



# Puntland Report 2020

Somali Health and  
Demographic Survey



PLHDS



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Somali Health and  
Demographic Survey



With technical support from:



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Finally, this report is the culmination of a wide range of efforts from Somali respondents, enumerators, supervisors, quality assurance teams and other field personnel, who sometimes had to brave conflict, poor weather and limited infrastructure in their quest to collect the data that made this report possible. We express our gratitude to all the above mentioned as well as anyone who participated in any capacity in the production of this report



## Foreword

It is a great pleasure for the Ministry of Planning, Economic Development and International cooperation in partnership with the Ministry of Health to present the findings of the Puntland Health and Demographic Survey (PLHDS) based on the Somali Health and Demographic Survey (SHDS), conducted from 2018-2019. This survey is the first of its kind in the history of Somalia. It provides long-awaited information required by policy- and decision-makers, and all other relevant stakeholders to make evidence-based programme and policy decisions that deliver effective services to Puntland. The survey findings will enable the Puntland State of Somalia to monitor its respective sectors in the Development Plan, including those relating to improving the lives of women and children, and overall health in Puntland. The report presents more than just numbers—offering valuable nuggets of information to the Ministry of Health and our partners to strive at all levels to promote universal access to reproductive health care and rights. The survey findings will also offer a glimpse into social behaviour in our communities and encourage our people to adopt positive behavioural changes to improve their own lives.

These crucial findings are a result of the great efforts of UNFPA Somalia's Population and Development Unit that collaborated at every stage with technical teams from Puntland State statistical office—along with all the personnel who have worked on this survey. These professionals worked together diligently to complete every phase of work in a challenging environment.

We also remain grateful to the donors of this undertaking—the Government of Sweden, the Government of Finland, the Government of Italy, the Italian Agency for Development Cooperation (AICS), the Swiss Agency for Development and Cooperation for their generous contributions, and The Foreign, Commonwealth and Development Office (FCDO) formerly United Kingdom Department for International Development (DfID), which have created a product that will help turn the dreams of Puntland Population to reality. We look forward to seeing the findings from this report shaping vital plans in Puntland, including the response of the international community to support the Strategic Plans to



attain the Sustainable Development Goals, and response plans for diseases and emergencies, such ongoing COVID-19 pandemic, locust invasion, and recurrent drought and floods. It is our hope that this report will be used and analyzed even further to drive more positive changes in Puntland.

A handwritten signature in blue ink, appearing to read 'Abdiqafar Elmi Hange', written over a horizontal line.

**Hon Abdiqafar Elmi Hange**

Minister of Planning, Economic  
Development and International  
Cooperation, Puntland

A handwritten signature in blue ink, appearing to read 'Jama Farah Hassan', written over a horizontal line.

**Hon Dr. Jama Farah Hassan**

Minister of Health, Puntland



## Executive Summary

# Unlocking a brighter, healthier future for Somalis

**T**here has never been a more opportune time to ensure Somalis have better access to health, education, sanitation and nutrition. With the voices of Puntlanders from 28,079 households—documented across two phases of The Puntland Health and Demographic Survey (PLHDS)—presented in this report, policymakers and stakeholders now have access to rich and diverse information that will be key to unlocking a bright future for Puntland, particularly for women of childbearing ages and children. A first of its kind, the report sheds light on the lives and needs of nomadic communities—usually difficult to reach—and people living in urban and rural households. The information presented will help close gaps of inequality that have existed for years among people of different ages, lifestyles, places of residence and health status. Some of the key findings are presented below:

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### Demographic Information and Household Characteristics

As one of Puntland's biggest assets, and possibly untapped potentials, Like the rest of Somalia, Puntland has a young population—around 55 percent of household members are under 15 years of age, and 42 percent of Puntland's population falls within the working age group.

The PLHDS report reveals that the size of an average household in Puntland is 6 people. In addition to nuclear family members, 32 percent of households have foster child and/ or orphaned children.

Keeping their ties with family and friends strong, around two-thirds of households own mobile phones. Within the nomadic communities, 59 percent of households own a simple mobile phone with access to FM radio. This presents an opportunity for stakeholders to reach out to Somalis using innovative ways.

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### Education and School Attendance

Education is inextricably tied to ways in which people can improve their lives. The PLHDS findings show that, in general, the educated are empowered to make informed decisions to improve their lives, educational attainment varies across age



groups though. Of all the age groups analyzed, younger people have better access to education than older people. Those who fall within the age bracket 15-19 years have the lowest percentage of population with no education, males at 14 percent and females at 17 percent. Additionally, the survey reveals that places of residence have a bearing on access to education. Urban dwellers have better opportunities to progress to higher education than people in nomadic settlements (26 percent of women from urban areas have no education, as compared to 82 percent of nomadic women, for instance). Among the males, 6 percent have higher education compared to 4 percent of females.

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## **Marriage, Fertility and Birth Spacing**

Information on marriage guides the understanding of fertility patterns, particularly as marriage among women is universal and childbearing takes place within the context of marriage.

Early marriage is common, particularly for women—23 percent of women aged 20-24 interviewed were married by the time they turned 18. In comparison, 6 percent of men aged 20-24 had entered their first marriage by the time they turned 18. According to the survey, the median age at first marriage is 21 for Somali women in Puntland aged 25-49 and 24 for men aged 25-64.

Women who marry early are generally known to have a higher chance of getting pregnant and having more children during their reproductive years. According to the PLHDS report, the total fertility rate is 6.7 children.

As can be noted in the survey findings, for women with no education, the total fertility rate is about twice as high, at 7.1, as that of women with higher education, at 3.3. Information on birth spacing would help women make better choices about how many children to have, to ensure better health of women and children.

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## **Women's Empowerment**

By empowering women, a nation can make great strides in development and peace building. The PLHDS reveals that there is progress towards women's empowerment can be witnessed in Puntland.

For instance, about three-quarters of women aged 15-49 own a mobile phone and 61 percent use their mobile phones for financial transactions. Furthermore, Somali women in Puntland are contributing to financial decisions—nine out of ten women are deciding how their cash earnings will be spent either individually or jointly with their husbands, and close to seven out of ten (67 percent) of women make individual or joint decisions on how their husbands' cash will be spent.



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## Water and Sanitation

Access to safe drinking water, particularly if readily available within households, together with better sanitation would prevent the spread of diseases, such as diarrhoea and dysentery, across the country. Yet, less than thirty percent of household members, at 27 percent, have access to piped water coming into their dwelling, yard or plot.

The recent pandemic of COVID-19 further highlights the importance of access to water for safe handwashing in the prevention of diseases. However, in general, a large number of the population need access to safe water. Around six out of ten households, at 58 percent, use an improved source that provides safe drinking water and 19 percent of the households travel for at least 30 minutes or longer to get water.

Across the country, only around five out of ten households, at 54 percent, have an improved sanitation facility.

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## Maternal Health and Newborn Health

Despite the gains made in maternal health, one of the largest challenges Puntland faces is high maternal mortality rates. The survey finds that this can be attributed to low uptake of antenatal care, postnatal care and a low number of delivery at health facilities or with skilled health care providers. All these factors are strongly connected. Women who access health care throughout their pregnancy are more likely to seek support for the health of their newborns.

Thirty-five percent, of births are delivered with the assistance of a skilled health professional, which includes a doctor/clinical officer or nurse/midwife/auxiliary midwife. In general, young and educated Puntland mothers, as well as those living in urban areas are more likely to be assisted by skilled birth health care providers than older mothers, women with little or no education, and women living in rural or nomadic households.

The PLHDS noted that an overwhelming 81 percent of births were delivered at home, and 19 percent in the five years preceding the survey was delivered in a health facility. Deliveries are more common in public health facilities (at 16 percent) than in facilities supported by the private sector (at 2 percent). Even in urban settings, 33 percent of deliveries take place in public health facilities, as compared to 3 percent in private facilities.

In terms of care that women seek before and after childbirth, more interventions are needed to assist women and their caregivers to make better decisions. Only 26 percent of women aged 15-49 who had a live birth received ANC from skilled personnel during their last birth. An overwhelming 89 percent of the mothers did not receive any postnatal check-up in the first two days after childbirth.

To have any significant impact on improving women's lives, it would be essential to help them overcome the barriers they face in accessing health. At least seven out of ten (72 percent) women state they face at least one problem in accessing health care when they need it. The majority of women perceive the lack of money (63 percent) as a barrier, followed by the distance to a health facility (58 percent).



The PLHDS found that nomadic married women, women who aren't employed for cash, women with no education, and those from poorer households face acute problems in accessing health care.

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## **Child Health and Nutrition**

Information on child health is crucial for policymakers and parents to ensure children's longevity and productivity. The survey unveiled that Somali mothers were able to present health cards for only 2 percent of children aged 12-23 months and that just 7 percent of babies delivered live had their weight reported, 5 percent of which were infants with low birth weight (less than 2.5 kg).

Overall, only 9 percent of children aged 12-23 months are fully vaccinated (i.e. with BCG, pentavalent, polio and measles vaccines).

Vaccination rates are higher for children with educated mothers and children living in urban areas. In general children presenting with diarrhoea are more likely to be treated than children with acute respiratory infections (ARI).

Unsafe disposal of children's stool makes children susceptible to several diseases that are spread through the faecal-oral route. In Puntland, at 44 percent, close to half of under-fives who live with their mothers had their last stool disposed of safely. Children in urban areas (68 percent) and rural areas (64 percent) were more likely than those in nomadic areas (6 percent) to have their waste disposed of safely.

Another area in which children need support to reach their full potential is ensuring they receive proper and adequate nutrition. This journey starts early for children, at birth. In Puntland, 65 percent of the children were breastfed within the first hour of their birth and only around three out of ten children under 6 months were exclusively breastfed.

In total, 25 percent of children under the age of five years are stunted (height-forage) or too short for their age, 11 percent are wasted (refers to weight-for-height).

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## **Gender-Based Violence**

Gender-Based Violence (GBV) is one of the most prevalent human rights violations faced by people, particularly women, all around the globe.

Fifteen percent of women aged 15-49 had experienced physical violence since the age of 12. According to the survey results, it can be noted that younger women are more likely to experience physical violence, with 17 percent of women in the 15-19 age group reporting they had experienced violence since the age of 12.

With regard to women's opinions on who the most common perpetrators of violent acts against women are, the survey found that over half (59 percent) of women believe that husbands commit the most violent acts against women in the community.



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## Female Circumcision

Female circumcision, also known as Female Genital Mutilation/Cutting (FGM/C), has been practised in Somalia for several decades. The PLHDS shows that circumcision in women aged 15–49 is high in Puntland, at 99 percent. Pharaonic circumcision is the most common type, performed in Puntland at 59 percent. The findings also show that 14 percent of women have undergone the intermediate type of circumcision, while 24 percent have undergone the Sunni type. The majority of women (70 percent) aged 15–49 were circumcised between the ages of 5–9 years.

Mothers with daughters were also asked if their daughters underwent female circumcision, the age at which it was performed, and the type of FGM/C performed among other questions. The results indicate that 3 percent of girls underwent circumcision between the ages of 0–4, 25 percent of daughters underwent circumcision between the ages of 5–9 and 74 percent of daughters had undergone the practice within the ages of 10–14 years.

Among women surveyed, 75 percent believe that female circumcision is a religious requirement.

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## Chronic Diseases and Out-of-pocket Expenditure

For a society where the spotlight has focused mainly on communicable diseases, the PLHDS noted that 5 percent of Somalis are now suffering from chronic diseases. The most common chronic diseases are blood pressure (33 percent), diabetes (14 percent), kidney diseases (12 percent) and chronic headache and liver disease (at 9 percent each).

The survey further discovered that around 4 percent of the population are suffering from disabilities, and that 41 percent of disabled people had not received any care nor support for their disability in the year preceding the survey.

Without any current holistic financial support, around half of households (49 percent) reported they are paying for their health expenses from their income. Future interventions working on improving health service delivery will need to take this into consideration for planning and effective programmes.

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## HIV/AIDS

Even though HIV/AIDS is not considered a major epidemic in Puntland, the PLHDS set out to collect information about the knowledge of Puntland people about HIV/AIDS and their attitudes towards people living with HIV. The survey revealed that 66 percent of women aged 15–49 in Puntland had heard of HIV/AIDS.

Unfortunately, 43 percent of women aged 15–49 have discriminatory attitudes towards people living with HIV; Fifty-eight percent of women aged 15–49 even reported they would not buy fresh vegetables from a shopkeeper who is living with HIV. The findings on this topic would guide programmes working to prevent the spread of HIV/AIDS.



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## **Adult and Maternal Mortality**

Indicators on adult and maternal mortality can be used to assess the health status of a population. Using the direct estimates of female and male mortality rates for the two years preceding the survey, the PLHDS found that there were more male deaths than female deaths. Among women of the ages of reproductive health, the death rate is highest among women aged 35-39, at 3.08 deaths per 1,000 population. This is also the age group where childbearing is at its peak. The survey reveals that the main causes of maternal mortality are postpartum hemorrhage, preeclampsia/eclampsia, obstructed labour and sepsis.

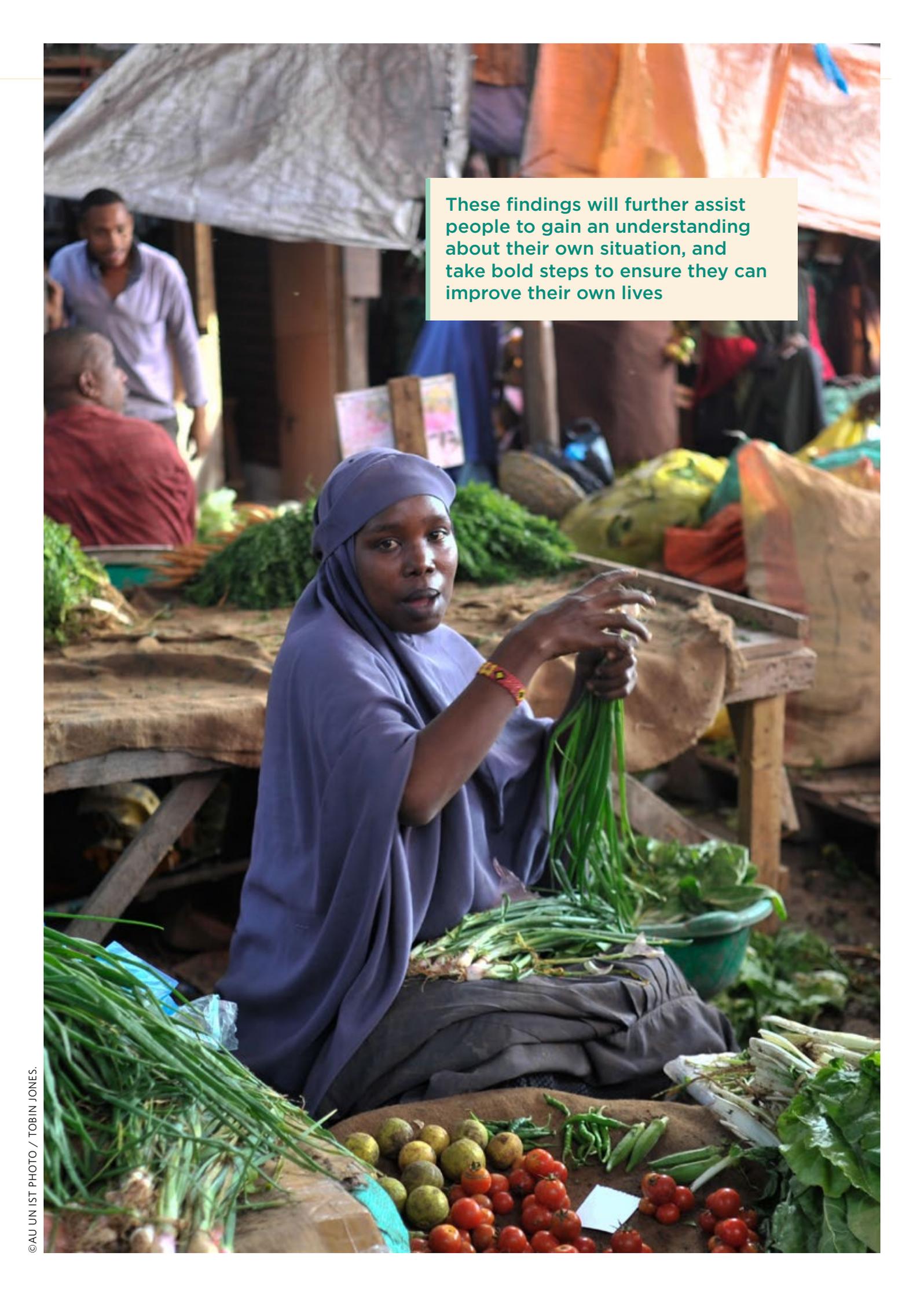
Overall, a quarter of men (26 percent) and 7 percent of women who have reached the age of 15 are likely to die before they reach the age of 50.

Over the years, some gains have been made. Puntland's maternal mortality rate has dropped from 732 in 2015 to 622 maternal deaths per 100,000 live births. However, more efforts need to be made to save every mother's life in Puntland.

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## **The PLHDS Agenda**

The PLHDS presents pivotal, and potentially game-changing information for Puntland. While informing planning and decision making, the statistics generated will feed into national plans and strategies and spur actions that will improve the lives of Puntland people. These findings will further assist people to gain an understanding about their own situation, and take bold steps to ensure they can improve their own lives.

A woman wearing a purple hijab and a matching long-sleeved top is sitting on a wooden stall at an outdoor market. She is holding a bunch of green onions in her hands and looking towards the camera. The stall is filled with various fresh vegetables, including green onions, tomatoes, and leafy greens. In the background, other people are visible, including a man in a light blue shirt and another man in a red shirt. The market is covered with large, colorful tarps in shades of white, orange, and blue. The overall scene is a busy, vibrant outdoor market.

These findings will further assist people to gain an understanding about their own situation, and take bold steps to ensure they can improve their own lives



## Sustainable Development Goal Indicators

Goal	Indicator	Male	Female	Total	
 <p><b>2</b> ZERO HUNGER</p>	<b>Zero hunger</b>				
	<b>2.2.1</b>	Prevalence of stunting among children under 5 years of age	25.2	25.6	25.4
	<b>2.2.2</b>	Prevalence of malnutrition among children under 5 years of age	24.4	26.6	25.2
		a) Prevalence of wasting among children under 5 years of age	10.9	11.2	11.0
 <p><b>3</b> GOOD HEALTH AND WELL-BEING</p>	<b>Good health and well-being</b>				
	<b>3.1.1</b>	Maternal mortality ratio	n/a	622	n/a
	<b>3.1.2</b>	Proportion of births attended by skilled birth personnel	n/a	32.6	n/a
	<b>3.7.1</b>	Proportion of women of reproductive age (aged 15-49 years) who have their need for birth spacing satisfied with modern methods	n/a	2.9	n/a
	<b>3.7.2</b>	Adolescent birth rates per 1,000 women			
		a) Women aged 15-19 years	na	95	na
	<b>3.a.1</b>	Age-standardized prevalence of current tobacco use among persons aged 15 years and older	8.8.	1.2	4.7
	<b>3.b.1</b>	Proportion of the target population covered by all vaccines included in their national programme	8.3	9.4	8.8
	 <p><b>4</b> QUALITY EDUCATION</p>	<b>Inclusive and equitable quality education and lifelong learning opportunities for all</b>			
<b>4.3.1</b>		Participation rate of youth and adults in formal and non-formal education and training in the last 12 months			
		a) Net Attendance Ratio (primary)	35.9	31.8	33.9
		b) Net Attendance Ratio (secondary)	19.9	13.4	16.3
<b>4.6.1</b>		Percentage of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills			
	a) Adult literacy	n/a	33.0	n/a	

Goal	Indicator	Male	Female	Total	
<b>5</b> GENDER EQUALITY 	<b>Gender equality</b>				
	<b>5.2.1</b>	Proportion of ever-married women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former husband in the previous 12 months			
		a) Physical violence	n/a	11.1	n/a
		c) Psychological violence	n/a	4.1	n/a
	<b>5.3.1</b>	Proportion of women aged 20-24 years who were married before age 15 and before age 18			
		a) Before age 15	n/a	10.3	n/a
		b) Before age 18	n/a	23.1	n/a
<b>5.3.2</b>	Proportion of girls and women aged 15-49 years who have undergone female genital mutilation/cutting, by age				
		n/a	99.1	n/a	
<b>5.b.1</b>	Proportion of individuals who own a mobile telephone				
		n/a	73.2	n/a	
<b>6</b> CLEAN WATER AND SANITATION 	<b>Ensure availability and sustainable management of water and sanitation for all</b>				
	<b>6.1.1</b>	Percentage of population using safely managed drinking water services			
		n/a	n/a	57.9	
	<b>6.2.1</b>	Percentage of population using safely managed sanitation services, including a hand-washing facility with soap and water			
	a) Percentage with basic sanitation service	n/a	n/a	39.3	
	c) Percentage with a handwashing facility with water and soap available	n/a	n/a	9.0	
<b>7</b> AFFORDABLE AND CLEAN ENERGY 	<b>Affordable and clean energy</b>				
			<b>Urban</b>	<b>Rural</b>	<b>Total</b>
	<b>7.1.1</b>	Proportion of population with access to electricity	70.4	28.4	51.6
<b>7.1.2</b>	Proportion of population with primary reliance on clean fuels and technology	16.6	3.5	10.7	



Goal	Indicator	Male	Female	Total		
<b>8</b> DECENT WORK AND ECONOMIC GROWTH 	<b>Decent work and economic growth</b>					
	<b>8.10.2</b>	Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider				
	a)	n/a	4.3	n/a		
	b)	n/a	61.1	n/a		
<b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS 	<b>Peaceful and inclusive societies for sustainable development, access to justice for all and effective, accountable and inclusive institutions</b>					
	<b>16.1.3</b>	Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months				
	a)	n/a	7.9	n/a		
<b>16.9.1</b>	Proportion of children under 5 years of age whose births have been registered with a civil authority			4.6	4.5	4.6
<b>17</b> PARTNERSHIPS FOR THE GOALS 	<b>Partnerships for the goals</b>					
	<b>17.8.1</b>	Proportion of individuals who used Internet in the last 12 months			n/a	15.3





## Acronyms

<b>AIDS</b>	Acquired Immunodeficiency Syndrome
<b>ANC</b>	Antenatal Care
<b>ARI</b>	Acute Respiratory Infections
<b>ART</b>	Antiretroviral Therapy
<b>ASFRs</b>	Age-Specific Fertility Rates
<b>BCG</b>	Bacillus Calmette-Guérin [tuberculosis vaccine]
<b>BMI</b>	Body Mass Index
<b>CAPI</b>	Computer-Assisted Personal Interviewing
<b>CBR</b>	Crude Birth Rate
<b>CEB</b>	Children Ever Born
<b>CM</b>	Centimeter
<b>CPR</b>	Contraceptive Prevalence Rate
<b>CRVS</b>	Civil Registration and Vital Statistics
<b>C-section</b>	Cesarean Section
<b>CSPro</b>	Census and Survey Processing System
<b>DANIDA</b>	Danish International Development Agency
<b>DfID</b>	Department for International Development
<b>DHS</b>	Demographic and Health Surveys
<b>DNS</b>	Directorate of National Statistics
<b>DPT</b>	Diphtheria, Pertussis and Tetanus Vaccine
<b>EAs</b>	Enumeration Areas
<b>EPHS</b>	Essential Package of Health Services
<b>FGM/C</b>	Female Genital Mutilation/Cutting
<b>FGS</b>	Federal Government of Somalia
<b>GAR</b>	Gross Attendance Ratios
<b>GBV</b>	Gender-Based Violence
<b>GDP</b>	Gross Domestic Product
<b>GFR</b>	General Fertility Rate
<b>GIS</b>	Geographic Information System
<b>GPI</b>	Gender Parity Index
<b>GPS</b>	Global Positioning System
<b>HC</b>	Health Centers
<b>HIV</b>	Human Immunodeficiency Virus
<b>ICPD</b>	International Conference on Population Development
<b>IUD</b>	Intra Uterine Device
<b>IYCF</b>	Infant and Young Child Feeding
<b>KG</b>	Kilogram
<b>LAM</b>	Lactational Amenorrhea
<b>LAMPS</b>	Learning and Monitoring Programme for Somalia



<b>MCH</b>	Maternal Child Health
<b>MICS</b>	Multiple Indicator Cluster
<b>MMR</b>	Maternal Mortality Ratio
<b>MOH</b>	Ministry of Health
<b>MoPEDIC</b>	Ministry of Planning, Economic Development and International Cooperation
<b>MTCT</b>	Mother-to-child transmission
<b>NA</b>	Not Applicable
<b>NAR</b>	Net Attendance Ratios
<b>NDP</b>	National Development Plan
<b>NLWs</b>	Nomadic Link Workers
<b>ORS</b>	Oral Rehydration Salts
<b>ORT</b>	Oral Rehydration Therapy
<b>P &amp; D</b>	Population and Development
<b>PAPFAM</b>	Pan Arab Project for Family Health
<b>PESS</b>	Population Estimation Survey of Somalia
<b>PHU</b>	Primary Health Unit
<b>PLHDS</b>	Puntland health and demographic survey
<b>PNC</b>	Postnatal Care
<b>PPS</b>	Probability Proportional to Size
<b>PSU</b>	Primary Sampling Units
<b>RHF</b>	Recommended Home Fluids
<b>SD</b>	Standard Deviation
<b>SDGs</b>	Sustainable Development Goals
<b>SGBV</b>	Sexual and Gender-Based Violence
<b>SHDS</b>	Somali Health and Demographic Survey
<b>SHS</b>	Second-Hand Smoke
<b>SNBS</b>	Somali National Bureau of Statistics
<b>SPSS</b>	Statistical Package for the Social Science
<b>SSUs</b>	Secondary Sampling Units
<b>STD</b>	Sexually Transmitted Diseases
<b>STIs</b>	Sexually Transmitted Infections
<b>TBA</b>	Traditional Birth Attendant
<b>TFR</b>	Total Fertility Rate
<b>TPM</b>	Third party monitoring
<b>TNG</b>	Transitional National Government
<b>ToTs</b>	Training of Trainers
<b>TTI</b>	Tetanus Toxoid injections
<b>UHC</b>	Universal Health Care
<b>UNFPA</b>	United Nations Population Fund
<b>UNICEF</b>	United Nations Children's Fund
<b>US</b>	United States
<b>USD</b>	United States Dollar
<b>USUs</b>	Ultimate Sampling Units
<b>WHO</b>	World Health Organization



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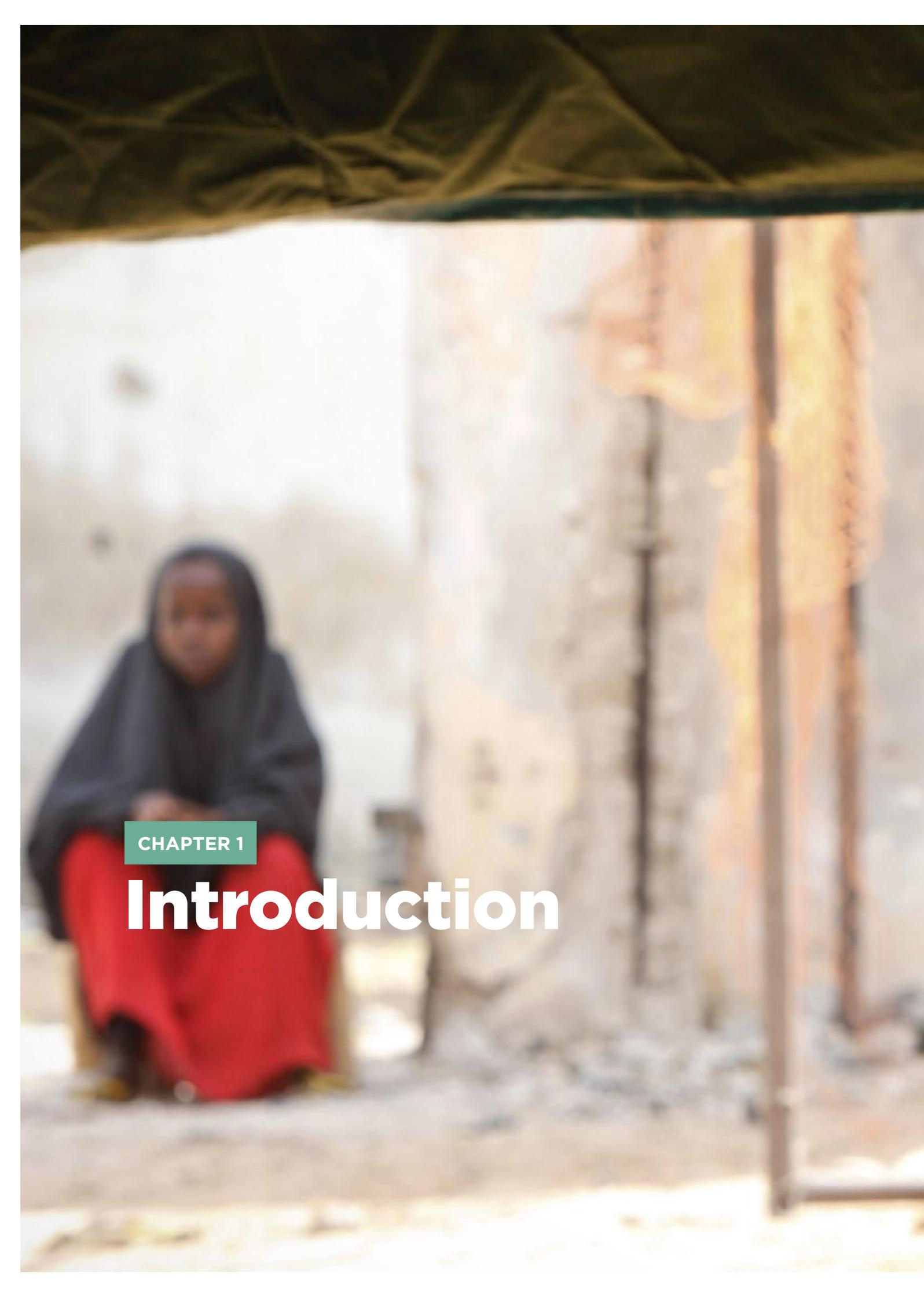


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A young girl with a grey headscarf and a red dress is sitting on the ground in a simple, possibly damaged, structure. The background is blurred, showing a white wall and a wooden door. The scene is lit with natural light, and the overall tone is somber.

CHAPTER 1

# Introduction







# 80%

of Puntland's foreign exchange earnings is largely dependent on livestock exports

# 53 years

Life expectancy of males

# 56 years

Life expectancy of females

and semi-arid environment. Remittance from the Diaspora has also played a major role in the economy.

## Health Status

The burden of disease is heavily dominated by communicable diseases, reproductive health and under-nutrition issues. However, non-communicable diseases and mental illness are on the rise (WHO 2015).

Life expectancy in Puntland is estimated to be 53 and 56 years respectively for males and females. One in 7 children die before their fifth birthday. Infant mortality in Puntland stands at 85 per 1000 live births. The morbidity and mortality trends have remained the same for years, with the general population affected by the same diseases, including diarrhoea, acute respiratory infections (ARI), malaria, malnutrition, and other vaccine-preventable diseases (MOH, 2018).

The adult HIV prevalence rate in 2014 was estimated at 0.55 percent (UNAIDS 2014), however other health indicators remain poor. This could be attributed to the poor state of the health system that continues to suffer from a lack of resources and adequate data to inform planning. This is particularly noticeable in reproductive health, an area largely dependent on the adequacy and availability of health services, which are features of a well-functioning health system.

The Ministry of Health (MOH) works to support Puntland people in attaining better health, which will enable them to participate in economic and social development and to contribute to the alleviation of poverty (Ministry of Health, 2014). To attain this goal, the government's policy for the health sector is centred on the following priorities:

- Scaling up of essential and basic health and nutrition services (EPHS)
- Overcoming the crisis of human resources for health
- Improving governance and leadership of the health system
- Enhancing access to essential medicines and technologies
- Providing a functioning health information system
- Health financing for progress towards Universal Health Coverage (UHC)
- Improving health sector physical infrastructure
- Enhancing health emergency preparedness and response
- Promoting action on social determinants of health and health in all policies



## Survey Objectives and Organization

The main objective of the Somali Health and Demographic Survey (SHDS) was to provide evidence on the health and demographic characteristics of the Somali population that will guide the development of programmes and formulation of effective policies. This information would also help monitor and evaluate national, sub-national and sector development plans, including the Sustainable Development Goals (SDGs), both by the government and development partners. The specific objectives of the SHDS were to:

- Estimate maternal and adult mortality
- Examine basic indicators of maternal and child health
- Measure fertility and birth spacing
- Describe patterns of knowledge and awareness of the Human Immunodeficiency Virus (HIV) and other sexually transmitted infections
- Estimate infant and child mortality
- Understand the extent and patterns of gender-based violence and female circumcision

## Sample Design

The sample for the SHDS was designed to provide estimates of key indicators for the state as a whole. Each region was stratified into urban, rural and nomadic areas, yielding a total of 15 sampling strata.

Up-to-date, high-resolution satellite imagery, as well as on-the-ground knowledge of staff from the respective ministries of planning, all dwelling structures were digitized in urban and rural areas. Enumeration Areas (EAs) were formed on-screen through a spatial count of dwelling structures in a Geographic Information System (GIS) software. Thereafter, a sample ground verification of the digitized structures was carried out for large urban and rural areas and necessary adjustments made to the frame. Each EA created had a minimum of 50 and a maximum of 149 dwelling structures. In Puntland a total of 1773 EAs were digitized (1,058 in urban and 715 in rural), which formed the final frame. The nomadic frame comprised an updated list of Temporary Nomadic Settlements (TNS) obtained from nomadic link workers who are tied to these nomadic settlements. A total of 1,338 TNS formed the SHDS nomadic sampling frame.

Up-to-date, high-resolution satellite imagery, as well as on-the-ground knowledge of staff from the respective ministries of planning, all dwelling structures were digitized in urban and rural areas.

The SHDS followed a three-stage stratified cluster sample design in urban and rural strata with a probability proportional to size,



### **BOX 1** Nomadic households

Nomadic households reside temporarily in areas known as Temporary Nomadic Settlements (TNS) for as long as they can access pasture and water in these locations. The duration of their stay in such places is mainly dependent on the amount of rain that falls within that season and how long the season will last. During the long rains, the nomads would be stationed in one location, between 60 to 90 days, and for the short rains they spend about 45 days, based on anecdotal information. In the dry seasons, nomads move long distances, including across regions, and into neighbouring countries in search of water and pasture.

Nomadic settlements usually affiliate themselves with local settlements along their paths of movement.

References to 'nomadic areas' in the SHDS report are made to locations where survey teams visited households within temporary nomadic settlements.

for the sampling of Primary Sampling Units (PSU) and Secondary Sampling Units (SSU) (respectively at the first and second stage), and systematic sampling of Households (HHs) at the third stage. For the nomadic stratum, a two-stage stratified cluster sample design was applied with a probability proportional to size for sampling of PSUs at the first stage and systematic sampling of HHs at the second stage. To ensure that the survey precision is comparable across regions, PSUs were allocated equally to all regions with slight adjustments in two regions.

Within each stratum, a sample of 35 EAs was selected independently, with probability proportional to the number of digitized dwelling structures. In the urban and rural selected EAs, all households were listed and information on births and deaths was recorded through the maternal mortality questionnaire. The data collected in this first phase was cleaned and a summary of households listed per EA formed the sampling frames for the second phase. In the second stage, 10 EAs were sampled out of the possible 35 that were listed, using probability proportional to the number of households. All households in each of these 10 EAs were serialized based on their location in the EA and 30 of these households sampled for the survey. The serialization was done to ensure distribution of the households interviewed for the survey in the EA sampled. A total of 100 EAs were allocated to urban and rural strata (50 EAs each), while in the third stage, 30 households were selected from the listed households in every EA to yield a total of 3300 households from 149 EAs covered (50 EAs in urban, 49 EAs in rural and 50 EAs in nomadic) out of the sampled 150 EAs.

In nomadic areas, a sample of 10 EAs (in this case TNS) were selected from each nomadic stratum, with probability proportional to the number of estimated households. A complete listing of households was carried out in the selected TNS followed by the selection of 30 households for the main survey interview. In those TNS with less than 30 households, all households were interviewed for the main survey. All eligible ever-married women aged 12 to 49 and never-married women aged 15 to 49 were interviewed in the selected households, while the household questionnaire was administered to all households selected. The maternal mortality questionnaire was administered to all households in each sampled TNS.

## **Questionnaires**

Four types of questionnaires were used in the PLHDS 2020: The Maternal Mortality Questionnaire, the Household Questionnaire and two individual questionnaires—Ever-married Woman's Questionnaire and Never-married Woman's Questionnaire.



## Maternal Mortality Questionnaire

A stand-alone Maternal Mortality Questionnaire was used in all households during the listing phase to identify maternal deaths in the two years preceding the survey. This allowed the estimation of the Maternal Mortality Ratio (MMR) using a direct method. The methodology was adopted from the Yemen National Health and Demographic Survey carried out in 2013 and was used to obtain a more current estimate of the maternal mortality in Somalia.

## Household and Individual Questionnaires

The Household Questionnaire, Ever-married Woman's Questionnaire, and Never-married Woman's Questionnaire were based on The Demographic and Health Surveys (DHS) Program's standard Demographic and Health Survey Questionnaires (DHS7) and the 2013 Yemen Health and Demographic Survey instruments, and was adapted to reflect the relevant population and health issues in the Somali context.

Input was solicited from various stakeholders representing government agencies, particularly the ministries of health and planning, as well as international development partners. After the preparation of the questionnaires in English, they were translated into Somali. The questionnaires were further tested and refined in the field to ensure that cultural and religious sensitive questions were appropriately worded.

The Household Questionnaire was used to list all the regular members of and visitors to the selected households. Basic demographic information was collected on the characteristics of each person listed, including his or her age, sex, marital status, education, and relationship to the head of the household. For children under the age of 18, parents' survival status was determined. The data obtained from the Household Questionnaire was used to identify ever- and never-married women eligible to be interviewed with the relevant individual questionnaire and those persons eligible for anthropometric measurements. The Household Questionnaire also collected information on the characteristics of the household's dwelling unit, such as their source of drinking water; type of sanitation facility; materials used for the floor, walls, and roof of the dwelling unit; and ownership of various durable goods. In addition, the questionnaire included questions about disability, as well as out-of-pocket expenditure on health.

**The questionnaires were further tested and refined in the field to ensure that cultural and religious sensitive questions were appropriately worded**

The Ever-married Woman's Questionnaire was used to collect information from all women aged 12 to 49 years who were currently married, divorced, abandoned, or widowed. In all households, eligible women were asked questions on the following topics:

- Background characteristics, such as age, education, literacy and media exposure



- Birth history and child mortality
- Knowledge and use of family planning methods
- Antenatal care, delivery, and postnatal care
- Breastfeeding and infant feeding practices
- Vaccinations and children's illnesses
- Marriage and sexual activity
- Fertility preferences
- Women's work and partners' work background characteristics
- Knowledge of HIV/AIDS and methods of HIV transmission
- Adult and pregnancy-related mortality

The Never-married Woman's Questionnaire was used to collect information from all women aged 15 to 49 years who had never been married. In all households, eligible women were asked questions on the following topics:

- Background characteristics, such as age, education, literacy and media exposure
- Violence against women

In this survey, Computer-Assisted Personal Interviewing (CAPI) was used, with interviewers using smart phones to record responses during interviews. The phones were equipped with Bluetooth technology to enable remote electronic transfer of completed questionnaires from interviewers to supervisors. Supervisors transferred completed files to the CSWeb server<sup>1</sup> whenever internet connectivity was available. Any revision to the questionnaire was received by the supervisors and interviewers by simply synchronizing their phones with the CSWeb server, which was created specifically for the SHDS. The CAPI data collection system employed in the SHDS 2020 was developed by UNFPA using the mobile version of the Census and Survey Processing System (CSPro)<sup>2</sup>. The CSPro software was developed jointly by the U.S. Census Bureau, the DHS Program and Serpro S.A.

## Training

Training for the SHDS was two-phased: for the Listing/Maternal Mortality Ratio (MMR) data collectors and for the Main Survey data collectors (those administering the household, ever-married woman and never-married woman questionnaires).

**In this survey, Computer-Assisted Personal Interviewing (CAPI) was used, with interviewers using smart phones to record responses during interviews.**

1 CSWeb is a web application that facilitates the secure transfer of questionnaires or files between a user's tools (with CSEntry) and a web server.

2 CSPro is a public domain software package that allows users to enter, edit, tabulate and disseminate census and survey data.



Participants were assessed through both theoretical evaluations in class as well as observations made on their survey implementation during the pretest.

## Listing and MMR Training

Training of Trainers (ToT) sessions was conducted in Garowe, facilitated by technical staff from UNFPA. Seven trainers were trained in household listing concepts (identification of structures, dwelling units, and EA boundaries), interviewing techniques, interviewers' and supervisors' roles, age probing techniques, fieldwork procedures, sampling techniques, importance of data on births and deaths, recognizing and handling age inconsistencies, identification of maternal deaths and CSPro mobile data collection application. Thereafter, these trainers transferred this knowledge and skills to 45 data collectors from across the state in Garowe, Bossaso and Galkacyo. A pretest was carried out using both paper questionnaires and CAPI to assess the understanding of the trainees. Modifications were made to the questionnaire and survey methods, based on lessons drawn from the pretest. Participants were assessed through both theoretical evaluations in class as well as observations made on their survey implementation during the pretest.

## Main Survey Training

The UNFPA technical team trained 19 master trainers in October 2017 in Kigali, Rwanda, five of the master trainers came from Puntland. These master trainers were all Somali health and demographic professionals who participated in the development and review of data collection tools. Consequently, along with the master trainers, UNFPA trained 51 trainers of trainers inside the country. Finally, 97 supervisors and interviewers—89 women (constituting 90 percent of the data collectors who had been drawn from the medical profession (nurses, midwives and doctors). At the end of each training, a pretest was conducted using manual questionnaires and CAPI to ensure that all the trainees had acquired a minimum level of knowledge and skills required for the SHDS. The selection of supervisors was based on performance in both in-class assessments and field pretests.

## Fieldwork

Data collection in urban and rural areas was carried out in two distinct phases: listing/MMR and main survey. Data collection in the nomadic areas was carried out almost simultaneously due to the mobility of nomadic households.

## Listing and MMR Data Collection

The listing of households and MMR data collection began in February 2018 and was completed in January 2019 for urban and rural areas.

Fieldwork was carried out by 22 teams, each consisting of one



Fieldwork was carried out by 22 teams, each consisting of one supervisor, four enumerators and a driver

supervisor, four enumerators and a driver. An Android platform developed in CPro was used for data collection. Each team was assigned mobile phones (one for each enumerator and one for the supervisor), EA Maps (in A0 and A3 sizes), EA Google Earth files, control sheets, notebooks, pens and document folders. In addition, 34 data quality controllers (trainers, Geographical Information Systems (GIS) staff, survey/state directors, and regional coordinators) were coordinating and supervising fieldwork. In security-compromised areas, survey teams were supported by security guards and facilitators in the field.

## Main Survey Data Collection

The trained interviewers and supervisors were deployed to collect data from 30 selected households in each of the 10 sampled enumeration areas in each region-stratum. Selected households were obtained from a complete list of households in the EA. Data collectors were supported by the listing team who were well-versed in reading maps and could identify the EA boundaries as well as the selected households. Each interviewer collected data from approximately two households per day.

The nomadic households were listed a day prior to the day of enumeration in each TNS to obtain a current and complete list of households. During listing, coordinates of all nomadic household structures and the names of the head of each household were recorded. A sample of 30 households was then selected by the listing team and given to the supervisors of the enumerating team on their first day of enumeration. After this, supervisors allocated households to be interviewed to enumerators. The MMR questionnaire was administered by both listing and enumerating teams in nomadic areas. The enumerating team collected this data from the 30 sampled households, while the listing team collected data on maternal deaths from the remaining unsampled households in the TNS.

## Data Processing

Data processing for the SHDS was carried out by a core team of 17 people drawn from in-country statistical offices and UNFPA, with several members playing multiple roles. All team members had previously participated in the training and fieldwork for the SHDS.

Data from the SHDS was sent to a cloud CSWeb server that was protected by a password and the electronic files were downloaded as csdb files that were exported to Statistical Product and Service Solutions (SPSS)<sup>3</sup> and Stata<sup>4</sup> for data processing. Three people

3 SPSS is a software package used for statistical analysis. SPSS originally stood for Statistical Package for the Social Science.

4 A statistical software for data science.



# 99%

response rate yielded  
from the 3,625 occupied  
households that were  
successfully interviewed

served as CSPro data administrators. They were responsible for downloading the data from server instances and merging them, following which, a larger team worked on producing the six DHS standard type files, which were then handed over to other data processing teams. A team of three Geographical Information System (GIS) specialists carried out spatial editing of all household records from the server, assigning them to the correctly sampled EA codes. Concurrently, the data tabulation and re-coding teams produced the tabulation plan and re-coding manual following DHS standards but contextualized to the SHDS. Two team members were tasked with computing the sampling and survey weights.

## Response Rates

Table 1.1 presents response rates for the SHDS 2020. A total of 3,693 households were selected for the sample, of which 3637 were occupied. Of the occupied households, 3625 were successfully interviewed, yielding a response rate of 99 percent. The response rate was similar throughout all the three places of residence. The SHDS 2020 interviewed 5426 women in Puntland – 3728 ever-married women and 1698 never-married women.

## Quality Assurance

A variety of tools and mechanisms were used as part of the quality assurance arrangements throughout the implementation of the SHDS 2020. These included a consultative approach to critical decision making, extensive training and competitive recruitment of survey personnel, independent third-party monitoring, the Global Positioning System (GPS) tracking of field operations, peer review arrangements and validation meetings.

**Consultative approach to critical decision making** – all key decisions concerning the survey—its methodology, instruments, field work, tabulation plan, reports and data access— were discussed, designed and formulated following extensive consultations with Somali government partners, national and international experts and development partners where applicable. The idea was to draw on the widest possible expertise, as well as to ensure validation and in-country ownership.

**Extensive training and competitive recruitment of survey personnel** – given the national execution of the survey, UNFPA put in place an extensive training programme for survey personnel that worked on a “cascade” principle, with training of trainers at various levels. In each training, a test was administered at the end, and trainees who scored 80 percent and above were retained for participation in the survey.

**Learning and Monitoring Programme for Somalia (LAMPS)**—an Independent Third-Party Monitoring (TPM), engaged by the Department for International Development (DfID), provided



periodical monitoring of SHDS activities throughout the survey's implementation phase. The activities selected for verification, as well as field teams and beneficiaries to interview, were all randomly selected by the LAMPS teams throughout the entire phase of the survey. The findings from LAMPS provided the SHDS technical team with specific areas in which to improve the quality of SHDS training and collection of data from selected households. LAMPS consistently rated SHDS activities as delivered according to how they were designed and planned.

**GPS tracking of field operations** - During field data collection, the SHDS employed the use of handheld devices with embedded GPS, which allowed geo-referencing and the collection of geo-located data. It also enabled the tracking of fieldwork and ensured that the sample design is adhered to. Further, the geo-referenced data aided in data editing.

**Consistency checks of the data** - Geo-referenced listed data was cross-checked with digitized dwelling structures to ensure listing was undertaken in the correct EAs. Similarly, during the main survey, information collected during listing—which include coordinates, names of household members and other landmarks—helped to ensure teams visited the correct households. Further, listing information on the target population, women of child-bearing age and children under five years of age, aided in monitoring data collection by the main survey team.

**Peer review arrangements** - UNFPA approached prominent experts in the various fields related to the SHDS survey, including from the League of Arab States Pan Arab Project for Family Health (PAPFAM) expert group, National Statistical Offices (Statistics Norway, Statistics Sweden and Office for National Statistics), UN Habitat, and academia, to serve as peer reviewers of key aspects of SHDS and its outcomes. These included the sample design, methodology for covering the nomadic population, the use of GIS and satellite imagery in the preparations for the survey, the use of Brass-type techniques for the analysis of the survey data, and the SHDS reports themselves.

**Validation forums** - The Somali partners and international experts have reviewed the SHDS data, reports and other outcomes of the survey with the aim to validating the processes and findings.

A woman wearing a vibrant purple headscarf and a patterned skirt is seen from behind, leading a pack of brown donkeys along a dusty dirt road. The scene is set in a rural village with traditional thatched-roof huts on the left and a dense line of green trees in the background under a bright blue sky with scattered white clouds. The overall atmosphere is one of daily life in a rural, possibly developing, region.

CHAPTER 2

# Household and Housing Characteristics

# Key Findings

## AGE STRUCTURE



**55%**

of the household members are below 15 years of age

## WOMEN OF REPRODUCTIVE AGE



**39%**

percent of women in the households are within the reproductive 15-49.

## HOUSEHOLD HEADSHIP



**31%**

of household heads are women.

## FOSTER AND/OR ORPHAN CARE



**32%**

of households have a foster and or orphaned child

## EDUCATION



**33%**

of women and girls aged 6 and above have never been to school

## DRINKING WATER



**58%**

of households use an improved source of drinking water

## SANITATION FACILITY



**54%**

of households have an improved sanitation facility

## MOBILE PHONE OWNERSHIP



**66%**

of households own a mobile phone

## BIRTH REGISTRATION



**5%**

of children aged 2-4 years have had their births registered



# 2

## Chapter 2

# Household and Housing Characteristics

This chapter presents the socioeconomic characteristics of the household members that were covered by the Puntland Health and Demographic Survey 2020. Information collected includes respondents' age, sex, type of residence (urban, rural and nomadic household members) and educational status, as well as household facilities, characteristics and possessions. The profile of the households presented in this chapter will assist in understanding the results of the PLHDS 2020 in the subsequent chapters, while serving as a foundation for social and economic development planning. The domain of coverage for the PLHDS was the 18 pre-war regions of Somalia. In the Puntland State of Somalia, the survey covered five regions; Bari, Nugaal, Mudug, Sool and Sanaag.

### BOX 2.1 Key definitions

#### Household

A person or group of related or unrelated persons who live together in the same dwelling unit(s) or in connected premises, who acknowledge one adult, male or female, as the head of the household, who share the same housekeeping arrangements, and who are considered a single unit.

#### De facto population

All persons who stayed in the selected households the night before the interview (whether usual residents or visitors).

#### De jure population

All persons who are usual residents of the selected households, whether or not they stayed in the household the night before the interview.

#### Age in completed years (Age at last birthday)

This is the most common definition of age, where it is expressed as the number of completed years lived by a person. Other definitions include exact age, which is used mostly for modelling purposes, and age reached during the year.

The PLHDS collected information from all usual residents of a selected household (de jure population) and persons who had stayed in the surveyed household the night before the interview (de facto population). Although the difference between these two populations is small, to avoid double counting, all tables in this report refer to the de facto population, unless otherwise specified.

## Age and Sex Composition

Age and sex are important demographic variables that are the primary basis of demographic classification in vital statistics, census and surveys. They are the basis for studying patterns of mortality, fertility, fertility preference, age at first marriage and other information about the inhabitants of a country.

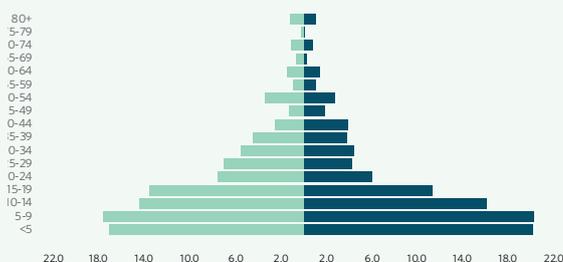
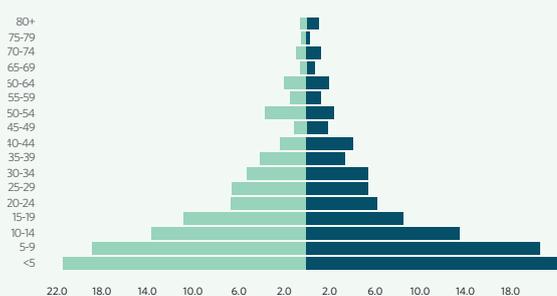
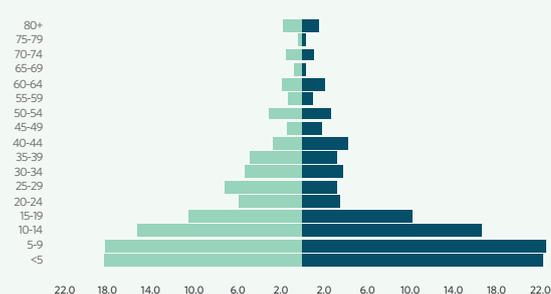
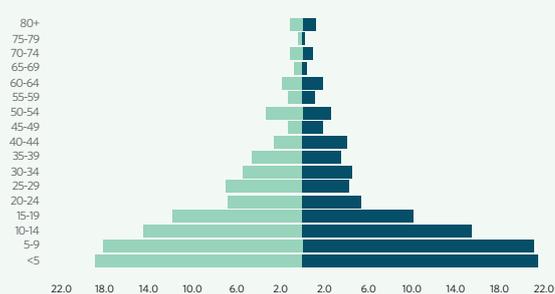
The PLHDS collected information on age in completed years for each household member. When the age was not known, interviewers inquired further for dates of birth in the Gregorian calendar/Somali historical calendar. Age was then calculated using conversion charts, specifically designed for this purpose.

Table 2.1 presents the distribution of the household members, by age, residence (urban, rural and nomadic) and sex. Forty-eight percent of the households were males while 52 percent were females.

Youth between 15-29 years of age constitute 22 percent of the household members, while the older persons (65 years and above) comprise of only 3 percent of the total household members. Forty-two percent of the household members are within the working age of 15-64 years, highlighting the need to create jobs and ensure that

**Figure 2.1**

Distribution of population by age and sex according to residence, PLHDS 2020

**Urban population distribution by age and sex**

**Nomadic population distribution by age and sex**

**Rural population distribution by age and sex**

**Total population distribution by age and sex**


training or education offered addresses the needs of the labour market.

Thirty-eight percent of female household members are within childbearing age (15-49 years), which is the same at the national level. This can have implications on Puntland and the country's future birth rates. The large number of potential mothers creates a population momentum and is a strong indication of a potential spike in population growth that Puntland is likely to experience in the coming years.

The age structure of the household members is typical of a society with a young population. Somalia has one of the highest fertility rates in the world. Like the rest of Somalia, Puntland has a broad-based age pyramid, with 62 percent of the household members below 18 years which is the same as the national level. The sex and age distribution of the household members is presented in the population pyramid (Figure 2.1).

The population pyramids in Figure 2.1 are in line with the national population pyramid which is typical of a developing country's population where there is high fertility and mortality, which, demographically, present a young population. There are more boys than girls among children under 15 years of age, and more women than men at older age groups. This is a pattern observed universally, which is driven by the sex ratio at birth (under normal circumstances around 105 boys are born for every 100 girls) and by the sex differences in mortality as women generally have lower death rates compared to men.

Regardless of the type of residence, the age pyramids in Figure 2.1 sharply taper to become narrower above the age of 55, this indicates high mortality rates among older age groups. Like the rest of Somalia, the Puntland population is demographically very young, with around two-thirds of the population aged below 20 years of age and around three-quarters at 78 percent aged below 30 years.

## Household Composition

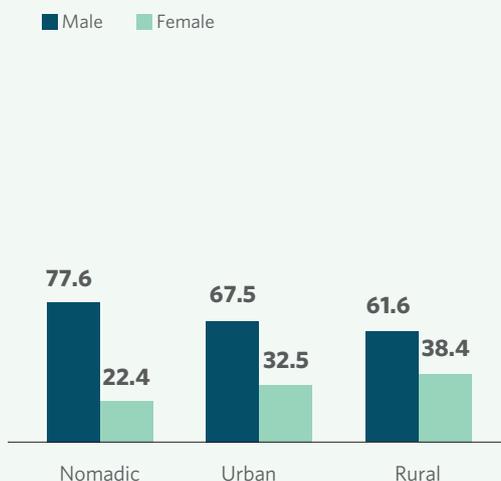
Table 2.2 shows the distribution of households covered in Puntland by the sex of the head of household and the number of household members, according to urban, rural and nomadic residences. Thirty-one percent of households are headed by women, 33 percent in urban households, 38 percent in rural households, and 22 percent in nomadic households) (Figure 2.2). The region with the highest percent of female headed households is Mudug at 34 percent while the least is Nugaal at 27 percent.

The average household size is 6 persons, compared to 6.2 persons at the national level. Urban households, which have 6.6 persons



**Figure 2.2**

Household headship



Percent distribution of households by sex of head of household and type of residence

## 6

### the average household size in Puntland

per household, are slightly larger than rural households, with 5.8 persons per household. Nomadic households have the lowest average household size with 5.4 persons. The average household size varies modestly among the regions, ranging from 6.2 in Mudug, 6.1 in Nugaal and 5.7 in Sanaag.

Table 2.2 indicates that 32 percent of households have a foster child and/or orphaned children, 18 percent have foster children, 14 percent have single orphans and 5 percent have double orphans. There is a marginal difference in the number of households with foster children between the three Type of residence. Urban households have the highest proportion of foster and/orphaned children in their households at 33 percent, followed by rural and nomadic households at 31 percent for each. Among the regions, Mudug has the highest share of households with foster and/orphaned children at 37 percent while Bari has the least at 24 percent.

## Education

The level of education is a critically important characteristic, as it affects behaviour, including health-related behaviours and choices made in relation to reproduction, contraceptive use, child health, and hygiene. Access to education is considered a human right that inherently influences the development of a country. It is one of the key national responses that would guarantee orphans and children from vulnerable backgrounds equal access to better lives as they grow up.

### Educational Attainment

Information on educational attainment of male and female household members aged six and above is presented in Table 2.3a and Table 2.3b. The survey results indicate that educational attainment varies across age groups. The age group with the lowest number of people with no education is 15-19 among male household members at 14 percent and 15-19 among female household members at 17 percent.

Among the male household members, those in the age group 45-49 have more people at 19 percent with completed secondary education. Female household members show slight variations across different age groups with those in age cohorts 15-19 and those in 45-49 being more likely to have completed secondary education at 11 percent and 13 percent compared to the other age groups.

Nine percent of males in the urban have completed secondary education compared to 6 and 1 percent among the rural and nomadic residents respectively. Six percent of males in Mudug have

**Access to education is considered a human right that inherently influences the development of a country**

completed secondary education compared to 5 percent in Sool. Six percent of women in urban have completed secondary education while less than one percent in the nomadic have completed secondary education. Women in Sool and Sanaag are least likely to complete secondary education at 3 percent and Mudug has the highest percent of women with secondary education at 6 percent.

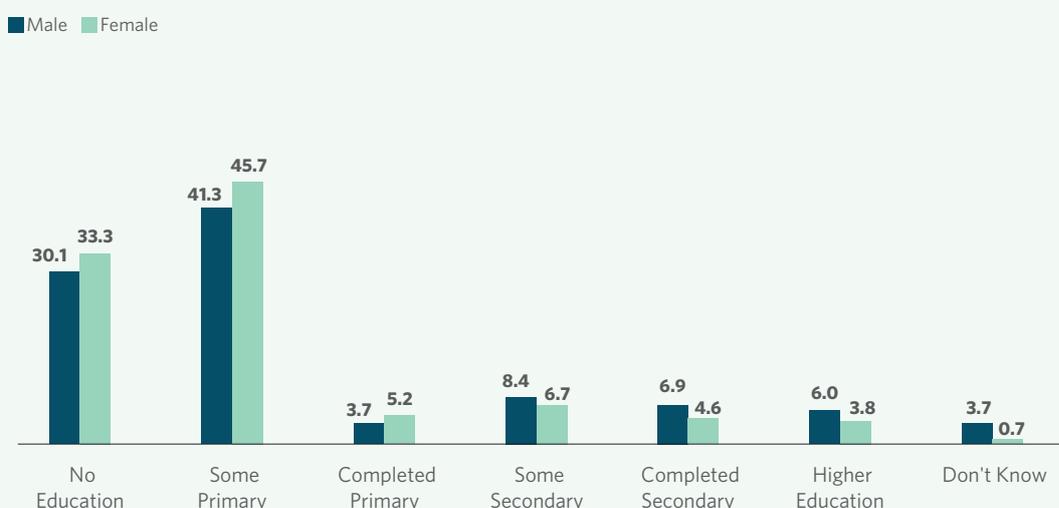
Figure 2.3 compares educational attainment by sex. Educational attainment is higher for men than it is for women. Overall, 30 percent of men and boys aged 6 and above have never been to school, compared to 33 percent of women and girls aged 6 and above. Forty-six percent of female household members and 41 percent of the male household members have had some primary education. Twenty-one percent of men have attended secondary or higher schooling, compared to 16 percent of women.

The chances of progression to higher education are slightly better for urban dwellers compared to people living in rural and nomadic areas, as educational facilities are concentrated in the urban centres. Nomadic household members are the most disadvantaged in terms of accessing education.

Seventy-six percent of males residing in the nomadic areas have no education compared to 27 and 22 percent among rural and urban male residents respectively. Among the females, 82 percent of nomadic residents have no education compared to 33 and 26 percent among rural and urban residents respectively.

**Figure 2.3**

Educational attainment by sex

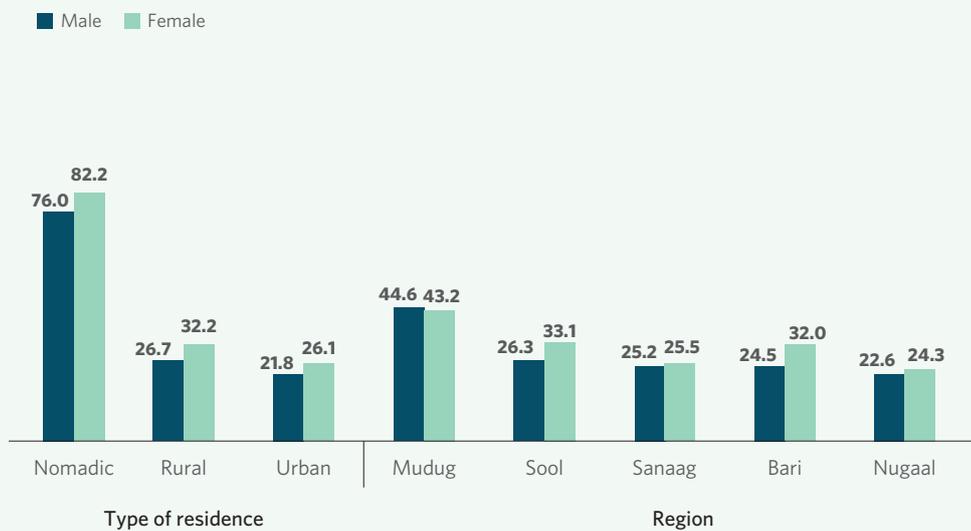


Percent distribution of the de facto male and female populations aged six and over by educational attainment



**Figure 2.4**

Educational attainment by sex



Percent distribution of the de facto male and female populations aged six and over with no education by region and type of residence

Regionally Mudug has the highest proportion of males with no education at 45 percent while Nugaal has the least at 23 percent. Among the females, those residing in Mudug have the highest level of those with no education at 43 percent while those in Nugaal have the least percent of those with no education at 24 percent (Figure 2.4).

### School Attendance Ratios

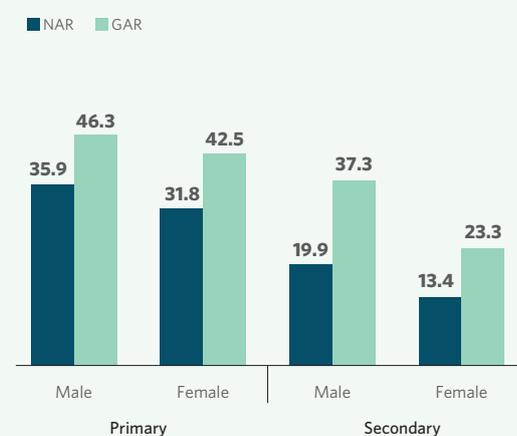
Table 2.4 presents data on net attendance ratios (NARs) and gross attendance ratios (GARs) by school level, sex, and place of residence. The NAR is the percentage of the school-age population that attends primary school (age 6-13) or secondary school (age 14 -17). The GAR for primary schooling is measured as the total number of primary school students relative to the official primary-school-age population; similarly, GAR for secondary schooling relates to the number of secondary school students relative to the official secondary-school-age population. The GAR is nearly always higher than the NAR for the same level because the GAR includes participation by those who may be older or younger than the official age group for that level. A NAR of 100 percent would indicate that all those in the official age range for the specific level are attending school at that level. The GAR can exceed 100 if there is significant overage or under-age participation at a given level of schooling.

**76%**

of males residing in the nomadic areas have no education

Twenty-four percent of the total children attending primary school

**Figure 2.5**  
School attendance ratios



Net Attendance Ratio (NAR) and Gross Attendance Ratio (GAR) for the de facto household population by sex and level of schooling

are of the right age for that level. At secondary level, 8 percent of the total children attending are of the right age for that level.

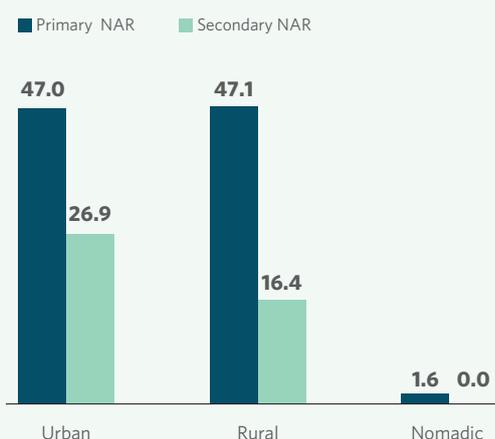
As shown in Figure 2.5 the NAR for boys is higher than that for girls at the primary level at 36 percent and 32 percent, respectively. Likewise, the NAR is higher for males than females at the secondary level at 20 percent and 13 percent, respectively.

The GAR is higher for males compared to females, at 46 and 43 percent respectively at the primary-school level, and 37 and 23 percent, respectively, at the secondary-school level, indicating higher school attendance among males than females.

Figure 2.6 shows that the NAR for primary level in urban areas is almost same as NAR in rural areas at 47 percent, the NAR for primary level among the nomadic household members is 2 percent. The NAR for secondary level is higher in urban areas at 27 percent than in rural areas at 16 percent, and nothing for nomadic household members.

Among the regions, the NAR for primary school is highest in Bari and Nugaal regions at 45 and 42 percent respectively while NAR for secondary is also highest in Nugaal and Bari at 25 and 18 percent respectively. The same indicators are lowest in Sool and Mudug regions for primary school 26 and 27 percent respectively and Sool and Sanaag regions for secondary school at 8 and 15 percent respectively.

**Figure 2.6**  
Total net attendance ratios



Total net attendance ratios by type of residence

## Housing Characteristics

### Water Supply

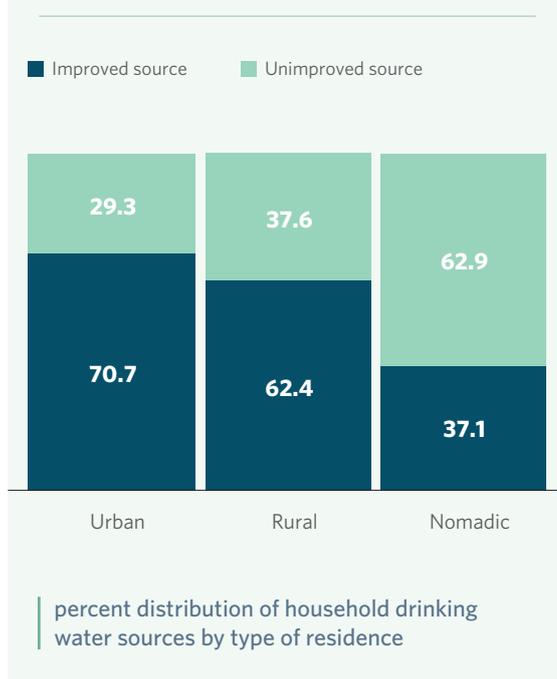
Access to clean drinking water is one of the Sustainable Development Goals (SDGs) and a target outlined in Somalia's National Development Plan (NDP) 9. The different types of water sources and sanitation facilities available to a population are important determinants of health, particularly among children. Good hygienic and sanitation practices can reduce exposure to and repercussions of preventable diseases. Conversely, poor quality of water and water scarcity also shape livelihood choices.

The source of drinking water for a household is an indicator of how safe it is to consume that water. Sources that are likely to provide uncontaminated water that is suitable for drinking are known as improved water sources (Table 2.5). These include piped water, protected dug wells, tube wells or boreholes, rainwater, and bottled water. The lack of ready access to a water source may limit the quantity of suitable drinking water that is available to a household. Even where water is obtained from an improved source,



**Figure 2.7**

Household drinking water sources



if it is fetched from a source that is not immediately accessible to a household, it may be contaminated during transportation or storage. By treating water effectively at home, families can improve the quality of household drinking water.

The prevalence of preventable, water-borne diseases such as diarrhoea and dysentery in Puntland can be reduced by introducing and using improved water sources that are readily available to the households. According to the survey, 58 percent of households get their drinking water from improved water sources. Seventy-one percent of urban households in Puntland have access to improved water sources, while 21 percent of rural households and 37 percent of nomadic households have access to improved water sources (Table 2.5a and Figure 2.7)

Regionally, Sool has the lowest proportion of households that obtain their drinking water from improved water sources at 21 percent compared to households in Mudug which have the highest proportion at 72 percent. Percentages of the households in Sanaag, Bari and Nugaal who get their drinking water from improved water sources are 42, 65 and 64 percent respectively.

Twenty-seven percent of household members have access to piped water into their dwelling, yard or plot. Nineteen percent of households have to travel for at least 30 minutes or more to get water. Nomadic household members spend more time getting water probably for longer distances due to water availability. Forty-four percent of nomadic households, 10 percent of rural and 7 percent of urban households travel more than 30 minutes, to access improved water sources.

As shown in Table 2.5b, only 8 percent of households in Puntland treat water before drinking, 11 percent of both urban and rural households. It is reported that nomadic households do not use any appropriate treatment methods for drinking water.

The most common method of water treatment is boiling, used by 5 percent of households, at 6 percent in urban households and 8 percent in rural settings. None of the nomadic households use bleaching/chlorination.

Among the regions, percentages of households using an appropriate treatment method were higher in Bari (at 10 percent), Nugaal (11 percent) and Mudug (at 9 percent) and lower in Sool and Sanaag at 3 percent each.

**The different types of water sources and sanitation facilities available to a population are important determinants of health, particularly among children**

## Sanitation Facilities

With adequate sanitation and means of disposal of human excreta, which are both fundamental needs and human rights—as well as with personal hygiene—people are assured of the ability to

**27%**

percent of household members have access to piped water into their dwelling, yard or plot

maintain their dignity and protection from various diseases.

The inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrhoeal diseases. Improved sanitation can reduce diarrheal disease by more than a third (Cairncross S., Hunt C., Boisson S., et al. 2010), and can significantly lessen the adverse health impacts of other disorders responsible for death and disease among millions of children in developing countries. An improved sanitation facility is defined as one that hygienically separates human excreta from human contact. Improved sanitation facilities for excreta disposal include flush or pour flush to a piped sewer system, septic tank, or pit latrine; ventilated improved pit latrine, pit latrine with slab, and use of a composting toilet. The PLHDS considers improved toilets as those that flush or pour flush into a piped sewer system or septic tank.

A household is classified as having an improved toilet if the toilet is used only by members of one household (i.e. it is not shared) and if the facility used by the household separates the waste from human contact as proposed by WHO and UNICEF (UNICEF 2012).

Table 2.6 shows that 54 percent of households in Puntland use sanitation facilities with basic sanitation services that would be considered as improved toilet facilities.

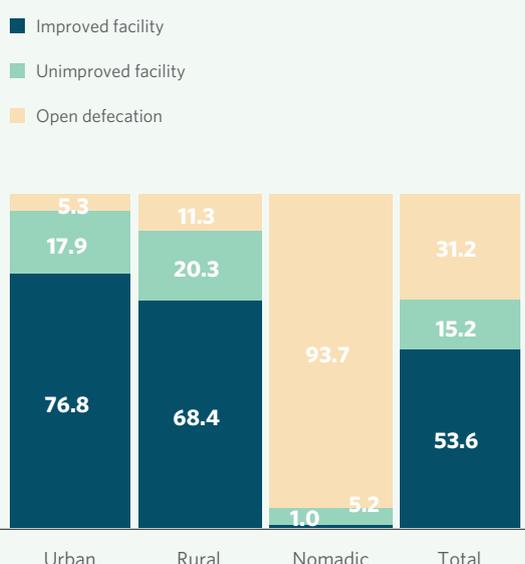
Access to improved sanitation facilities within households varies greatly between urban, rural and nomadic residences, as shown in Table 2.6. Majority of households in urban and rural areas have access to improved toilet facilities at 77 and 68 percent respectively, compared to nomadic households at one percent. Regionally, Nugaal has the highest proportion of households that use improved toilet facilities at 73 percent and Sool has the least at 27 percent.

As indicated in Figure 2.8, the prevalence and use of open defecation is higher in nomadic settings at 94 percent than in rural and urban settings at 11 and 5 percent respectively.

### Flooring Material, Lighting and Cooking Arrangements

Table 2.7 presents the distribution of households by dwelling characteristics and amenities. In Puntland, 34 percent of households use electricity compared to the national rate of 44 percent, with variations in geographical locations and type of residence. In urban areas, 70 percent of households use electricity for lighting, compared to 28 percent of rural households, and less than one percent in nomadic households.

**Figure 2.8**  
Household sanitation facilities



Percent distribution of households by type of toilet/latrine facilities in use and type of residence



The type of flooring used in a house can be indicative of the lifestyle its inhabitants have

The type of flooring used in a house can be indicative of the lifestyle its inhabitants have. Across Puntland, more than half of households have floors made of earth or sand at 51 percent. In urban residences 56 percent of households use ceramic tiles and cement for flooring, compared to 56 percent of rural households. Regionally, Nugaal has the highest proportion of households using ceramic tiles and cement for flooring at 70 percent while Mudug has the lowest proportion at 28 percent.

Firewood is the most common source of fuel used for cooking in nomadic and rural areas, at 94 and 68 percent respectively. In urban areas, 42 percent of households use charcoal for cooking, compared to 22 percent in rural areas and 2 percent in nomadic areas.

## Household Possessions

Information on the ownership of durable goods and other possessions is presented in Table 2.8. The availability of durable consumer goods is an indicator of a household's socioeconomic status and access to various benefits. For example, access to the radio can increase exposure to innovative ideas, whereas transport vehicles can provide access to services outside of the local area.

As shown in Figure 2.9, only 11 percent of households in Puntland own a television, and 66 percent own a mobile telephone.

Keeping up with technological advances and connecting with friends and family is a top priority in majority of households: Seventy-four percent of people living in urban households, 66 percent in rural households and 59 percent of nomadic households own simple mobile telephones.

Seventy-six percent of people living in Nugaal region use simple mobile telephones and 10 percent use internet. People in Sanaag had the least proportion of mobile phone ownership at 61 percent compared to other regions.

In addition to the above, 22 percent of urban households, 18 percent of rural households and 9 percent of nomadic households own radios as well (Figure 2.10).

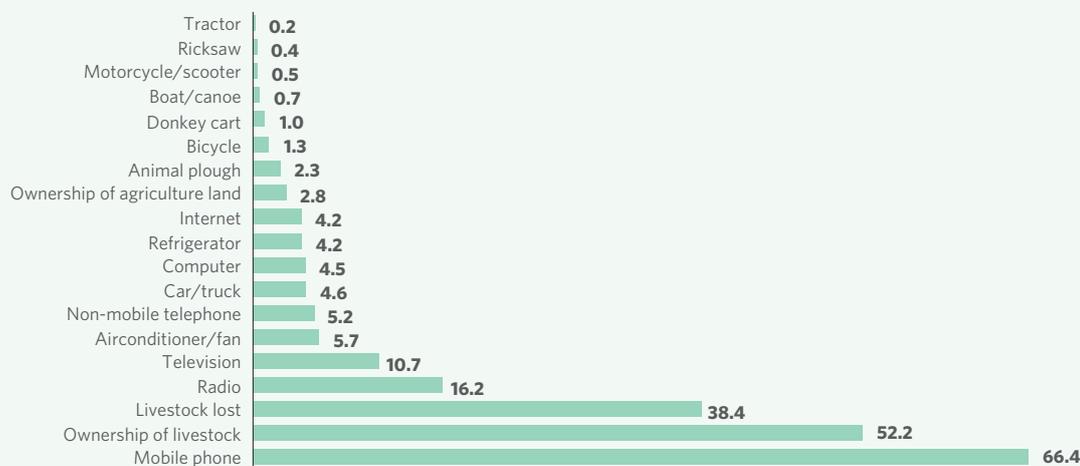
Eight percent of urban households own a car or truck. As is the case throughout the country, families in Puntland value livestock and regard them as assets: Almost all nomadic households own livestock at 95 percent while 46 percent of rural households and 17 percent of urban households own livestock.

**66%**

of households in Puntland own a mobile telephone

**Figure 2.9**

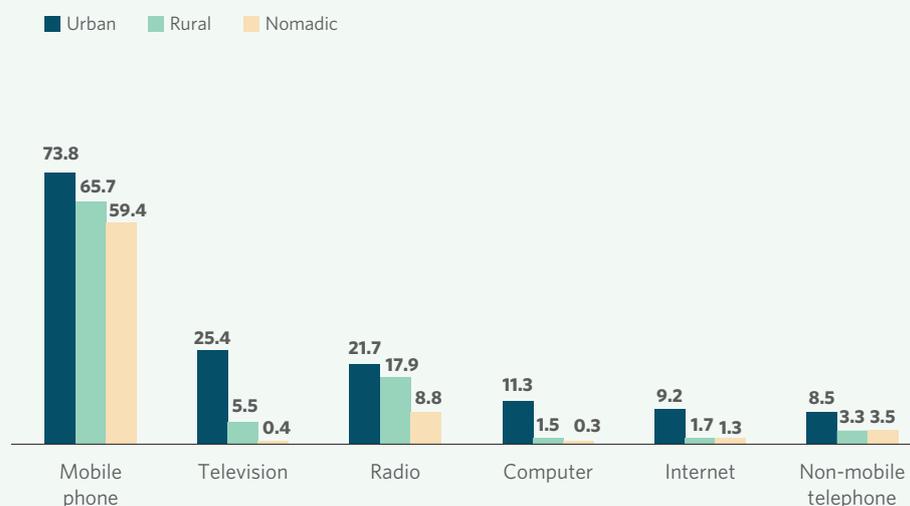
## Household possessions



## Percent of household possessions

**Figure 2.10**

## Household effects



## Percent of households effects ownership by type of residence

## Household Wealth

In addition to presenting standard background characteristics, many of the results in this report are shown by wealth quintiles, an indicator of the economic status of households. The PLHDS did not collect data on consumption or income, but the information



**95%**

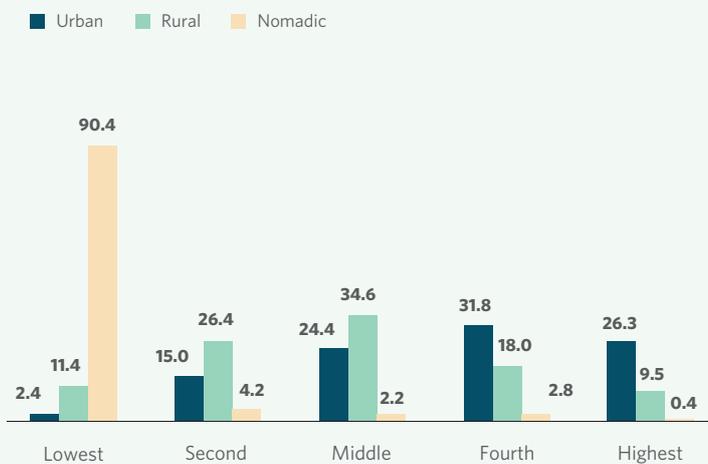
of nomadic households own livestock

collected on dwelling and household characteristics, consumer goods, and assets is used as a measure of socio-economic status. The resulting wealth index is an indicator of relative level of wealth that is used as a proxy for expenditure and income measures. Each household asset for which information is collected is assigned a 'weight' or 'factor score' generated through Principal Components Analysis (PCA). The resulting asset scores are standardized in relation to a standard normal distribution with a mean of zero and a standard deviation of one.

Table 2.9 shows the distribution of the household members into five wealth quintiles (five equally divided levels) based on the wealth index by place of residence and region. These distributions indicate the degree to which wealth is evenly (or unevenly) distributed across Puntland.

Figure 2.11 shows wealth quintile categories. As expected, according to the PLHDS findings, urban areas are wealthier than rural and nomadic areas. Within urban households, 26 percent belong to the highest wealth quintile, followed by 10 percent in rural areas and less than one percent in nomadic areas, indicating that the most affluent or wealthier households live in urban settings. Among the regions, Nugaal has the highest proportion of wealthier households at 22 percent, while Sanaag and Sool have the least proportion at 8 and 7 percent respectively.

**Figure 2.11**  
Wealth quintiles



Percent distribution of de-jure household members by wealth quintiles and type of residence

As expected, according to the PLHDS findings, urban areas are wealthier than rural and nomadic areas

## Birth Registration

The registration of births is the inscription of the facts of a birth into an official log. A birth certificate is issued as proof of the registration of birth. Information on the registration of births was collected in the household interview by asking whether children under the age of 5 had a birth certificate. If the interviewer was informed that the child did not have a birth certificate, then he/she probed further to ascertain whether the child's birth had been registered with the civil authority.

# 5%

of children under two years were registered and less than one percent had a birth certificate

Almost all children did not have a birth certificate. Five percent of children under two years were registered and less than one percent had a birth certificate. These figures may be significantly low due to the lack of civil registration and the lack of a vital statistics system in Puntland. The levels of registration were generally low and no significant variations were recorded across the regions and places of residence, as shown in Table 2.10.

The levels of registration were generally low and no significant variations were recorded across the regions and places of residence





**Table 2.1** Household population by age, sex, and residence

Background characteristics	Percent distributions of the de facto household population by various age groups and percentage of the de facto household population age 10-19, according to sex and residence, PLHDS 2020											
	Urban			Rural			Nomadic			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Age</b>												
<5	20.1	17.1	18.6	22.2	18.4	20.2	22.2	21.4	21.8	21.4	18.8	20.0
5-9	20.3	17.6	18.9	22.5	18.3	20.2	20.6	18.9	19.7	21.1	18.2	19.6
10-14	16.1	14.5	15.3	16.6	15.2	15.8	13.4	13.6	13.5	15.4	14.5	14.9
15-19	11.3	13.6	12.5	10.2	10.6	10.4	8.5	10.8	9.6	10.1	11.8	11.0
20-24	6.1	7.5	6.8	3.5	5.8	4.7	6.2	6.7	6.4	5.3	6.7	6.1
25-29	4.3	7.0	5.7	3.1	7.2	5.3	5.4	6.5	5.9	4.3	6.9	5.7
30-34	4.4	5.5	5.0	3.7	5.3	4.6	5.4	5.3	5.3	4.5	5.4	5.0
35-39	3.8	4.4	4.2	3.1	4.8	4.0	3.4	4.1	3.8	3.5	4.5	4.0
40-44	3.9	2.5	3.2	4.2	2.7	3.4	4.1	2.3	3.2	4.1	2.5	3.3
45-49	1.9	1.2	1.6	1.8	1.4	1.6	1.9	1.1	1.5	1.9	1.3	1.6
50-54	2.7	3.4	3.1	2.6	3.0	2.8	2.4	3.6	3.0	2.6	3.4	3.0
55-59	1.1	0.9	1.0	1.0	1.2	1.1	1.3	1.5	1.4	1.1	1.2	1.1
60-64	1.5	1.5	1.5	2.1	1.8	1.9	2.0	2.0	2.0	1.8	1.7	1.8
65-69	0.3	0.6	0.5	0.3	0.8	0.6	0.7	0.6	0.6	0.4	0.6	0.5
70-74	0.9	1.1	1.0	1.0	1.5	1.3	1.2	0.8	1.0	1.0	1.1	1.1
75-79	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.3
80+	1.0	1.1	1.1	1.5	1.7	1.6	1.0	0.6	0.8	1.2	1.2	1.2
<b>Total</b>	100	100	100	100	100	100	100	100	100	100	100	100
<b>Dependency Age Groups</b>												
0-14	56.6	49.2	52.7	61.3	51.9	56.3	56.3	53.9	55.1	57.9	51.4	54.5
15-64	41.1	47.8	44.6	35.4	43.8	39.9	40.6	43.7	42.2	39.2	45.3	42.4
65+	2.4	3.1	2.7	3.2	4.3	3.8	3.2	2.4	2.8	2.9	3.3	3.1
<b>Total</b>	100	100	100	100	100	100	100	100	100	100	100	100
<b>Child and adult populations</b>												
0-17	63.6	57.2	60.3	67.9	58.7	63.0	61.7	61.2	61.4	64.3	58.8	61.5
18+	36.4	42.8	39.7	32.1	41.3	37.0	38.3	38.8	38.6	35.7	41.2	38.5
<b>Total</b>	100	100	100	100	100	100	100	100	100	100	100	100
Adolescents 10-19	27.4	28.1	27.8	26.8	25.8	26.2	21.9	24.4	23.1	25.5	26.3	25.9
<b>Number of persons</b>	5,732	6,312	12,043	4,490	5,166	9,656	4,695	4,776	9,471	14,916	16,253	31,170

**Table 2.2** Household composition

Percent distribution of households by sex of head of household and by household size; mean size of household, and percentage of households with orphans and foster children under 18 years of age, according to residence PLHDS 2020

Background characteristics	Type of residence			Region of residence					Total
	Urban	Rural	Nomadic	Sool	Sanaag	Bari	Nugaal	Mudug	
<b>Household Headship</b>									
Male	67.5	61.6	77.6	67.8	69.8	70.4	72.8	66.1	69.0
Female	32.5	38.4	22.4	32.2	30.2	29.6	27.2	33.9	31.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of usual members</b>									
1	1.5	4.2	2.4	2.5	4.0	3.1	2.7	1.5	2.7
2	4.1	6.2	8.2	6.3	7.6	6.1	5.9	5.4	6.2
3	7.6	11.0	11.5	10.1	9.0	10.8	10.3	9.7	10.0
4	11.3	13.1	14.9	13.5	14.3	13.6	12.1	11.8	13.0
5	13.0	13.2	16.0	15.9	14.2	13.8	14.9	13.0	14.1
6	14.5	14.0	16.0	14.8	15.5	14.2	12.5	15.9	14.8
7	14.0	12.9	13.0	12.4	11.6	13.3	12.9	15.1	13.3
8	10.9	9.9	8.7	10.2	8.7	10.2	10.4	9.8	9.8
9+	23.0	15.5	9.3	14.2	14.9	14.9	18.2	17.9	16.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>99.9</b>	<b>100.0</b>	<b>99.9</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Mean size of households	6.6	5.8	5.4	5.8	5.7	5.8	6.1	6.2	5.9
<b>Percentage of households with orphans and foster children under 18</b>									
Foster children <sup>1</sup>	18.6	18.2	15.9	21.5	20.9	9.7	18.9	20.3	17.6
Double orphans	5.1	4.5	5.3	2.3	2.9	5.8	8.3	5.6	5.0
Single orphans <sup>2</sup>	16.0	13.7	13.5	13.4	12.4	13.7	15.9	16.3	14.4
Foster and/or orphan children	33.4	30.6	30.5	31.9	32.0	24.3	34.7	36.5	31.5
<b>Number of households</b>	<b>1,855</b>	<b>1,702</b>	<b>1,768</b>	<b>772</b>	<b>985</b>	<b>1,414</b>	<b>637</b>	<b>1,517</b>	<b>5,326</b>

Note: Table is based on de jure household members, i.e., usual residents

<sup>1</sup> Foster children are those under age 18 years of age living in households with neither their mother nor their father present

<sup>2</sup> Includes children with one dead parent and an unknown survival status of the other parent



**Table 2.3a** Educational attainment of the male household members

Percent distribution of the de facto male household members age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, PLHDS 2020

Background Characteristics	Educational attainment of the household members							Total	Number of males	Median years completed
	No Education	Some Primary	Completed Primary <sup>1</sup>	Some Secondary	Completed Secondary <sup>2</sup>	Higher Education	Don't Know			
<b>Age</b>										
6-9	51.9	48.1	0.0	0.0	0.0	0.0	0.0	100.0	1,184	2.0
10-14	23.7	71.6	2.0	2.7	0.0	0.0	0.0	100.0	1,554	4.0
15-19	14.0	34.6	8.0	26.2	12.2	4.2	0.8	100.0	969	8.0
20-24	18.7	15.9	3.8	21.3	18.4	20.0	2.0	100.0	386	11.0
25-29	22.6	14.5	7.3	13.3	12.3	21.7	8.3	100.0	272	11.0
30-34	32.2	17.8	3.8	4.1	12.6	19.7	9.9	100.0	258	12.0
35-39	37.2	17.8	4.6	6.4	13.1	7.1	13.9	100.0	201	9.0
40-44	28.4	11.6	9.0	4.7	14.5	12.3	19.6	100.0	239	11.8
45-49	33.2	13.0	6.2	6.0	18.7	8.0	14.8	100.0	94	12.0
50-54	35.5	17.4	6.2	3.7	13.9	15.7	7.5	100.0	151	12.0
55-59	33.4	14.4	0.0	1.9	14.7	19.3	16.3	100.0	58	12.0
60-64	39.1	8.6	5.9	1.5	8.6	11.2	25.1	100.0	79	12.0
65+	53.5	10.1	2.9	6.0	9.9	7.3	10.3	100.0	112	11.0
<b>Type of residence</b>										
Urban	21.8	41.5	4.1	11.2	8.6	9.2	3.5	100.0	2,900	7.0
Rural	26.7	50.1	4.1	7.0	6.1	3.1	3.0	100.0	1,989	5.0
Nomadic	76.0	14.1	0.9	0.8	1.4	0.3	6.4	100.0	670	3.0
<b>Regions</b>										
Sool	26.3	45.4	3.9	8.4	5.2	6.4	4.4	100.0	585	5.0
Sanaag	25.2	47.1	4.8	9.2	6.9	4.3	2.4	100.0	850	5.0
Bari	24.5	45.8	3.1	9.0	7.2	5.3	5.1	100.0	1,741	5.0
Nugaal	22.6	41.8	3.3	11.3	8.9	9.7	2.4	100.0	829	7.0
Mudug	44.6	31.1	3.9	5.9	6.0	5.4	3.1	100.0	1,553	6.0
<b>Total</b>	<b>30.1</b>	<b>41.3</b>	<b>3.7</b>	<b>8.4</b>	<b>6.9</b>	<b>6.0</b>	<b>3.7</b>	<b>100.0</b>	<b>5,558</b>	<b>6.0</b>

<sup>1</sup> Completed 8th grade at the primary level

<sup>2</sup> Completed 12th grade at the secondary level

**Table 2.3b** Educational attainment of the female household members

Percent distribution of the de facto female household members age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, PLHDS 2020

Background Characteristics	Educational attainment of the household members							Total	Number of females	Median years completed
	No Education	Some Primary	Completed Primary <sup>1</sup>	Some Secondary	Completed Secondary <sup>2</sup>	Higher Education	Don't Know			
<b>Age</b>										
6-9	47.9	52.1	0.0	0.0	0.0	0.0	0.0	<b>100.0</b>	833	3.0
10-14	25.6	68.8	3.4	2.2	0.0	0.0	0.0	<b>100.0</b>	1,446	4.0
15-19	17.4	36.6	9.6	20.2	11.1	4.5	0.6	<b>100.0</b>	987	8.0
20-24	20.6	31.3	6.7	13.3	9.1	18.4	0.7	<b>100.0</b>	455	9.0
25-29	35.3	33.7	8.5	3.1	8.5	9.2	1.6	<b>100.0</b>	399	7.0
30-34	35.2	41.4	5.5	5.4	5.1	4.8	2.6	<b>100.0</b>	268	6.0
35-39	43.1	39.7	6.1	1.8	6.0	2.7	0.6	<b>100.0</b>	170	5.0
40-44	55.0	25.7	4.2	4.2	8.0	0.0	3.0	<b>100.0</b>	78	4.0
45-49	46.5	14.8	9.3	4.8	12.5	6.9	5.2	<b>100.0</b>	44	9.0
50-54	39.3	18.8	14.8	8.6	8.9	7.9	1.7	<b>100.0</b>	98	8.0
55-59	62.0	15.5	6.7	0.0	5.6	1.4	8.9	<b>100.0</b>	42	6.3
60-64	38.4	31.6	13.6	5.5	4.1	0.0	6.8	<b>100.0</b>	30	4.0
65+	82.5	10.4	0.0	5.5	0.0	0.0	1.6	<b>100.0</b>	38	6.2
<b>Type of residence</b>										
Urban	26.1	45.3	6.3	9.3	6.3	6.1	0.6	<b>100.0</b>	2,747	6.0
Rural	32.2	53.7	4.6	4.5	3.2	1.3	0.5	<b>100.0</b>	1,873	4.0
Nomadic	82.2	14.8	0.7	0.0	0.0	0.2	2.2	<b>100.0</b>	450	3.0
<b>Region</b>										
Sool	33.1	51.8	3.8	5.4	2.5	2.8	0.6	<b>100.0</b>	570	4.0
Sanaag	25.5	53.8	5.9	8.7	2.7	2.6	0.7	<b>100.0</b>	707	5.0
Bari	32.0	48.2	5.4	6.0	4.1	3.2	1.0	<b>100.0</b>	1,489	5.0
Nugaal	24.3	47.7	4.5	8.3	5.4	8.9	0.9	<b>100.0</b>	801	6.0
Mudug	43.2	36.0	5.4	6.0	6.3	2.6	0.3	<b>100.0</b>	1,503	6.0
<b>Total</b>	<b>33.3</b>	<b>45.7</b>	<b>5.2</b>	<b>6.7</b>	<b>4.6</b>	<b>3.8</b>	<b>0.7</b>	<b>100.0</b>	<b>5,070</b>	<b>5.0</b>

<sup>1</sup> Completed 8th grade at the primary level

<sup>2</sup> Completed 12th grade at the secondary level



**Table 2.4** School attendance ratio

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household members by sex and level of schooling and Gender Parity Index (GPI)								
Background Characteristics	PRIMARY SCHOOL: Net Attendance Ratio <sup>1</sup>				PRIMARY SCHOOL: Gross Attendance Ratio <sup>2</sup>			
	Male	Female	Total	Gender Parity Index <sup>3</sup>	Male	Female	Total	Gender Parity Index <sup>3</sup>
<b>Primary</b>								
<b>Type of residence</b>								
Urban	49.5	44.4	47	0.9	63.3	59.6	61.5	0.9
Rural	49.4	44.7	47.1	0.9	63.3	58.7	61	0.9
Nomadic	2.2	1	1.6	0.4	3.8	2.2	3	0.6
<b>Region</b>								
Sool	28.9	24.3	26.6	0.8	38.7	32.8	35.7	0.8
Sanaag	34.7	31.5	33.1	0.9	45.9	38.8	42.4	0.8
Bari	44.4	38.8	41.7	0.9	55	47.9	51.5	0.9
Nugaal	46	44.1	45.1	1	58.4	61.4	59.9	1.1
Mudug	27.8	23.3	25.6	0.8	36.7	36	36.4	1.0
<b>Wealth</b>								
Lowest	7.3	5.7	6.5	0.8	10.5	8.6	9.6	0.8
Second	30.4	27.4	28.9	0.9	37.5	36.8	37.1	1.0
Middle	45.5	42.6	44	0.9	59.3	56.9	58.1	1.0
Fourth	56.4	48.5	52.8	0.9	71.2	64.2	68	0.9
Highest	66.2	59.5	62.8	0.9	85.6	78	81.7	0.9
<b>Total</b>	<b>35.9</b>	<b>31.8</b>	<b>33.9</b>	<b>0.9</b>	<b>46.3</b>	<b>42.5</b>	<b>44.4</b>	<b>0.9</b>
<b>Secondary</b>								
<b>Type of residence</b>								
Urban	32.0	22.7	26.9	0.7	60.5	40.1	49.3	0.7
Rural	21.1	12.6	16.4	0.6	37.7	20.9	28.4	0.6
Nomadic	0.0	0.0	0.0	0.0	1.2	0.0	0.5	0.0
<b>Region</b>								
Sool	9.9	6.2	8.0	0.6	21.8	12.6	17.2	0.6
Sanaag	14.4	14.8	14.5	1.0	30.0	24.2	27.3	0.8
Bari	21.9	14.8	18.3	0.7	45.3	25.1	35.0	0.6
Nugaal	34.9	16.8	25.0	0.5	56.5	33.5	44.0	0.6
Mudug	19.9	13.1	15.5	0.7	33.3	21.5	25.6	0.6
<b>Wealth</b>								
Lowest	0.5	0.8	0.6	1.7	1.9	1.2	1.5	0.7
Second	12.9	6.1	8.9	0.5	22.1	8.3	13.9	0.4
Middle	22.2	15.2	18.4	0.7	49.7	26.1	36.9	0.5
Fourth	29.0	18.4	23.4	0.6	52.4	32.2	41.8	0.6
Highest	46.3	33.0	38.6	0.7	79.2	59.3	67.8	0.7
<b>Total</b>	<b>19.9</b>	<b>13.4</b>	<b>16.3</b>	<b>0.7</b>	<b>37.3</b>	<b>23.3</b>	<b>29.6</b>	<b>0.6</b>

<sup>1</sup> The NAR for primary school is the percentage of the primary-school-age (6-13 years) population that is attending primary school.

The NAR for secondary school is the percentage of the secondary-school-age (14-18 years) population that is attending secondary school. By definition, the NAR cannot exceed 100 percent.

<sup>2</sup> The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary-school-age population.

The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary-school-age population. If there are significant numbers of overage and under-age students at a given level of schooling, the GAR can exceed 100 percent.

<sup>3</sup> The Gender Parity Index for primary school is the ratio of the primary school NAR (or GAR) for females to the NAR (or GAR) for males. The Gender Parity Index for secondary school is the ratio of the secondary school NAR (or GAR) for females to the NAR (or GAR) for males.

**Table 2.5a** Household drinking water

Percent distribution of households by source of drinking water and by time to obtain drinking water; percentage of households with basic drinking water service and percentage with limited drinking water service, according to residence, PLHDS , 2020

Background Characteristics	Type of residence			Region of residence					
	Urban	Rural	Nomadic	Sool	Sanaag	Bari	Nugaal	Mudug	Total
<b>Source of drinking water</b>									
<b>Improved source</b>	70.7	62.4	37.1	31.8	41.7	64.9	63.5	71.9	57.9
Piped water into dwelling/ yard/plot	49.3	26.7	0.1	2.2	4.2	26.0	36.2	51.0	27.3
Piped to neighbor	2.7	2.6	0.2	0.4	1.2	2.8	2.8	1.9	1.9
Public tap/ standpipe	3.2	2.7	0.2	0.4	1.5	4.4	3.6	0.7	2.1
Tube well/ borehole	2.3	4.2	2.3	3.8	3.9	2.9	2.9	1.9	2.9
Protected dug well	9.4	17.0	7.1	10.3	15.1	20.1	4.5	3.7	11.1
Protected spring	1.7	3.6	5.1	5.7	5.8	1.9	0.8	3.0	3.3
Rainwater	1.0	4.4	22.0	8.7	9.7	4.7	11.7	9.5	8.4
Bottled water	1.1	1.2	0.1	0.1	0.2	2.0	0.9	0.4	0.8
<b>Non-improved source</b>	29.3	37.6	62.9	68.2	58.3	35.1	36.5	28.1	42.1
Unprotected well	4.6	10.1	34.5	25.4	20.4	9.9	7.4	15.8	15.4
Unprotected spring	0.6	1.6	9.7	7.1	5.6	1.2	2.0	3.9	3.7
Tanker truck/cart with drum	21.2	20.7	9.3	26.8	27.5	20.5	18.7	3.5	17.4
Water Kiosk	0.2	0.7	0.3	1.5	0.0	0.2	1.0	0.0	0.4
Surface water	0.5	3.2	6.8	4.6	2.5	0.4	5.6	4.6	3.3
Others	1.6	0.9	1.9	2.1	1.5	2.5	1.6	0.2	1.5
Missing	0.4	0.4	0.3	0.6	1.0	0.3	0.0	0.1	0.4
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Time to obtain drinking water (round trip)</b>									
Water on premises	73.7	61.9	10.2	23.8	28.5	62.6	65.4	60.7	50.7
Less than 30 minutes	16.5	25.8	42.9	42.0	36.5	28.2	23.6	15.8	27.4
30 minutes or longer	7.2	9.5	43.9	25.4	32.0	7.6	10.4	22.1	19.1
DK/Missing	2.6	2.7	3.0	8.9	3.0	1.6	0.6	1.5	2.7
<b>Drinking Water Service</b>									
Basic drinking water service	67.6	57.8	20.7	21.2	29.9	60.8	58.8	64.2	50.3
Percentage with limited drinking water service	2.3	3.6	14.7	7.9	10.3	3.0	4.2	7.5	6.5
Number of households	12,365	10,032	9,804	4,619	5,779	8,372	3,954	9,476	32,201
<sup>1</sup> Includes water piped to a neighbor and those reporting a round trip collection time of zero minutes <sup>2</sup> Defined as drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less Includes safely managed <sup>3</sup> Drinking water from an improved source, provided round-trip collection time is more than 30 minutes									



**Table 2.5b** Treatment of household drinking water

Percent distribution of households by using various methods to treat drinking water, and percentage using an appropriate treatment method, according to residence, PLHDS 2020

Water treatment Method	Type of residence			Region of residence					
	Urban	Rural	Nomadic	Sool	Sanaag	Bari	Nugaal	Mudug	Total
<b>Water treatment prior to drinking</b>									
Boiled	6.1	7.9	0.0	1.8	2.3	5.2	5.5	7.1	4.8
Bleach/chlorine added	5.6	3.5	0.0	1.8	0.9	5.5	5.4	2.5	3.3
Strained through cloth	0.1	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.1
Ceramic, sand or other filter	0.5	0.2	0.0	0.1	0.0	0.7	0.3	0.0	0.2
Solar disinfection	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Let it stand and settle	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Other treatment	0.5	1.1	0.0	0.2	0.7	0.6	0.8	0.5	0.6
No treatment	87.0	88.0	98.0	95.3	95.9	87.9	86.6	89.3	90.6
Don't Know	12.4	11.8	2.0	4.4	4.1	11.6	13.0	10.3	9.0
Percentage using an appropriate treatment method <sup>1</sup>	11.1	10.5	0.0	2.8	3.0	9.7	10.8	9.3	7.5
<b>Number of households</b>	<b>12,311</b>	<b>9,994</b>	<b>9,775</b>	<b>4,591</b>	<b>5,724</b>	<b>8,344</b>	<b>3,952</b>	<b>9,468</b>	<b>32,080</b>

Respondents may report multiple treatment methods so the sum of treatment may exceed 100 percent.

<sup>1</sup> Appropriate water treatment methods include boiling, bleaching, straining, filtering and solar disinfecting

This table is for population only, household section is missing and regional comparison is also missing

**Table 2.6** Household sanitation facilities

Percent distribution of households by type of toilet/latrine facilities, percent distribution of households with a toilet/latrine facility by location of the facility, percentage of households with basic sanitation services, and percentage with limited sanitation services, according to residence, PLHDS 2020

Type of toilet/latrine facility	Households			Region of residence					Total
	Urban	Rural	Nomadic	Sool	Sanaag	Bari	Nugaal	Mudug	
<b>Improved facility</b>	76.8	68.4	1.0	27.2	36.6	61.5	73.2	60.6	53.6
Flush/pour to piped sewer system	5.7	5.4	0.0	1.1	3.7	4.5	2.1	6.2	4.1
Flush/pour to septic tank	7.2	5.7	0.0	0.7	2.6	5.9	2.8	7.8	4.8
Flush/pour to a pit latrine	40.3	35.0	0.3	9.7	10.3	40.0	41.7	30.0	27.8
Ventilated improved pit (VIP) latrine	6.8	10.2	0.1	4.7	9.8	7.3	4.4	4.2	6.0
Pit latrine with a slab	16.7	12.0	0.6	11.0	10.2	3.8	22.2	12.4	10.9
<b>Non-improved facility</b>	17.9	20.3	5.2	17.5	16.1	22.3	10.5	9.7	15.2
Flush to some where else	2.0	2.8	0.4	0.4	0.0	4.0	1.4	1.8	1.8
Flush/pour flush, don't know where	0.2	0.9	0.1	0.0	0.0	0.8	0.2	0.5	0.4
Pit latrine without slab/ Open latrine	14.5	15.0	2.0	14.1	13.2	15.5	7.1	7.0	11.3
Bucket toilet	0.6	1.3	0.4	2.3	0.5	0.6	1.2	0.2	0.8
Hanging toilet/hanging latrine	0.4	0.1	0.0	0.4	0.0	0.3	0.0	0.2	0.2
Others	0.3	0.3	2.3	0.3	2.4	1.2	0.6	0.0	0.8
<b>Open Defecation</b>	5.3	11.3	93.7	55.4	47.4	16.3	16.3	29.8	31.2
Percentage with basic sanitation service <sup>1</sup>	56.6	49.9	0.6	20.3	30.1	42.1	47.2	47.8	39.3
Percentage with limited sanitation service <sup>2</sup>	20.2	18.5	0.5	6.9	6.5	19.3	26.1	12.8	14.3
Number of households	95,586	70,014	61,884	32,035	39,504	58,048	29,721	68,176	227,484
<b>Location of the facility</b>									
In own dwelling	47.6	29.1	10.1	48.2	36.7	26.8	40.5	47	37.9
In own Yard/Plot	38.9	49.2	18.3	30.8	45	49.5	33.8	42.3	42.7
Else Where	13.5	21.8	71.5	21	18.2	23.8	25.7	10.7	19.4
Number of households	1276	1103	91	229	313	841	378	709	2470

<sup>1</sup> Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown separately.

<sup>2</sup> Defined as use of improved facilities shared by 2 or more household.



**Table 2.7** Household characteristics and social amenities

Percent distribution of households by housing characteristics, percentage using solid fuel for cooking; and percent distribution by frequency of smoking in the home, according to residence, PLHDS 2020

Housing Characteristics	Type of residence			Region of residence					Total
	Urban	Rural	Nomadic	Sool	Sanaag	Bari	Nugaal	Mudug	
<b>Electricity</b>									
Yes	70.4	28.4	0.1	21.4	26.7	46.4	48.0	34.2	35.9
No	29.6	71.6	99.9	78.6	73.3	53.6	52.0	65.8	64.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Flooring material</b>									
Earth/Sand	31.0	38.9	86.8	56.3	56.7	37.7	17.7	68.8	50.5
Dung	0.9	0.4	0.7	0.3	0.4	1.5	0.3	0.4	0.7
Grass	1.3	1.5	7.9	7.0	3.0	3.4	6.4	0.5	3.4
Wooden Planks	1.2	0.9	0.2	0.4	0.1	1.4	1.3	0.8	0.8
Palm/Bamboo	1.4	1.4	3.1	2.8	0.3	2.4	2.6	1.7	1.9
Parquet/Polished wood	0.1	0.4	0.0	0.0	0.1	0.3	0.4	0.0	0.2
Vinyl/Asphalt Strips	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0
Ceramic Tiles	11.1	2.7	0.0	5.5	3.2	4.1	9.9	5.0	5.1
Cement	51.0	53.0	0.5	27.1	35.9	46.4	59.8	22.1	36.2
Carpet	1.8	0.6	0.6	0.1	0.2	2.7	0.8	0.6	1.0
Others	0.2	0.1	0.2	0.4	0.0	0.0	0.7	0.1	0.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>99.9</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Flooring material</b>									
One	27.5	42.6	94.0	66.0	55.5	48.2	45.2	50.9	52.5
Two	30.9	38.7	5.9	17.8	24.8	31.6	25.2	25.1	25.7
Three or more	41.6	18.7	0.1	16.2	19.8	20.2	29.6	24.0	21.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Place for cooking</b>									
In the house	44.5	35.1	9.7	24.2	30.1	33.9	39.5	28.7	31.0
In a separate building	37.1	35.4	9.7	27.0	23.5	31.0	27.9	29.3	28.2
Outdoors	17.9	29.1	78.2	48.0	44.8	34.2	32.3	40.7	39.8
Others	0.5	0.4	2.3	0.8	1.6	0.9	0.3	1.2	1.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Cooking fuel</b>									
Electricity	4.6	0.5	0.0	2.0	0.9	1.6	4.6	1.7	1.9
LPG/natural gas/ biogas	12.0	3.0	0.1	1.1	1.6	11.1	11.3	2.8	5.6
Kerosene	4.2	2.2	0.3	1.3	0.8	5.1	0.1	2.4	2.4
Firewood	35.4	68.4	94.3	74.9	69.5	60.8	59.7	58.8	63.6
Charcoal	42.1	22.0	2.2	20.4	23.7	18.5	21.5	30.6	23.7
Straw/shrubs/grass	0.3	1.7	0.0	0.0	0.0	0.0	0.0	2.2	0.6
Agricultural crop	1.3	2.0	2.7	0.3	3.3	2.5	2.5	1.3	2.0
Animal dung	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
No food cooked in the household	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2
Other	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Percentage using solid fuel for cooking <sup>1</sup>	79.0	94.2	99.3	95.5	96.5	81.9	83.7	92.9	89.9
Percentage using clean fuel for cooking <sup>2</sup>	16.6	3.5	0.1	3.1	2.5	12.8	15.9	4.5	7.5
<b>Household Members</b>	<b>12,311</b>	<b>9,994</b>	<b>9,775</b>	<b>4,591</b>	<b>5,724</b>	<b>8,344</b>	<b>3,953</b>	<b>9,468</b>	<b>32,080</b>

LPG = Liquid petroleum gas

<sup>1</sup>Includes coal/lignite, charcoal, wood, straw/shrubs/grass, agricultural crops, and animal dung

<sup>2</sup>Includes electricity and LPG/natural gas/biogas

**Table 2.8** Household possessions

Percentage of households possessing various household effects, means of transportation, PLHDS 2020									
Possessions	Type of residence			Region of residence					
	Urban	Rural	Nomadic	Sool	Sanaag	Bari	Nugaal	Mudug	Total
<b>Household effects</b>									
Radio	21.7	17.9	8.8	8.9	7.2	19.0	19.3	21.8	16.2
Television	25.4	5.5	0.4	6.6	7.2	12.9	16.0	11.0	10.7
Refrigerator	9.9	2.4	0.1	3.3	2.2	3.5	9.5	4.5	4.2
Mobile phone	73.8	65.7	59.4	67.1	61.3	63.3	75.5	68.6	66.4
Non-mobile telephone	8.5	3.3	3.5	3.6	2.3	6.8	8.0	5.2	5.2
Computer	11.3	1.5	0.3	2.0	1.6	4.5	10.7	5.0	4.5
Internet	9.2	1.7	1.3	1.9	2.1	4.1	10.1	4.2	4.2
Air conditioner/ Fan	13.2	2.0	1.4	3.1	1.3	6.7	12.2	6.2	5.7
<b>Means of transport</b>									
Bicycle	2.4	0.2	1.2	0.5	0.7	1.8	2.6	1.2	1.3
Motorcycle/ scooter	1.1	0.0	0.2	0.1	0.2	0.6	0.5	0.7	0.5
Donkey cart	1.2	0.2	1.6	1.7	0.5	1.0	0.5	1.3	1.0
Car/truck	7.5	4.7	1.6	2.9	3.6	4.6	9.5	4.1	4.6
Boat /Canoe	0.6	0.6	0.8	0.3	0.4	1.2	0.7	0.4	0.7
Tractor	0.4	0.1	0.2	0.2	0.2	0.4	0.1	0.2	0.2
Rickshaw	1.1	0.1	0.1	0.6	0.1	0.2	0.6	0.8	0.4
Animal plough	0.6	0.4	6.0	2.8	1.7	1.4	1.8	3.7	2.3
<b>Ownership of agriculture land</b>	2.1	4.5	2.0	3.2	3.2	4.6	3.4	0.5	2.8
<b>Ownership of livestock<sup>1</sup></b>	16.9	46.3	94.7	69.0	68.7	30.6	40.2	57.9	52.2
<b>Livestock lost<sup>1</sup></b>	11.8	33.8	70.6	62.9	52.4	17.4	26.5	41.3	38.4
<b>Number of households</b>	1,855	1,702	1,768	772	985	1,414	637	1,517	5,326

<sup>1</sup>Camels, cattle, sheep, goats, horses, donkeys, poultry.



**Table 2.9** Wealth quintiles

Percent distribution of de-jure household members by wealth quintiles and the Gini coefficient, according to residence and region, PLHDS 2020								
Residence/region	Wealth quintile					Total	Number of persons	Gini coefficient
	Lowest	Second	Middle	Fourth	Highest			
<b>Type of residence</b>								
Urban	2.4	15.0	24.4	31.8	26.3	100.0	8,146	0.4
Rural	11.4	26.4	34.6	18.0	9.5	100.0	6,645	0.5
Nomadic	90.4	4.2	2.2	2.8	0.4	100.0	6,389	0.4
<b>Region</b>								
Sool	52.9	13.1	14.4	13.1	6.6	100.0	2,994	0.3
Sanaag	50.8	7.0	15.5	18.8	8.0	100.0	3,744	0.3
Bari	12.8	23.1	27.8	21.7	14.6	100.0	5,501	0.3
Nugaal	14.5	12.6	27.1	24.3	21.5	100.0	2,684	0.4
Mudug	34.4	15.7	18.7	16.4	14.9	100.0	6,258	0.3
<b>Total</b>	<b>31.8</b>	<b>15.3</b>	<b>20.9</b>	<b>18.7</b>	<b>13.2</b>	<b>100.0</b>	<b>21,181</b>	<b>0.3</b>

**Table 2.10** Birth registration of children under age five

Percentage of de jure children under five years of age whose births are registered with the civil authorities, according to background characteristics, PLHDS 2020

Background characteristics	Children whose births are registered			Number of children
	Percentage who had birth certificate	Percentage who did not have birth certificate	Percentage registered	
<b>Age</b>				
<2	0.3	4.5	4.7	2,217
2-4	0.3	4.2	4.5	4,058
<b>Sex</b>				
Male	0.4	4.3	4.6	3,211
Female	0.2	4.3	4.5	3,064
<b>Type of residence</b>				
Urban	0.6	6.1	6.7	2,248
Rural	0.2	5.0	5.2	1,967
Nomadic	0.0	1.6	1.6	2,060
<b>Regions</b>				
Sool	0.7	4.7	5.4	924
Sanaag	0.5	3.8	4.3	1,084
Bari	0.3	6.4	6.7	1,531
Nugaal	0.1	3.7	3.8	738
Mudug	0.0	3.0	3.0	1,998
<b>Total</b>	<b>0.3</b>	<b>4.3</b>	<b>4.6</b>	<b>6,275</b>



CHAPTER 3

# Characteristics of the Respondents



# Key Findings

## EDUCATIONAL ATTAINMENT



**74%**

percent of women aged 15-49 have never attended school at all.

## LITERACY



**33%**

percent of women aged 15-49 in Puntland are literate.

## ACCESS TO MEDIA



**88%**

percent of women aged 15-49 have no access to newspapers, radio, or television at least once a week.

## INTERNET USE



**17%**

percent of women aged 15-49 had used the internet at least once.

## EMPLOYMENT



**8%**

of ever-married women aged 15-49 were currently employed

## HEALTH INSURANCE



**99.7%**

percent of ever-married women aged 15-49 do not have health insurance





# 3

## Chapter 3

# Characteristics of the Respondents

This chapter presents information on the individual demographic and socioeconomic characteristics of the survey respondents who were interviewed in Puntland for the SHDS 2020. For information presented in this chapter, enumerators administered questions to never-married and ever-married women. Questions on educational attainment, literacy, exposure to mass media and internet use were administered to both never-married and ever-married women, whereas questions on employment status, occupation, health insurance coverage and use of tobacco were only administered to ever-married women.

This information is useful in understanding the factors that affect the life of women in the reproductive age group and provides a context for the interpretation of demographic and health indicators.

## Background Characteristics of Respondents

Information on the background characteristics of women aged 15-49 interviewed in the PLHDS 2020 is presented in Table 3.1. by age, marital status, type of residence, education and wealth quintile. Thirty percent of women were aged 15-19 - 79 percent of never married women and 8 percent of ever married women were aged 15-19.

Sixty percent of women were currently married while 31 percent had never been married, 6 percent were divorced or separated and 3 percent were widowed.

More women lived in nomadic than urban and rural areas. Thirty-six percent of all women resided in nomadic areas whereas rural and urban had 32 percent.

Educational attainment among the respondents in Puntland was low; 74 percent of all women had never attended school compared to 75 percent nationally. Eighty-two percent of ever-married women had no education compared to 57 percent of never-married women.

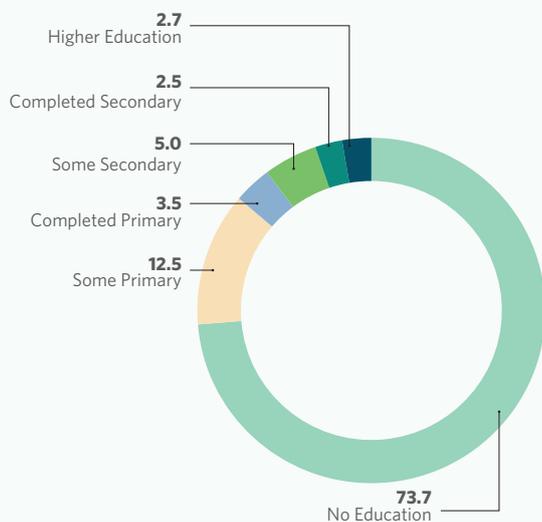
Eighteen percent of ever-married women and 28 percent of never-married women were from the wealthiest households.

# 82%

of ever-married women  
had no education

**Figure 3.1**

Educational attainment



Percent distribution of women aged 15-49 by highest level of schooling attended or completed

## Educational Attainment

Table 3.2 presents the distribution of women aged 15-49 by educational attainment and median years of schooling completed according to background characteristics.

The findings show that educational attainment among women in Puntland is very low. Overall, 74 percent of women aged 15-49 have not attended any formal schooling. Thirteen percent of women have some levels of primary education, but only 4 percent completed primary schooling. Moreover, 5 percent of women attended secondary school, but only 3 percent completed secondary education. Three percent of the respondents have completed higher levels of education (Figure 3.1).

Educational attainment decreases as the age of the women increases except for age group 45-49. The percentage of women who have some level of primary education is highest among women aged 15-19 at 17 percent and lowest among women aged 40-44 and 45-49 at 5 and 4 percent respectively.

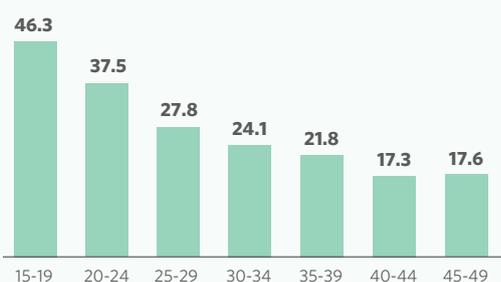
The differences in educational attainment among women aged 15-49 in urban, rural and nomadic areas is pronounced. Ninety-seven percent of the women living in nomadic areas have never attended formal schooling compared to 71 percent in rural areas and 56 percent in urban areas.

There are significant differences across regions. Percentage of women who have attended at least some secondary education is highest in Nugaal at 8 percent, followed by Mudug at 6 percent and lowest in Sool at 3 percent.

Educational attainment increases with increasing levels of wealth. The proportion of women with no education is highest in the lowest wealth quintile at 96 percent and lowest in the highest wealth quintile at 45 percent.

**Figure 3.2**

Literacy



Percent of women aged 15-49 by literacy and age

## Literacy

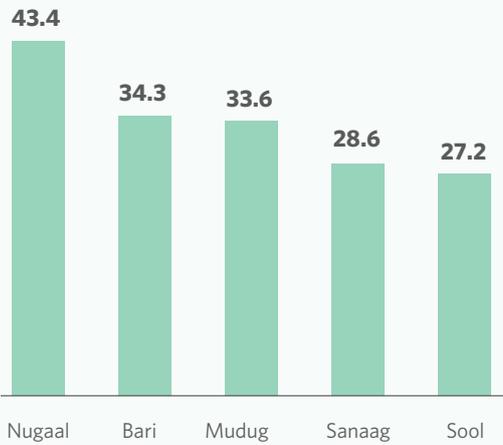
Adult literacy is defined as the percentage of the population aged 15 years and over who are both able to read and write, with an understanding, a short simple statement on their everyday lives (UNESCO Institute for Statistics, 2013).

The PLHDS 2020 assessed literacy levels among women aged 15-49 who had never been to school or who had primary or secondary levels of education by asking them to read all or part of a sentence in English or Somali. Anyone who could read a sentence in any other language was also considered a literate person. Those with a higher level of education were assumed to be literate without administering a reading test. Table 3.3 presents the literacy of the



**Figure 3.3**

Literacy by geographical area



Percent of women aged 15-49 by literacy and region

**88%**

of the respondents did not access any of the three forms of media—newspaper, radio and television—at least once a week.

**Exposure to media increases with both education and wealth.**

respondents by background characteristics. The table shows that 33 percent of women in Puntland aged 15-49 are literate.

As shown in Figure 3.2, literacy levels generally decrease with age; literacy is highest among women aged 15-19 at 46 percent and lowest among those aged 40-44 at 17 percent.

Literacy among women aged 15-49 varies by place of residence. Fifty-two percent of women living in urban areas are literate compared to 39 percent in rural areas. Nomadic areas have the lowest proportion of literate women at 7 percent. Regionally women's literacy is highest in Nugaal at 43 percent, followed by Bari and Mudug at 34 percent each and lowest in Sanaag and Sool at 29 percent and 27 percent respectively.

Further analysis by wealth levels show that literacy levels increase with wealth status. Women from wealthier households are more literate at 66 percent compared to women from poorer households at 8 percent.

## Exposure to Mass Media

The PLHDS 2020 collected information on the exposure of respondents to both broadcast and print media for Puntland. Respondents were asked how often they read a newspaper, watch television, or listen to the radio. This information indicates the extent to which women are regularly exposed to mass media and can be used in the development of educational programmes, to convey messages to the public about government policies, disseminate health information, report the opinions of people on health issues and other societal matters, as well as serve as a tool to observe public sentiments on important issues.

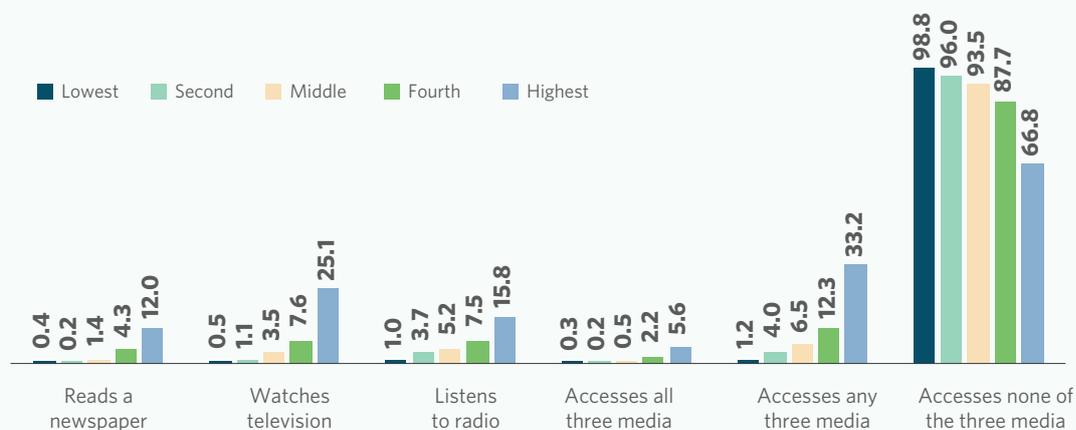
Table 3.4 shows that 88 percent of the respondents did not access any of the three forms of media—newspaper, radio and television—at least once a week. Watching television was the most common use of media—8 percent of the respondents in Puntland watch television at least once a week compared to the national level at 11 percent (SHDS 2020); 7 percent listen to the radio at least once a week; and 4 percent read newspapers at least once a week.

Exposure to media increases with both education and wealth. While less than one percent of the respondents with no education read a newspaper at least once a week, 38 percent of the respondents with higher education do so. Similarly, while 3 percent of respondents with no education watch television at least once a week, 47 percent of the respondents with higher education watch television at least once a week.

Figure 3.4 presents the percentage of women aged 15-49 exposed to mass media by wealth quintile. Less than one percent of the

**Figure 3.4**

Exposure to mass media

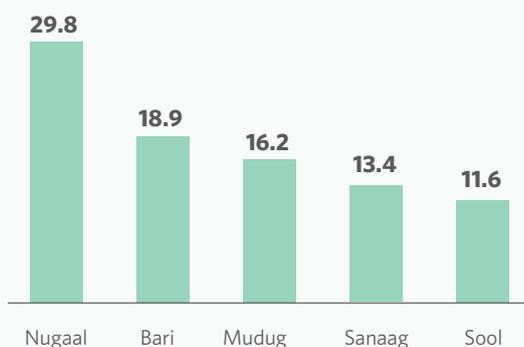


Percent of women aged 15-49 who are exposed to specific media on a weekly basis by wealth status

respondents in the lowest wealth quintile watch television at least once a week, compared to 25 percent in the highest quintile. Likewise, 1 percent of the respondents in the lowest quintile listen to the radio at least once a week, compared to 16 percent in the highest quintile, however this figure does not include those who listen to the radio through their mobile telephone which is a common practice.

**Figure 3.5**

Internet use by geographical area



Percent of women aged 15-49 who have ever used the internet by region

## Internet Use

Globally, women are 23 percent less likely than men to use mobile internet. In Sub-Saharan Africa, women are 41 percent less likely than men to use mobile internet (Broadband Commission for Sustainable Development, 2019). The internet is an important tool for accessing information. Furthermore, studies have shown that women use the internet more often for health-related information searches than men. When their access is hindered, chances are women are slower to have access to important information for their families.

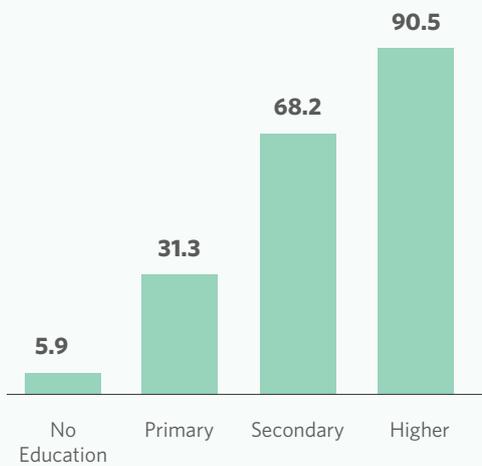
The PLHDS collected information about women’s use of the internet: women aged 15-49 were asked whether they had ever used the internet and, if they had, whether they used it in the 12 months preceding the survey. Interviewers also enquired how often women had used the internet in the month preceding the survey.

Table 3.5 shows that 17 percent of the respondents had used the internet at least once and 15 percent had used the internet in the past 12 months preceding the survey.



**Figure 3.6**

Internet use



Percent of women aged 15-49 who have ever used the internet by education level

Use of the internet generally decreases with increase in age; 24 percent of women aged 15-19 had used the internet, compared to 5 percent of women aged 40-44.

Thirty-four percent of women living in urban areas had used the internet at least once, compared to 12 percent and one percent of women living in rural and nomadic areas respectively.

Women in Sool and Sanaag regions had the least percentage of ever used internet - 13 and 12 percent and used internet in the past 12 months - 12 and 11 percent respectively. Thirty percent of women in Nugaal and 19 percent of women in Bari had ever used the internet while 16 percent of women in Mudug had used the internet (Figure 3.5).

Internet usage also increases with educational attainment and wealth status. Ninety-one percent of women with higher education had ever used the internet, compared to 6 percent of women with no education (Figure 3.6). Moreover, 46 percent of women in the highest quintile had ever used the internet, compared to one percent of women in the lowest wealth quintile.

## Employment Status

In the PLHDS 2020, ever-married women aged 15-49 were asked about their employment status in the seven days preceding the survey, as well as whether they had done any work in the 12 months prior to the survey. Respondents were categorized as currently employed if they had worked in the seven days preceding the survey. Table 3.6 shows the employment status of ever-married women by background characteristics.

The employment status of the respondents was low. Eight percent of ever-married women in Puntland were currently employed at the time the survey was conducted, while one percent were not currently employed but had worked in the 12 months preceding the survey. Ninety-one percent of the respondents had not done any work in the 12 months prior to the survey.

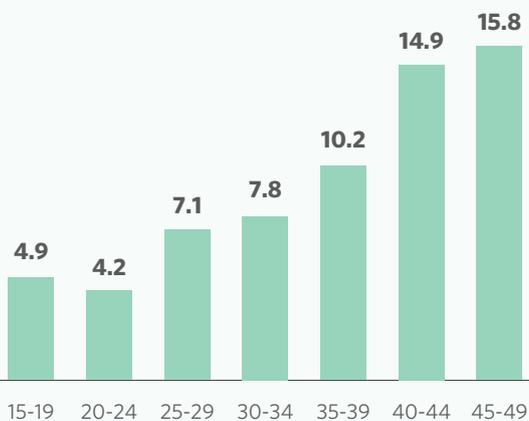
Employment varies by number of living children— 6 percent for women with no living children and 5 percent of those with one to two children, 8 percent for those with three to four children and 11 percent for women with 5 or more children.

The proportion of ever-married women who are currently employed increases with age except age group 15-19; it is lowest among ever-married women aged 20-24 at 4 percent and highest among those aged 45-49 at 16 percent (Figure 3.7).

Employment varies by place of residence, regions and wealth status

**Figure 3.7**

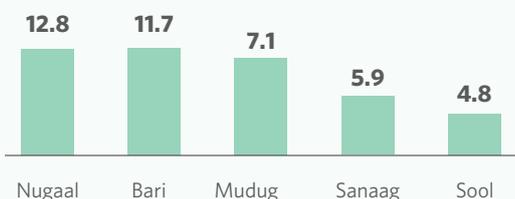
Employment status



Percent of ever-married women aged 15-49 currently employed by age

**Figure 3.8**

Employment status by geographical area



Percent of ever-married women aged 15-49 currently employed by region

of the household. Among women from nomadic areas, 2 percent were currently employed, compared to 13 percent and 10 percent of women from urban and rural areas respectively. More women from wealthier households were employed than in poorer ones; 13 percent of women in the highest quintile were currently employed compared to 3 percent of women in the lowest wealth quintile.

Among the regions, Sool had least percentage of women employed at 5 percent while Nugaal and Bari had highest percentages of women employed, at 13 and 12 percent respectively (Figure 3.8).

### Type of Employment

Table 3.7 shows the distribution of ever-married women aged 15-49 who were employed in the 12 months preceding the survey by type of earnings and employer, as well as continuity of employment, by whether their work is agricultural or non-agricultural.

**91%**

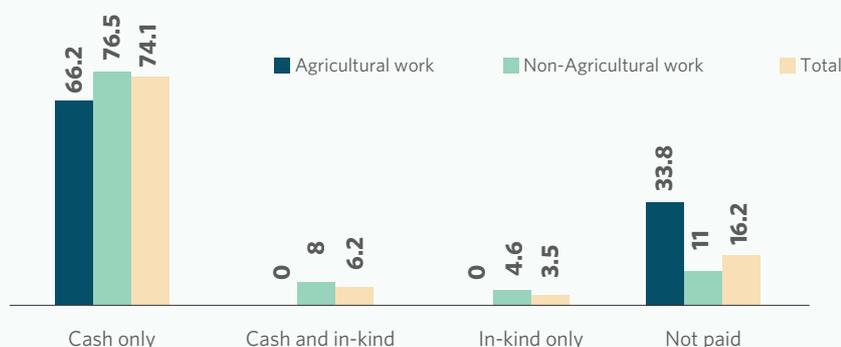
of the respondents had not done any work in the 12 months prior to the survey

Overall, 74 percent of the respondents were paid in cash only while 16 percent were not paid for their work. Sixty-six percent of the respondents working in agriculture were paid in cash only for their work, while 34 percent were not paid at all. Women in non-agricultural work were mainly paid in cash only at 77 percent, whereas 8 percent were paid in cash and in kind, 5 percent were paid in kind only and 11 percent were not paid (Figure 3.9).

Fifty-two percent of the currently employed women aged 15-49 were self-employed. Forty-nine percent of women in agricultural

**Figure 3.9**

Type of employment and earnings



Percent of ever-married women aged 15-49 employed in the 12 months preceding the survey by type of earnings



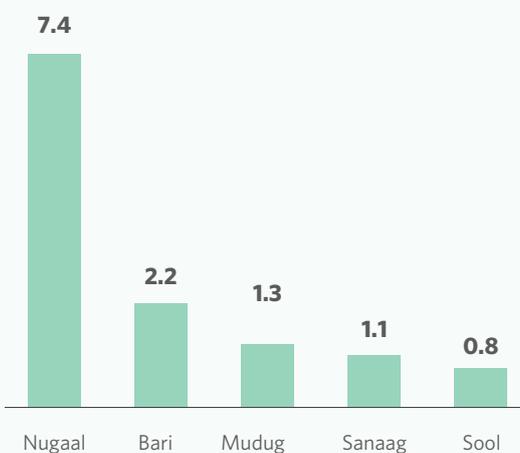
# 99.7%

did not have health insurance

Women who smoke are more likely than non-smokers to experience infertility and delays in conceiving.

**Figure 3.10**

Use of tobacco



Percent of ever-married women aged 15-49 who use any type of tobacco by region

work were employed by a family member. Over half of women engaged in non-agricultural work were self-employed at 52 percent.

Sixty percent of women aged 15-49 were employed all year round. Both women engaged in agricultural and non-agricultural work were mostly employed all year round at 68 and 58 percent respectively.

## Health Insurance Coverage

The World Health Organization (WHO) considers health insurance a promising means for achieving universal health care coverage (WHO, 2010).

In the SHDS 2020, ever-married women aged 15-49 were asked whether they were covered by health insurance and the type of health insurance they were using. Table 3.8 presents the distribution of health insurance coverage. The survey shows that almost all women (99.7 percent) did not have health insurance.

## Use of Tobacco

Tobacco use and second-hand smoke (SHS) exposure during pregnancy have adverse health effects on women and infants. Women who smoke are more likely than non-smokers to experience infertility and delays in conceiving. Maternal smoking during pregnancy increases risks of prematurity, stillbirth, and neonatal death and may cause a reduction in breast milk (WHO, 2010).

Ever-married women aged 15-49 were asked about their smoking habits. Table 3.9 shows the distribution of cigarette smokers and the percentage of women who use various types of tobacco by background characteristics.

Overall, 3 percent of ever-married women smoke cigarettes or use any type of tobacco. There is a slight variation among women of various age groups. Three percent of women in all age groups except 30-34, 40-44 and 45-49 use any type of tobacco.

Figure 3.10 shows that 4 percent of women in urban and rural areas use any type of tobacco compared to 1 percent of women in nomadic areas. The figure also indicates that Bari region has the highest proportion of women who use any type of tobacco at 7 percent.

The World Health Organization (WHO) considers health insurance a promising means for achieving universal health care coverage





**Table 3.1** Birth registration of children under age five

Percentage of all women aged 15-49 by selected background characteristics, PLHDS 2020

Background characteristics	Marital Status								
	Ever married Women			Never married women			Women		
	Weighted percentage	Weighted number	Unweighted number	Weighted percentage	Weighted number	Unweighted number	Weighted percentage	Weighted number	Unweighted number
<b>Age</b>									
15-19	8.2	304	304	79.1	1,346	1,306	30.4	1,651	1,610
20-24	17.6	657	655	15.9	270	296	17.1	928	951
25-29	23.9	889	886	3.4	58	68	17.5	947	954
30-34	19.3	720	725	1.0	17	19	13.6	737	744
35-39	16.5	615	615	0.2	3	3	11.4	619	618
40-44	9.0	336	338	0.4	6	6	6.3	342	344
45-49	5.4	202	205	N/A	N/A	N/A	3.7	202	205
<b>Marital status</b>									
Never Married	N/A	N/A	N/A	100.0	1,701	1,698	31.4	1,701	1,698
Married	86.6	3,226	3,253	N/A	N/A	N/A	59.5	3,226	3,253
Divorced	8.8	328	317	N/A	N/A	N/A	6.0	328	317
Widowed	4.6	171	158	N/A	N/A	N/A	3.2	171	158
<b>Type of residence</b>									
Urban	28.3	1,055	1,137	40.0	681	773	32.0	1,736	1,910
Rural	32.9	1,227	1,168	30.5	518	471	32.2	1,745	1,639
Nomadic	38.7	1,443	1,423	29.5	502	454	35.8	1,945	1,877
<b>Education</b>									
No Education	82.4	3,068	3,063	57.0	969	937	74.4	4,037	4,000
Primary	13.1	487	495	22.6	385	400	16.1	872	895
Secondary	3.2	118	124	16.0	271	267	7.2	390	391
Higher	1.4	51	46	4.4	75	94	2.3	127	140
<b>Wealth quintile</b>									
Lowest	22.4	835	899	16.3	278	265	20.5	1,113	1,164
Second	20.8	774	732	13.5	230	221	18.5	1,004	953
Middle	17.3	644	629	18.5	315	284	17.7	959	913
Fourth	21.3	795	788	24.2	411	425	22.2	1,206	1,213
Highest	18.2	677	680	27.5	467	503	21.1	1,144	1,183
<b>Total</b>	<b>100.0</b>	<b>3,725</b>	<b>3,728</b>	<b>100.0</b>	<b>1,701</b>	<b>1,698</b>	<b>100.0</b>	<b>5,426</b>	<b>5,426</b>

Note: Education categories refer to the highest level of education attended, whether or not that level was completed  
n/a = Not applicable

**Table 3.2** Educational attainment

Percent distribution of all women aged 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, PLHDS 2020									
Background Characteristics	Educational attainment of the household members						Total	Median years completed	Number of women
	No Education	Some Primary	Completed Primary <sup>1</sup>	Some Secondary	Completed Secondary <sup>2</sup>	Higher Education			
<b>Age</b>									
15-19	60.8	16.5	5.9	11.0	3.7	2.0	100.0	0.0	1,666
20-24	68.6	12.9	3.4	5.7	2.8	6.6	100.0	0.0	926
25-29	77.8	11.4	3.3	1.8	2.3	3.5	100.0	0.0	956
30-34	81.1	12.4	2.2	1.7	1.3	1.2	100.0	0.0	734
35-39	86.6	9.5	0.9	0.3	1.6	1.1	100.0	0.0	619
40-44	91.7	5.1	1.1	0.9	1.2	0.0	100.0	0.0	345
45-49	89.0	4.2	2.0	1.1	2.0	1.7	100.0	0.0	180
<b>Type of residence</b>									
Urban	55.9	17.1	6.0	9.8	5.1	6.1	100.0	0.0	2,102
Rural	71.0	17.6	4.0	4.4	1.9	1.2	100.0	0.0	1,524
Nomadic	96.8	2.9	0.2	0.0	0.1	0.1	100.0	0.0	1,800
<b>Region</b>									
Sool	78.8	12.5	2.7	3.1	1.2	1.8	100.0	0.0	742
Sanaag	77.2	11.3	3.3	4.6	1.7	2.1	100.0	0.0	990
Bari	73.1	13.1	2.8	4.4	3.7	3.0	100.0	0.0	1,254
Nugaal	61.0	15.6	4.5	8.2	4.0	6.7	100.0	0.0	554
Mudug	74.1	11.9	4.2	5.5	2.3	2.1	100.0	0.0	1,886
<b>Wealth quintile</b>									
Lowest	96.2	3.2	0.4	0.0	0.0	0.2	100.0	0.0	1,166
Second	91.3	7.6	0.7	0.2	0.3	0.0	100.0	0.0	868
Middle	77.7	14.2	2.8	3.9	1.1	0.4	100.0	0.0	1,003
Fourth	65.6	17.7	4.4	6.5	3.5	2.3	100.0	0.0	1,154
Highest	44.5	18.6	8.3	12.7	6.6	9.2	100.0	4.0	1,235
<b>Total</b>	<b>73.7</b>	<b>12.5</b>	<b>3.5</b>	<b>5.0</b>	<b>2.5</b>	<b>2.7</b>	<b>100.0</b>	<b>0.0</b>	<b>5,426</b>

<sup>1</sup> Completed 8th grade at the primary level

<sup>2</sup> Completed 12th grade at the secondary level



**Table 3.3** Literacy: Women

Percent distribution of women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, PLHDS 2020

Background Characteristics	No schooling or primary school or Secondary						Total	Percentage literate <sup>1</sup>	Number of women
	Higher Education	Can read a whole sentence	Can read part of the sentence	Cannot read at all	No card with required language	Blind/visually impaired			
<b>Age</b>									
15-24	3.6	22.6	16.9	56.1	0.4	0.3	100.0	43.2	2,592
15-19	1.9	27.3	17.1	53.2	0.3	0.2	100.0	46.3	1,666
20-24	6.6	14.3	16.6	61.4	0.6	0.5	100.0	37.5	926
25-29	3.5	8.0	16.5	70.2	1.5	0.4	100.0	28.0	956
30-34	1.2	8.3	14.5	74.4	1.2	0.3	100.0	24.1	734
35-39	1.1	4.7	16.1	76.1	1.9	0.2	100.0	21.8	619
40-44	0.0	4.1	13.1	81.3	1.4	0.0	100.0	17.3	345
45-49	1.7	6.1	9.9	79.8	2.3	0.3	100.0	17.6	180
<b>Type of residence</b>									
Urban	6.1	24.0	21.5	47.3	0.8	0.4	100.0	51.6	2,102
Rural	1.1	15.6	21.9	61.1	0.3	0.1	100.0	38.6	1,524
Nomadic	0.1	2.0	4.4	91.3	1.9	0.4	100.0	6.5	1,800
<b>Region</b>									
Sool	1.8	11.3	14.2	71.6	0.3	0.9	100.0	27.2	742
Sanaag	2.1	15.5	11.0	68.9	2.0	0.5	100.0	28.6	990
Bari	3.0	14.1	17.3	65.6	0.1	0.0	100.0	34.3	1,254
Nugaal	6.7	12.2	24.5	54.6	1.2	0.7	100.0	43.4	554
Mudug	2.0	15.8	15.9	65.1	1.3	0.0	100.0	33.6	1,886
<b>Wealth quintile</b>									
Lowest	0.1	2.5	5.5	90.1	1.2	0.6	100.0	8.1	1,166
Second	0.0	3.9	6.8	88.2	1.2	0.0	100.0	10.6	868
Middle	0.4	10.3	19.1	69.8	0.4	0.0	100.0	29.8	1,003
Fourth	2.3	19.5	20.8	56.0	1.0	0.4	100.0	42.7	1,154
Highest	9.2	31.4	25.2	32.9	1.1	0.3	100.0	65.8	1,235
<b>Total</b>	<b>2.7</b>	<b>14.4</b>	<b>15.9</b>	<b>65.7</b>	<b>1.0</b>	<b>0.3</b>	<b>100.0</b>	<b>33.0</b>	<b>5,426</b>

<sup>1</sup> Refers to women who attended higher education and women who can read a whole sentence or part of the sentence

**Table 3.4** Exposure to mass media

Percentage of all women aged 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, PLHDS 2020

Background characteristics	Reads a newspaper at least once a week	Watches television at least once a week	Listens to radio at least once a week	Accesses all three media at least once a week	Accesses any three media at least once a week	Accesses none of the three media at least once a week	Number of women
<b>Age</b>							
15-19	6.7	10.4	7.5	3.2	14.9	85.1	1,666
20-24	4.8	9.0	6.6	1.7	12.0	88.0	926
25-29	2.7	7.3	6.8	1.3	11.4	88.6	956
30-34	2.7	7.3	8.1	2.0	12.0	88.0	734
35-39	2.1	4.2	5.8	0.7	8.4	91.6	619
40-44	0.0	6.3	4.3	0.0	7.9	92.1	345
45-49	1.4	11.0	9.3	1.4	15.4	84.6	180
<b>Type of residence</b>							
Urban	8.3	18.0	13.4	4.0	25.1	74.9	2,102
Rural	2.7	4.3	5.0	1.3	7.6	92.4	1,524
Nomadic	0.1	0.2	1.1	0.0	1.3	98.7	1,800
<b>Region</b>							
Sool	0.7	6.0	1.3	0.2	7.0	93.0	742
Sanaag	2.3	6.5	3.3	1.3	8.4	91.6	990
Bari	5.7	11.4	13.5	2.6	19.3	80.7	1,254
Nugaal	6.2	13.7	11.1	3.6	18.0	82.0	554
Mudug	4.5	6.4	5.5	1.9	10.0	90.0	1,886
<b>Education</b>							
No Education	0.5	3.4	3.5	0.2	5.8	94.2	3,997
Primary	7.4	15.0	11.2	3.7	21.9	78.1	873
Secondary	18.8	28.0	20.4	8.6	36.9	63.1	411
Higher	37.9	46.6	39.8	20.6	62.9	37.1	145
<b>Wealth quintile</b>							
Lowest	0.4	0.5	1.0	0.3	1.2	98.8	1,166
Second	0.2	1.1	3.7	0.2	4.0	96.0	868
Middle	1.4	3.5	5.2	0.5	6.5	93.5	1,003
Fourth	4.3	7.6	7.5	2.2	12.3	87.7	1,154
Highest	12.0	25.1	15.8	5.6	33.2	66.8	1,235
<b>Total</b>	<b>4.0</b>	<b>8.3</b>	<b>7.0</b>	<b>1.9</b>	<b>12.3</b>	<b>87.7</b>	<b>5,426</b>



**Table 3.5** Internet use

Percentage of women aged 15-49 who have ever used the Internet, and percentage who have used the Internet in the past 12 months; and among women who have used the internet in the past 12 months, percent distribution by frequency of Internet use in the past month, according to background characteristics, PLHDS 2020

Background characteristics	Ever used the internet	Used the internet in the past 12 months	Number of women	Among women who have used the internet in the past 12 months, percentage who, in the past month, used the internet				Total	Number of women
				Almost every day	At least once a week	Less than once a week	Not at all		
<b>Age</b>									
15-19	23.8	22.0	1,666	61.2	25.2	6.1	7.5	100.0	366
20-24	25.4	23.3	926	62.4	21.0	7.5	9.2	100.0	216
25-29	15.5	13.5	956	72.0	18.8	5.4	3.8	100.0	129
30-34	9.3	9.0	734	64.6	20.0	2.5	13.0	100.0	66
35-39	7.2	5.5	619	(59.0)	(7.0)	(10.4)	(23.6)	100.0	34
40-44	4.8	3.6	345	*	*	*	*	100.0	13
45-49	7.3	4.5	180	*	*	*	*	100.0	8
<b>Type of residence</b>									
Urban	34.4	31.9	2,102	64.8	21.7	5.5	7.9	100.0	670
Rural	11.9	9.9	1,524	60.9	21.2	7.5	10.4	100.0	151
Nomadic	1.0	0.6	1,800	*	*	*	*	100.0	11
<b>Region</b>									
Sool	13.4	12.0	742	75.3	14.2	3.1	7.5	100.0	89
Sanaag	11.6	11.0	990	60.2	26.1	7.6	6.1	100.0	109
Bari	18.9	16.0	1,254	49.8	33.2	6.7	10.3	100.0	200
Nugaal	29.8	28.4	554	73.6	11.3	5.2	9.8	100.0	157
Mudug	16.2	14.6	1,886	64.7	19.6	6.8	8.9	100.0	276
<b>Education</b>									
No Education	5.9	5.0	3,997	49.4	23.9	9.9	16.8	100.0	199
Primary	31.3	27.3	873	61.7	24.0	7.1	7.2	100.0	238
Secondary	68.2	65.1	411	67.7	20.7	5.1	6.6	100.0	268
Higher	90.5	87.7	145	79.1	15.2	0.9	4.7	100.0	127
<b>Wealth quintile</b>									
Lowest	1.0	0.7	1,166	*	*	*	*	100.0	8
Second	1.7	0.8	868	*	*	*	*	100.0	7
Middle	10.0	8.5	1,003	39.2	24.3	10.1	26.4	100.0	85
Fourth	19.2	17.0	1,154	64.6	20.7	6.9	7.8	100.0	196
Highest	46.4	43.3	1,235	68.0	21.4	4.9	5.7	100.0	535
<b>Total</b>	<b>17.0</b>	<b>15.3</b>	<b>5,426</b>	<b>63.3</b>	<b>21.6</b>	<b>6.2</b>	<b>8.9</b>	<b>100.0</b>	<b>831</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

**Table 3.6** Employment status

Percent distribution of ever-married women aged 15-49 by employment status, according to background characteristics, PLHDS 2020					
Background characteristics	Employed in the 12 months preceding the survey			Total	Number of ever married women
	Currently employed <sup>1</sup>	Not currently employed	Not employed in the 12 months preceding the survey		
<b>Age</b>					
15-19	4.9	0.3	94.8	100.0	300
20-24	4.2	0.8	94.9	100.0	633
25-29	7.1	0.5	92.4	100.0	889
30-34	7.8	1.1	91.1	100.0	717
35-39	10.2	1.4	88.4	100.0	616
40-44	14.9	2.8	82.3	100.0	339
45-49	15.8	3.7	80.6	100.0	180
<b>Number of living children</b>					
0	6.2	2.1	91.7	100.0	428
1-2	5.4	1.0	93.6	100.0	858
3-4	8.4	1.2	90.4	100.0	1,039
5+	10.5	1.0	88.5	100.0	1,351
<b>Type of residence</b>					
Urban	13.0	1.5	85.5	100.0	1,271
Rural	9.9	1.9	88.2	100.0	1,074
Nomadic	2.3	0.3	97.4	100.0	1,330
<b>Region</b>					
Sool	4.8	0.1	95.1	100.0	527
Sanaag	5.9	0.6	93.5	100.0	720
Bari	11.7	3.6	84.7	100.0	870
Nugaal	12.8	1.3	85.9	100.0	372
Mudug	7.1	0.3	92.6	100.0	1,186
<b>Education</b>					
No Education	7.4	1.2	91.4	100.0	3,011
Primary	9.8	0.7	89.5	100.0	481
Secondary	10.7	2.8	86.6	100.0	135
Higher	(37.8)	(0.0)	(62.2)	100.0	49
<b>Wealth quintile</b>					
Lowest	2.5	0.3	97.3	100.0	859
Second	6.3	1.1	92.6	100.0	666
Middle	11.8	1.9	86.2	100.0	685
Fourth	9.0	1.2	89.8	100.0	748
Highest	12.6	1.7	85.7	100.0	717
<b>Total</b>	8.2	1.2	90.6	100.0	3,675

<sup>1</sup>Currently employed' is defined as having done work in the seven days preceding the survey. Includes persons who did not work in the seven days preceding the survey but who are regularly employed and were absent from work for leave illness, vacation or any other such reason.

Note: Figures in parentheses are based on 25-49 unweighted cases



**Table 3.7** Type of employment

Percent distribution of ever-married women aged 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or non-agricultural), PLHDS 2020

Background characteristics	Agricultural work	Non-Agricultural work	Total
<b>Type of earning</b>			
Cash only	66.2	76.5	74.1
Cash and in-kind	0.0	8.0	6.2
In-kind only	0.0	4.6	3.5
Not paid	33.8	11.0	16.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Type of employer</b>			
Employed by family member	48.6	17.2	24.3
Employed by non-family member	0.0	30.9	24.0
Self-employed	51.4	51.8	51.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Continuity of employment</b>			
All year	67.6	57.9	60.1
Seasonal	11.9	20.7	18.7
Occasional	20.5	21.5	21.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of women employed during the past 12 months</b>	<b>13</b>	<b>44</b>	<b>56</b>

**Table 3.8** Health insurance coverage

Percentage of ever-married women aged 15-49 with specific types of health insurance coverage, and percentage with any health insurance, according to background characteristics, PLHDS 2020							
Background characteristics	Social security	Other employer-based insurance	Mutual Health Organization/ community based insurance	Privately purchased commercial insurance	Other	None	Number of women
<b>Age</b>							
15-19	0.0	0.0	0.2	0.0	0.0	99.8	300
20-24	0.0	0.2	0.0	0.0	0.0	99.8	633
25-29	0.0	0.1	0.0	0.3	0.0	99.6	889
30-34	0.0	0.2	0.0	0.0	0.0	99.8	717
35-39	0.0	0.0	0.0	0.0	0.0	100.0	616
40-44	0.0	0.0	0.0	0.6	0.1	99.3	339
45-49	0.0	0.0	0.0	0.0	0.0	100.0	180
<b>Type of residence</b>							
Urban	0.0	0.3	0.0	0.3	0.0	99.4	1,271
Rural	0.0	0.0	0.1	0.0	0.0	99.9	1,074
Nomadic	0.0	0.0	0.0	0.1	0.0	99.9	1,330
<b>Region</b>							
Sool	0.0	0.0	0.0	0.0	0.0	100.0	527
Sanaag	0.0	0.1	0.1	0.1	0.00	99.7	720
Bari	0.0	0.0	0.0	0.5	0.0	99.5	870
Nugaal	0.0	0.8	0.0	0.0	0.10	99.1	372
Mudug	0.0	0.0	0.0	0.0	0.0	100.0	1,186
<b>Education</b>							
No Education	0.0	0.0	0.0	0.1	0.0	99.9	3,011
Primary	0.0	0.1	0.1	0.0	0.0	99.8	481
Secondary	0.0	0.0	0.0	1.5	0.0	98.5	135
Higher	(0.0)	(4.1)	(0.0)	(0.0)	(0.0)	(95.9)	49
<b>Wealth</b>							
Lowest	0.0	0.0	0.0	0.0	0.0	100.0	859
Second	0.0	0.0	0.0	0.1	0.0	99.9	666
Middle	0.0	0.0	0.0	0.0	0.0	100.0	685
Fourth	0.0	0.0	0.0	0.0	0.0	100.0	748
Highest	0.0	0.5	0.1	0.6	0.0	98.9	717
<b>Total</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>99.7</b>	<b>3,675</b>

Note: Figures in parentheses are based on 25-49 unweighted cases



**Table 3.9** Use of tobacco

Percentage of ever-married women aged 15-49 who use various tobacco products, according to background characteristics, PLHDS 2020

Background characteristics	Percentage who Smoke			Number of women
	Cigarettes	Other types of tobacco	Any type of tobacco	
<b>Age</b>				
15-19	3.2	0.0	3.2	300
20-24	2.9	0.2	2.9	633
25-29	2.7	0.5	2.9	889
30-34	2.2	0.6	2.3	717
35-39	2.6	0.6	2.6	616
40-44	3.6	0.6	3.6	339
45-49	0.9	0.0	0.9	180
<b>Type of residence</b>				
Urban	3.3	0.8	3.5	1,271
Rural	3.9	0.5	4.0	1,074
Nomadic	1.0	0.0	1.0	1,330
<b>Region</b>				
Sool	1.1	0.0	1.1	527
Sanaag	0.8	0.0	0.8	720
Bari	7.2	1.5	7.4	870
Nugaal	2.1	0.7	2.2	372
Mudug	1.3	0.0	1.3	1,186
<b>Education</b>				
No Education	2.8	0.5	2.9	3,011
Primary	1.6	0.4	1.6	481
Secondary	3.5	0.0	3.5	135
Higher	(1.1)	(0.0)	(1.1)	49
<b>Wealth quintile</b>				
Lowest	1.0	0.0	1.0	859
Second	2.1	0.7	2.1	666
Middle	5.4	1.0	5.7	685
Fourth	3.4	0.1	3.5	748
Highest	1.8	0.6	1.8	717
<b>Total</b>	<b>2.6</b>	<b>0.4</b>	<b>2.7</b>	<b>3,675</b>

Note: Figures in parentheses are based on 25-49 unweighted cases



A photograph of a woman wearing a blue and white headscarf, smiling and looking down at a baby she is holding. The baby is wrapped in a red and yellow cloth. They are standing in a rocky, arid landscape under a clear blue sky.

CHAPTER 4

# Marriage, Fertility, Fertility Preference and Birth Spacing

# Key Findings

## MARITAL STATUS



**32%**  
percent of women aged 15-49 have never been married

## AGE AT FIRST MARRIAGE

The median age at first marriage is **21 for women** and **24 for men**.

## EARLY MARRIAGE



**10%**  
of ever-married women aged 20-49 are married by age 15, and **23 percent** are married by 18 years

## TOTAL FERTILITY RATE (TFR)

**6.8**  
children per woman

## BIRTH SPACING

A median of **21 months** between two births

## AGE AT FIRST BIRTH

The median age at first birth in Puntland is **23** for women aged 25-49

## TEENAGE PREGNANCY AND MOTHERHOOD



**11%**  
of women aged 15-19 have either given birth or are pregnant with their first child

## DESIRE FOR MORE CHILDREN



**62%**  
of women want to have another child soon

## IDEAL NUMBER OF CHILDREN



**10.6**  
for both ever-married women and for currently married women

## FERTILITY PLANNING



**67%**  
of births were reported by the mother to have been wanted at the time of conception, and **22 percent** were mistimed (wanted later); only **11 percent** of births were unintended at the time of conception

## CONTRACEPTIVE KNOWLEDGE



**61%**  
of all ever-married women and **63 percent** of currently married women have knowledge of modern contraception. contraceptive prevalence for women aged 15-49 currently married is at **8 percent** for any method and **1.2 percent** for any modern method.





# 4

## Chapter 4

# Marriage, Fertility, Fertility Preference and Birth Spacing

The Somali Health and Demographic Survey shows that Somalia has one of the highest fertility levels in the world (SHDS 2020). The data on marriage and fertility collected as part of the PLHDS contributes to the understanding of the fertility dynamics.

Some of these factors, including proximate determinants such as age at marriage, timing of fertility, and birth spacing, age at first birth and inter-birth intervals among others, are presented in this chapter. It also examines the key factors that determine the exposure to the risk of pregnancy. Information presented pertains to women of reproductive age

Information on marriage helps to determine the extent to which a woman is exposed to the risk of pregnancy, and is therefore important to the understanding of fertility levels and trends. Populations in which women marry at a young age tend to initiate childbearing early, and thus have higher fertility rates in general. Marriage and fertility are closely linked in Puntland, because childbearing takes place within the context of marriage.

## Marital Status

The PLHDS classified marital status as never-married, currently married, divorced or widowed. Table 4.1 and Figure 4.1 show the distribution of women aged 15-49 by their current marital status and according to age. Marriage among Puntland women is virtually universal, with all women aged 45-49 having entered into a marital union.

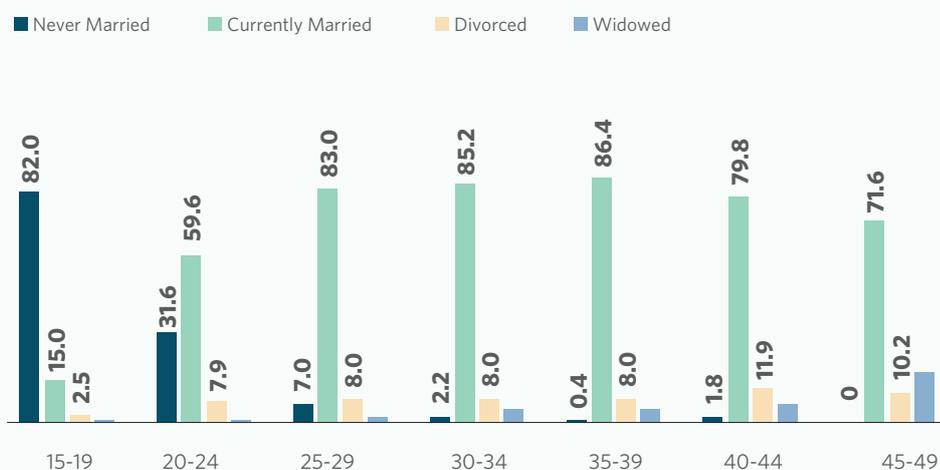
Overall, 32 percent of women aged 15-49 were never married, 58 percent were currently married, 7 percent were divorced and 3 percent were widowed at the time of the survey.

The percentage of women who have never married decreases sharply with increasing age, from 82 percent among those aged 15-19 to less than 1 percent for women aged 35-39. Almost all Puntland women are married by the age of 35. The percentage of currently married women increases with age and peaks at the 35-39 age group at 86 percent. Widowhood significantly increases and peaks among women of age group 45-49 at 18 percent. The

**Marriage among Puntland women is virtually universal, with all women aged 45-49 having entered into a marital union**

**Figure 4.1**

Current marital status of women aged 15-49



Percent distribution of women aged 15-49 by current marital status

percentage of divorced women generally increases with increasing age from 3 percent among those aged 15-19 and peaks among age group 40-44 at 12 percent.

### Age at First Marriage

The age at first marriage is an important indicator of exposure to the risk of conception and childbirth, especially in a society in which almost all births occur within marriage. Women who marry early will, on average, have a longer exposure to the risk of pregnancy and a greater number of births in their reproductive years. Information on age at first marriage was obtained by asking all ever-married women the month and year in which they got married to their first husbands, while similar information for men was obtained from the household roster.

Table 4.2 shows the percentage of ever-married women aged 15-49 by specific exact ages and median age at first marriage. Overall, 10 percent of women in the age group 20-49 and 25-49 entered their first marriage by the age of 15. Twenty three percent of women aged 20-49 and 22 percent of women aged 25-49 were married for the first time by the age of 18, while 32 percent of women aged 20-49 and 25-49 married for the first time by the time they turned 20. The median age at first marriage for women aged 25-49 is 21 years.

There is a slight variation among regions in age at first marriage and median age at first marriage. Women in Mudug are more likely to enter their first marriage below 20 years of age compared to

**21** years

the median age at first marriage for women aged 25-49

Women who marry early will, on average, have a longer exposure to the risk of pregnancy and a greater number of births in their reproductive years



**Somali parents encourage the marriage of their daughters while they are still young, in the hope that marriage will benefit the girls both financially and socially, while also relieving financial burdens on the family**

other women in Puntland, the median age at first marriage is also lowest in Mudug at 20 years of age.

Table 4.3 shows the percentage of men aged 15-64 who were first married, by specific exact ages and the median age at first marriage. Overall, less than 1 percent of men in the age group 20-49 entered into their first marriage by the age of 15 and 8 percent by the age of 18. Ten percent of the men aged 25-64 had never-married.

## Early Marriage

Early marriage is still widely practiced in many parts of the world, including Somalia, even though it violates the rights of young people (particularly girls) and has widespread and long-term consequences. Somali parents encourage the marriage of their daughters while they are still young, in the hope that marriage will benefit the girls both financially and socially, while also relieving financial burdens on the family. This traditional practice prevents young girls from realizing their full potential in life, limiting their physical, psychological and economic development. Duration of exposure to the risk of pregnancy depends primarily on the age at which women first marry. Early marriage often results in early childbearing, which has a detrimental effect on the health of both the mother and child. It also often leads to a longer reproductive period and higher levels of fertility. In many countries, the postponement of marriage greatly reduces childbearing rates.

As seen in Table 4.2, 10 percent of women aged 25-49 and 20-49 had already married by the time they turned 15. Twenty-three percent of women aged 20-49 and 22 percent of women aged 25-49, were first married by the age of 18 (Figure 4.2).

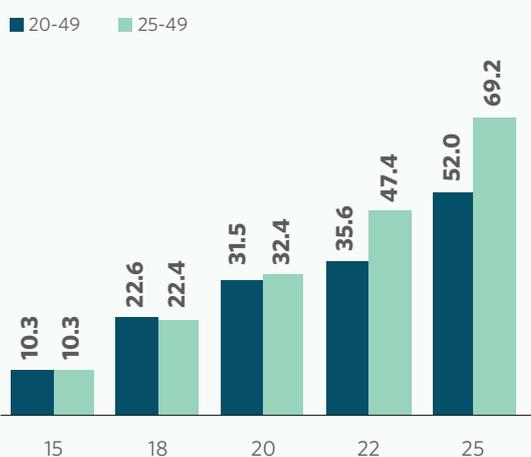
A comparison by regions show that women in Mudug tend to marry at younger ages than women in other Puntland regions; 11 percent and 20 percent of women in Mudug married at age 15 and 18 respectively.

## Fertility

This section examines a number of issues related to fertility and childbearing, including fertility levels, age at which women initiate childbearing, fertility preference, and other determinants of fertility. The knowledge of current and cumulative fertility is central to understanding population dynamics and the factors that influence the size and age structure of a population. It is also essential in monitoring the progress and evaluating the impact of population and health programmes in Puntland. Using the information collected during the PLHDS, it is possible to estimate the current level of fertility, identify trends, and highlight variations in fertility according to certain characteristics. During the survey,

**Figure 4.2**

Age at first marriage



Percent of women age 15-49 who were first married by specific exact ages

The knowledge of current and cumulative fertility is central to understanding population dynamics and the factors that influence the size and age structure of a population

# 6.8

number of children per woman in Puntland (total fertility rate)

interviewers asked all ever-married women aged 15-49 in the sampled households about the total number of children they had ever given birth to, alive or dead, the sex of the children, those that are living within the household, and children living elsewhere. Following this, interviewers compiled a complete history of births for each respondent, from the earliest to the most recent birth, recording for each of them the type of birth (single or multiple), survival status, gender and date of birth.

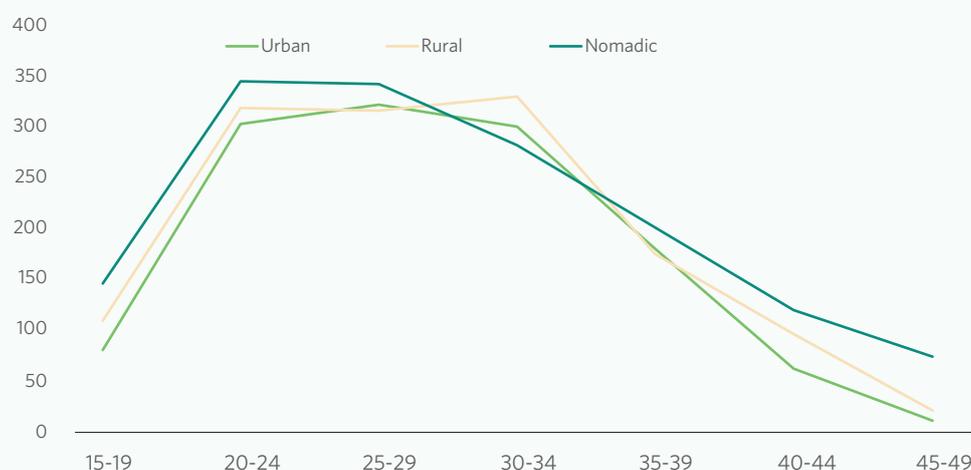
## Current Fertility

The most used measures of current fertility are the total fertility rate (TFR) and one of its components—age-specific fertility rates (ASFRs). The TFR is a summary measure of fertility and is interpreted as the number of children a woman would have by the end of her child-bearing years if she were to experience the currently observed ASFRs. The TFR estimates compiled during the PLHDS refer to the three years preceding the survey. The ASFR was calculated as the number of live births by women in a given age group divided by the number of woman-years in that age group during the specified period.

Generally, across most of the age groups, women residing in nomadic households have higher ASFRs compared to those in rural and urban settings. However, in the age group 30-34 years, women residing in rural households have higher ASFRs than their urban and nomadic counterparts (Figure 4.3).

**Figure 4.3**

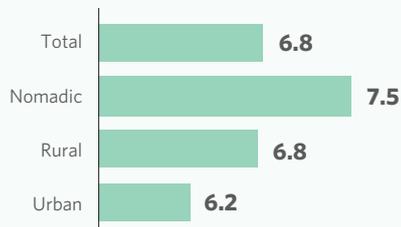
Age-specific fertility rates by residence



Percent of women age 15-49 who were first married by specific exact age



**Figure 4.4**  
Total fertility rate



| Total fertility rates by residence

Other important measures of current fertility are the general fertility rate (GFR) and crude birth rate (CBR). The GFR is the number of live births in a population per 1,000 women aged 15-49, while the CBR is the ratio of the number of live births occurring in a given year per 1,000 population.

Table 4.4 presents the ASFRs and aggregate fertility measures (TFR, GFR, and CBR) by type of residence.

The total fertility rate for Puntland is 6.8 children per woman compared to 6.9 at the national level. According to the SHDS findings, differences can be noted in the TFRs of women by their type of residence. The TFR is highest among women residing in nomadic areas at 7.5, and lowest among those residing in urban areas at 6.2 (Figure 4.4). Childbearing peaks in the age group 25-29 and drops sharply after 39 years.

Overall, the GFR in Puntland is 225 births per 1,000 women. The GFR is highest in nomadic areas at 245 births per 1,000 women, followed by rural areas at 230 births per 1,000 women and lowest in urban areas at 203 births per 1,000 women. The CBR exhibits the same pattern as the TFR and the GFR.

Table 4.5 presents differentials in TFRs, the percentage of women aged 15-49 who are currently pregnant, and the mean number of children ever born (CEB) to women aged 40-49 by background characteristics. It is important to keep in mind that the two indicators capture two different perspectives on fertility. The TFR is a “period” indicator, which shows the number of children that would be born per woman if she was subject to the current schedule of age-specific fertility rates. The CEB is a cohort indicator, which measures the mean number of children born alive to women in a given age group. The number of children ever born to a particular woman is a measure of her lifetime fertility experience up to the moment the PLHDS was carried out. Table 4.5 presents the CEB for women aged 40-49 years, as they are nearing the end of their reproductive lives and thus could be interpreted as a measure of the average completed fertility. It is important to keep in mind that the reporting of children ever born is subject to recall and other biases, and this is particularly pronounced among older women. The table also presents data for women who reported they were pregnant at the time of the survey. This percentage may be underreported since women may not be aware of a pregnancy, especially at the early stages, and some women who are early in their pregnancy may not want to reveal that they are pregnant.

The number of children ever born to a particular woman is a measure of her lifetime fertility experience up to the moment the SHDS was carried out

Comparing the TFR (a measure of period/ current fertility) with the mean number of CEB among women aged 40 to 49 completed fertility (a measure of cohort/past fertility) provides important insights in fertility patterns and trends. If fertility remained stable

It is important to keep in mind that the reporting of children ever born is subject to recall and other biases, and this is particularly pronounced among older women

over time and women accurately reported the number of children, they have ever born alive, the TFR and mean CEB for women aged 40-49 would be equal. The PLHDS indicates that in Puntland there is a very slight difference between the TFR (6.8) and mean CEB for women aged 40-49 years (7.4).

As Table 4.5 indicates, the TFR is consistently lower than the mean number of children ever born for women aged 40-49. This is likely to be attributed to the afore mentioned problems with recall and other biases in reporting CEB. The magnitude of the differences suggests though that the current fertility levels in Puntland might be lower than in the past. A forthcoming specialized thematic report will investigate this in more detail. Notably, this pattern holds across places of residence and women's education levels. In terms of differences in TFR by place of residence, Table 4.5 indicates that fertility is lowest among women living in urban areas at 6.2 and highest among those living in nomadic areas at 7.5. The largest fertility differentials are associated with educational background (Figure 4.5). For women with no education, the TFR is about twice as high at 7.1 as that for women with higher education at 3.3. Notably, the difference in TFR between women with no education and those with primary education is relatively small.

Among the regions, the total fertility rate is highest in Sool at 7.9 and lowest in Bari at 6.1.

The percentage of women who reported being pregnant at the time of the survey is also presented in Table 4.5. Sixteen percent of women were pregnant at the time of the survey. Nomadic women are more likely to be pregnant at 17 percent than rural and urban women at 15 and 14 percent respectively. Similar as the TFR, the proportion of women who are currently pregnant is highest in Sool at 18 percent and lowest in Bari at 13 percent. There is no pattern between the proportion of currently pregnant women and levels of education. Generally, there is a decline of the proportion of currently pregnant women with increasing wealth status of the households from 18 percent in the lowest wealth quintile to 15 percent in highest wealth quintile.

Information on the number of CEB for Puntland is presented in Table 4.6 for ever-married women and currently married women. On average, ever-married women aged 45-49 have given birth to 6.1 children, of whom 5.5 survived until the time the survey was conducted. Of the 6.4 children born on average to currently married women aged 45-49, 5.9 survived until the time the survey was conducted. The difference in fertility between the two groups could be attributed to the fact that it is almost universal that children are born within marriage across the country. The dissolution of marriage, particularly at early ages of childbearing, reduces the exposure to the risk of pregnancy and childbearing. The mean

**16%**

of women were pregnant at the time of the survey



**Studies have shown that short birth intervals are associated with increased risk of death for mother and baby, particularly when the birth interval is less than 24 months**

number of CEB increases with age, reflecting the natural family building process. For example, among ever-married women, the average number of live births for the age group 25-29 is 3.6, while women of 35-39 years reported an average of 5.6 children. Among currently married women, the mean CEB to women of 25-29 years is 3.7, 5.8 for women in the 35-39 age group and 6.4 among women aged 45-49.

### Inter-Birth Intervals

The inter-birth interval, defined as the period between two consecutive births. Information on birth intervals provides insight into birth spacing patterns, which affect fertility as well as maternal, infant, and childhood mortality. Studies have shown that short birth intervals are associated with increased risk of death for mother and baby, particularly when the birth interval is less than 24 months.

Table 4.7 shows the percent distribution of non-first births in the five years preceding the survey by number of months since the preceding birth, according to background characteristics. The median birth interval in Puntland is 21 months. The median number of months since a preceding birth increases significantly with age, from 12 months among mothers aged 15-19 to 24 months among mothers aged 40-49. The median birth interval also increased slightly with the increase of the birth order from 20 months for birth order 2-3 to 22 months for birth order 4-6. The median birth interval in urban and rural areas (23 months) is slightly higher than in nomadic areas (19 months). Women with secondary and higher education have a longer median birth interval (24 months) than women with no education (20 months). Women in Nugaal and Bari have a longer median birth interval (24 months) than women in other regions.

There is no marked difference in the length of the median birth interval by wealth quintiles.

### Menopause

Women are considered to have reached menopause if they are neither pregnant nor postpartum amenorrhoeic and have not had a menstrual period in the six months before the survey; if they report being menopausal; or having had a hysterectomy; or if they have never menstruated.

Table 4.8 shows that, overall, 19 percent of women aged 30-49 are menopausal. As could be expected, the proportion of menopausal women increases with increasing age.

**21 months**

The median birth interval in Puntland

**23 years**  
median age at first birth

## Age at First Birth

The age at which childbearing commences is an important determinant of the overall level of fertility, as well as the health and well-being of the mother and child. The data on age at first birth is sometimes affected by reporting errors, such as misreporting the woman's age, underreporting of first births, and misreporting the first child's date of birth. Such errors are usually more pronounced among older women.

Table 4.9 shows the percentage of women by age at first birth according to their current age. The survey shows that the median age at first birth for Puntland among women aged 25-49 is 23 years.

## Teenage Pregnancy and Motherhood

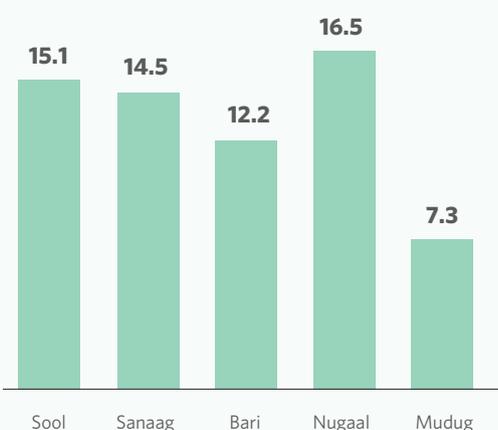
Teenage pregnancy and motherhood is defined as the percentage of women aged 15-19 who are pregnant with their first child at the time of the survey, or have had a live birth or have begun childbearing, according to the DHS program (Croft T et al. 2018).

Childbearing under the age of 20 has major health implications for both the mother and the child. Likewise, pregnancy under the age of 20 has adverse social consequences, especially for female education, as women who become mothers under the age of 20 are likely not to complete their education. The percentage of teenage women (aged 15-19) who are mothers or pregnant with their first child is shown in table 4.10. The data indicates that 11 percent of the Puntland girls aged 15-19 fall in this category, 10 percent having already given birth to a child and 2 percent being pregnant with their first child. The proportion of teenagers who have begun childbearing rises rapidly with age. One percent of women aged 15 have started childbearing, but by the age of 19, 34 percent of women have had a baby or are pregnant with their first child.

There are significant differences in background characteristics - while 14 percent of girls aged 15-19 in nomadic areas are already mothers or pregnant with their first child, this proportion in urban areas is 8 percent. Teenage childbearing is lowest in Mudug at 7 percent and highest in Nugaal at 17 percent. Early childbearing is inversely related to educational level. Many teenagers with no education at 15 percent have begun childbearing than those with secondary education at 5 percent. Sixteen percent of the girls aged 15-19 in the poorest households have started childbearing, compared to 7 percent of girls of the same age in the wealthiest households (Figure 4.5).

Pregnancy under the age of 20 has adverse social consequences, especially for female education, as women who become mothers under the age of 20 are likely not to complete their education.

**Figure 4.5**  
Total fertility rate



Total fertility rates by residence



## Fertility Preferences

Information on fertility preferences can help assess the desire for children, ideal number of children, the extent of wanted, mistimed and unintended pregnancies. Data on fertility preferences may suggest the way in which fertility trends and patterns are likely to evolve in the future. This section presents SHDS data on whether and when married women desire more children and the desire to limit children, by background characteristics. It also presents the reported ideal number of children, the mean ideal number of children, and whether the last birth was intended at the time of conception.

### Fertility Preferences by Number of Living Children

Table 4.11 presents the percent distribution of currently married women by their desire for more children, according to the number of living children they had, as stated at the time the survey was conducted. Overall, 62 percent of currently married women want to have a child soon, 19 percent are undecided on whether to have another child, and 14 percent do not want any more children. Women's desire to have another child soon decreases with increasing number of living children, 72 percent of currently married women with no living children want to have a child soon, while 55 percent of women with six or more children want to have another child soon. Only 2 percent of currently married women wanted to have another child later.

**62%**

of currently married women want to have a child soon

### Desire to Limit Childbearing

Table 4.12 shows the percentage of currently married women who want no more children by the number of living children they already have, according to background characteristics. Overall, 14 percent of currently married women are willing to stop childbearing. The desire to limit childbearing increases as the number of living children increases, from zero percent among married women with no living children to 19 percent among women with six or more living children. Analysis by women's residence shows that, generally, nomadic women are less likely to want no more children at 12 percent compared to urban and rural women at 16 and 14 percent, respectively.

The desire to limit childbearing increases as the number of living children increases

Among the regions, there are variations on limiting of children by currently married women; Bari and Nugaal have the highest proportions of women who want to limit childbearing at 18 and 17 percent, respectively, while Mudug and Sool have the lowest proportion of women who want to limit childbearing at 11 percent each. There is no clear relationship between education or wealth and wanting no more children. However, sixteen percent of women with no education want to limit childbearing, as compared with 8

# 10.6

on average, the ideal number of children that currently married women in Puntland could choose

percent of those with secondary education. By wealth, women in the middle wealth quintile are more likely to want no more children at 18 percent than women in the lowest wealth quintile at 12 percent.

## Ideal Number of Children

In order to obtain a greater insight into fertility preferences among Puntland women, the SHDS interviewers asked all ever-married women, regardless of the number of living children they have, a hypothetical question about the number of children they would choose to have if they could start their reproductive lives again. Respondents with no children were asked: "If you could choose exactly the number of children to have in your whole life, how many would that be?," Respondents who had children were asked: "If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?."

Table 4.13 shows the percent distribution of women aged 15-49 by their opinions on their ideal number of children, and mean ideal number of children for all respondents, as well as for currently married respondents, according to the number of living children they have. It indicates that the Puntland women desire large families. Overall, 90 percent of women consider six or more children to be the ideal family size. Two percent stated their ideal number of children is four, and 2 percent of women consider the ideal family size to be three children or fewer.

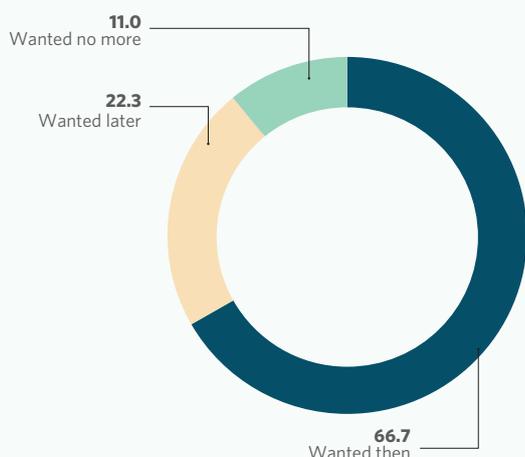
If currently married women in Puntland could choose their ideal number of children, they would like to have 10.6 children on average. There is no difference between the mean ideal number of children for ever-married women and currently married women.

Among the currently married women who have no living children, the mean ideal number of children is 9.8, while among the ever-married women with no living children, the mean ideal number of children is 9.6. It is interesting to note that women with four and more living children are more likely to desire more children than women with three and fewer living children.

## Fertility Planning

Information collected as part of the SHDS 2020 provides an opportunity to estimate the levels of unintended fertility. This information provides an insight into the degree to which couples are able to control fertility. Women aged 15-49 were asked a series of questions about each child born to them in the five years preceding the survey, as well as any current pregnancy, to determine whether the birth or pregnancy was intended at the time of conception, intended later, or not intended at all. In assessing these results,

**Figure 4.6**  
Fertility planning status



Percent distribution of births to women aged 15-49 in the five years preceding the survey by planning status of the birth



**A larger proportion of births to older women are unintended than those to younger women.**

it is important to recognise that women may declare a previously unintended birth or current pregnancy as intended, and this rationalisation would result in an underestimate of the true extent of unintended births.

Table 4.14 summarizes the planning status of births in the five years preceding the survey: whether the birth was intended at the time of conception, intended later, or not intended at all. Overall, about two-thirds of births (67 percent) were wanted at the time they occurred, while 22 percent were intended later and around 11 percent were born to mothers who intended to have no more children (Figure 4.6). First- and second- order births were more likely to have been intended at 70 and 66 percent, respectively than third- or higher- order births at 64 and 61 percent respectively. A larger proportion of births to older women are unintended than those to younger women. While only 11 percent of births to women under-age of 20 are unintended, 20 percent of births to women aged 40-44 are unintended.

## Birth Spacing

Couples can use contraceptive methods to better space their children. Information on contraceptive use is of interest to policymakers, programme managers, and researchers in population and birth spacing. This section describes women's knowledge and use of contraceptive methods and the need and demand for birth spacing.

### Knowledge of Contraceptive Methods

The knowledge of contraceptive methods is a precondition for their proper use. Information regarding knowledge of birth spacing methods was gathered by asking the respondent first about ways or methods by which the couple could delay or avoid pregnancy. If the respondent failed to mention any of the methods included in the questionnaire, the interviewer described the method and asked the respondent whether she had heard about it. No questions were asked to obtain information about the depth of knowledge. Contraceptive methods used for the survey were classified into two broad categories: modern methods and traditional methods. Modern methods include the pill, the intrauterine device (IUD), injectables, implants, the male and the female condom, the diaphragm, the lactational amenorrhea method (LAM), and emergency contraception. Traditional methods include rhythm (periodic abstinence) and withdrawal.

Table 4.15 presents data on the knowledge of contraceptive methods. Overall, 62 percent of ever-married women have heard of at least one method of contraception. Modern contraceptive methods are more widely known than traditional methods. Sixty-one percent of

**62%**

of ever-married women have heard of at least one method of contraception

# 54%

of currently married women know about LAM

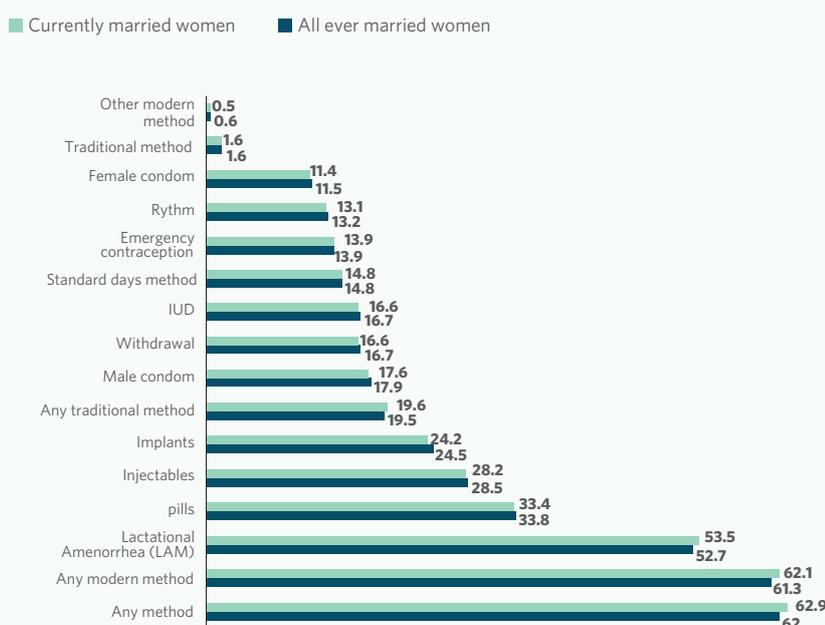
ever-married women and 62 percent of currently married women know of any modern method, while 20 percent of ever-married women and currently married women know of a traditional method (Figure 4.8). The known modern contraceptive methods among women in Puntland include: IUD, injectables, implants, pills, male condom, female condom, emergency contraception, standard days method, and Lactational Amenorrhea (LAM). The most well-known modern method among currently married women is LAM at 54 percent and the least well-known is the female condom at 11 percent (Figure 4.8).

Table 4.16 presents data on the knowledge of contraceptive methods by background characteristics. Knowledge of contraception is highest among women aged 45-49 and 25-49 at 66 percent respectively, and 35-39 at 65 percent. Currently married women in urban areas are more likely to know of any modern contraceptive at 73 percent compared to currently married women in rural and nomadic areas at 64 and 51 percent respectively.

Among the regions, currently married women in Nugaal are best informed about modern contraception as 66 percent have heard of at least one modern method of contraception compared to women

**Figure 4.3**

Knowledge of contraceptive methods



Percentage of all ever-married women, currently married women 15-49 who have heard of any contraceptive method, by specific method



## The use of contraception among currently married women decreases with increasing age

# 8%

of the currently married women are using any contraceptive method

# 7%

of ever-married women correctly reported the most fertile time as being halfway between two menstrual periods

in Bari and Sanaag who are least informed at 61 and 60 percent respectively. As could be expected, women with higher education are best informed about modern contraception, as 89 percent have heard of at least one modern method compared to those with no education at 58 percent.

## Contraceptive Use

One of the most frequently used indicators for assessing the success of birth spacing programmes is examining the current level of contraceptive use by determining the current level of contraceptive prevalence rate (CPR). CPR is percentage of currently women of reproductive age who use any contraceptive method at a particular point in time. This is also widely used as a measure in the analysis of determinants of fertility. Table 4.17 shows the distribution of currently married women who were using modern contraception by age. Overall, 8 percent of the currently married women are using any contraceptive method and 1 percent are using any modern methods. The use of contraception among currently married women decreases with increasing age. Thirteen percent of women aged 15-19 are using contraceptives compared to 2 percent of those aged 40-44.

Table 4.18 presents the percent distribution of currently married women by their use of contraceptive methods, according to background characteristics. This table allows a comparison of levels of current contraceptive use across major population groups and an examination of differences in use in the various subgroups.

The use of any modern contraceptive method decreases with increasing number of living children, from 4 percent for those with 1-2 living children to 1 percent for those with more than 5 living children.

Women in urban areas are more likely to use any modern contraceptive methods at 3 percent than women in rural at 1 percent and nomadic at less than 1 percent. The CPR is 11 percent in urban areas, compared to 9 and 5 percent in rural and nomadic areas respectively.

By region, use of any method is highest in Nugaal at 11 percent and lowest in Sanaag at 6 percent. There is no clear pattern between education level of women and use of contraception.

## Knowledge of Fertile Period

To examine a woman's knowledge of the reproductive process, respondents were asked whether there were certain days between the menstrual periods when a woman was more likely to become pregnant if she had sexual intercourse. Women who responded that the fertile period is "halfway between two menstrual periods"



were considered to have correct knowledge of their fertile period.

Table 4.19 shows the percentage of ever-married women aged 15-49 with correct knowledge of the fertile period during the ovulation cycle, according to age. Overall, only 7 percent of ever-married women correctly reported the most fertile time as being halfway between two menstrual periods.

Generally, correct knowledge on fertile period increases with increasing age. Among young ever-married women (15-19 years of age), 6 percent had corrected knowledge of the fertile period compared to 9 percent of women aged 45-49.

Women who are currently married and who either do not want any more children or want to wait two or more years before having another child, but are not using contraception, are considered to have an 'unmet need' for birth spacing

**37%**

of currently married women have an unmet need for birth spacing services

### Need and Demand for Birth Spacing

One of the major concerns of birth spacing programmes is to assess the size of the potential demand for contraception and to identify women who are in need of contraceptive services. Table 4.20 presents estimates of unmet need, met need, and the total demand for birth spacing. The table also shows the percentage of the total demand that is satisfied. Women who are currently married and who either do not want any more children or want to wait two or more years before having another child, but are not using contraception, are considered to have an 'unmet need' for birth spacing. Women with a 'met need' for birth spacing are those who are currently using contraception. The total demand for birth spacing is the sum of unmet needs and met needs.

Overall, 37 percent of currently married women have an unmet need for birth spacing services (28 percent for spacing births and 9 percent for stopping childbearing). One percent of married women are currently using a contraceptive method or have a met need for either birth spacing or limiting childbearing. Thirty-eight percent of currently married women have a demand for birth spacing (29 percent for birth spacing and 9 percent for limiting childbearing). At present, only 3 percent of the potential demand for birth spacing is being met. This means that if all married women who said they want to space the births of their children, or limit their number of children were to use birth spacing methods, the contraceptive prevalence rate would increase from 1 percent to 38 percent.

Analysis by age shows that the unmet need for birth spacing is highest among women aged 30-34 at 40 percent, and lowest among women aged 45-49 at 30 percent. There is no variation in unmet need for birth spacing by type of residence. By region, unmet need is highest in Nugaal at 43 percent and lowest in Bari at 35 percent. Unmet needs decreases with increasing education, it is highest among women with no education at 38 percent and lowest among those with higher education at 23 percent. There is slight



## The role of the media in promoting birth spacing is essential in bringing information to different target groups

# 17%

of women had been exposed to birth spacing messages at least through one of these media

variation in the total demand for birth spacing among currently married women from households of different wealth status. Unmet need is lowest among women from wealthier households, at 35 percent, and highest among women in the middle wealth quintile, at 41 percent.

### Exposure to Birth Spacing Messages

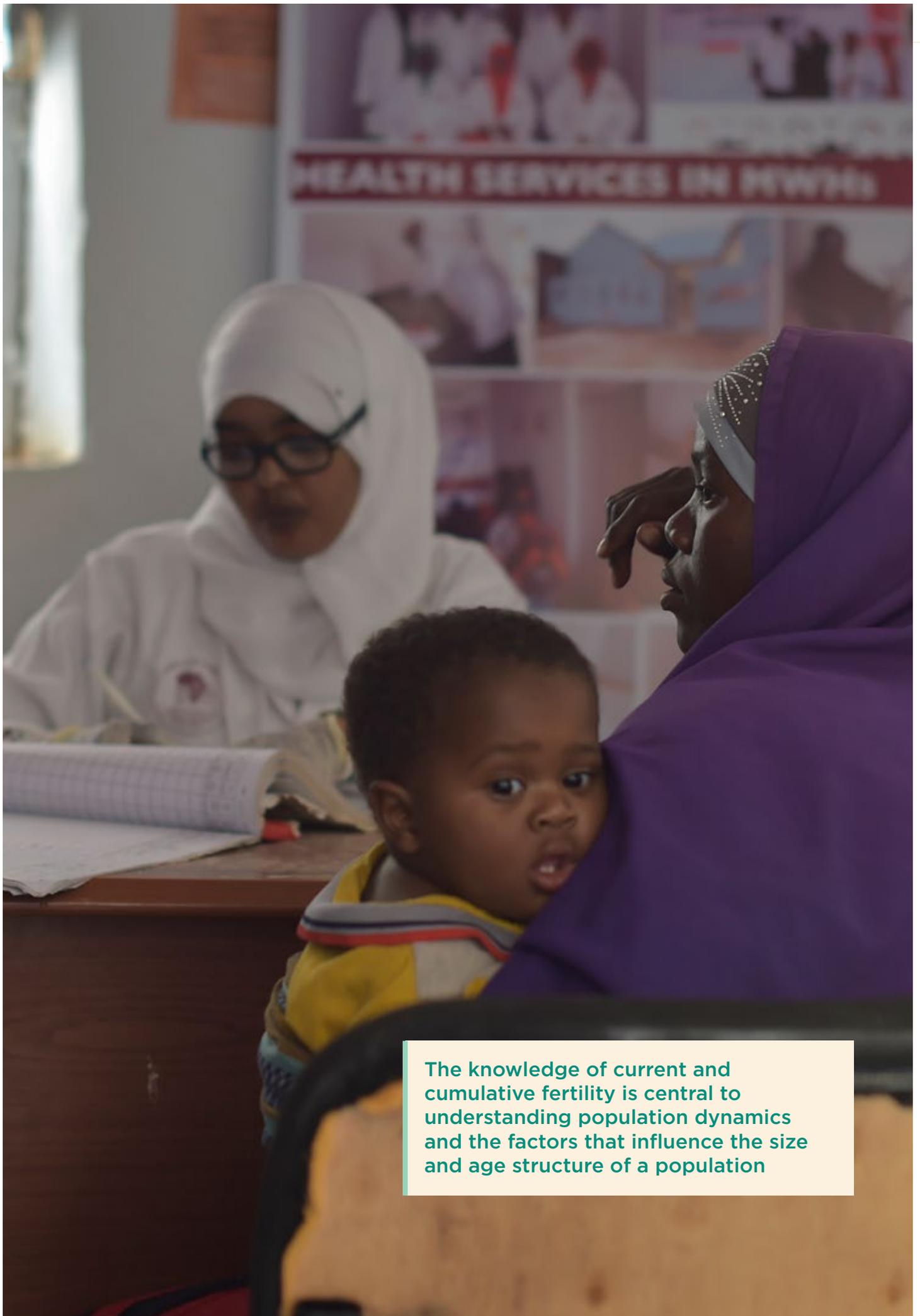
The role of the media in promoting birth spacing is essential in bringing information to different target groups. Data on the level of exposure to media, such as the radio, television, and papers/magazines are important for programme managers and planners to effectively target population subgroups for information, education, and communication campaigns. To assess the effectiveness of such media on the dissemination of birth spacing information, interviewing teams asked ever-married women whether they had heard messages about birth spacing on the radio or seen related messages on television or in newspapers/magazines during the few months preceding the survey.

Table 4.21 presents the distribution of ever married women aged 15-49 who heard or saw a birth spacing message on radio, television, newspaper/magazine, or mobile phone in the past few months preceding the survey, according to background characteristics. Overall, 13 percent of women have heard a message related to birth spacing on the radio, 9 percent have seen a message on birth spacing on television, and 5 percent read a message on birth spacing in a newspaper.

Seventeen percent of women had been exposed to birth spacing messages at least through one of these media. As expected, women in Urban areas are more likely to have been exposed to birth spacing messages in the media compared to women in Nomadic and rural areas (29 percent, 4 percent and 17 percent respectively) By region, women in Nugaal are most likely to be exposed to birth spacing messages on the radio at 27 percent, the television and newspaper are also the most important source for women in Nugaal at 19 percent and 11 percent respectively.

Women in Sool are least likely to be exposed to birth spacing messages from any media source at 8 percent. Exposure to birth spacing messages either through radio, television, newspaper increases with the level of education and wealth quintiles.

Only three percent of women had been exposed to birth spacing message in all the specified media sources. Exposure to all three media sources on birth spacing is highest among women in urban area at 6 percent, women in Nugaal at 10 percent and women in the highest wealth quintile at 8 percent.



The knowledge of current and cumulative fertility is central to understanding population dynamics and the factors that influence the size and age structure of a population



**Table 4.1** Current marital status

Percent distribution of women aged 15-49 by current marital status and age, PLHDS 2020						
Age	Never Married	Currently Married	Divorced	Widowed	Total	Number of women
15-19	82.0	15.0	2.5	0.4	100.0	1,666
20-24	31.6	59.6	7.9	0.9	100.0	926
25-29	7.0	83.0	8.1	1.9	100.0	956
30-34	2.2	85.3	8.1	4.4	100.0	734
35-39	0.4	86.4	8.1	5.1	100.0	619
40-44	1.8	79.8	11.9	6.5	100.0	345
45-49	0.0	71.6	10.2	18.3	100.0	180
<b>Total</b>	<b>32.3</b>	<b>58.3</b>	<b>6.7</b>	<b>2.8</b>	<b>100.0</b>	<b>5,426</b>

**Table 4.2** Age at first marriage for women

Percentage of women aged 15-49 who were first married by specific exact ages, and median age at first marriage, according to current age, PLHDS 2020

Current age	Percentage first married by exact age:					Percentage of never married	Number of respondents	Median age at first marriage
	15	18	20	22	25			
15-19	5.0	n/a	n/a	n/a	n/a	81.1	1,610	a
20-24	10.3	23.1	28.7	n/a	n/a	31.1	951	a
25-29	7.9	20.4	28.9	43.5	63.9	7.1	954	21.0
30-34	19.1	26.9	36.6	51.5	75.8	2.6	744	21.0
35-39	6.0	20.1	30.1	46.9	72.2	0.5	618	22.0
40-44	6.1	21.2	34.3	47.7	65.1	1.7	344	22.0
45-49	10.2	24.9	37.1	51.7	67.8	0.0	205	21.0
20-49	10.3	22.6	31.5	n/a	n/a	10.3	3,816	a
25-49	10.3	22.4	32.4	47.4	69.2	3.4	2,865	21.0
<b>Region</b>								
Sool	8.9	17.4	22.2	25.0	37.0	29.7	1,254	21.0
Sanaag	9.7	16.8	23.5	25.9	36.2	29.0	1,377	21.0
Bari	6.6	13.3	20.4	25.1	37.4	30.5	847	21.0
Nugaal	6.1	10.0	15.6	22.1	34.5	29.8	838	22.0
Mudug	11.0	19.5	26.5	26.1	37.4	37.7	1,110	20.0

Note: The age at first marriage is defined as the age at which the respondent got married to her first spouse

n/a = Not applicable due to censoring

a = Omitted because less than 50 percent of the women got married for the first time before reaching the beginning of the age group

**Table 4.3** Age at first marriage for Male

Percentage of men age 15-64 who were first married by specific exact ages, and median age at first marriage, according to current age, PLHDS 2020

Current age	Percentage first married by exact age:					Percentage of never married	Number of respondents	Median age at first marriage
	15	18	20	22	25			
15-19	0.2	n/a	n/a	n/a	n/a	97.7	1,560	a
20-24	0.4	6.1	12.8	n/a	n/a	74.4	831	a
25-29	0.3	9.0	18.4	30.5	52.0	34.3	680	22
30-34	1.2	9.0	18.2	32.4	53.9	10.6	725	23
35-39	0.7	8.7	18.6	36.4	50.1	4.4	554	24
40-44	0.7	8.0	15.4	34.6	44.1	3.2	665	25
45-49	0.7	6.4	15.3	33.5	42.9	4.2	308	25
50-54	0.1	7.5	15.1	33.0	41.0	1.6	434	25
55-59	0.0	6.7	14.8	36.8	46.3	1.9	175	25
60-64	0.3	11.8	16.6	44.8	53.7	3.3	304	22
20-49	0.6	7.9	16.4	n/a	n/a	26.2	3,764	23
25-49	0.7	8.4	17.4	33.4	49.3	12.6	2,933	a
20-64	0.6	8.1	16.2	n/a	n/a	21.5	4,677	a
25-64	0.6	8.5	16.9	34.4	48.6	10.1	3,846	24

Note: The age at first marriage is defined as the age at which the respondent got married to her first spouse

n/a = Not applicable due to censoring

a = Omitted because less than 50 percent of the women got married for the first time before reaching the beginning of the age group



**Table 4.4** Current Fertility

Age-specific and total fertility rate, the general fertility rate, and the crude birth rate for the three years preceding the survey, by Residence PLHDS 2020

Age group	Type of residence			Total
	Urban	Rural	Nomadic	
15-19	78	107	145	107
20-24	302	316	343	320
25-29	320	315	340	326
30-34	299	328	281	303
35-39	177	174	198	183
40-44	59	93	117	87
45-49	9	19	72	35
TFR (15-49)	6.2	6.8	7.5	6.8
GFR	203	230	245	225
CBR	42.9	43.2	44.0	43.7

Notes: Age-specific fertility rates are per 1,000 women.

Rates for age group 45-49 may be slightly biased due to truncation.

Rates are for the period 1-36 months prior to interview.

TFR: Total fertility rate expressed per women

GFR: General fertility rate expressed per 1,000 women aged 15-49

CBR: Crude birth rate expressed per 1,000 population

**Table 4.5** Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49 years, by background characteristics, PLHDS 2020

Background characteristics	Total Fertility Rate	Percentage women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
<b>Type of residence</b>			
Urban	6.2	13.9	6.9
Rural	6.8	15.2	7.1
Nomadic	7.5	17.4	9.0
<b>Region</b>			
Sool	7.9	17.7	8.6
Sanaag	7.7	15.0	7.6
Bari	6.1	13.2	6.8
Nugaal	7.0	15.2	7.4
Mudug	6.3	16.7	7.3
<b>Education</b>			
No Education	7.1	14.6	8.4
Primary	6.8	17.6	9.9
Secondary	4.2	28.6	6.9
Higher	3.3	16.3	8.6
<b>Wealth quintile</b>			
Lowest	7.3	17.9	7.3
Second	8.0	17.1	8.6
Middle	6.8	13.1	7.0
Fourth	7.0	14.5	7.1
Highest	5.4	14.7	7.4
<b>Total</b>	<b>6.8</b>	<b>15.5</b>	<b>7.4</b>

Note: Total fertility rates are for the period 1-36 months preceding the interview



**Table 4.6** Children ever born and living

Percent distribution of all women and currently married women age 15 - 49 by number of children ever born, mean number of children ever born and mean number of living children, according to age group, PLHDS 2020

Age	Number of children ever born										Total	Number of women	Mean number of children ever born	Mean number of living children					
	0	1	2	3	4	5	6	7	8	9					10+				
<b>All ever married women</b>																			
15-19	47.4	33.2	15.2	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	300	0.8	0.8	
20-24	17.6	19.6	27.1	22.4	10.6	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	633	2	1.9	
25-29	7.8	7.1	13.6	20.9	20.8	12.5	8.2	6.5	1.6	0.6	0.5	100	889	3.6	3.4	889	3.6	3.4	
30-34	5.8	3.4	9.2	14.1	14.3	16.4	13.5	9.9	7.2	2.6	3.6	100	717	4.7	4.5	717	4.7	4.5	
35-39	5.0	2.4	5.8	9.7	11.2	14.2	11.8	15.0	9.1	7.9	7.9	100	616	5.6	5.3	616	5.6	5.3	
40-44	4.8	1.3	6.6	8.1	7.4	15.8	15.4	11.5	9.8	6.6	12.7	100	339	6.0	5.5	339	6.0	5.5	
45-49	5.8	0.3	6.2	10.1	8.6	11.4	14.2	11.9	7.6	11.4	12.4	100	180	6.1	5.5	180	6.1	5.5	
Total	11.5	9.0	12.9	14.9	12.6	11.1	8.7	7.7	4.6	3.1	3.9	100	3,675	4.0	3.8	3,675	4.0	3.8	
<b>Currently married women</b>																			
15-19	46.3	32.5	16.9	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	250	0.8	0.8	
20-24	16.9	18.2	26.7	24.4	11.4	2.4	0.0	0.0	0.0	0.0	0.0	100	552	2.0	2.0	552	2.0	2.0	
25-29	7.0	6.2	12.9	22.0	20.6	12.9	8.7	6.8	1.8	0.5	0.6	100	794	3.7	3.5	794	3.7	3.5	
30-34	4.8	2.6	8.8	13.9	14.1	16.4	15.0	10.1	7.4	2.9	3.8	100	626	4.9	4.7	626	4.9	4.7	
35-39	4.2	2.0	5.3	9.4	10.7	14.3	11.8	15.6	9.2	8.8	8.6	100	535	5.8	5.5	535	5.8	5.5	
40-44	4.4	0.7	5.7	7.0	7.9	14.7	15.6	12.2	11.5	6.9	13.5	100	276	6.2	5.8	276	6.2	5.8	
45-49	1.5	0.0	5.7	11.5	7.0	15.2	15.5	9.7	7.6	12.8	13.3	100	129	6.4	5.9	129	6.4	5.9	
<b>Total</b>	<b>10.5</b>	<b>8.3</b>	<b>12.6</b>	<b>15.5</b>	<b>12.8</b>	<b>11.2</b>	<b>9.1</b>	<b>7.8</b>	<b>4.8</b>	<b>3.3</b>	<b>4.1</b>	<b>100</b>	<b>3,161</b>	<b>4.1</b>	<b>3.9</b>	<b>3,161</b>	<b>4.1</b>	<b>3.9</b>	

**Table 4.7** Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, PLHDS 2020

Background characteristic	Birth order						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
<b>Age</b>									
15-19	14.9	0.0	5.8	0.9	0.0	78.3	100.0	72	12.1
20-29	29.6	11.7	21.1	6.9	1.7	29.0	100.0	1,343	19.2
30-39	27.2	15.1	31.5	10.2	5.2	10.9	100.0	924	22.8
40-49	24.2	13.0	25.2	12.5	4.7	20.3	100.0	141	24.0
<b>Sex of preceding birth</b>									
Male	28.3	13.4	22.9	9.0	3.4	23.0	100.0	1,312	20.0
Female	27.6	12.0	26.9	7.4	2.7	23.4	100.0	1,168	20.8
<b>Survival of preceding birth</b>									
Living	28.6	12.6	24.8	8.0	3.1	23.0	100.0	2,284	20.0
Dead	21.1	14.3	23.8	11.5	3.6	25.7	100.0	197	24.0
<b>Birth order</b>									
2-3	28.1	12.8	25.1	8.3	2.8	22.8	100.0	2,256	20.3
4-6	28.1	11.6	22.5	6.4	5.9	25.5	100.0	211	22.0
7+		*	*	*	*	*	100	14	*
<b>Types of residence,</b>									
Urban	31.3	11.4	23.0	8.6	2.8	23.0	100.0	868	23.0
Rural	26.8	15.1	26.4	7.5	2.6	21.5	100.0	711	23.0
Nomadic	25.7	12.1	25.2	8.5	3.8	24.8	100.0	902	19.2
<b>Region</b>									
Sool	23.7	14.7	26.1	8.4	3.1	24.0	100.0	394	20.0
Sanaag	27.6	10.6	23.6	10.0	2.8	25.6	100.0	516	20.0
Bari	25.7	10.9	27.1	8.5	3.3	24.5	100.0	519	24.0
Nugaal	24.3	11.0	25.9	11.1	3.9	23.8	100.0	251	24.0
Mudug	33.0	14.8	23.0	6.0	2.9	20.3	100.0	800	19.0
<b>Education</b>									
No Education	27.3	12.5	25.3	8.5	3.1	23.3	100.0	1,999	20.0
Primary	31.8	13.1	23.5	7.3	2.8	21.5	100.0	385	21.0
Secondary	26.7	15.6	12.5	9.5	4.9	30.7	100.0	71	24.0
Higher	(26.5)	(14.4)	(36.9)	(0.0)	(0.0)	(22.2)	100.0	26	24.3
<b>Wealth quintile</b>									
Lowest	27.9	12.3	23.0	8.2	3.6	24.9	100.0	576	18.4
Second	25.0	10.7	28.4	8.6	3.7	23.6	100.0	476	20.0
Middle	26.4	14.5	24.8	7.1	3.1	24.1	100.0	477	23.0
Fourth	31.2	11.8	25.4	8.9	2.6	20.1	100.0	562	22.0
Highest	28.9	15.0	21.9	8.3	2.3	23.7	100.0	389	22.0
<b>Total</b>	<b>28.0</b>	<b>12.7</b>	<b>24.8</b>	<b>8.2</b>	<b>3.1</b>	<b>23.2</b>	<b>100.0</b>	<b>2,481</b>	<b>20.8</b>

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.



**Table 4.8** Menopause

Percentage of women age 30-49 who are menopausal by age, PLHDS 2020		
Age	Percentage Menopausal <sup>1</sup>	Number of women
30-34	15.8	734
35-39	17.6	619
40-41	19.5	271
42-43	19.3	59
44-45	31.8	123
46-47	(24.0)	32
48-49	(41.9)	40
<b>Total</b>	<b>18.7</b>	<b>1,878</b>

<sup>1</sup> Percentage of women who are not pregnant and not postpartum amenorrheic whose last menstrual period occurred six or more months preceding the survey  
Note: Figures in parentheses are based on 25-49 unweighted cases.

**Table 4.9** Age at first birth

Percentage of women aged 15-49 who gave birth by specific exact ages, percentage who have never given birth, and median age at first birth, according to current age, PLHDS 2020								
Current age	Percentage who gave birth by exact age:					Percentage who never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
15-19	0.1	n/a	n/a	n/a	n/a	83.5	1,610	a
20-24	0.7	10.0	21.8	n/a	n/a	34.3	951	a
25-29	1.2	9.3	21.0	40.3	65.2	9.3	954	22.0
30-34	2.0	9.8	21.1	39.2	67.5	4.6	744	22.0
35-39	0.5	5.2	15.2	30.7	60.5	0.8	618	23.0
40-44	1.5	7.0	12.5	26.5	51.2	2.0	344	24.0
45-49	0.5	5.4	9.3	19.0	34.1	2.0	205	26.0
20-49	1.1	8.5	18.9	26.1	45.7	12.2	3,816	a
25-49	1.2	8.0	17.9	34.8	60.9	4.9	2,865	23.0

Na = Not applicable due to censoring  
a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

**Table 4.10** Teenage pregnancy and motherhood

Percentage of women aged 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, PLHDS 2020

Background characteristics	Percentage of women age 15-19 who:			Number of women
	Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	
<b>Age group</b>				
15-19	9.5	1.9	11.4	1,666
15	0.1	0.9	1.1	460
16	0.6	0.3	1.0	345
17	8.7	2.6	11.3	276
18	17.2	3.3	20.5	351
19	30.4	3.2	33.6	234
<b>Type of residence</b>				
Urban	7.1	1.3	8.3	700
Rural	10.7	2.1	12.8	428
Nomadic	11.7	2.6	14.3	538
<b>Region</b>				
Sool	12.8	2.3	15.1	202
Sanaag	14.1	0.4	14.5	275
Bari	10.7	1.4	12.2	355
Nugaal	13.7	2.8	16.5	171
Mudug	4.8	2.4	7.3	663
<b>Education</b>				
No Education	11.9	2.6	14.5	1,012
Primary	7.2	1.3	8.5	376
Secondary	4.4	0.2	4.6	246
Higher	(1.7)	(0)	(1.7)	32
<b>Wealth quintile</b>				
Lowest	12.8	2.9	15.7	352
Second	12.2	2.8	14.9	233
Middle	10.9	1.5	12.4	316
Fourth	6.9	1.8	8.8	347
Highest	6.3	1.0	7.3	418
<b>Total</b>	<b>9.5</b>	<b>1.9</b>	<b>11.4</b>	<b>1,666</b>

Note: Figures in parentheses are based on 25-49 unweighted cases.



**Table 4.11** Fertility preferences by number of living children

Percent distribution of currently married women aged 15-49 by desire for children, according to number of living children, PLHDS 2020

Desire for children	Number of living children <sup>1</sup>							Total 15-49
	0	1	2	3	4	5	6+	
Have another soon <sup>2</sup>	71.5	73.4	66.1	62.6	60.5	61.8	54.5	62.2
Have another later <sup>3</sup>	0.1	3.1	2.2	1.9	1.7	1.8	3.3	2.3
Undecided	20.8	13.0	17.6	19.3	21.4	17.0	19.4	18.7
Want no more	0.0	8.0	11.4	13.9	14.6	16.8	19.3	13.8
Declared infecund	7.6	2.5	2.7	2.3	1.8	2.5	3.4	3.1
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Number of respondents</b>	278	287	399	501	426	380	890	3,161

<sup>1</sup> The number of living children includes current pregnancy for women

<sup>2</sup> Wants next birth within 2 years

<sup>3</sup> Wants to delay next birth for 2 or more years

**Table 4.12** Desire to limit childbearing: Women

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, PLHDS 2020

Background characteristics	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
<b>Type of residence</b>								
Urban	0.0	8.7	15.9	16.5	14.5	23.3	19.8	15.9
Rural	0.0	8.4	9.0	14.8	12.3	14.8	20.7	13.8
Nomadic	0.0	7.1	9.5	11.0	16.2	12.9	17.6	12.0
<b>Region</b>								
Sool	0.0	3.8	14.7	8.2	11.7	12.1	15.9	11.3
Sanaag	0.0	11.5	8.2	14.2	15.3	16.5	22.1	14.4
Bari	0.0	9.3	26.4	21.3	15.6	23.3	18.2	17.5
Nugaal	0.0	10.1	6.7	20.5	17.2	16.4	28.5	17.2
Mudug	0.0	6.1	3.4	9.3	14.2	14.7	17.2	10.9
<b>Education</b>								
No Education	0.0	8.1	14.1	16.1	16.8	19.2	20.4	15.5
Primary	0.0	7.0	0.0	2.6	5.6	6.1	12.0	6.0
Secondary	0.0	13.4	0.0	5.8	0.0	0.0	36.8	7.8
Higher	(0.0)	(0.0)	(26.3)	(11.7)	(0.0)	(0.0)	(0.0)	(2.6)
<b>Wealth quintile</b>								
Lowest	0.0	6.3	11.0	12.2	17.2	12.3	15.2	11.8
Second	0.0	9.9	6.7	18.8	10.3	11.8	19.2	13.1
Middle	0.0	5.5	20.6	20.6	13.4	26.6	22.5	17.9
Fourth	0.0	12.0	10.4	10.4	13.8	16.7	21.2	14.3
Highest	0.0	7.4	9.8	9.5	17.1	17.2	18.7	12.7
Total	0.0	8.0	11.4	13.9	14.6	16.8	19.3	13.8

Note: Women who have been sterilized are considered to want no more children.

<sup>1</sup> The number of living children includes the current pregnancy.

Note: Figures in parentheses are based on 25-49 unweighted cases.



**Table 4.13** Ideal number of children

Percent distribution of women aged 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to the number of living children, PLHDS 2020

	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
<b>Ideal number of children</b>								
1	2.0	1.6	0.0	0.0	0.0	0.0	0.2	0.4
2	3.1	1.9	2.4	1.4	0.5	1.8	0.2	1.4
3	2.9	0.2	1.8	4.1	1.3	0.5	0.9	1.7
4	2.4	3.1	3.5	1.0	2.1	1.3	1.0	1.9
5	8.9	6.9	7.5	7.7	2.9	2.8	2.0	5.1
6+	80.7	86.3	84.8	85.7	93.3	93.6	95.6	89.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100</b>
<b>Number of women</b>	268	280	376	421	361	322	689	2,718
<b>Mean ideal number of children for: <sup>2</sup></b>								
All Ever Married women	9.6	9.8	9.9	10.0	10.7	10.7	12.0	10.6
Number of women	268	280	376	421	361	322	689	2718
<b>Mean ideal number of children for currently married women</b>								
Currently married women	9.8	9.8	9.7	10.1	10.8	10.8	12.1	10.6
Number of currently married women	209	219	315	374	315	287	620	2339

<sup>1</sup> The number of living children includes current pregnancy for women

<sup>2</sup> Means are calculated excluding respondents who gave non-numeric responses.

**Table 4.14** Fertility planning status

Percent distribution of births to women aged 15-49 in the five years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, PLHDS , 2020

Birth order and mother's age at birth	Planning status of birth			Total	Number of births
	Wanted then	Wanted later	Wanted no more		
<b>Birth order</b>					
1	69.5	20.2	10.3	100.0	2,433
2	65.7	22.9	11.4	100.0	1,887
3	63.9	24.1	12.0	100.0	978
4+	60.6	28.7	10.7	100.0	384
<b>Mother's age at birth</b>					
<20	64.7	24.3	11.0	100.0	823
20-24	69.7	22.2	8.1	100.0	1,676
25-29	66.5	23.1	10.4	100.0	1,564
30-34	66.1	21.6	12.3	100.0	1,001
35-39	62.4	20.0	17.7	100.0	507
40-44	64.3	16.2	19.5	100.0	101
45-49	*	*	*	100.0	10
<b>Total</b>	<b>66.7</b>	<b>22.3</b>	<b>11.0</b>	<b>100.0</b>	<b>5,682</b>

Note: Figures in asterisks are based on fewer than 25 unweighted cases

**Table 4.15** Knowledge of contraceptive methods

Percentage of all women, currently married women 15-49 who have heard of any contraceptive method, by specific method, PLHDS , 2020

Method	All ever married women	Currently married women
<b>Any method</b>	62.0	62.9
<b>Any modern method</b>	61.3	62.1
IUD	16.7	16.6
Injectables	28.5	28.2
Implants	24.5	24.2
pills	33.8	33.4
Male condom	17.9	17.6
Female condom	11.5	11.4
Emergency contraception	13.9	13.9
Standard days method	14.8	14.8
Lactational Amenorrhoea (LAM)	52.7	53.5
Other modern method	0.6	0.5
<b>Any traditional method</b>	19.5	19.6
Rythm	13.2	13.1
Withdrawal	16.7	16.6
Traditional method	1.6	1.6
<b>Mean number of methods known by women 15-49</b>	<b>2.5</b>	<b>2.5</b>
<b>Number of respondents</b>	<b>3,675</b>	<b>3,161</b>



**Table 4.16** Knowledge of contraceptive methods by background characteristics

Percentage of currently married women aged 15-49 who have heard of at least one contraceptive method and who have heard of at least one modern method, by background characteristics, PLHDS 2020

Background characteristics	Heard of any method	Heard of any modern method	Number of women
<b>Age</b>			
15-19	48.3	47.9	250
20-24	62.6	61.6	552
25-29	66.4	65.6	794
30-34	63.6	62.8	626
35-39	65.6	65.0	535
40-44	58.5	57.2	276
45-49	66.2	66.2	129
<b>Type of residence</b>			
Urban	73.7	73.2	1,056
Rural	64.4	63.9	885
Nomadic	52.5	51.2	1,221
<b>Region</b>			
Sool	61.6	61.5	479
Sanaag	60.9	60.0	650
Bari	61.2	61.1	720
Nugaal	66.5	66.2	321
Mudug	64.9	63.2	992
<b>Education</b>			
No education	58.7	57.9	2,595
Primary	81.8	81.1	417
Secondary	80.7	79.3	106
Higher	(89.0)	(89.0)	43
<b>Wealth quintile</b>			
Lowest	51.5	50.3	793
Second	60.4	59.9	584
Middle	62.9	62.1	578
Fourth	70.0	69.6	620
Highest	73.3	72.4	587
Total 15-49	62.9	62.1	3,161

Note: Figures in Parentheses are based on 25-49 unweighted cases

**Table 4.17** Current use of contraception by age

Percent distribution of currently married women aged 15-49 by contraceptive method currently used, according to age, PLHDS 2020

Age	Modern method										Traditional Method		Not currently using	Number of women currently married	
	Any modern method					Any traditional method					Rhythm	Withdrawal			
	IUD	Injectables	Implants	Pills	condom	Lactational Amenorrhoea (LAM)	Any traditional method	Rhythm	Withdrawal						
15-19	12.5	1.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	87.5	100.0	208
20-24	11.3	0.6	0.0	0.1	0.0	0.1	0.0	0.3	0.0	0.0	10.7	0.0	88.7	100.0	446
25-29	9.6	1.3	0.0	0.2	0.0	0.6	0.0	0.1	0.0	0.0	8.3	0.0	90.4	100.0	641
30-34	8.6	2.3	0.2	0.2	1.0	0.6	0.1	0.2	0.0	0.0	6.3	0.0	91.4	100.0	516
35-39	5.8	0.7	0.0	0.1	0.0	0.4	0.0	0.1	0.0	0.0	5.1	0.0	94.2	100.0	473
40-44	2.0	1.6	0.0	0.0	0.8	0.2	0.0	0.6	0.0	0.0	0.5	0.0	98.0	100.0	265
45-49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	127
<b>Total</b>	<b>8.0</b>	<b>1.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.4</b>	<b>0.4</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>6.8</b>	<b>0.0</b>	<b>92.0</b>	<b>100.0</b>	<b>2,675</b>

Note: If more than one method is used, only the most effective method is considered in this tabulation

n/a = Not applicable

LAM = Lactational amenorrhoea method



**Table 4.18** Current use of contraception by background characteristics

Percent distribution of currently married women aged 15-49 by contraceptive method currently used, according to background characteristics, PLHDS 2020														
Background characteristic	Any modern method			Modern method					Any traditional method			Traditional method		Number of women currently married
	Any modern method	Injectables	IUD	Implants	Pills	Condom	Lactational Amenorrhea (LAM)	Any traditional method	Rhythm	Withdrawal	Not currently using	Total		
<b>Number of living children</b>														
0	*	*	*	*	*	*	*	*	*	*	*	*	*	1
1-2	(8.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(4.2)	(3.8)	(3.8)	(0.0)	(92.0)	100.0	36	
3-4	10.5	1.4		1.4				9.1	9.1	0.0	89.5	100.0	120	
5+	7.9	1.2	0.1	0.4	0.3	0.0	0.2	6.7	6.7	0.0	92.1	100.0	2518	
<b>Type of residence</b>														
Urban	10.9	2.9	0.3	1.2	0.9	0.0	0.2	8.1	8.1	0.0	89.1	100.0	910	
Rural	8.7	0.9	0.0	0.0	0.2	0.1	0.4	7.8	7.8	0.0	91.3	100.0	748	
Nomadic	5.0	0.1	0.0	0.0	0.0	0.0	0.1	4.9	4.9	0.0	95.0	100.0	1,017	
<b>Region</b>														
Sool	7.2	0.9	0.0	0.0	0.1	0.0	0.3	6.3	6.3	0.0	92.8	100.0	394	
Sanaag	6.4	0.8	0.0	0.0	0.2	0.0	0.2	5.6	5.6	0.0	93.6	100.0	556	
Bari	8.2	1.9	0.3	1.0	0.6	0.0	0.0	6.3	6.3	0.0	91.8	100.0	624	
Nugaal	10.7	1.9	0.4	0.7	0.0	0.2	0.6	8.9	8.9	0.0	89.3	100.0	272	
Mudug	8.6	1.1	0.0	0.4	0.5	0.0	0.2	7.5	7.5	0.0	91.4	100.0	829	
<b>Education</b>														
No education	6.9	0.5	0.1	0.1	0.1	0.0	0.1	6.4	6.4	0.0	93.1	100.0	2,222	
Primary	14.3	4.6	0.0	2.4	1.7	0.0	0.2	9.7	9.7	0.0	85.7	100.0	340	
Secondary	10.9	6.3	0.0	0.0	2.8	0.0	2.7	4.6	4.6	0.0	89.1	100.0	77	
Higher	(12.3)	(2.7)	(2.7)	(0.0)	(0.0)	(0.0)	(0.0)	(9.5)	(9.5)	(0.0)	(87.7)	100.0	37	
<b>Total</b>	<b>8.0</b>	<b>1.2</b>	<b>0.1</b>	<b>0.4</b>	<b>0.4</b>	<b>0.0</b>	<b>0.2</b>	<b>6.8</b>	<b>6.8</b>	<b>0.0</b>	<b>92.0</b>	<b>100.0</b>	<b>2,675</b>	

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. LAM = Lactational amenorrhea method

**Table 4.19** Knowledge of fertile period by age

Percentage of ever married women aged 15-49 with correct knowledge of the fertile period during the ovulatory cycle, according to age, PLHDS 2020

Age	Percentage with correct knowledge of the fertile period	Number of ever Married women
15-19	5.9	300
20-24	7.7	633
25-29	7.4	889
30-34	7.0	717
35-39	7.8	616
40-44	6.3	339
45-49	9.0	180
<b>Total</b>	<b>7.3</b>	<b>3,675</b>

Note: Correct knowledge of the fertile period is defined as halfway between two menstrual periods



**Table 4.20** Need and demand for birth spacing among currently married women

Percentage of currently married women aged 15-49 with unmet need for birth spacing, percentage with met need for birth spacing, the total demand for birth spacing, and the percentage of the demand for contraception that is satisfied, by background characteristics, PLHDS 2020

Background characteristic	Unmet need for birth spacing			Met need for birth spacing (currently using)			Total demand for birth spacing 1			Percentage of demand satisfied 2	Percentage of demand satisfied by modern method	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
<b>Age</b>												
15-19	30.1	4.7	34.8	0.4	0.8	1.2	30.5	5.5	36.0	3.3	3.3	250
20-24	28.3	3.6	31.9	0.5	0.0	0.5	28.8	3.6	32.4	1.5	1.5	552
25-29	32.0	6.6	38.6	0.9	0.4	1.3	32.9	7.0	39.9	3.3	3.3	794
30-34	30.1	9.7	39.8	1.8	0.1	1.9	31.9	9.8	41.7	4.5	4.5	626
35-39	26.5	12.3	38.8	0.1	0.5	0.6	26.6	12.8	39.4	1.5	1.5	535
40-44	21.8	17.0	38.8	0.9	0.6	1.5	22.7	17.6	40.3	3.8	3.8	276
45-49	15.9	14.5	30.4	0.0	0.0	0.0	15.9	14.5	30.4	0.0	0.0	129
<b>Type of residence</b>												
Urban	26.6	10.7	37.3	1.8	0.9	2.7	28.4	11.5	40.0	6.7	6.7	1,056
Rural	27.3	9.3	36.7	0.7	0.1	0.7	28.0	9.4	37.4	2.0	2.0	885
Nomadic	30.6	6.6	37.2	0.0	0.1	0.1	30.6	6.7	37.2	0.1	0.1	1,221
<b>Region</b>												
Sool	31.7	6.3	38.0	0.6	0.1	0.7	32.3	6.4	38.7	1.8	1.8	479
Sanaag	27.3	9.6	36.9	0.5	0.1	0.6	27.9	9.7	37.6	1.7	1.7	650
Bari	23.0	12.0	35.1	1.1	0.8	1.9	24.1	12.9	37.0	5.2	5.2	720
Nugaal	34.2	9.2	43.4	1.1	0.5	1.6	35.3	9.7	44.9	3.5	3.5	321
Mudug	29.4	6.8	36.2	0.8	0.2	0.9	30.1	6.9	37.1	2.5	2.5	992
<b>Education</b>												
No Education	28.0	10.0	37.9	0.2	0.3	0.5	28.2	10.3	38.5	1.4	1.4	2,597
Primary	33.2	2.5	35.8	3.4	0.4	3.7	36.6	2.9	39.5	9.5	9.5	417
Secondary	22.0	4.4	26.4	4.5	0.0	4.5	26.5	4.4	31.0	14.6	14.6	106
Higher	(20.3)	(2.6)	(22.9)	(2.4)	(0.0)	(2.4)	(22.7)	(2.6)	(25.3)	(9.6)	(9.6)	42
<b>Wealth quintile</b>												
Lowest	28.6	6.1	34.7	0.0	0.0	0.0	28.6	6.1	34.7	0.0	0.0	793
Second	29.4	8.3	37.7	0.1	0.1	0.2	29.5	8.4	37.9	0.5	0.5	584
Middle	28.7	12.1	40.8	0.6	1.0	1.6	29.4	13.1	42.4	3.7	3.7	578
Fourth	29.2	9.6	38.8	0.8	0.2	1.0	30.0	9.8	39.8	2.6	2.6	620
Highest	25.8	8.4	34.1	2.7	0.4	3.2	28.5	8.8	37.3	8.5	8.5	587
<b>Total</b>	<b>28.4</b>	<b>8.7</b>	<b>37.1</b>	<b>0.8</b>	<b>0.3</b>	<b>1.1</b>	<b>29.1</b>	<b>9.0</b>	<b>38.2</b>	<b>2.9</b>	<b>2.9</b>	<b>3,161</b>

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al., 2012.

1 Total demand is the sum of unmet need and met need.

2 Percentage of demand satisfied is met need divided by total demand.

3 Modern methods include pill, IUD, injectables, implants, male condom, and lactational amenorrhea method (LAM).

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

**Table 4.21** Exposure to birth spacing messages

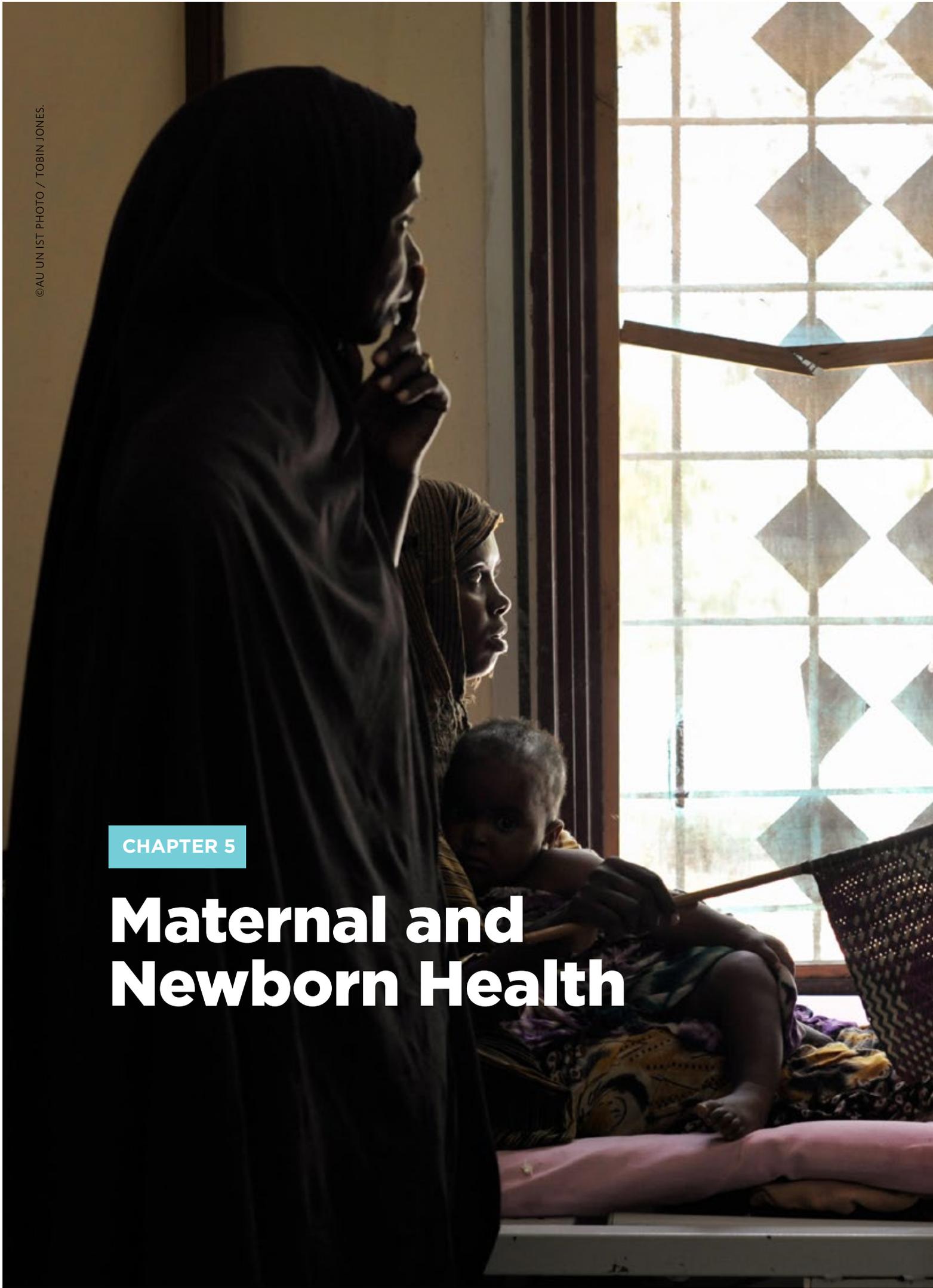
Percentage of ever married women aged 15-49 who heard or saw a birth spacing message on radio, on television, in a newspaper or magazine, or on a mobile phone in the past few months, according to background characteristics, PLHDS 2020

Background characteristics	Radio	Television	Newspaper	Any of these three media source	All of these three media source	None of these three media sources	Number of women
<b>Type of residence</b>							
Urban	21.1	18.0	10.3	29.4	5.9	70.6	1,271
Rural	14.2	8.7	5.4	17.0	3.7	83.0	1,074
Nomadic	3.8	0.5	0.6	4.3	0.2	95.7	1,330
<b>Region</b>							
Sool	4.4	4.5	2.0	7.7	0.8	92.3	527
Sanaag	7.5	6.6	2.0	11.8	1.0	88.2	720
Bari	17.0	10.5	7.7	22.5	3.1	77.5	870
Nugaal	27.1	19.0	11.2	29.4	9.8	70.6	372
Mudug	12.2	8.2	5.4	15.4	3.6	84.6	1,186
<b>Education</b>							
No Education	9.7	5.5	3.1	12.6	1.6	87.4	3,011
Primary	22.5	19.2	10.2	29.6	5.9	70.4	481
Secondary	34.6	35.9	26.3	45.8	20.7	54.2	135
Higher	(50.2)	(45.8)	(43.0)	(62.2)	(26.1)	(37.8)	49
<b>Wealth quintile</b>							
Lowest	3.4	1.1	1.1	4.2	0.5	95.8	859
Second	6.5	1.4	1.3	7.1	0.7	92.9	666
Middle	12.2	6.0	4.5	14.9	1.9	85.1	685
Fourth	17.2	12.9	7.5	23.4	4.5	76.6	748
Highest	25.9	24.1	13.0	35.3	8.4	64.7	717
<b>Total 15-49</b>	<b>12.8</b>	<b>9.0</b>	<b>5.4</b>	<b>16.7</b>	<b>3.2</b>	<b>83.3</b>	<b>3,675</b>

Note: Figures in parentheses are based on 20-49 unweighted cases

CHAPTER 5

# Maternal and Newborn Health





## Key Findings

### ANTENATAL CARE COVERAGE



**26%**

of women aged 15-49 who had a live birth in the 5 years before the survey received antenatal care from skilled health personnel during the pregnancy of their last birth

### ANC VISITS



**6%**

of women aged 15-49 had at least four ANC visits

### COMPONENTS OF ANTENATAL CARE



**87%**

of women who received antenatal care had their blood pressure measured, **63 percent** had a urine sample taken, and **67 percent** had a blood sample taken while **9 percent** were given iron supplements

### TETANUS TOXOID INJECTIONS



**22%**

of births were protected against neonatal tetanus

### DELIVERY SERVICES



**33%**

of births were delivered with the assistance of skilled birth attendant, **19 percent** were delivered at the health facility, of which **16 percent** went to public and **2 percent** went to private facilities.

### POSTNATAL CHECKS



**10%**

of mothers and **9 percent** of newborns had a postnatal check within the first 2 days after delivery

### BARRIERS TO ACCESS TO HEALTH CARE



**72%**

of women aged 15-49 had at least one problem accessing health care



# 5

## Chapter 5

# Maternal and Newborn Health

This chapter presents crucial findings on maternal health, including information on the provision of antenatal care (ANC), delivery, and postnatal care (PNC). These services support key strategic and health policy objectives in Somalia, particularly the reduction of maternal morbidity and mortality.

The survey results provide an opportunity to identify critical issues affecting the health status of women and children in Puntland. This information will assist policy makers, planners and other collaborators in the health sector to formulate appropriate strategies and interventions to improve maternal, new-born and child health services across Puntland.

## Antenatal Care

The health care that a mother receives during pregnancy and at the time of delivery, known as ANC, is important for the survival and well-being of both the mother and new-born child. The ANC from nurse or trained personnel is vital in monitoring a pregnancy and reducing the risks related to morbidity and mortality for the mother and child during pregnancy and delivery.

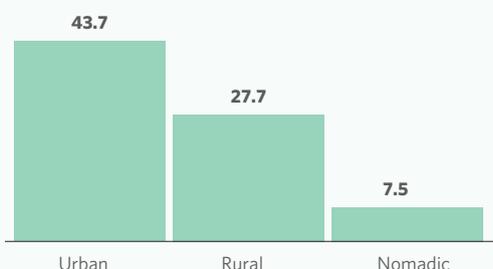
A well-designed and well-implemented ANC programme facilitates the timely detection and treatment of problems during pregnancy. In developing countries in particular, the prevention and treatment of malaria in pregnant women, management of anaemia during pregnancy, and treatment of sexually transmitted infections (STIs) can significantly improve foetal outcomes and improve maternal health. During the antenatal period, interventions such as the administering of tetanus immunization can be life-saving for both the mother and child.

During the 2020 PLHDS, women who had given birth in the five years preceding the survey were asked about the type of ANC provider they had used; the number of ANC visits they had made; the stage of pregnancy they were in at the time of their first visit; and services and information provided during ANC. For women with two or more live births during the five-year period, data on ANC refers to the most recent birth only.

**A well-designed and well-implemented ANC programme facilitates the timely detection and treatment of problems during pregnancy**

**Figure 5.1**

Skilled assistance received during ANC by the type of residence



Percentage receiving antenatal care from skilled provider the type of residence

## Antenatal Care Coverage

Table 5.1 shows the percent distribution of women who had a birth in the five years prior to the survey, by ANC provider during pregnancy. Overall, 73 percent of women in Puntland did not attend ANC during their most recent pregnancy in the five years prior to the survey. Among those who attended ANC, 26 percent received ANC from trained personnel (doctors/clinical officers, nurses, midwives and auxiliary midwives) at least once. Ten percent of women received ANC from doctors/clinical officers, and 16 percent received care from midwives, nurses or auxiliary midwives.

The percentage of mothers receiving ANC from a skilled provider, increases from 25 percent for those below 20 years to 27 percent for those aged 20-34 and then decreases to 21 percent for those aged 35-49.

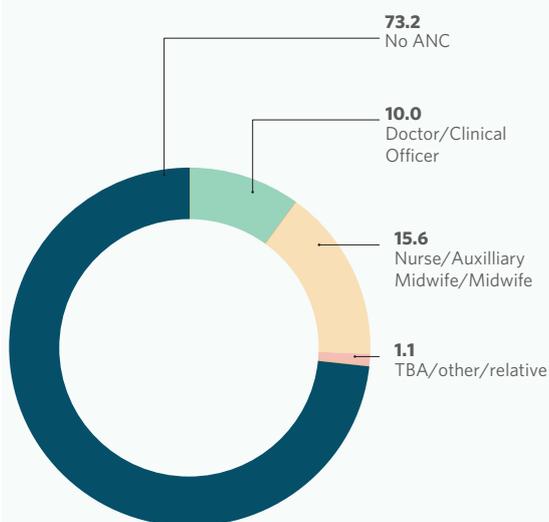
Figure 5.1 presents ANC received from skilled personnel by type of residence. Forty-four percent of women living in urban areas received ANC from skilled personnel, compared to rural and nomadic areas at 28 and 8 percent respectively.

Among the regions, women who received ANC from skilled personnel were highest in Nugaal at 40 percent and lowest in Sool and Sanaag at 22 percent each.

Education levels and the wealth status of women were strongly associated with their use of ANC from a skilled health care provider. Seventy-two percent of women with higher education received antenatal care from a skilled provider, compared to 20 percent of women with no education. Forty-nine percent of women from wealthier households received ANC from a skilled provider compared to 8 percent of women from poorer households.

**Figure 5.2**

Source of antenatal care



Percent distribution of mothers who had children in the five years before the survey, by source of antenatal care received during pregnancy

## Number and Timing of Antenatal Visits

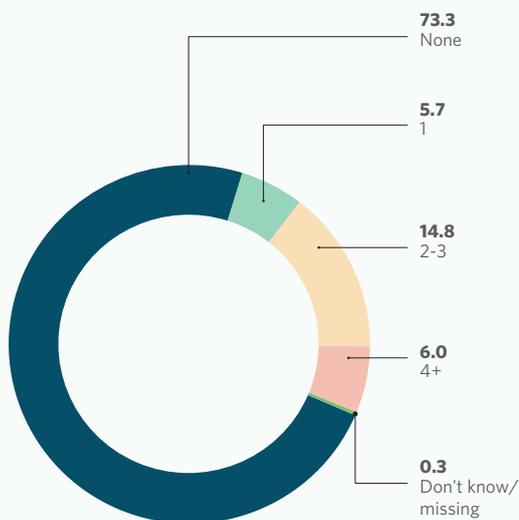
Antenatal care is beneficial in preventing adverse outcomes of pregnancy when it is sought early in the pregnancy and is continued throughout pregnancy. Health professionals recommend that the first antenatal visit should occur within the first three months of the pregnancy and that visits continue on a monthly basis through week 28 of pregnancy, and then every two weeks up to week 36 (or until birth). If the first antenatal visit is made during the third month of pregnancy and then visits occur as regularly as recommended, a total of at least 12 to 13 antenatal visits should have been made.

Table 5.2 presents data on the percent distribution of women aged 15-49 who had a live birth in the five years preceding the survey by number of ANC visits for the most recent live birth by background characteristics. Among women who had a live birth in the five years preceding the survey. Seventy-three percent had made no



**Figure 5.3**

ANC visits made by pregnant women



Percent distribution of women aged 15-49 who had a live birth in the five years preceding the survey, and attended antenatal care (ANC) by number of ANC visits for the most recent live birth

visits in their most recent pregnancy in the five years preceding the survey. Twelve percent of women residing in the urban areas had made four or more ANC visits compared to women from rural and nomadic areas at 6 and 1 percent respectively.

Twenty nine percent of women make their first antenatal care visit before the fourth month of pregnancy. Urban women have a larger percentage of women who delay ANC to the last trimester—4 percent made their first ANC visit in or after the eighth month, as compared to 3 and 1 percent among women in rural and nomadic areas respectively. The median length of pregnancy at the first antenatal care visit is 5 months.

### Components of Antenatal Care

The content of ANC is an essential component of the quality of maternal health services being delivered. In addition to receiving basic care, every pregnant woman should be monitored for complications. Ensuring that pregnant women receive information and undergo screening for complications should be a routine part of all ANC visits. To assess antenatal care services, respondents were asked whether they had been advised of complications or received certain screening tests during at least one of the ANC visits.

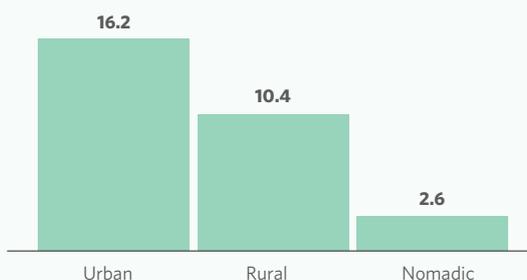
Table 5.3 presents information on the content of antenatal services, including the percentages of women who took iron supplements, took drugs for intestinal parasites, were informed of the signs of pregnancy complications, and received selected routine services during ANC visits for their most recent birth in the five years preceding the survey.

Overall, 9 percent of women took iron tablets during the pregnancy of their last birth while only 1 percent of women took drugs to treat intestinal worms. Among other ANC services, 87 percent of women who received ANC had their blood pressure measured, 63 percent had a urine sample taken, and 67 percent had a blood sample taken.

Women in urban households are more likely to receive ANC component or services compared to those in other population domains. Urban women are more likely to take iron supplements at 16 percent compared to rural and nomadic women at 10 and 3 percent respectively. Regionally, the percentage of women who took iron tablets was highest in Nugaal at 15 percent and lowest in Sool at 6 percent (Figure 5.4).

**Figure 5.4**

Iron tablets by the type of residence



Among women with a live birth in the past five years, the percentage who during the pregnancy for their last birth

The proportion of women who took iron supplements increases steadily with an increase in both education and wealth quintile. Twenty-eight percent of women with higher education took iron supplements compared to 8 percent of those with no education.

**A well-designed and well-implemented ANC programme facilitates the timely detection and treatment of problems during pregnancy**

Women from richer households are more likely to take iron tablets at 17 percent compared to women from poorer households at 3 percent.

**Tetanus Toxoid**

Tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus, a leading cause of early infant death in many developing countries, often attributed to poor hygiene during delivery. For full protection of her newborn baby, a pregnant woman should receive at least two injections of the vaccine during pregnancy. If a woman has been vaccinated during a previous pregnancy, she may only require one or no doses for the next pregnancy. Five doses are considered to provide protection for a lifetime.

Table 5.4 presents the percentage of women aged 15-49 with a live birth in the five years preceding the survey who received two or more tetanus toxoid injections during their most recent pregnancy and the percentage whose last birth was protected against neonatal tetanus.

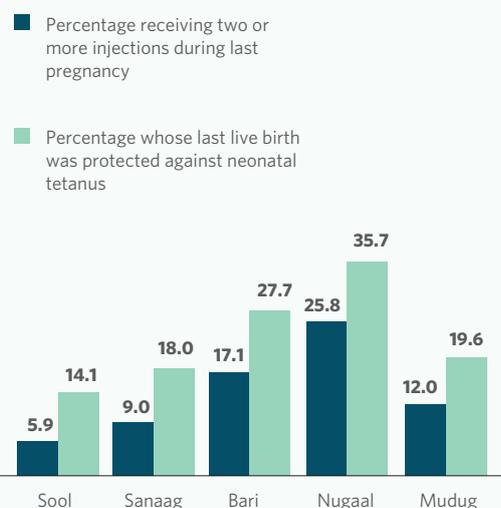
Results show that very few pregnant women get vaccinated against tetanus in Puntland, despite the need for vaccination. Overall, 13 percent of women received two or more tetanus toxoid injections during the pregnancy of their last live birth and 22 percent of births were protected against neonatal tetanus.

Twenty-four percent of women in urban areas received tetanus injections and 38 percent were protected against neonatal tetanus, while 1 percent of women in nomadic areas got tetanus injections and 3 percent were protected against neonatal tetanus.

Regionally, Nugaal had the highest proportion of women who received two or more tetanus injections at 26 percent and highest protection against neonatal tetanus at 36 percent, whereas women in Sool had the lowest proportion of those who received tetanus injections at 6 percent and lowest protection against neonatal tetanus at 14 percent (Figure 5.5).

The proportion of births protected against tetanus increases with the mothers educational level. Thirty-three percent of mothers with higher education received two or more tetanus injections, compared to 10 percent of mothers with no education. The proportion of mothers receiving tetanus vaccinations increases with an increase in level of wealth; less than one percent for the lowest wealth quintile and 24 percent for the highest wealth quintile.

**Figure 5.5**  
Iron tablets by the type of residence

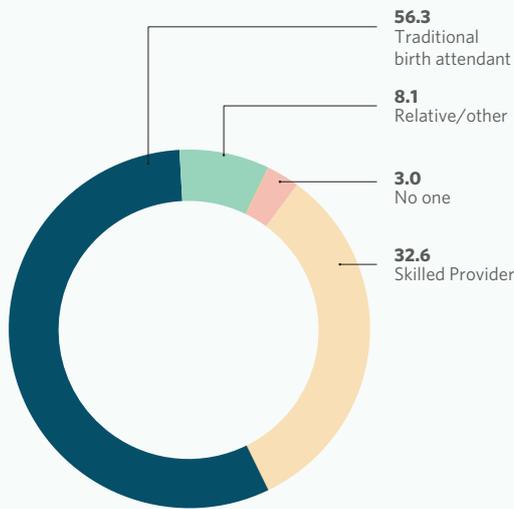


Among women with a live birth in the past five years, the percentage who during the pregnancy for their last birth



**Figure 5.6**

Assistance during delivery



Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery

## Assistance During Delivery

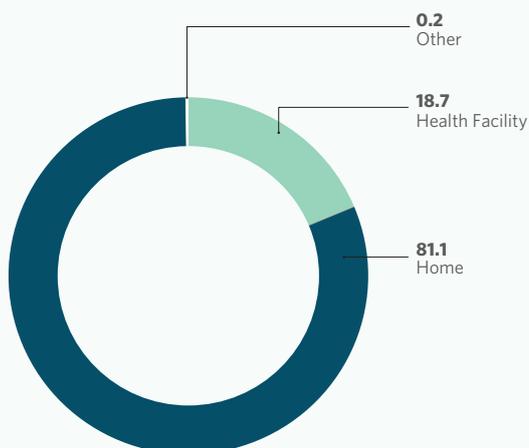
To reduce maternal and neonatal morbidity and mortality, there is a need for every child to be delivered with the assistance of trained skilled birth attendant. Table 5.5 shows the percent distribution of births in the five years preceding the survey by the type of medical assistants available at the time of delivery, births attended by a skilled health provider, and births delivered by caesarean section (C-section), according to background characteristics.

Overall, 33 percent of births in Puntland were delivered with the assistance of a skilled health professional, which includes a doctor/clinical officer, nurse, midwife or auxiliary midwife. Over half (56 percent) of births were delivered with the assistance of a traditional birth attendant (TBA) and 2 percent were delivered through C-section (Figure 5.7).

Analysis by age shows that mothers aged 20-34 years are more likely to be assisted by skilled birth attendants at 34 percent than those under 20 years and those aged 35-49 at 30 percent each. ANC attendance influences the decision of a woman to seek skilled attendance during delivery. Eighty percent of women who made four or more ANC visits, were delivered by a skilled birth attendant compared to those who made 2-3 visits at 60 percent and those who did not make any ANC visits at 27 percent.

**Figure 5.7**

Place of delivery



Percent distribution of live births in the five years preceding the survey by place of delivery

Among the births that were delivered outside a health facility, 18 percent were delivered by a skilled birth attendant.

Among the places of residence and regions, the percentage of women assisted by skilled personnel is higher in the urban areas at 61 percent and lower in the rural and nomadic areas at 32 and 8 percent respectively. The percentage of women assisted by skilled personnel is highest in Bari at 47 percent and lowest in Sool at 18 percent.

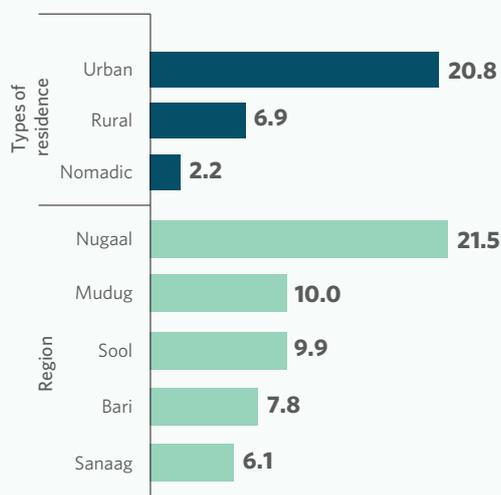
As expected, mothers' education level and wealth status impact on type of delivery care they receive. Mothers with no education and mothers from poorest households are less likely to be assisted by skilled personnel at 27 and 9 percent respectively compared to mothers with higher education and those from richest households at 75 and 66 percent respectively.

## Place of Delivery

Delivery within a health facility is key in reducing health risks to both the mother and baby. Proper medical attention and hygienic conditions during delivery reduce the risks of complications and infection that can cause mortality in either the mother or baby.

**Figure 5.8**

Timing of first postnatal check-up for the mothers by Place of residence and Regions



Percentage of women with a postnatal checkup in the first two days after birth

**89%**

of the mothers did not receive any postnatal check-up after child birth

Table 5.6 shows the percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility according to background characteristics in Puntland. According to the findings, 16 percent of births in the five years preceding the survey were delivered in a public sector, compared to only 2 percent in a private sectors and 81 percent at home (Figure 5.9).

Among the Type of residence, 37 percent of births in urban areas were delivered in a health facility compared to rural and nomadic areas at 16 and 4 percent respectively.

Bari and Nugaal regions have the largest proportion of women who delivered at a health facility at 24 percent each while Sanaag has the least proportion at 10 percent.

Education and wealth have an impact on the uptake of delivery services at health facilities. Sixty-three percent of those with higher education deliver at health facilities, compared to 13 percent of those with no education. Similarly, 43 percent of women from the wealthiest households deliver in health facilities, compared to 4 percent of women from the poorest households.

## Postnatal Care and Practices

Generally, a large number of maternal and neonatal deaths occur during the first 48 hours after delivery. To address this, safe motherhood programmes have increased their emphasis on the importance of postnatal care, encouraging that all women receive a health check-up within two days of delivery. To assess the extent of use of postnatal care in Puntland, respondents who had given birth in the five years preceding the survey were asked whether they had received a health check after the delivery of their last birth. Table 5.7 shows the timing of the first postnatal check-up for women giving birth in the two years preceding the survey. The findings show that only 10 percent of mothers had a postnatal check-up within the first four hours after delivery. Eighty-nine percent of the mothers did not receive any postnatal check-up after child birth.

Women are more likely to seek postnatal care for their first births compared to subsequent births. Further, 44 percent of women who gave birth in a health facility had a postnatal check-up within the first two days after birth.

Urban women were more likely to receive postnatal care within the first two days after birth at 21 percent compared to those in rural and nomadic areas at 7 and 2 percent respectively. Among the regions, percentage of mothers who received postnatal check-up within the first two days after child birth was highest in Nugaal at 22 percent and lowest in Sanaag at 6 percent (Figure 5.10).



The wealth status of the household, had an influence on new-borns postnatal check-up. New-borns from wealthier households were more likely to receive postnatal check-up within two days after birth

**30%**

of mothers with a secondary education have postnatal checks within the first two days of birth

Additionally, women from wealthier households were more likely to receive postnatal care within two days of delivery at 25 percent compared to women from poorer households at 2 percent.

Table 5.8 shows the percent distribution of last births in the two years preceding the survey by time after birth of first postnatal check-up, and births with a postnatal check-up in the first two days after birth, according to background characteristics. Overall, 91 percent of new-borns received no postnatal care. There are no marked variations in uptake of postnatal care services within the first two days of birth, by mother's age.

Among the new-borns delivered in a health facility, 41 percent had their first postnatal check-up within two days of birth.

New-borns born to urban women are more likely to receive postnatal check-up within the first 2 days of birth at 21 percent than those born to rural and nomadic women at 5 and 2 percent respectively.

Among the regions, Nugaal had the highest percentage of new-borns who had their first postnatal check-up within two days after birth at 23 percent compared to Sanaag with the lowest proportion at 5 percent.

Postnatal checks within the first two days of birth increases with an increase in mother's level of education, 7 percent among mothers with no education and 30 percent among mothers with secondary education.

The wealth status of the household, had an influence on new-borns postnatal check-up. New-borns from wealthier households were more likely to receive postnatal check-up within two days after birth at 23 percent compared to those from poorer households at 2 percent.

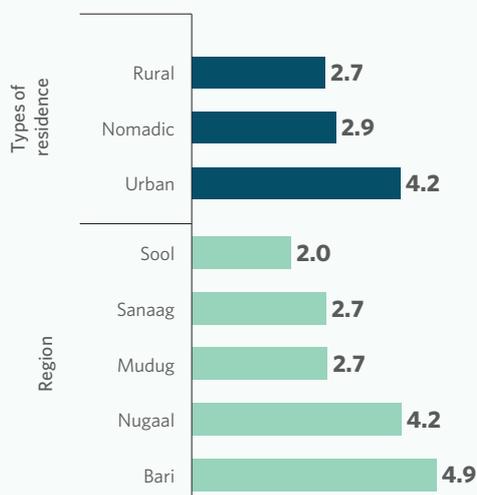
## Obstetric Fistula

Obstetric fistula is a medical condition consisting of an abnormal opening between the vagina and bladder or between the vagina and rectum. A woman with fistula experiences an uncontrollable leakage of urine and/or feces from her vagina. Although largely eradicated in the developed world due to improved obstetric care, fistula continues to have devastating effects on the lives of many women in Puntland. Vaginal fistula usually results from prolonged obstructed labor (Peterman, 2008).

In PLHDS, ever-married women were asked whether they had heard of a medical condition in which women experience constant leakage of stool or urine from their vagina that usually occurs after a difficult childbirth but may occur after sexual assault or after pelvic surgery.

**Figure 5.9**

Obstetric fistula experience by geographical location



Percentage of ever-married women aged 15-49 who have experienced obstetric fistula

Although largely eradicated in the developed world due to improved obstetric care, fistula continues to have devastating effects on the lives of many women in Somalia

Table 5.9 shows percentage of ever-married women age 15-49 who have heard of obstetric fistula and percentage who have experienced obstetric fistula. Overall 53 percent of ever-married women had heard of the problem, but only 3 percent of the women reported they had experienced symptoms consistent with fistula. Obstetric fistula is highly stigmatized and respondents may choose not to report such a “socially undesirable” condition. Consequently, the occurrence of fistula may be underreported in the PLHDS, and the actual prevalence may be much higher than 3 percent of married women, constituting a severe threat to maternal health. Thus, the PLHDS findings should be interpreted with caution.

Among the ever-married women, women aged 15-19 have the least proportion of those that had heard of obstetric fistula at 39 percent compared to ever married women aged 45-49 at 59. Experience of obstetric fistula is also highest among older women at 6 percent compared to one percent reported among those of age 15-19. Figure 5.11 shows that urban women were more likely to experience symptoms consistent with a fistula at 4 percent, compared to women in rural and nomadic areas at 3 percent each. Among the regions, Bari had the highest percentage of women who had reported they had experienced symptoms consistent with obstetric fistula at 5 percent and Sool had the lowest percentage at 2 percent.

The table 5.9 shows that women’s awareness of fistula is not related to their level of education and wealth status.

Women who reported experiencing symptoms consistent with fistula were asked whether the problem started after a natural delivery, after still birth or in some other way. As shown in Table 5.10, 39 percent of women said the leakage started after a delivery, 23 percent of the women said the leakage started after still birth and 38 percent said it came in some other way.

Women were also asked if they sought treatment for the fistula. As shown in Table 5.11, 65 percent of ever-married women who had experienced fistula did not seek treatment, 24 percent of the women sought assistance from Doctor/Clinical officer while 8 percent went to a nurse or midwife for treatment.

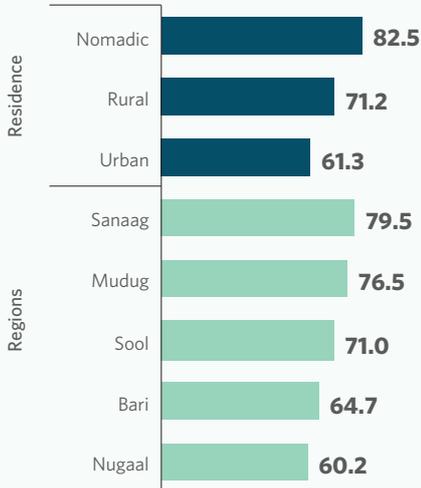
### Problems in Accessing Health Care

The PLHDS included a series of questions designed to obtain information on the problem’s women face in obtaining health care services for themselves. This information is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy and, particularly, during child delivery. To obtain this information, women aged 15-49 were asked whether each of the following factors would be a big problem



**Figure 5.10**

Problems in accessing health care by geographical locations



Percentage of women age 15-49 who reported that they have At least one problem accessing health care

or not for them in obtaining health services: getting permission to go facilities, getting money for treatment, the distance to the health facility, and not wanting to go alone. Table 5.12 shows the percentages of respondents who consider the individual factors to be a big problem, and the percentages reporting at least one of the specified factors to be a big challenge, according to background characteristics.

Overall, 72 percent of women face at least one problem accessing health care. The majority at 63 percent perceived lack of money as a barrier to their access to health services, 58 percent cited the distance to a health facility as a challenge, while 42 percent mentioned not wanting to go alone as a deterrent. Thirty-five percent of all women cited obtaining permission from the husband as a big problem.

The employment status over the past 12 months preceding the survey, had an influence on the women’s access to health services. Women who were employed for cash were least likely to have at least one problem accessing health care at 65 percent compared to the unemployed women at 73 percent and those employed but not for cash at 70 percent.

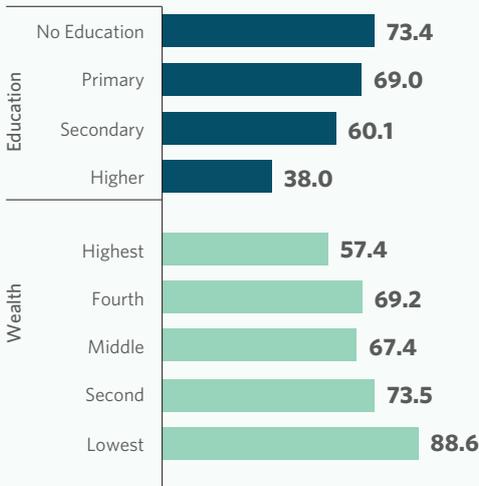
Table 5.12 shows that nomadic and rural women are more likely to have at least one problem accessing health care at 83 and 71 percent respectively, compared to women from urban areas at 61 percent.

Among the regions, women in Sanaag were more likely to have at least one problem in accessing health care at 80 percent compared to women in Nugaal at 60 percent.

The probability of women having at least one problem accessing health care decreases with increasing level of education; 73 percent of women with no education are likely to encounter at least one problem accessing health care compared to 60 percent of those with secondary level of education. Women from wealthier households are less likely to encounter at least one problem accessing health care at 57 percent compared to women from poorer households at 89 percent (Figure 5.13).

**Figure 5.11**

Problems in accessing health care by Background Characteristics



Percentage of women age 15-49 who reported that they have At least one problem accessing health care



Women are more likely to seek postnatal care for their first births compared to subsequent births



**Table 5.1** Antenatal Care

Percent distribution of ever married women aged 15-49 who had a live birth in the 5 years preceding the survey by antenatal care (ANC) provider, during PLHDS 2020

Background characteristics	Person providing assistance during ANC				Total	Skilled assistance during ANC	Number of women
	Doctor/Clinical Officer	Nurse/Auxilliary Midwife/Midwife	TBA/other/relative	No ANC			
<b>Mother's age at birth</b>							
<20	10.9	14.2	0.9	74.0	100.0	25.1	560
20-34	9.8	16.7	1.3	72.2	100.0	26.5	1,847
35-49	9.4	11.4	0.7	78.4	100.0	20.9	288
<b>Birth Order</b>							
1	10.0	15.6	1.2	73.3	100.0	25.6	2,692
2-3	*	*	*	*	*	*	2
6+	*	*	*	*	*	*	2
<b>Type of residence</b>							
Urban	15.3	28.4	1.1	55.1	100.0	43.7	920
Rural	11.0	16.6	1.3	71.1	100.0	27.7	765
Nomadic	4.3	3.1	1.1	91.5	100.0	7.5	1,010
<b>Region</b>							
Sool	7.1	14.9	1.1	76.9	100.0	22.0	421
Sanaag	6.3	15.7	1.1	76.7	100.0	22.1	544
Bari	9.9	19.3	1.0	69.9	100.0	29.1	593
Nugaal	15.8	24.3	0.8	59.1	100.0	40.1	275
Mudug	11.9	10.6	1.4	76.1	100.0	22.5	863
<b>Education</b>							
No education	7.2	12.4	1.1	79.3	100.0	19.6	2,191
Primary	18.5	30.5	2.0	49.0	100.0	49.0	374
Secondary	27.4	26.4	0.0	46.1	100.0	53.9	97
Higher	(46.1)	(25.8)	(0.0)	(28.1)	100.0	(71.9)	33
<b>Wealth quintile</b>							
Lowest	3.9	3.9	0.7	91.6	100.0	7.7	650
Second	5.1	8.3	1.2	85.4	100.0	13.4	503
Middle	6.7	16.3	0.8	76.0	100.0	23.0	499
Fourth	12.2	26.8	1.6	59.4	100.0	39.0	551
Highest	23.9	25.3	1.5	49.3	100.0	49.2	492
<b>Total</b>	10.0	15.6	1.1	73.2	100.0	25.6	2,695

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.



**Table 5.2** Number of antenatal care visits and timing of first visit

Percent distribution of women aged 15-49 who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth, and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, PLHDS 2020

Number and timing of ANC visits	Type of residence			Total
	Urban	Rural	Nomadic	
None	55.1	71.1	91.5	73.3
1	6.6	6.0	4.6	5.7
2-3	26.1	17.0	2.9	14.8
4+	12.2	5.7	0.6	6.0
Don't know/missing	0.1	0.3	0.5	0.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of months pregnant at time of first ANC visit</b>				
<4	16.0	10.2	2.9	29.1
4-5	15.5	9.1	1.7	26.3
6-7	9.6	6.2	2.0	17.8
8+	3.6	2.8	1.4	8.2
Don't know/missing	0.2	0.6	0.4	1.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100</b>
Number of women	920	765	1,010	740
Median months pregnant at first visit (for those with ANC)	5.0	5.0	5.0	5.0
Number of women with ANC	414	221	86	740


**Table 5.3** Components of antenatal care

Among women aged 15-49 with a live birth in the five years preceding the survey, the percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, PLHDS 2020

Background characteristics	Among women with a live birth in the past five years, the percentage who during the pregnancy for their last birth:		Number of women with a live birth in the past five years	Among women who received ANC for their most recent birth in the past 5 years, the percentage with the selected services:			Number of women with ANC for their most recent birth
	Took iron tablets or syrup	Took intestinal parasite drugs		Blood pressure measured	Urine sample taken	Blood sample taken	
<b>Mother's age at birth</b>							
<20	14.1	0.9	781	85.8	58.9	60.6	146
20-34	10.1	0.8	3,643	89.1	64.5	70.1	513
35-49	4.0	0.3	517	76.4	61.3	58.0	62
<b>Birth order</b>							
1	22.2	1.7	2,507	87.3	63.0	67.0	719
2-3	0.1	0.0	2,334	*	*	*	2
4-5	0.0	0.0	97	0.0	0.0	0.0	0
6+	*	*	3	*	*	*	0
<b>Type of residence</b>							
Urban	16.2	1.3	1,684	89.6	64.4	70.8	414
Rural	10.4	0.7	1,431	84.6	59.5	59.8	221
Nomadic	2.6	0.2	1,826	83.4	65.7	68.3	86
<b>Region</b>							
Sool	5.8	0.2	782	93.9	60.2	58.0	97
Sanaag	7.4	0.1	1,014	92.4	49.6	50.2	127
Bari	13.5	1.2	1,039	81.9	54.0	59.4	178
Nugaal	15.4	1.7	495	87.9	69.5	74.7	112
Mudug	8.0	0.8	1,611	85.6	77.0	84.3	207
<b>Education</b>							
No Education	7.5	0.6	3,981	84.8	57.8	62.0	454
Primary	16.6	1.0	742	90.2	69.4	72.7	191
Secondary	19.7	0.8	162	94.3	74.0	79.4	52
Higher	27.8	6.0	56	(97.8)	(87.3)	(91.4)	24
<b>Wealth quintile</b>							
Lowest	2.5	0.2	1,174	82.2	58.4	64.4	55
Second	5.6	0.1	936	88.6	60.6	56.8	73
Middle	10.9	1.2	925	84.2	58.8	65.0	120
Fourth	14.1	1.3	1,066	87.9	57.0	65.8	224
Highest	16.5	0.8	840	89.1	72.2	72.9	249
<b>Total</b>	<b>9.4</b>	<b>0.7</b>	<b>4,941</b>	<b>87.3</b>	<b>63.0</b>	<b>67.1</b>	<b>721</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

**Table 5.4** Tetanus toxoid injections

Among mothers aged 15-49 with a live birth in the five years preceding the survey, the percentage receiving two or more tetanus toxoid injections (TTI) during the pregnancy for the last live birth and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, PLHDS 2020

Background characteristics	Percentage receiving two or more injections during last pregnancy	Percentage whose last live birth was protected against neonatal tetanus <sup>1</sup>	Number of mothers
<b>Mother's age of birth</b>			
<20	9.2	18.3	560
20-34	14.6	23.2	1,847
35-49	9.8	20.1	288
<b>Birth Order</b>			
1	11.9	22.2	734
2-3	12.6	21.2	1,662
4-5	17.6	24.4	281
6+	*	*	18
<b>Type of residence</b>			
Urban	24.4	38.1	920
Rural	15.0	26.6	765
Nomadic	1.0	3.4	1,010
<b>Region</b>			
Sool	5.9	14.1	421
Sanaag	9.0	18.0	544
Bari	17.1	27.7	593
Nugaal	25.8	35.7	275
Mudug	12.0	19.6	863
<b>Education</b>			
No Education	9.8	16.6	2,191
Primary	26.0	44.9	374
Secondary	26.1	39.8	97
Higher	(32.7)	(54.8)	33
<b>Wealth quintiles</b>			
Lowest	0.7	3.9	650
Second	7.0	12.4	503
Middle	15.5	26.3	499
Fourth	20.7	32.7	551
Highest	23.9	38.6	492
<b>Total</b>	<b>13.0</b>	<b>21.9</b>	<b>2,695</b>

<sup>1</sup> Includes mothers with two injections during the pregnancy of her last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last birth

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.



**Table 5.5** Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider, and the percentage delivered by caesarian-section, according to background characteristics, PLHDS 2020

Background characteristics	Person providing assistance during delivery					Total	Percentage delivered by skilled provider <sup>1</sup>	Percentage delivered by C-section	Number of birth
	Doctor	Nurse/Auxiliary Midwife/Midwife	Traditional birth attendant	Relative/other	No one				
<b>Mother's age of birth</b>									
<20	6.2	23.7	56.6	10.1	3.4	100.0	29.9	1.9	823
20-34	7.0	26.7	56.2	7.6	2.6	100.0	33.7	2.0	4,241
35-49	5.8	23.7	57.1	8.6	4.8	100.0	29.6	0.4	699
<b>Birth order</b>									
1	7.9	26.0	55.2	8.2	2.7	100.0	33.9	2.4	2,503
2-3	6.1	25.8	56.5	8.3	3.2	100.0	31.9	1.3	2,875
4-5	3.6	27.2	60.6	5.7	2.9	100.0	30.7	1.2	360
6+	(7.8)	(12.1)	(80.1)	(0.0)	(0.0)	100.0	(19.9)	(7.8)	26
<b>Antenatal care visits</b>									
None	6.8	19.8	61.0	9.1	3.4	100.0	26.6	1.4	1,974
2-3	12.7	47.6	36.4	2.3	1.0	100.0	60.4	4.8	551
4+	13.1	66.8	18.3	1.9	*	100.0	79.9	4.2	161
Don't know/missing	*	*	*	*	*	100.0	*	*	8
<b>Place of delivery</b>									
Health facility	22.5	72.7	3.9	0.3	0.6	100.0	95.2	9.5	1,076
Elsewhere	3.1	15.2	68.4	9.9	3.5	100.0	18.3	0.0	4,687
<b>Place of residence</b>									
Urban	13.2	47.6	35.2	2.7	1.4	100.0	60.8	3.1	1,958
Rural	7.0	25.1	61.9	3.9	2.1	100.0	32.1	2.4	1,614
Nomadic	0.8	7.1	71.1	15.9	5.1	100.0	7.9	0.1	2,191

**Table 5.5** (Cont'd) Assistance during delivery

Background characteristics	Person providing assistance during delivery					Total	Percentage delivered by skilled provider <sup>1</sup>	Percentage delivered by C-section	Number of birth
	Doctor	Nurse/Auxiliary Midwife/Midwife	Traditional birth attendant	Relative/other	No one				
<b>Region</b>									
Sool	2.0	16.1	60.4	16.6	4.8	100.0	18.1	1.1	926
Sanaag	2.7	16.6	66.9	12.0	1.8	100.0	19.3	0.7	1,196
Bari	15.3	31.5	49.8	1.4	2.0	100.0	46.8	3.0	1,177
Niugaal	5.9	36.3	44.8	4.3	8.8	100.0	42.1	2.3	584
Mudug	6.6	29.9	55.2	6.7	1.6	100.0	36.5	1.8	1,880
<b>Education</b>									
No Education	5.3	21.2	60.6	9.3	3.6	100.0	26.5	1.0	4,684
Primary	11.2	45.2	40.0	3.3	0.3	100.0	56.4	3.5	837
Secondary	17.9	50.2	31.9	0.0	0.0	100.0	68.1	11.9	177
Higher	21.5	53.3	25.2	0.0	0.0	100.0	74.8	4.0	65
<b>Wealth quintile</b>									
Lowest	1.0	8.2	67.8	19.5	3.4	100.0	9.2	0.1	1,424
Second	1.8	11.0	71.7	9.7	5.8	100.0	12.8	0.2	1,113
Middle	7.8	25.6	59.8	3.0	3.8	100.0	33.4	1.4	1,048
Fourth	9.0	41.8	46.0	2.4	0.8	100.0	50.8	3.2	1,206
Highest	16.8	49.6	30.9	1.8	0.9	100.0	66.4	4.6	973
<b>Total</b>	<b>6.7</b>	<b>25.9</b>	<b>56.3</b>	<b>8.1</b>	<b>3.0</b>	<b>100.0</b>	<b>32.6</b>	<b>1.8</b>	<b>5,763</b>

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.

<sup>1</sup> Skilled provider includes doctor/clinical officer or nurse/midwife/auxiliary midwife

<sup>2</sup> Includes only the most recent birth in the five years preceding the survey

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.


**Table 5.6** Timing of first postnatal check-up for the mother

Percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, PLHDS 2020

Background characteristics	Health facility				Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector	Home	Other			
<b>Mother's age at birth</b>							
<20	14.7	2.3	82.5	0.6	100.0	17.0	823
20-34	17.1	2.3	80.4	0.2	100.0	19.4	4,241
35-49	14.0	2.0	83.6	0.3	100.0	16.0	699
<b>Birth order</b>							
1	17.0	2.1	80.6	0.2	100.0	19.2	2,503
2-3	15.9	2.3	81.5	0.3	100.0	18.2	2,875
4-5	16.0	3.1	80.7	0.2	100.0	19.2	360
6+	(15.7)	(2.1)	(82.2)	(0.0)	100.0	(17.8)	26
<b>Antenatal care visits<sup>1</sup></b>							
None	11.2	1.0	87.5	0.3	100.0	12.2	1,974
1-3	36.2	5.8	57.7	0.3	100.0	42.0	551
4+	49.1	16.9	33.9	0.0	100.0	66.1	161
Don't know/ missing	*	*	*	*	100.0	*	8
<b>Type of residence</b>							
Urban	33.3	4.1	62.5	0.2	100.0	37.3	1,958
Rural	14.7	1.6	83.3	0.5	100.0	16.2	1,614
Nomadic	2.6	1.2	96.0	0.2	100.0	3.8	2,191
<b>Region</b>							
Sool	10.0	2.6	87.2	0.2	100.0	12.6	926
Sanaag	8.1	2.0	89.6	0.3	100.0	10.1	1,196
Bari	23.5	0.9	75.5	0.2	100.0	24.3	1,177
Nugaal	21.7	2.7	75.3	0.3	100.0	24.4	584
Mudug	18.8	3.1	77.9	0.2	100.0	21.8	1,880
<b>Education</b>							
No Education	11.7	1.4	86.7	0.2	100.0	13.1	4,684
Primary	35.8	4.0	59.5	0.7	100.0	39.8	837
Secondary	37.9	12.3	49.8	0.0	100.0	50.2	177
Higher	49.2	13.5	37.3	0.0	100.0	62.7	65
<b>Wealth quintile</b>							
Lowest	2.8	1.4	95.6	0.3	100.0	4.1	1,424
Second	6.0	0.7	93.2	0.1	100.0	6.7	1,113
Middle	16.9	1.1	81.8	0.2	100.0	17.9	1,048
Fourth	25.2	2.8	71.9	0.1	100.0	28.0	1,206
Highest	36.9	6.1	56.5	0.5	100.0	42.9	973
<b>Total</b>	<b>16.4</b>	<b>2.3</b>	<b>81.1</b>	<b>0.2</b>	<b>100.0</b>	<b>18.7</b>	<b>5,763</b>

<sup>1</sup> Includes only the most recent birth in the five years preceding the survey.

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

**Table 5.7** Timing of first postnatal check-up for the mother

Among women aged 15-49 giving birth in the two years preceding the survey, the percent distribution of the mother's first postnatal check-up for the last live birth by time after delivery, and the percentage of woman with a live birth in the two years preceding the survey who received a postnatal checkup in the first two days after giving birth, according to background characteristics, PLHDS 2020

Background characteristics	Time after delivery of mothers first postnatal checkup							Total	Percentage of women with a postnatal checkup in the first two days after birth	Number of women
	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know	No postnatal checkup <sup>1</sup>			
<b>Mother's age at birth</b>										
<20	8.7	0.5	1.2	0.3	0.0	0.9	88.5	100.0	10.3	437
20-34	8.5	0.5	0.5	0.1	0.2	0.5	89.7	100.0	9.6	1,137
35-49	9.6	0.0	0.0	0.0	0.0	1.5	88.8	100.0	9.6	114
<b>Birth order</b>										
1	14.2	0.2	0.9	0.0	0.6	1.0	83.0	100.0	15.3	311
2-3	7.2	0.6	0.6	0.1	0.0	0.6	90.9	100.0	8.4	1,128
4+	8.3	0.4	0.3	0.2	0.0	0.2	90.5	100.0	9.0	250
<b>Place of delivery</b>										
Health facility	38.6	2.2	2.9	0.5	0.5	2.9	52.5	100.0	43.8	378
Elsewhere	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	1,310
<b>Type of residence</b>										
Urban	19.1	1.1	0.6	0.0	0.4	1.4	77.5	100.0	20.8	569
Rural	6.0	0.5	0.5	0.2	0.0	0.5	92.4	100.0	6.9	470
Nomadic	1.4	0.0	0.8	0.1	0.0	0.1	97.6	100.0	2.2	648
<b>Region</b>										
Sool	8.8	0.4	0.7	0.6	0.0	0.6	88.9	100.0	9.9	276
Sanaag	4.7	0.5	0.8	0.0	0.0	0.2	93.9	100.0	6.1	361
Bari	7.1	0.0	0.7	0.0	0.6	1.6	90.1	100.0	7.8	357
Nugaal	20.0	0.6	0.9	0.0	0.0	0.0	78.5	100.0	21.5	167
Mudug	8.7	0.9	0.4	0.0	0.0	0.6	89.5	100.0	10.0	526
<b>Education</b>										
No education	5.3	0.3	0.7	0.0	0.1	0.6	93.0	100.0	6.2	1,348
Primary	16.6	1.6	0.5	0.4	0.0	1.2	79.7	100.0	18.9	257
Secondary	36.2	0.9	1.0	0.0	0.0	0.0	61.9	100.0	38.1	61
Higher Education	*	*	*	*	*	*	*	100.0	*	21
<b>Wealth quintile</b>										
Lowest	1.3	0.1	0.6	0.2	0.0	0.2	97.7	100.0	2.0	405
Second	2.7	0.0	1.2	0.0	0.0	0.0	96.1	100.0	3.9	324
Middle	6.6	0.5	0.2	0.4	0.0	0.6	91.7	100.0	7.3	301
Fourth	12.2	0.5	0.8	0.0	0.0	0.6	86.0	100.0	13.5	351
Highest	22.5	1.5	0.4	0.0	0.7	2.2	72.8	100.0	24.5	306
<b>Total</b>	8.6	0.5	0.6	0.1	0.1	0.7	89.4	100.0	9.8	1,688

<sup>1</sup> Includes women who received a check-up after 41 days

An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.



**Table 5.8** Timing of first postnatal checkup for the newborn

Percent distribution of last births in the two years preceding the survey by time after birth of first postnatal checkup, and the percentage of births with a postnatal checkup in the first two days after birth, according to background characteristics, PLHDS 2020

Background characteristics	Time after birth of newborn's first postnatal checkup						Total	Percentage of births with a postnatal checkup in the first two days after birth	Number of births
	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know	No postnatal checkup <sup>1</sup>			
<b>Mother's age at birth</b>									
<20	6.9	1.1	0.2	0.1	0.1	91.6	100.0	8.2	437
20-34	8.7	0.4	0.5	0.3	0.0	90.1	100.0	9.6	1,137
35-49	8.3	0.0	1.3	0.0	0.0	90.4	100.0	9.6	114
<b>Birth order</b>									
1	13.4	0.2	1.1	0.0	0.0	85.3	100.0	14.7	311
2-3	7.1	0.7	0.4	0.3	0.0	91.5	100.0	8.2	1,128
4+	6.7	0.6	0.0	0.2	0.0	92.5	100.0	7.3	250
<b>Place of delivery</b>									
Health facility	36.7	2.6	2.0	1.0	0.1	57.6	100.0	41.3	378
Elsewhere	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	1,310
<b>Type of residence</b>									
Urban	18.9	1.2	0.9	0.4	0.1	78.6	100.0	21.0	569
Rural	3.9	0.4	0.6	0.2	0.0	94.9	100.0	4.9	470
Nomadic	2.0	0.1	0.0	0.1	0.0	97.8	100.0	2.1	648
<b>Region</b>									
Sool	9.1	0.4	0.2	0.4	0.2	89.6	100.0	9.7	276
Sanaag	5.4	0.0	0.0	0.0	0.0	94.6	100.0	5.4	361
Bari	7.3	0.6	0.6	0.6	0.0	91.0	100.0	8.4	357
Nugaal	21.4	0.3	1.2	0.3	0.0	76.7	100.0	22.9	167
Mudug	6.1	1.1	0.6	0.0	0.0	92.2	100.0	7.8	526
<b>Education</b>									
No Education	6.0	0.6	0.1	0.1	0.0	93.2	100.0	6.7	1,348
Primary	12.3	0.8	1.4	0.2	0.0	85.3	100.0	14.5	257
Secondary	26.7	0.0	3.4	3.3	0.9	65.8	100.0	30.1	61
Higher	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(0.0)	21
<b>Wealth quintile</b>									
Lowest	2.0	0.0	0.0	0.2	0.0	97.8	100.0	2.0	405
Second	3.2	0.2	0.0	0.0	0.0	96.6	100.0	3.4	324
Middle	5.5	0.5	0.5	0.2	0.0	93.4	100.0	6.5	301
Fourth	12.7	0.6	0.0	0.2	0.2	86.4	100.0	13.3	351
Highest	19.3	1.8	2.0	0.7	0.0	76.3	100.0	23.1	306
<b>Total</b>	<b>8.2</b>	<b>0.6</b>	<b>0.5</b>	<b>0.2</b>	<b>0.0</b>	<b>90.5</b>	<b>100.0</b>	<b>9.2</b>	<b>1,688</b>

<sup>1</sup> Includes newborns who received a check-up after the first week  
Figures in parentheses are based on 25-49 unweighted cases.

**Table 5.9** Obstetric fistula

Percentage of ever-married women aged 15-49 who have heard of obstetric fistula and percentage who have experienced obstetric fistula, according to background characteristics, PLHDS 2020

Background characteristics	heard obstetric fistula	experienced obstetric fistula	Number of ever married women
<b>Age</b>			
15-19	38.6	0.6	300
20-24	49.3	2.1	633
25-29	54.8	3.6	889
30-34	54.5	2.6	717
35-39	58.0	5.2	616
40-44	54.8	3.3	339
45-49	59.1	6.3	180
<b>Type of residence</b>			
Urban	58.6	4.2	1,271
Rural	54.8	2.7	1,074
Nomadic	46.9	2.9	1,330
<b>Region</b>			
Sool	49.5	2.0	527
Sanaag	58.6	2.7	720
Bari	46.1	4.9	870
Nugaal	55.2	4.2	372
Mudug	56.1	2.7	1,186
<b>Mother's education</b>			
No education	50.3	3.2	3,011
Primary	68.5	3.9	481
Secondary	60.8	3.4	135
Higher	(59.6)	(0.0)	49
<b>Wealth quintile</b>			
Lowest	52.9	2.4	859
Second	43.3	2.3	666
Middle	46.1	4.5	685
Fourth	59.3	2.9	748
Highest	63.3	4.3	717
<b>Total</b>	<b>53.2</b>	<b>3.3</b>	<b>3,675</b>

Figures in parentheses are based on 25-49 unweighted cases.



**Table 5.10** Origin of fistula

Percent distribution of ever-married women aged 15-49 who have experienced obstetric fistula, by origin and time to onset, PLHDS 2020

Origin of fistula	Total
After delivery	39.4
After still birth	22.5
Neither	38.2
Number of ever married women who experienced fistula	120

**Table 5.11** Treatment

Percent distribution of ever-married women aged 15-49 who sought Fistula treatment, PLHDS 2020

Source of treatment	Total
Did not seek	65.1
Doctor/Clinical officer	24.0
Nurse/Midwife	8.3
Other	2.5
Number of ever married women who experienced Fistula	120

**Table 5.12** Problems in accessing health care

Percentage of women aged 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, PLHDS 2020

Background characteristics	Problems in accessing health care					Number of Ever Married Women
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	At least one problem accessing health care	
<b>Age</b>						
15-19	29.4	59.3	52.3	39.5	67.8	300
20-34	35.0	64.3	58.6	42.1	73.1	2,240
35-49	35.5	62.5	57.9	42.9	70.5	1,135
<b>Number of living children</b>						
0	*	*	*	*	*	1
1-2	32.6	70.6	51.3	33.5	70.6	61
3-4	33.0	61.7	51.5	43.5	72.6	168
5+	34.8	63.3	58.3	42.2	71.8	3,445
<b>Marital status</b>						
Married	35.3	64.4	59.1	42.7	72.7	3,161
Divorced/ widowed	31.3	56.6	50.5	38.5	66.3	514
<b>Employed past 12 months</b>						
Not employed	35.1	64.3	58.9	42.9	72.5	3,298
Employed for cash	31.4	54.1	48.0	34.5	65.4	303
Employed not for cash	30.2	58.6	53.9	39.3	70.3	74
<b>Type of residence</b>						
Urban	28.4	54.0	41.6	30.4	61.3	1,271
Rural	35.3	61.6	55.7	39.2	71.2	1,074
Nomadic	40.3	73.7	75.2	55.8	82.5	1,330
<b>Regions</b>						
Sool	41.5	65.3	62.1	43.8	71.0	527
Sanaag	43.4	71.3	69.7	51.2	79.5	720
Bari	20.7	52.9	39.8	28.4	64.7	870
Nugaal	30.5	49.7	47.1	32.4	60.2	372
Mudug	38.0	69.5	65.5	49.1	76.5	1,186
<b>Education</b>						
No Education	36.3	65.3	60.7	44.4	73.4	3,011
Primary	30.7	59.0	50.5	35.9	69.0	481
Secondary	21.5	48.2	32.9	24.8	60.1	135
Higher	(12.5)	(24.2)	(27.1)	(15.8)	(38.0)	49
<b>Wealth</b>						
Lowest	45.7	81.1	81.5	60.0	88.6	859
Second	34.8	64.1	65.0	45.9	73.5	666
Middle	35.0	59.0	50.1	37.4	67.4	685
Fourth	32.3	59.6	50.4	38.1	69.2	748
Highest	23.7	49.4	38.3	25.9	57.4	717
<b>Total</b>	<b>34.7</b>	<b>63.3</b>	<b>57.9</b>	<b>42.2</b>	<b>71.8</b>	<b>3,675</b>

Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

CHAPTER 6

# Child Health



## Key Findings

### BIRTH WEIGHT



**14%**

percent of births in the five years preceding the survey had a low birth weight (less than 2.5kg)

### VACCINATIONS



**9%**

of children aged 12-23 months had received all basic vaccinations (Bacillus Calmette-Guérin (BCG), three doses of pentavalent and polio vaccines, and one dose of the measles vaccine) at any time before the survey.

### VACCINATION COVERAGE

is highest in urban, followed by the rural and nomadic areas

### FEVER



**6%**

had fever and **35 percent** had sought advice or treatment

### DIARRHOEA



**5%**

of children under age five had diarrhoea in the 2 weeks before the survey, **45 percent** of these children had sought advice or treatment from a health facility/provider



# 6

## Chapter 6

# Child Health

This chapter presents findings from the PLHDS that relate to children's health. These include the characteristics of newborns such as birth weight, vaccination status of children, symptoms of acute respiratory infection (ARI), fever, diarrhoea and treatment of childhood illnesses. Information collected on child health from the PLHDS is expected to assist policy makers and programme managers in formulating appropriate strategies and interventions to improve the health of children in Puntland and sanitation in their environment.

## Birth Weight

Birth weight is a major determinant of infant and child health, as low birth weight is associated with fetal and neonatal morbidity, inhibited physical and cognitive development, and chronic diseases later in life. Birth weight is used as a summary indicator of the challenges that a public health system faces, including long-term maternal malnutrition, ill health, and poor health care during pregnancy. Children whose birth weight is less than 2.5 kilograms, or children reported to be "very small" or "smaller than average," are considered to have a higher risk of early childhood death than average children (WHO 2014).

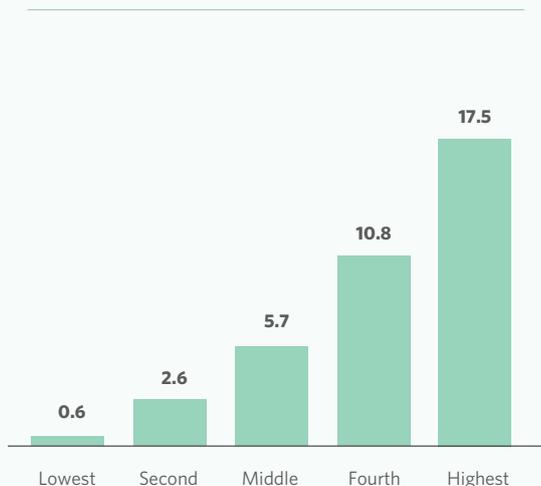
The PLHDS recorded births occurring during the five years preceding the survey. Birth weight was recorded in the Ever-Married Woman's Questionnaire, based on either written record or the mother's verbal report. As the birth weight may not have been known for many babies, the mother's estimate of the baby's size at birth was also obtained. Even though such an estimate is subjective, it can be a useful estimate for the weight of the child.

Table 6.1 presents information on child weight at birth by background characteristics. It shows that the birth weight was reported for only 7 percent of the live births occurring in the five years preceding the survey. Fourteen percent of the infants had low birth weight (less than 2.5 kg). According to the findings presented, more underweight births were reported among the mothers aged 20-34, at 15 percent, compared to 10 percent of underweight births reported by mothers aged below 20 and those aged 35-49. These percentages (figures in parentheses in the tables) are to be used with caution due to small sample sizes.

The proportion of all births that have a reported birth weight were higher among the urban children at 15 percent, compared to

**Birth weight is used as a summary indicator of the challenges that a public health system faces, including long-term maternal malnutrition, ill health, and poor health care during pregnancy**

**Figure 6.1**  
Birth weight by wealth quintile



Percentage of all births that have a reported birth weight in the five years preceding the survey by wealth quintile

rural and nomadic areas at 5 and 1 percent respectively. Among the regions, the proportion of all births that have a reported birth weight were highest in Nugaal at 11 percent and lowest in Sool at 3 percent.

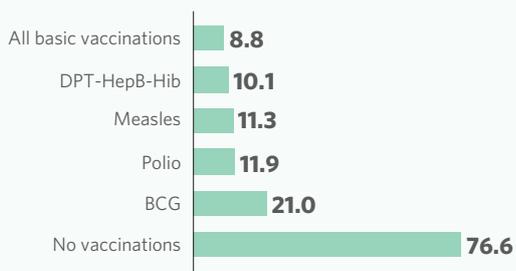
The proportion of all births that have a reported birth weight increased with increasing level of education from 4 percent of children belonging to mothers with no education to 38 percent of children belonging to mothers with higher level of education. Similarly, the proportion of all births that have a reported birth weight increased with increasing wealth status of households from less than one percent of children belonging to mothers from the poorest households to 18 percent of children belonging to mothers from the wealthiest households (Figure 6.1).

## Vaccination of Children

According to WHO, a child is considered fully vaccinated if he or she has received a BCG vaccination against tuberculosis; three doses of pentavalent vaccine; at least three doses of polio vaccine; and one dose of measles vaccine. The PLHDS collected information on the coverage of these vaccinations among children born in the five years preceding the survey.

Following internationally recommended procedures, information on vaccination coverage was obtained in two ways in the survey—from child health cards and from mothers’ verbal reports. All mothers were asked to show the interviewer the child health cards on which immunization dates were recorded for all children born in the five years preceding the survey. If a card was available, the interviewer recorded the dates of each vaccination received by the child. If a card showed that the child was not fully vaccinated, the mother was then asked whether the child had received other vaccinations that were not recorded on the card, and these too were noted. If a child never received a health card or if the mother was unable to show the card to the interviewer, the vaccination information for the child was based on the mother’s report. Questions were asked for each type of vaccine. Mothers were asked to recall whether the child had received BCG, polio, pentavalent and measles vaccinations. If the mother indicated that the child had received the polio or pentavalent vaccines, she was asked about the number of doses that the child received. The results presented here are based on both information from the health card and the mother’s report for those without a card.

**Figure 6.2**  
Vaccination coverage for children aged 12-23 months



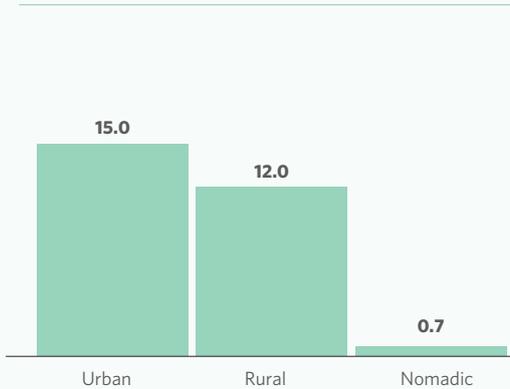
Percentage of children aged 12-23 months who received specific vaccines

Table 6.2 presents data on the vaccination coverage for children aged 12-23 months, the age by which they should have received all vaccinations. Mothers were able to present health cards for 2 percent of these children.



**Figure 6.3**

Vaccination coverage by type of residence



Percentage of children aged 12-23 months who received specific vaccines by type of residence

Overall, only 9 percent of children aged 12-23 months are fully vaccinated, meaning that they received the basic vaccinations (one BCG vaccine, three doses of pentavalent and polio vaccines, and one dose of measles vaccine) at any time before the survey was conducted (Figure 6.2). Twenty-one percent of children had received BCG at any time before the survey, 23 percent received the first dose of pentavalent vaccine, and 23 percent received the first dose of polio. Ten percent of children completed the required three doses of the pentavalent vaccine and 12 percent of the children received the three doses of polio vaccine. Eleven percent of children had been vaccinated against measles.

There is variation by place of residence; 15 percent of children in urban areas had received all basic vaccinations compared to less than 1 percent of children in nomadic areas (Figure 6.3).

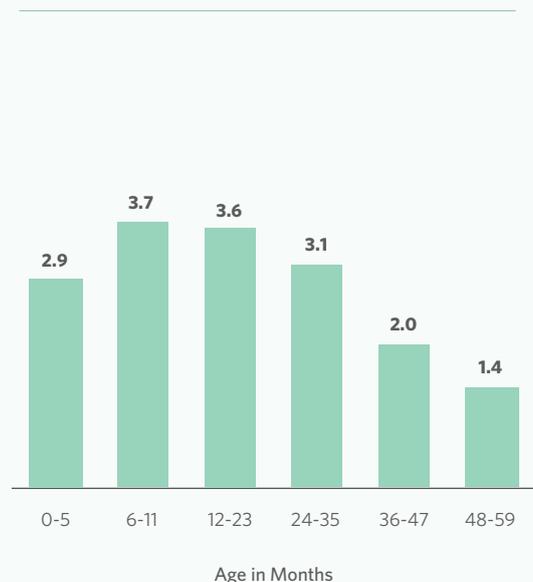
Among the regions, Bari had the highest percentage of children that received all basic vaccinations at 13 percent, while Mudug had the least percentage at 6 percent (Table 6.2).

Vaccination coverage improved with the increasing household wealth. One percent of children from the lowest wealth quintile households had received all the basic vaccinations compared to 23 percent of children from highest wealth quintile households.

## Symptoms of Acute Respiratory Infection

**Figure 6.4**

Children with ARI symptoms by age



Percent of children with ARI symptoms in the two weeks preceding the survey

Acute Respiratory Infection (ARI) is a serious infection that prevents normal breathing. It usually begins as a viral infection in the nose, trachea (windpipe) or lungs. If the infection is not treated, it can spread to the entire respiratory system. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by ARI. According to WHO, ARI is one of the leading causes of childhood morbidity and mortality throughout the world. In the PLHDS, the prevalence of ARI was estimated by asking mothers whether their children under the age of five had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the survey. These are typical symptoms of ARI.

Table 6.3 shows the percentage of children who had symptoms of ARI in the two weeks before the survey and the percentage for whom advice or treatment was sought from a health facility or provider. It also shows the percentage of children who received antibiotics as treatment.

Overall 3 percent of children under the age of 5 years experienced ARI symptoms during the two weeks preceding the survey. Further, 16 percent of children who were reported to have experienced ARI had received antibiotics, and 20 percent of these children received

**3%**  
of children under the age of 5 years experienced ARI symptoms during the two weeks preceding the survey

advice or treatment from a health facility or provider.

The proportion of children with symptoms of ARI in the two weeks preceding the survey was higher among age groups of 6-11 and 12-23 months at 4 percent compared to the other age groups (Figure 6.4). The proportion of children with symptoms of ARI varies based on the type of cooking fuel used in households; households that use clean energy were less likely to report children suffering from ARI, compared to households using crude sources of energy for cooking. More children suffered from ARI in households that cooked meals using kerosene, firewood or charcoal at 3 percent each.

Among the regions, Bari had the highest percentage of children with ARI symptoms in the two weeks preceding the survey at 6 percent compared to Mudug with the lowest proportion at 1 percent.

## Fever

Fever is an abnormally high body temperature that is usually accompanied by shivering, headache, and restlessness. Fever is a symptom of many illnesses, including malaria, pneumonia, the common cold, and influenza among other infections. In the PLHDS, mothers were asked whether their children under the age of 5 had been ill with fever in the two weeks before the survey. For children with fever, mothers in Puntland were also asked about the actions they took to treat the fever, including whether the child had been given any drug to treat the fever, and if yes what type of drugs were given to the child.

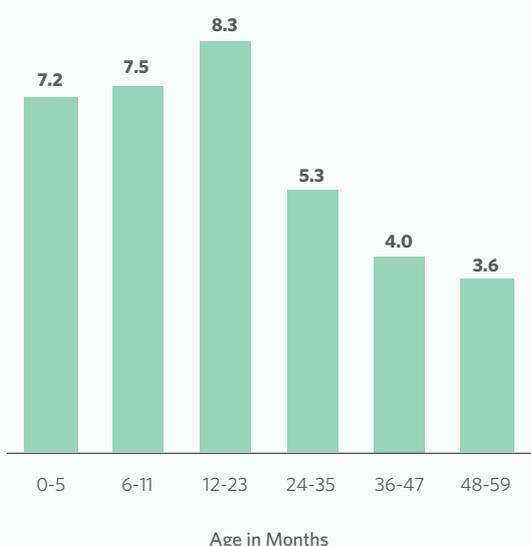
Table 6.4 shows the distribution of children who; had a fever in the two weeks preceding the survey; advice or treatment was sought from a health facility or provider, and who received antibiotics as treatment, by their background characteristics and those of their mothers. Overall, 6 percent of children under the age of five had a fever during the two weeks preceding the survey. Treatment from a health facility or provider was sought for 35 percent of children with fever; however, only 10 percent were taken for treatment the same day or the day after they developed the fever. Twenty-two percent of children with fever were given antibiotics for the illness.

The prevalence of fever varied with the age of the child, as children less than 24 months of age were more likely to have fever (Figure 6.5).

The proportion of children with fever for whom advice or treatment was sought was higher in rural and urban areas at 46 and 42 percent respectively compared to only 9 percent in nomadic areas. The proportion of children who were treated the same day or the next day was higher in urban areas at 13 percent compared to only

**Figure 6.5**

Children with fever by age



Percentage with fever Among children under age five



# 6%

of children under the age of 5 had a fever during the two weeks preceding the survey

**Figure 6.6**

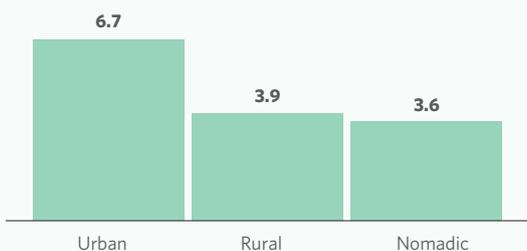
Percent of children with diarrhoea by age



Percent of children under-five who had diarrhoea in the two weeks preceding the survey

**Figure 6.7**

Children with diarrhoea by residence



Percent of children with diarrhoea by type of residence

2 percent in nomadic areas. Similarly, the proportion children who received antibiotics was higher among urban children at 31 percent, followed by rural at 25 percent and lowest in nomadic areas at 2 percent (Table 6.4).

Among the regions, the proportion of children for whom advice or treatment was sought was highest in Nugaal at 51 percent and lowest in Sool at 24 percent.

The proportion of children for whom advice or treatment was sought increased with increasing wealth status of the household from 12 percent of the poorest households to 58 percent of the richest households.

## Diarrhoeal Diseases

Dehydration caused by severe diarrhoea is a major cause of morbidity and mortality among young children, although the condition can be easily treated with oral rehydration therapy (ORT). Cases of diarrhoea are related to the use of contaminated water and unhygienic practices in food preparation and disposal of excreta. The PLHDS collected information on the prevalence of diarrhoea among children in Puntland by asking mothers whether their children under the age of 5 years had diarrhoea during the two weeks before the survey. If a child was identified as having had diarrhoea, information was collected on the treatment and feeding practices during the episode.

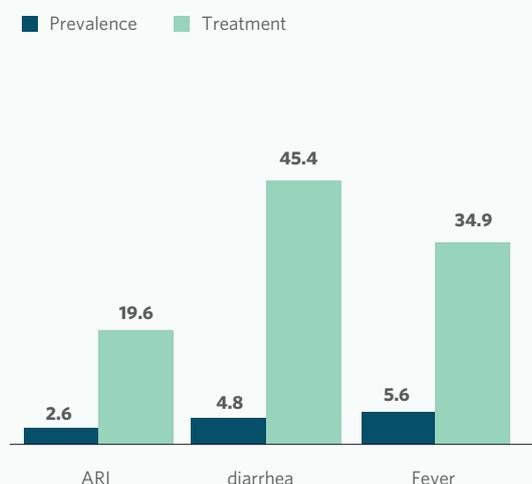
Table 6.5 presents data on the percentage of children under age five who had diarrhoea during the two weeks preceding the survey by selected background characteristics. Overall, 5 percent of children under the age of five had diarrhoea. Children with diarrhoea for whom advice or treatment was sought from a health facility or provider was 45 percent.

The prevalence of diarrhoea varied with the age of the child, as children less than 24 months of age were more likely to have diarrhoea (Figure 6.5). Advice or treatment was more likely to be sought for male children with diarrhoea at 49 percent than female children at 42 percent.

Figure 6.6 shows that children in the urban areas are more likely to have diarrhoea at 7 percent than those in the rural and nomadic areas at 4 percent each. The proportion of children with diarrhoea for whom advice or treatment was sought from a health facility or provider was highest in urban areas at 58 percent and lowest in nomadic areas at 25 percent.

Among the regions, Nugaal had the highest prevalence of diarrhoea at 9 percent while Sanaag had the lowest at 3 percent. The proportion of children with diarrhoea for whom advice or

**Figure 6.8**  
Prevalence and treatment of childhood illnesses



Percent of children under age five treated for childhood illnesses in the two weeks preceding the survey

treatment was sought from a health facility or provider was highest in Nugaal at 55 percent and lowest in Sanaag at 27 percent.

The proportion of children with diarrhoea for whom advice or treatment was sought from a health facility or provider increased with increasing household wealth status; from 23 percent among the poorest households to 70 percent among the richest households.

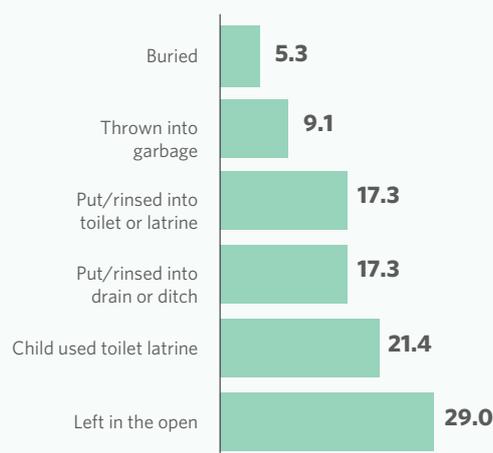
## Treatment of Childhood Illnesses

Figure 6.8 presents a summary of the survey results regarding the prevalence and treatment of childhood illnesses. During the 2 weeks before the survey, 6 percent of children under age 6 had a fever, while 5 percent had diarrhoea and 3 percent had ARI symptoms. Advice or treatment was sought for 45 percent of children with diarrhoea, 35 percent with fever, and 20 percent of children with ARI.

## Disposal of Children's Stool

The proper disposal of children's faeces is important in preventing the spread of diseases. If human faeces are left uncontained, disease may spread by others who come into direct contact with it, or by animal contact with the faeces.

**Figure 6.9**  
Disposal of children's stool



Percent distribution of youngest children under age five, living with the mother, by the manner of disposal of the child's last faecal matter

Table 6.6 presents information on the disposal of the stool of children under the age of 5 by background characteristics. The information was derived from asking ever-married women what was done to dispose of the stool the last time their youngest child under-five passed stool. Overall, 44 percent of the children who live with their mother had their last stool disposed of safely.

Children in urban areas and rural areas were more likely to have their stool safely disposed at 68 and 64 percent respectively than those in nomadic areas at 6 percent. Safe stool disposal is related to maternal education and wealth status. Among mothers with secondary education, 80 percent of children had their stool safely disposed, which is double those reporting safe stool disposal among children of mothers with no education, at 38 percent. Safe disposal of stool of children under the age of 5 increased with increasing wealth status of the household from 7 percent of children from the poorest households to 73 percent of children from the wealthiest households (Table 6.6). Twenty-nine percent of children's stool is left in the open while 9 percent is thrown into garbage (Figure. 6.8)


**Table 6.1** Child's weight and size at birth

Percentage of live births in the five years preceding the survey that have a reported birth weight; among live births in the five years preceding the survey with a reported birth weight, percent distribution by birth weight; and percent distribution of all live births in the five years preceding the survey by mother's estimate of baby's size at birth, according to background characteristics, PLHDS 2020

Background characteristics	Percent distribution of all live births by size of child at birth			Total	Percentage of all births that have a reported birth weight <sup>1</sup>	Number of births	Births with a reported birth weight <sup>1</sup>	
	Very small	Smaller than average	Average or larger				Less than 2.5 kg	Number of births
<b>Mother's age at birth</b>								
<20	4.5	6.6	89.0	100.0	7.8	705	9.7	55
20-34	5.1	3.1	91.8	100.0	7.4	3,672	15.0	270
35-49	4.5	3.0	92.6	100.0	5.8	600	(10.0)	35
<b>Birth order</b>								
1	5.8	4.3	90.0	100.0	9.7	2,333	13.4	227
2-3	4.2	2.9	92.9	100.0	5.2	2,435	13.6	127
4-5	4.3	3.8	92.0	100.0	2.8	205	*	6
<b>Mother's smoking status</b>								
Smokes cigarettes/tobacco	1.5	0.6	97.8	100.0	15.2	100	*	15
Does not smoke	5.0	3.7	91.4	100.0	7.1	4,877	13.0	345
<b>Type of residence</b>								
Urban	5.6	4.0	90.4	100.0	15.2	1,810	11.0	275
Rural	3.2	4.1	92.7	100.0	5.1	1,420	20.3	73
Nomadic	5.6	2.8	91.7	100.0	0.7	1,748	*	12
<b>Region</b>								
Sool	6.6	2.3	91.0	100.0	3.4	712	(15.7)	24
Sanaag	1.6	3.2	95.2	100.0	3.9	1,065	(8.1)	41
Bari	6.4	4.6	89.0	100.0	6.9	1,065	10.1	74
Nugaal	8.5	1.4	90.1	100.0	11.3	499	10.8	57
Mudug	4.3	4.4	91.3	100.0	10.1	1,636	17.4	164
<b>Education</b>								
No Education	5.1	3.4	91.5	100.0	4.3	3,987	16.3	170
Primary	4.7	5.0	90.2	100.0	16.4	757	12.2	124
Secondary	3.0	2.6	94.4	100.0	24.8	169	(15.3)	42
Higher	0.8	0.0	99.2	100.0	37.5	64	(0.0)	24
<b>Wealth quintile</b>								
Lowest	4.3	1.9	93.8	100.0	0.6	1,146	*	7
Second	6.2	5.1	88.7	100.0	2.6	913	(9.0)	24
Middle	4.9	4.8	90.3	100.0	5.7	925	25.0	53
Fourth	4.9	3.8	91.3	100.0	10.8	1,093	8.1	118
Highest	4.5	2.7	92.8	100.0	17.5	902	13.2	158
<b>Total</b>	<b>4.9</b>	<b>3.6</b>	<b>91.5</b>	<b>100.0</b>	<b>7.2</b>	<b>4,978</b>	<b>13.7</b>	<b>360</b>

<sup>1</sup> Based on either a written record or the mother's recall

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

**Table 6.2** Vaccinations by background characteristics

Background characteristics	BCG		DPT-HepB-Hib				Polio <sup>1</sup>				Measles	All basic vaccinations <sup>2</sup>	No vaccinations	Percentage with a vaccination card seen	Number of children	
	1	2	3	0	1	2	3									
<b>Sex</b>																
Male	21.1	22.5	9.8	9.6	21.4	22.9	11.0	10.8	10.2	8.3	76.6	1.7	486			
Female	20.8	22.5	11.6	10.7	21.4	23.1	14.1	13.2	12.7	9.4	76.7	2.0	402			
<b>Birth order</b>																
1	31.7	35.0	24.6	22.5	32.4	34.6	26.8	24.4	23.0	20.7	63.6	5.8	84			
2-3	25.6	27.6	14.4	14.1	26.2	28.1	16.7	16.0	15.4	12.0	71.5	1.0	314			
4-5	14.7	15.0	4.1	3.5	14.7	15.7	5.2	5.2	5.2	3.2	84.3	2.4	237			
6+	17.6	19.0	7.4	7.4	18.0	19.5	9.1	8.8	8.1	6.0	80.1	1.0	253			
<b>Type of residence</b>																
Urban	38.1	39.4	16.3	15.9	39.0	40.0	19.8	18.9	18.3	15.0	60.0	4.3	301			
Rural	23.7	25.6	14.7	13.9	23.7	25.5	15.6	15.0	14.8	12.0	73.5	1.4	255			
Nomadic	3.4	4.8	2.4	2.1	3.7	5.6	3.3	3.1	2.3	0.7	94.1	0.0	332			
<b>Region</b>																
Sool	16.9	18.4	9.9	9.5	17.6	18.9	9.5	9.5	9.5	8.0	81.1	0.7	146			
Sanaag	16.9	20.2	13.3	12.1	17.8	20.5	14.7	14.4	13.1	9.5	78.5	0.7	190			
Bari	26.9	27.8	14.2	14.2	26.9	29.1	17.1	15.7	15.4	13.3	70.9	3.9	193			
Nugaal	24.7	24.7	7.6	7.6	25.7	27.0	12.6	12.6	10.6	7.6	73.0	5.0	101			
Mudug	20.4	21.6	7.6	7.0	20.4	21.0	8.8	8.2	8.2	5.8	78.4	0.6	258			
<b>Mother's education</b>																
No Education	14.8	15.9	7.3	6.9	14.9	16.4	8.5	8.0	7.4	5.9	83.1	1.5	709			
Primary	43.0	46.6	18.8	17.7	45.3	47.3	24.0	23.1	22.3	14.1	52.7	2.7	135			
Secondary	(47.7)	(49.2)	(40.9)	(40.9)	(47.7)	(47.7)	(40.9)	(40.9)	(40.9)	(39.3)	(50.8)	(6.5)	35			
Higher	*	*	*	*	*	*	*	*	*	*	*	*	9			
<b>Wealth quintile</b>																
Lowest	3.8	5.7	3.6	3.1	4.3	6.7	4.7	4.7	3.4	1.2	92.6	0.0	216			
Second	7.4	8.3	3.8	3.5	7.7	8.6	4.2	3.8	3.5	2.6	91.4	0.0	169			
Middle	21.7	22.0	9.6	8.6	22.0	22.6	14.4	12.2	11.6	8.3	77.4	1.2	161			
Fourth	30.6	31.4	12.6	12.6	31.1	32.9	14.5	14.5	13.9	11.7	67.1	4.4	186			
Highest	47.4	51.0	26.5	25.7	47.8	49.7	27.5	27.1	27.1	22.9	49.0	3.9	156			
<b>Total</b>	21.0	22.5	10.6	10.1	21.4	23.0	12.4	11.9	11.3	8.8	76.6	1.8	888			

<sup>1</sup> Polio 0 is the polio vaccination given at birth

<sup>2</sup> BCG, measles, and three doses each of DPT-HepB-Hib and polio vaccine (excluding polio vaccine given at birth)

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.


**Table 6.3** Prevalence and treatment of symptoms of ARI

Among children under age five, the percentage who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey and among children with symptoms of ARI, the percentage for whom advice or treatment was sought from a health facility or provider and the percentage who received antibiotics as treatment, according to background characteristics, PLHDS 2020

Background characteristics	Among children under age five:		Among children under age five with symptoms of ARI:		Number of children
	Percentage with symptoms of ARI <sup>1</sup>	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider	Percentage who received antibiotics	
<b>Age in months</b>					
0-5	2.9	486	*	*	14
6-11	3.7	415	*	*	15
12-23	3.6	857	(40.5)	(23.3)	30
24-35	3.1	997	(15.5)	(16.8)	31
36-47	2	1,025	*	*	21
48-59	1.4	954	*	*	13
<b>Sex</b>					
Male	2.8	2,478	18.9	17.7	70
Female	2.4	2,257	20.4	12.7	55
<b>Cooking fuel</b>					
Electricity or gas	1.2	108	*	*	1
Kerosene	2.9	31	*	*	1
Firewood	2.6	591	(11.4)	(11.4)	15
Charcoal	2.5	349	*	*	9
Straw/Shrubs/Grass	*	8	*	*	0
Agricultural crops	0	18	*	*	0
Other fuel	*	2	*	*	0
No food cooked in household	*	8	*	*	1
Missing	2.7	3,619	19.6	15.2	98
<b>Type of residence</b>					
Urban	3.4	1,760	14.4	16.9	60
Rural	3	1,365	(34.5)	(20.0)	41
Nomadic	1.5	1,609	(6.5)	(4.3)	24
<b>Region</b>					
Sool	2.6	644	(14)	(10.8)	17
Sanaag	1.9	834	(22)	(20.7)	16
Bari	5.5	1,031	20.1	15.5	57
Nugaal	2.3	507	*	*	12
Mudug	1.3	1,718	*	*	23
<b>Mother's education</b>					
No Education	2.7	3,775	18.3	16.8	103
Primary	2.2	731	*	*	16
Secondary	3.3	169	*	*	6
Higher	0	60	*	*	0
<b>Wealth quintile</b>					
Lowest	1	1,014	*	*	10
Second	2.5	866	(15.4)	(0.0)	22
Middle	3.8	923	(22.4)	(18.1)	35
Fourth	2.9	1,072	(31.3)	(29.4)	31
Highest	3.1	860	*	*	27
<b>Total</b>	<b>2.6</b>	<b>4,734</b>	<b>19.6</b>	<b>15.5</b>	<b>124</b>

<sup>1</sup> Symptoms of ARI (cough accompanied by short, rapid breathing which was chest-related and/or by difficult breathing which was chest-related) is considered a proxy for pneumonia

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

**Table 6.4** Prevalence and treatment of fever

Among children under age five, the percentage who had a fever in the two weeks preceding the survey and among children with fever, the percentage for whom advice or treatment was sought from a health facility or provider, percentage who took antimalarial drugs, and the percentage who received antibiotics as treatment, by background characteristics, PLHDS 2020

Background characteristics	Among children under the age of five:		Among children under age five with fever:			Number of children with fever
	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought	Percentage for whom treatment was sought same or next day	Percentage who took antibiotic drugs	
<b>Age in months</b>						
0-5	7.2	490	(13.4)	(0.0)	(17.1)	36
6-11	7.5	424	(37.9)	(12.3)	(22.6)	32
12-23	8.3	874	46.1	11.5	24.1	73
24-35	5.3	1,005	40.3	10.0	23.1	54
36-47	4.0	1,038	(18.3)	(7.6)	(13.7)	41
48-59	3.6	967	(42.2)	(16.5)	(26.9)	34
<b>Sex</b>						
Male	5.9	2,508	30.7	9.4	21.8	147
Female	5.3	2,290	40.0	10.3	21.3	122
<b>Type of residence</b>						
Urban	6.9	1,631	41.6	12.9	30.7	113
Rural	6.4	1,385	46.3	11.9	25.2	88
Nomadic	3.8	1,783	9.0	1.9	1.5	68
<b>Region</b>						
Sool	5.6	760	(23.8)	(6.9)	(11.5)	43
Sanaag	4.1	979	(40.8)	(18.2)	(17.1)	40
Bari	7.0	1,003	37.4	7.8	31.1	70
Nugaal	9.8	478	(50.7)	(16.3)	(32.4)	47
Mudug	4.4	1,580	25.0	4.4	13.2	69
<b>Education</b>						
No education	5.3	3,868	30.3	7.1	18.3	207
Primary	7.1	716	41.5	10.8	26.8	51
Secondary	6.1	160	*	*	*	10
Higher	3.8	56	*	*	*	2
<b>Wealth quintile</b>						
Lowest	4.2	1,138	(11.6)	(2.5)	(2.5)	48
Second	4.7	912	(14.9)	(1.5)	(1.3)	43
Middle	7.5	893	31.8	11.9	17.0	67
Fourth	5.2	1,035	51.3	6.8	39.5	54
Highest	7.0	822	57.5	22.4	40.8	58
<b>Total</b>	<b>5.6</b>	<b>4,799.0</b>	<b>34.9</b>	<b>9.8</b>	<b>21.5</b>	<b>269.0</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.



**Table 6.5** Diarrhea treatment

Among children under age five who had diarrhea in the two weeks preceding the survey, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage given oral rehydration therapy (ORT), the percentage given increased fluids, the percentage given ORT or increased fluids, and the percentage given other treatments, by background characteristics, PLHDS 2020

Background characteristics	Percentage with diarrhea	Number of children	Percentage of children with diarrhea for whom advice or treatment was sought from a health facility or provider	Number of children with Diarrhea
<b>Age in months</b>				
0-5	5.3	490	(27.8)	26
6-11	6.8	424	(64.8)	29
12-23	7.2	874	55.0	63
24-35	4.5	1,005	(44.3)	46
36-47	3.7	1,038	(37.0)	39
48-59	2.7	967	(33.1)	26
<b>Sex</b>				
Male	4.5	2,508	48.5	113
Female	5.0	2,290	42.4	115
<b>Type of residence</b>				
Urban	6.7	1,631	57.9	109
Rural	3.9	1,385	45.2	54
Nomadic	3.6	1,783	24.5	65
<b>Region</b>				
Sool	4.2	760	(30.2)	32
Sanaag	3.0	979	(27.0)	30
Bari	6.9	1,003	53.5	69
Nugaal	8.7	478	(54.9)	41
Mudug	3.6	1,580	46.9	56
<b>Mother's education</b>				
No Education	4.5	3,868	41.3	176
Primary	5.8	716	(55.3)	41
Secondary	6.4	160	*	10
Higher	1.8	56	*	1
<b>Wealth quintile</b>				
Lowest	4.2	1,138	(23.2)	48
Second	3.8	912	(31.0)	35
Middle	5.9	893	37.5	53
Fourth	5.6	1,035	65.2	58
Highest	4.2	822	(69.7)	35
<b>Total</b>	<b>4.8</b>	<b>4,799</b>	<b>45.4</b>	<b>228</b>

Note: ORT includes fluid prepared from oral rehydration salt (ORS) packets, pre-packaged ORS fluid, and recommended home fluids (RHF).

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed

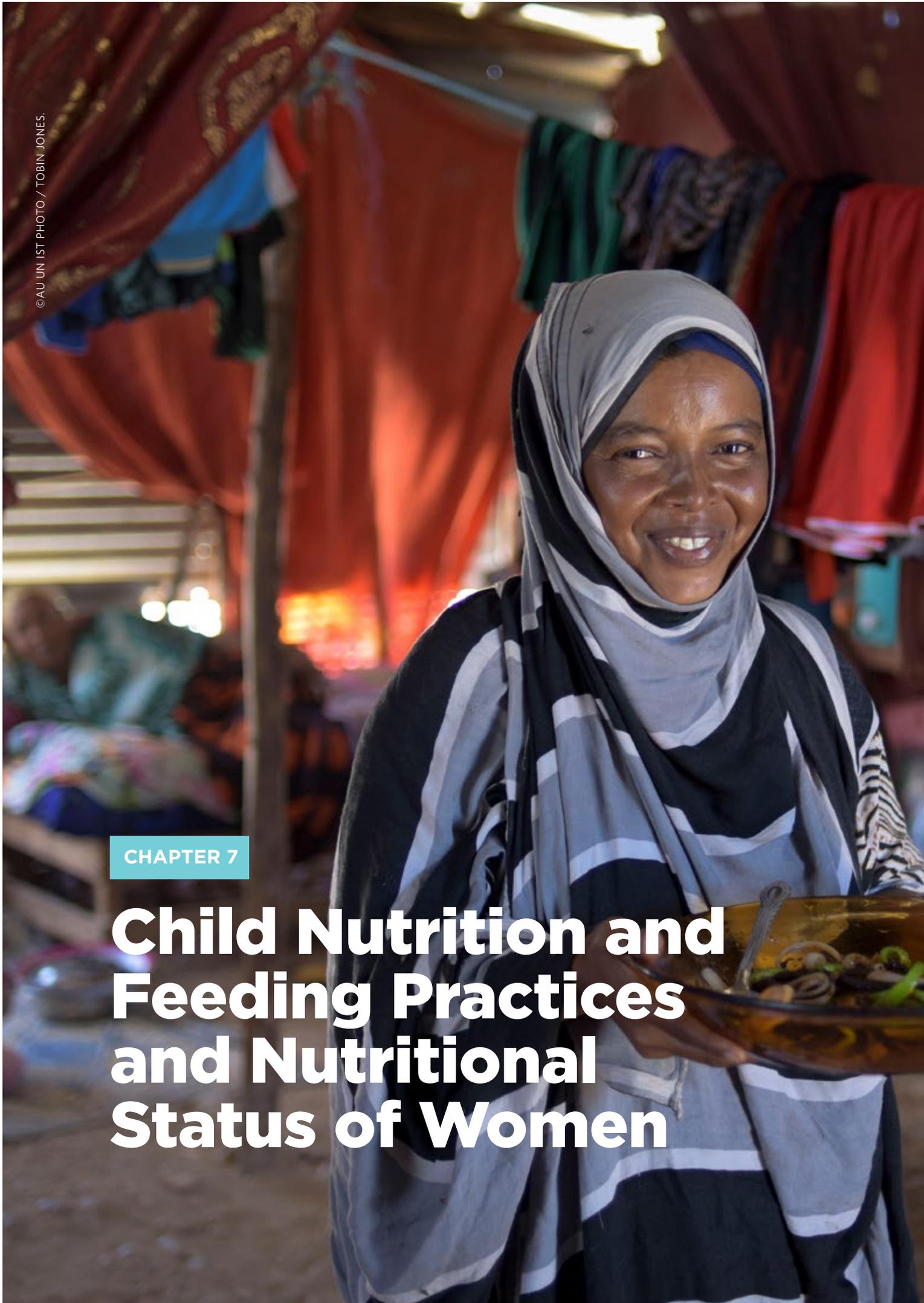
**Table 6.6** Disposal of children's stool

Background characteristics	Manner of disposal of children's stool						Total	Percentage of children whose stool were disposed of safely <sup>1</sup>	Number of children
	Child used toilet latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open			
<b>Age of child in months</b>									
0-5	21.5	16.7	3.7	22.1	10.2	25.7	100.0	41.9	466
6-11	14.9	12.1	7.5	21.8	9.7	33.9	100.0	34.5	416
12-23	20.9	19.5	4.0	16.4	9.4	29.7	100.0	44.5	851
24-35	22.5	18.8	5.8	17.8	8.3	26.8	100.0	47.1	965
36-47	21.4	16.3	6.1	16.6	9.4	30.2	100.0	43.8	996
48-59	23.7	17.3	5.1	16.8	8.4	28.8	100.0	46.0	926
<b>Type of residence</b>									
Urban	33.3	24.8	9.8	18.8	7.6	5.7	100.0	67.9	1,580
Rural	29.4	29.1	5.5	18.7	8.4	8.9	100.0	64.0	1,351
Nomadic	3.9	0.8	1.0	16.3	11.1	66.9	100.0	5.7	1,688
<b>Region</b>									
Sool	13.5	13.8	3.5	23.5	11.9	33.9	100.0	30.8	719
Sanaag	15.4	10.2	2.3	20.2	8.9	43.1	100.0	27.9	919
Bari	28.3	21.1	6.2	16.2	12.1	16.0	100.0	55.7	964
Nugaal	27.1	20.6	5.8	11.0	17.4	18.2	100.0	53.4	446
Mudug	22.7	19.8	7.2	17.0	3.8	29.5	100.0	49.7	1,571
<b>Mother's education</b>									
No Education	19.1	14.2	4.3	18.4	10.1	33.8	100.0	37.6	3,722
Primary	29.9	28.4	10.1	15.8	5.0	10.7	100.0	68.5	696
Secondary	32.1	41.2	6.7	13.9	4.7	1.5	100.0	80.0	150
Higher	42.0	23.2	11.4	17.5	2.1	3.8	100.0	76.6	51
<b>Wealth quintile</b>									
Lowest	4.7	1.3	1.4	18.5	10.5	63.6	100.0	7.4	1,097
Second	9.5	8.2	2.2	15.6	11.2	53.3	100.0	19.8	859
Middle	32.1	26.9	5.4	17.7	10.3	7.6	100.0	64.3	873
Fourth	31.0	25.8	7.7	21.2	7.8	6.5	100.0	64.5	999
Highest	33.8	28.0	11.0	15.5	5.1	6.6	100.0	72.9	791
<b>Total</b>	<b>21.4</b>	<b>17.3</b>	<b>5.3</b>	<b>17.9</b>	<b>9.1</b>	<b>29.0</b>	<b>100.0</b>	<b>44.0</b>	<b>4,619</b>

<sup>1</sup> Children's stool are considered to be disposed of safely if the child used a toilet or latrine, if the fecal matter was put/rinsed into a toilet or latrine or if it was buried  
 Note: Figures in parentheses are based on 20-49 unweighted cases.

CHAPTER 7

# Child Nutrition and Feeding Practices and Nutritional Status of Women





## Key Findings

### NUTRITIONAL STATUS OF CHILDREN



**25%**  
of children under-five are stunted  
(short for their age)



**11%**  
are wasted (thin for their height)



**25%**  
are underweight (thin for their  
age)

### BREASTFEEDING



**88%**  
percent of children are breastfed  
at some point

### EARLY INITIATION OF BREASTFEEDING



**65%**  
of children started breastfeeding  
within first hour of their birth

### EXCLUSIVE BREASTFEEDING



**32%**  
of children under 6 months are  
exclusively breastfed

### TIMELY INITIATION OF COMPLEMENTARY FEEDING



**44%**  
of children were introduced to  
complementary foods at 6-8  
months

### VITAMIN A



**29%**  
of children between 6-23 months  
consumed foods rich in vitamin A  
in the day preceding the survey

### IRON SUPPLEMENTATION



**20%**  
of children between 6-23 months  
have received iron supplements in  
the day preceding survey

### NUTRITIONAL STATUS OF WOMEN



**19%**  
of women aged 15-49 are thin  
(a body mass index [BMI] below  
18.5), while **14 percent** are  
overweight



# 7

## Chapter 7

# Child Nutrition and Feeding Practices and Nutritional Status of Women

This chapter presents information on the nutrition status of children and women. It includes information on breastfeeding status, infant and young child feeding practices and micronutrient intake among children and women.

Nutritional status is determined by multifaceted interactions between food availability, affordability, accessibility and consumption and infections. Nutrition is a substance that provides energy, promotes growth, and nourishes the body. Nutritional status influences an individual's growth and development, productivity, reproductive success and susceptibility to diseases. Good nutritional status is very critical for the growth and development of children particularly those who are under two years. Women's nutrition has a direct effect on their health and the health of their children. Nutritional deficiencies among women may lead to anemia, infections and pregnancy complications that may result in premature birth or death. Nutritional deficiency among children especially under five years of age can lead to childhood illnesses such as diarrhea and respiratory diseases and nutritional problems such as wasting and stunting.

## Nutrition of Children and Women

Nutritional status of women and children can be measured in different ways such as anthropometric, biochemical, clinical and dietary methods. These methods of assessment differ in how and when they are conducted. In PLHDS the anthropometric and dietary methods were used for assessing the nutritional status of women aged 15 to 49 years and children aged 0 to 5 years. The dietary method inquired about feeding practices of infants and children. While the anthropometric assessment measured the height and weight of women aged 15-49 and children under the age of five in the sampled households. The equipment used for height and weight measurements was SECA scale (for weight), height board (height for children under five) and SECA (height for adult).

**Nutritional deficiencies among women may lead to anemia, infections and pregnancy complications that may result in premature birth or death**

## The enumerators were medical professionals - midwives, nurses, public health and doctors

The PLHDS followed the standard method of taking height and weight of women and children. Women's weight was taken by putting the weighing scale on a flat surface to ensure it is balanced and letting the woman stand on it facing forward and their posture vertical. Children under two years of age were measured lying down (supine position) whereas children above two years were measured in standing position. The enumerating teams received training before deployment to the field. Training involved class sessions and field pilot-test on how to measure weight and length/height of children and women. The enumerators were medical professionals - midwives, nurses, public health and doctors. In PLHDS, standardized nutritional indicators were generated using WHO Anthropic tool for nutritional survey data analysis. The below measurements were used to generate the nutritional indicators: -

1. Low weight for age (underweight)
2. Low height for age (stunting)
3. Low weight for height (wasting)

Stunting, or low height-for-age, is a sign of chronic undernutrition that reflects failure to receive adequate nutrition over a long period. Stunting can also be affected by recurrent and chronic illness. Wasting, or low weight-for-height, is a measure of acute undernutrition and represents the failure to receive adequate nutrition in the period immediately before the survey. Wasting may result from inadequate food intake or from a recent episode of illness causing weight loss. Underweight, or low weight-for-age, is a composite index of weight-for-height and height-for-age. Thus, it includes both acute (wasting) and chronic (stunting) undernutrition.

Stunting (assessed via height-for-age): Height-for-age is a measure of linear growth retardation and cumulative growth deficits. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered short for their age (stunted), or chronically undernourished. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely stunted.

Wasting (assessed via weight-for-height): The weight-for-height index measures body mass in relation to body height or length and describes acute nutritional status. Children whose weight-for-height Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered thin (wasted), or acutely undernourished. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely wasted.

Underweight (assessed via weight-for-age): Weight-for-age is a composite index of height-for-age and weight-for-height. It takes



Like the rest of Somalia, nutritional status of Puntland children is relatively poor due to several reasons, such as low economic conditions of Somali households, and severe drought that has affected the country in recent years

into account both acute and chronic undernutrition. Children whose weight-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely underweight.

The means of the Z-scores for height-for-age, weight-for-height, and weight-for-age are also calculated as summary statistics representing the nutritional status of children in a population. These mean scores describe the nutritional status of the entire population of children without the use of a cut-off point. A mean Z-score of less than 0 (i.e., a negative mean value for stunting, wasting, or underweight) suggests a downward shift in the entire sample population's nutritional status relative to the reference population. The farther away mean Z-scores are from 0, the higher the prevalence of undernutrition.

## Nutritional Status of Children

Nutrition status of children is affected by different factors such as the mother's nutritional status, socio economic status, educational background or children's poor health condition. Like the rest of Somalia, nutritional status of Puntland children is relatively poor due to several reasons, such as low economic conditions of Somali households, and severe drought that has affected the country in

**Figure 7.1**

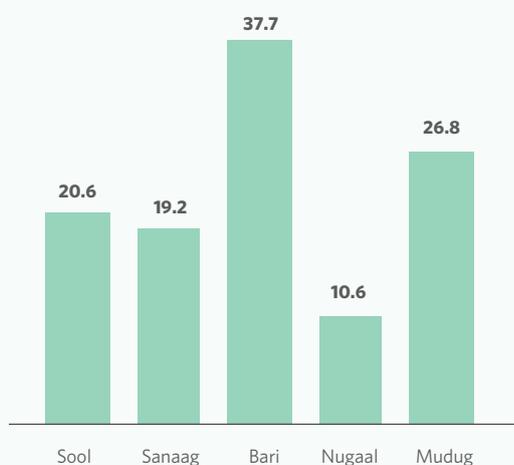
Nutritional status of children



Percent of children under five years classified as malnourished according to three anthropometric indices of nutritional status

**Figure 7.2**

Children who are underweight by region



Percentage of children under five years classified as underweight

**25%**

of children under the age of five are stunted

recent years. Under-nourishment in children is usually associated with high mortality and morbidity rates. Nutritional deficit also hinders children’s long term physical and mental development.

In PLHDS the height and weight measurements of children below five years of age were taken in addition to the inquiry of their dietary intake. Children’s height/length, weight, and age data were used to calculate three indices: height-for-age, weight for- height, and weight-for-age. As WHO standards indicate, indicators such as height for age, weight for height and weight for age or stunting, can be used to calculate the nutritional status of children under five.

Table 7.1 shows the nutritional status of children under-five years according to three anthropometric indices - height for age, weight for height and weight for age. Overall, 25 percent of children under the age of five are stunted, 16 percent are severely stunted, 11 percent are wasted, 6 percent are severely wasted, 25 percent are underweight, and 15 percent are severely underweight.

The prevalence of stunting generally increases with an increase in age peaking at 16 months (39 percent) before generally declining thereafter. The proportions of stunting (-2 SD) and severe stunting (-3 SD) are highest among children aged 12-17 months at 31 and 20 percent respectively (Figure 7.1).

Stunting is higher among female children at 26 percent than male children at 25 percent.

By type of residence, rural areas had the highest prevalence of stunting at 33 percent while nomadic areas had the lowest prevalence at 16 percent. Regionally, Bari has the highest prevalence of stunting at 35 percent while Nugaal has the lowest prevalence at 19 percent.

Stunting generally declines with an increase in the mother’s education from 27 percent of children of mothers with no education to 20 percent of children of mothers with secondary education.

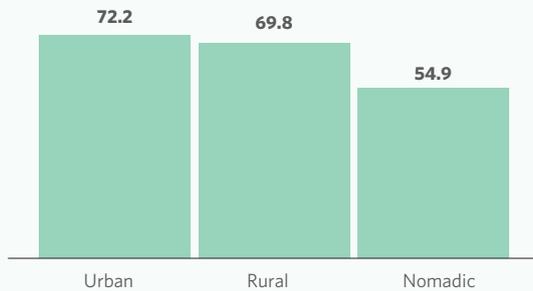
## Initiation of Breastfeeding

The World Health Organisation (WHO) recommends early initiation of breastfeeding within the first hour of birth. The first breast milk contains a substance called ‘colostrum’, which contains a high concentration of antibodies and nutrients. It protects babies from the onset of diseases. Breastfeeding is also beneficial for mothers as it is known to reduce the risks of breast and ovarian cancers and postpartum depression. Early suckling improves the production of milk and creates a bond between a mother and child. As a result, WHO recommends children be exclusively breastfed in



**Figure 7.3**

Initial Breastfeeding by type of residence



Percentage who started breastfeeding within the first hour of birth by place of residence

the first six months of their life and that mothers should continue breastfeeding up to two years, while providing complementary foods.

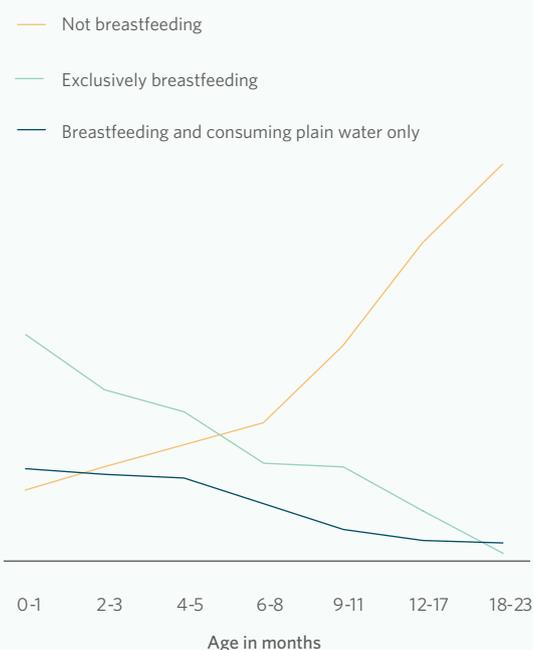
Table 7.2 shows that in total, 88 percent of children had ever been breastfed regardless of whether initiation of breastfeeding was within the first hour of birth or continuation of breastfeeding up to two years. Furthermore, 65 percent of children started breastfeeding within the first hour of their birth.

As presented in Figure 7.3, children from nomadic areas are less likely to be breastfed within the first hour of birth at 55 percent, compared to 72 and 70 percent of children from urban and rural areas respectively. Regionally, children in Bari are more likely to be breastfed within the first hour of birth at 73 percent compared to children in the other regions.

It is notable that children born in health facilities or delivered with the assistance of health professionals were more likely to have been breastfed in the first hour of birth compared to children born at home with the delivery assisted either by a traditional birth attendant or by no one. Seventy-eight percent of children born in health facilities started breastfeeding within the first hour of birth compared to 61 percent of children who were born at home. Children from the wealthiest households were more likely to have been breastfed in the first hour of birth compared to children of mothers from the poorest households (Table 7.2).

**Figure 7.4**

Breastfeeding status by age



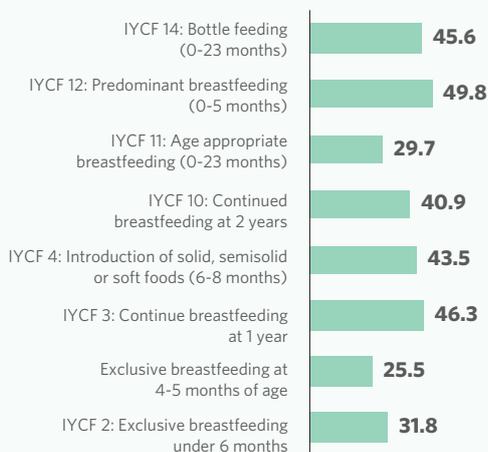
Percent of children under age two by breastfeeding status

## Breastfeeding Status by Age

In the PLHDS, information on breastfeeding status was obtained from ever-married women who had children under the age of 2. Further, for the last child, information was obtained on the duration it took to put the baby to the breast after birth, on anything given other than breast milk in the first three days of life and whether the child was still breastfeeding. In addition, information was obtained on whether the child had been given micronutrient powder, and whether they were ready to use therapeutic (PlumpyNut), or supplemental food (PlumpyDoz). The enumerators used the local names of these foods for the respondents to clearly understand the questions.

Table 7.3 and Figure 7.4 shows the percentage distribution of children less than two years of age by breastfeeding status, currently breastfeeding and percentage of all children under-two years of age using nipple feeding bottles according to age in months. Thirty-two percent of children under 6 months are exclusively breastfed and the percentage of exclusive breastfeeding declines with age from 39 percent in 0-1 month to 26 percent among children of 4-5 months. Contrary to the recommendation that children under the age of six months be exclusively breastfed, many infants under 6

**Figure 7.5**  
IYCF indicators on breastfeeding status



Indicators on breastfeeding by age in months

months are also fed with other liquids in addition to breast milk such as water at 14 percent, other milk at 16 percent, and non-milk liquids at 4 percent. Moreover, 19 percent of infants begin complementary foods before 6 months of age. Fifteen percent of children under the age of 6 months were not breastfeeding at the time of the survey. Forty-one percent of children under-two years of age are currently breastfed while forty-three percent are using a feeding bottle with nipple.

## Infant and Young Child Feeding (IYCF) Indicators on Breastfeeding status

Figure 7.5 shows that 32 percent of children under six months of age are exclusively breastfed while 50 percent of children under age 6 months are predominantly breastfed. Forty-six percent of children are still breastfeeding at age 1, and 41 percent are breastfeeding at age 2. Overall, 44 percent of children were introduced to complementary foods at 6-8 months and 30 percent of children under the age of 2 are breastfed appropriately for their age. Furthermore, 46 percent of children aged 0-23 months are bottle fed.

## Types of Complementary Foods

Complementary foods are recommended to be given to children when breastfeeding is no longer adequate for children’s needs. The period for complementary feeding usually starts from four to six months. At this age, children are vulnerable to malnutrition. Complementary feeding should be timely meaning that all infants should begin receiving foods in addition to the breast milk from six months onwards. However, foods to be given to children should be appropriate for their age and nutritional needs. Mothers or caregivers should take appropriate measures when preparing the foods and ensure its safety by minimizing the risk of food contamination.

Table 7.4 shows the foods consumed by children under two years of age who were living with the mother during the day or night preceding the survey according to the breastfeeding status. The data shows that 15 percent of breastfed children under two years and 15 percent of non-breastfed children under two years are fed with infant milk formula. Thirty-two percent of breastfed children are getting other liquids in addition to breast milk compared to 40 percent who are not breastfed.

Overall, 42 percent of breastfeeding children and 57 percent of non-breastfed children received solid or semi-solid complementary foods in addition to breast milk. Twenty-six percent of breastfed children between 0-23 months received foods made from grains,

**42%**

of breastfed children under two years of age received solid or semi-solid complementary foods in addition to breast milk



# 57%

of children aged 0-23 months who were not breastfeeding received solid or semi-solid foods from any sources

whereas 17 percent of the same children had fruits and vegetables rich in vitamin A. Fifteen percent of breastfed children and 17 percent of non-breastfed children aged 0-23 months were given milk products (cheese and yoghurt, among others). Fifty-seven percent of children aged 0-23 months who were not breastfeeding received solid or semi-solid foods from any sources.

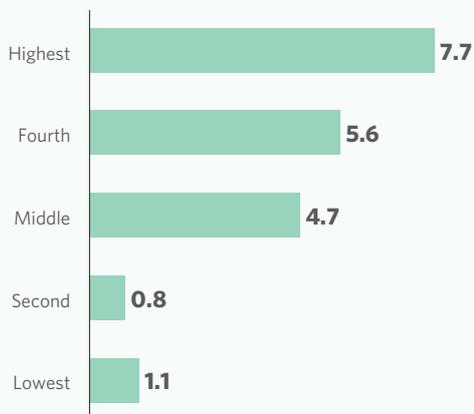
With respect to dietary intake of children by their breastfeeding status, a higher proportion of solid and semi-solid foods are being consumed by non-breastfed children. Thirty-four percent of non-breastfeeding children receive other types of milk and 40 percent receive other liquids. Supplementary foods given to children are fruits and vegetables rich in vitamin A, and meat, fish, poultry and eggs.

## Infant and Young Child Feeding (IYCF) Practices

Optimal Infant and Young Child Feeding practices are essential for child growth and development. The period during pregnancy and children's first two years of life are considered as a critical window for their growth and prevention of childhood illnesses. IYCF global strategy was first issued in 2002 jointly by WHO and UNICEF to reverse the disturbing trends of infant and child feeding practices. The main objective of the strategy is to improve, promote IYCF practices and as result to decrease the child morbidity and mortality.

**Figure 7.6**

IYCF practices by wealth quintile



Percentage of youngest children age 6-23 months living with their mother by wealth quintile

Table 7.5 shows the distribution of children aged 6-23 months living with their mother who were being fed according to the three IYCF practices based on the breastfeeding status, number of food groups and times they were being fed during the day or night preceding the survey. The UNICEF recommended IYCF practices to be followed based on breastfeeding status and the age of children. Breast-feeding children, from 6-8 months are recommended to be fed with four different groups of food per day at least twice. Whereas children of 9-23 months need to be with four or more different groups of food per day with a minimum meal frequency of three.

Overall, 15 percent of breastfed children 6-23 months were fed four or more different groups of food in the day or night preceding the survey and 33 percent were fed the minimum meal frequency in the night or day before the survey. Only 8 percent among the breastfeeding children 6-23 months old were fed four or more different groups of foods with a minimum number of times that is required.

Twenty-one percent of non-breastfeeding children were fed on milk or milk products whereas, 14 percent of the same children were fed four or more different groups of food in the night or day preceding the survey. Twenty-one percent of non-breastfeeding children were fed



The period during pregnancy and children's first two years of life are considered as a critical window for their growth and prevention of childhood illnesses

**4%**

of all the children aged between 6-23 months were fed in line with the three IYCF practices in the night or day prior to the survey

Vitamin A and Iron are key micronutrients, thus the need for supplementation. The deficiency of these micronutrients can result in a weak immune system, blindness, stunting or anemia.

the minimum meal frequency. Only 3 percent of non-breastfeeding children were fed as recommended by the IYCF guideline.

Overall, only 4 percent of all the children aged 6-23 months were fed in line with the three IYCF practices in the night or day prior to the survey, while 11 percent of the same children were fed with four or more different groups of food. Twenty percent of children aged 6-23 months had the recommended minimum meal frequency.

There are notable differences according to type of residence in the proportion of all children (both breastfed and non-breastfed) aged 6-23 months fed according to the recommended three IYCF practices; from 7 percent in urban areas to less than one percent in nomadic areas. Regionally, Nugaal has the highest proportion of children aged 6-23 months fed according to the recommended three IYCF practices at 5 percent, while Sool region has the lowest proportion at 2 percent.

There is a steady increase in the proportion of children fed according to the recommended three IYCF practices as mother's education increases from 2 percent among children whose mothers have no education to 17 percent among children whose mothers have secondary school education. As expected, children from the wealthiest households are more likely to be fed according to the recommended three IYCF practices at 8 percent compared to children from the poorest households at 1 percent (Figure 7.6).

## Micronutrients Intake Among Children

Micronutrients which consist of vitamins and minerals are essential for child development and prevention against illnesses. The age from 6 to 59 months is a critical window for children's health and well-being. Vitamin A and Iron are key micronutrients, thus the need for supplementation. The deficiency of these micronutrients can result in a weak immune system, blindness, stunting or anemia.

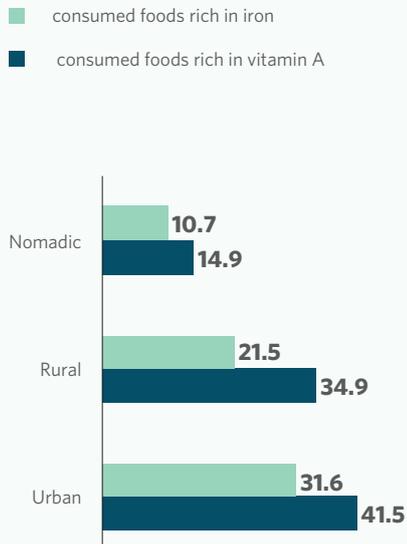
In PLHDS, ever-married women were asked if children aged 6-23 months consumed foods rich in vitamin A and iron in the day or night preceding the survey, and records were made to reflect those who had received any of these supplements.

Table 7.6 shows that 29 percent of children aged 6-23 months had consumed foods rich in vitamin A in the night or day preceding the survey, while 20 percent had consumed foods rich in iron. The findings further reveal that 6 percent of children aged 6-59 months were given iron supplementation in the seven days preceding the survey. Similarly, only 6 percent of children aged 6-59 months were given deworming drugs during the past six months preceding the survey. In general, the proportion of children consuming foods rich in vitamin A and iron and the proportion receiving deworming



**Figure 7.7**

children consuming foods rich in vitamin A and iron by type of residence



Percentage who consumed foods rich in vitamin A and iron in past 24 hours

medication increases with increasing household wealth.

Analysis by place of residence shows that a large proportion of children aged 6-23 months in urban areas received vitamin A supplements are at 42 percent, followed by those who live in rural areas at 35 percent while nomadic children received the least vitamin A supplements at 15 percent (Figure 7.7). Regionally, the percentage of children who have received vitamin A supplements was highest in Mudug and Nugaal at 38 percent each and lowest in Sool at 15 percent.

## Nutritional Status of Women

Nutrition of women is vital for women's health and pregnancy outcomes. In PLHDS, women's nutritional status was calculated by measuring the body mass index (BMI). BMI is a screening tool that can indicate whether the person is underweight, has normal weight or is overweight. BMI is calculated by dividing the weight (kg) of the person by height (m) square. The ranges of BMI are <18.5 (underweight), 18.5-24.9 (normal), 25.0-29.9 (overweight) and  $\geq 30$  (obese). If the person's BMI is outside of normal range, their health risk might increase significantly. Having too much weight can lead to varieties of health conditions such as diabetes 2, cardiovascular problems and high blood pressure. If the weight of the person is below the normal range the risk of adverse pregnancy outcomes and overall poor health status increases.

Table 7.7 shows the percentage distribution of women aged 15-49, with height under 145 cm, mean Body Mass Index (BMI), and those with specific BMI levels, by background characteristics. Seven percent of women had a height below 145 cm. Generally, women with short stature have a higher risk of having obstructed labor due to cephalopelvic disproportion (Surapanthapisit & Thitadilok, 2006). Sixty-two percent of women have a normal body mass index (between 18.5 and 24.9) while 19 percent of women aged 15-49 are thin with BMI of less than 18.5. Fourteen percent of women are overweight with a body mass index of 25.0 - 29.9 and 5 percent of women are obese.

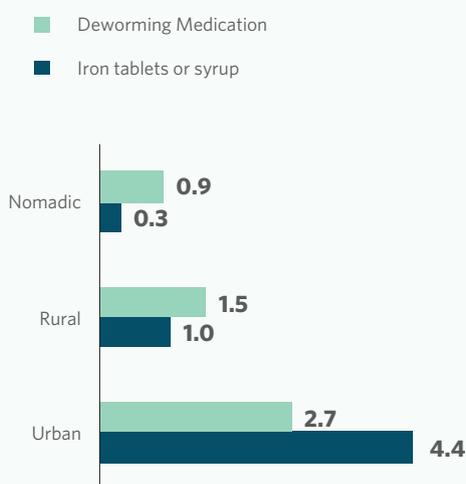
The proportion of overweight women increases with an increase in age, as women aged 40-49 at 21 percent are significantly more likely to be overweight compared to women aged 15-19 at 12 percent.

Nomadic areas have the highest percentage of thin women at 32 percent, followed by rural areas at 20 percent and 11 percent in urban areas. Similarly, the percentage of overweight women is highest in urban areas at 19 percent and lowest in nomadic areas at 6 percent. Regionally, Sanaag has the highest percentage of thin women at 31 percent, compared to Nugaal with the lowest percentage at 11 percent each.

**In PLHDS 2020 women's nutritional status was calculated by measuring the body mass index (BMI). BMI is a screening tool that can indicate whether the person is underweight, has normal weight or is overweight**

**62%**  
of women have a  
normal body mass index  
(between 18.5 and 24.9)

**Figure 7.8**  
Iron tablets and deworming



Percentage of women who took iron supplements for at least 90 days and deworming by type of residence.

The percentage of thin women tends to decrease with increasing levels of education, from 21 percent among women with no education to 14 percent among those with secondary education. Similarly, the percentage of overweight women tends to increase with an increase in education from 13 percent among women with no education to 19 percent among those with higher education.

The percentage of thin women tends to decrease with an increase in wealth status of the households, from 30 percent among women from the poorest households to 14 percent among those from the wealthiest households. Similarly, the percentage of overweight women tends to increase with an increase in wealth status of the households, from 7 percent among women from the poorest households to 20 percent among those from the fourth wealth quintile.

### Micronutrient Intake Among Women

Micronutrients deficiency is a global public health problem. Largely, deficiency is observed in minerals and vitamins affecting the health of mothers and, indirectly, the nutritional status and development of children. Iron supplementation for women during pregnancy is vital for mothers' and babies' health. Iron supplementation has an impact on the health of the mother during pregnancy, delivery or the post-partum stage as its severe deficiency may lead to anaemia, spontaneous abortion or low birth weight. Additionally, the strategy of deworming is a public health intervention for pregnant women recommended by WHO. Preventive deworming using a single dose of Albendazole or Mebendazole is recommended for pregnant women in areas where prevalence of hookworms or *T. trichiura* infection and anaemia is a public health problem. This is to curb the effects of helminths diseases on the health of pregnant women.

Table 7.8 and Figure 7.8 show the percentage of women who took iron tablets or syrup and deworming during the pregnancy and percentage who took deworming medication. Overall, only 2 percent of women reported that they had taken iron supplementation for the recommended 90 days or more during their last pregnancy. Similarly, only 2 percent of women took deworming medication.

Women in urban areas were more likely to have taken iron supplements during pregnancy for at least 90 days at 4 percent compared to women from nomadic areas at less than 1 percent. A similar trend is observed on the percentage of women who took deworming medication during pregnancy of their last birth; it is highest in urban areas at 3 percent and lowest in nomadic areas at 1 percent.

Regionally, the percentage of women who took iron supplements during pregnancy for at least 90 days was highest in Nugaal and Sanaag at 3 percent each and lowest in Sool and Bari at 1 percent each.



**Table 7.1** Nutritional status of children

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, PLHDS 2020

Background characteristics	Height-for-age1			Weight-for-Height			Weight-for-age			
	Percentage below -3 SD	Percentage below -2 SD 2	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD2	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD2	Mean Z-score (SD)	Number of children
<b>Age in months</b>										
0-5	11.4	17.3	4.5	7.2	14.1	1.3	21.9	28.2	2.0	324
6-8	19.0 (14.5)	26.5 (22.4)	4.5 (4.2)	9.4 11.3	15.9 18.3	1.5 0.9	15.1 14.6	28.6 20.2	2.4 2.6	164 103
12-17	19.9	30.7	2.1	4.5	10.2	1.6	12.3	23.1	0.6	231
18-23	14.6	24.1	1.1	6.4	8.6	1.1	8.2	20.9	0.4	92
24-35	17.7	29.3	1.8	5.5	9.8	1.3	14.5	24.9	0.6	405
36-47	13.2	22.2	3.1	4.7	10.7	1.2	15.6	26.6	1.3	579
48-59	16.6	25.6	2.8	5.0	10.3	1.0	15.7	25.3	1.1	505
<b>Sex</b>										
Male	16.4	25.2	2.8	5.8	10.9	1.2	24.4	21.0	1.2	1,230
Female	15.4	25.6	2.7	5.5	11.2	1.3	26.1	19.3	1.0	1,174
<b>Size at birth</b>										
Very small	(10.5)	(17.1)	(2.9)	(6.2)	(15.4)	(0.7)	13.6	18.9	1.3	92
Small	(17.0)	(30.3)	(3.0)	(8.2)	(12.0)	(1.6)	21.7	29.4	1.4	61
Average or larger	16.9	27.3	2.8	5.6	10.6	1.3	16.0	27.5	1.1	1,610
<b>Mother's nutritional status4</b>										
Thin (BMI < 18.5)	(18.7)	(33.4)	(2.0)	*	*	*	(13.5)	(22.9)	(1.1)	40
Normal (BMI 18.5-24.9)	14.5	22.3	2.6	7.0	12.8	1.3	13.2	23.6	1.2	175
Overweight/obese (BMI >= 25)	15.0	21.1	3.0	8.7	14.5	1.2	15.6	28.1	1.4	114
<b>Type of residence</b>										
Urban	17.8	27.9	3.0	4.4	8.8	1.1	19.9	30.4	1.1	913
Rural	20.2	32.5	3.1	5.4	9.1	1.8	16.3	28.8	1.0	706

**Table 7.1** (Cont'd) Nutritional status of children

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, PLHDS 2020

Background characteristics	Height-for-age <sup>1</sup>			Weight-for-Height			Weight-for-age			
	Percentage below -3 SD	Percentage below -2 SD 2	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD2	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD2	Mean Z-score (SD)	Number of children
Nomadic	10.3	16.4	2.1	7.2	15.1	0.9	9.0	16.8	1.3	784
<b>Region</b>										
Sool	13.2	25.1	1.6	7.0	13.1	0.8	9.5	20.6	0.9	306
Sanaag	14.3	23.8	1.4	6.8	14.5	0.5	8.9	19.2	0.7	352
Bari	25.3	35.1	3.5	4.5	8.4	1.2	26.2	37.7	0.7	647
Nugaal	7.0	19.1	2.7	6.7	13.8	0.7	5.0	10.6	2.0	262
Mudug	14.4	21.3	3.4	4.8	9.1	2.0	16.4	26.8	1.4	837
<b>Education</b>										
No education	16.0	26.5	2.8	5.9	11.2	1.4	16	26.4	1.1	1,163
Primary	16.1	24.7	2.5	5.3	10.4	1.1	14.7	24.7	1.1	645
Secondary	14.4	20.4	2.3	(4.0)	(8.5)	(0.6)	11.9	20.3	1.5	116
Higher education	*	*	*	*	*	*	(18.8)	(24.2)	(1.6)	30
<b>Wealth</b>										
Lowest	10.9	18.3	2.0	6.9	14.4	0.9	9.3	17.8	1.2	793
Second	17.9	27.8	3.2	4.6	9.9	1.7	21.4	32.7	1.2	431
Middle	18.5	28.7	3.3	5.3	9.2	1.4	21.1	31.6	1.0	503
Fourth	20.9	31.9	2.9	4.3	7.2	1.2	16.2	28.6	1.1	440
Highest	17.1	28.4	3.0	5.8	11.1	1.5	11.8	21.9	1.2	235
<b>Total</b>	<b>15.9</b>	<b>25.4</b>	<b>2.7</b>	<b>5.7</b>	<b>11.0</b>	<b>1.2</b>	<b>15.1</b>	<b>25.2</b>	<b>1.1</b>	<b>2,403</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.


**Table 7.2** Initial breastfeeding

Among last-born children who were born in the two years preceding the survey, the percentage who were ever breastfed and the percentage who started breastfeeding within one hour and within one day of birth and the percentage who received a pre-lacteal feed, by background characteristics, PLHDS 2020

Background Characteristics	Among last-born children born in the past two years:			Number of last-born children	Among last-born children born in the past two years:	
	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth <sup>1</sup>		Percentage who received a prelacteal feed <sup>2</sup>	Number of last-born children ever breastfed
<b>Sex</b>						
Male	88.7	64.1	86.6	881	40.3	781
Female	86.6	65.7	84.6	807	40.9	699
<b>Assistance at delivery</b>						
Health personnel	87.2	72.0	86.2	638	41.1	557
Traditional birth attendant	88.9	61.6	86.8	885	38.9	787
Relative/friend	91.2	67.7	83.4	118	46.4	108
Other	*	*	*	5	*	5
No one	(57.5)	(20.2)	(55.4)	41	(58.1)	24
<b>Place of delivery</b>						
Health facility	93.1	77.6	92.6	378	39.6	352
At home	86.2	61.3	83.8	1,303	40.9	1,123
Other	*	*	*	7	*	5
<b>Type of residence</b>						
Urban	92.3	72.2	90.9	569	38.0	526
Rural	89.6	69.8	87.1	470	43.6	422
Nomadic	82.2	54.9	79.9	648	40.8	532
<b>Region</b>						
Sool	91.0	64.9	86.9	276	42.2	251
Sanaag	87.2	65.1	86.1	361	33.3	315
Bari	84.3	73.1	83.8	357	38.0	301
Nugaal	93.6	60.7	89.9	167	41.1	156
Mudug	86.7	60.4	84.4	526	46.3	456
<b>Education</b>						
No Education	86.1	62.6	84.0	1,348	40.1	1,160
Primary	95.4	73.0	93.2	257	40.5	246
Secondary	93.7	81.8	92.1	61	43.0	57
Higher	(79.5)	(62.3)	(79.5)	21	*	17
<b>Wealth quintile</b>						
Lowest	85.5	57.3	83.2	405	39.8	346
Second	82.2	57.5	79.8	324	39.4	266
Middle	85.8	61.5	84.0	301	44.3	258
Fourth	91.7	70.7	90.0	351	36.1	322
Highest	93.6	79.2	91.5	306	44.4	287
<b>Total</b>	<b>87.7</b>	<b>64.9</b>	<b>85.6</b>	<b>1,688</b>	<b>40.6</b>	<b>1,480</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

**Table 7.3** Breastfeeding Status by age

Percent distribution of youngest children under two years who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under two years using a bottle with a nipple, according to age in months, PLHDS 2020

Age in months	Breastfeeding status:						Total	Currently breastfeeding	Number of youngest children under two years living with the mother	Percentage using a bottle with a nipple	Number of all children under two years
	Not breastfeeding	Exclusively breastfeeding	Breastfeeding and consuming plain water only	Breastfeeding and consuming non-milk liquids <sup>1</sup>	Breastfeeding and consuming other milk	Breastfeeding and consuming complementary foods					
0-1	11.3	39.2	15.2	4.6	15.2	14.5	100.0	88.7	174.6	24.8	175
2-3	15.3	29.3	14.2	2.1	19.4	19.7	100.0	84.7	178.6	35.6	179
4-5	19.4	25.5	13.7	4.1	14.0	23.3	100.0	80.6	131.0	47.9	131
6-8	23.4	16.4	8.9	7.1	11.7	32.4	100.0	76.6	230.0	51.2	230
9-11	37.3	15.2	4.3	3.0	4.9	35.4	100.0	62.7	180.1	54.0	180
12-17	55.6	7.4	2.5	3.3	4.2	27.0	100.0	44.4	519.3	51.6	519
18-23	69.7	0.0	1.9	2.0	2.2	24.1	100.0	38.4	222.3	42.0	222
0-3	13.3	34.2	14.7	3.3	17.3	17.1	100.0	86.7	353.2	30.3	353
0-5	15.0	31.8	14.4	3.6	16.4	18.8	100.0	85.0	484.2	35.1	484
6-9	24.6	16.1	7.3	6.9	11.3	33.8	100.0	75.4	293.5	54.1	293
12-15	53.7	7.3	2.3	3.5	4.8	28.4	100.0	46.3	445.7	53.2	446
12-23	59.8	5.2	2.3	2.9	3.6	26.1	100.0	42.6	741.5	48.7	742
20-23	67.6	0.0	2.3	3.0	1.0	26.1	100.0	40.9	128.9	43.2	129

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

<sup>1</sup> Non-milk liquids include juice, juice drinks, clear broth or other liquids



**Table 7.4** Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under two years of age who are living with the mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, PLHDS, 2020

Age in months	Liquids					Solid or semi solid foods										Number of children
	Infant formula	Other milk <sup>1</sup>	Other liquids	Fortified baby food	Food made from grains	Fruits and vegetables rich in vitamin A	Other fruits and vegetables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish and poultry	Eggs	Cheese, yogurt, other milk product	Any solid or semisolid food			
<b>BREASTFEEDING CHILDREN</b>																
0-1	12.6	13.7	14.5	2.6	8.5	7.5	0.0	2.1	1.0	2.9	1.0	5.8	15.9	149		
2-3	21.6	13.6	16.6	5.1	12.4	7.0	2.4	1.5	2.0	2.8	3.4	7.1	23.1	147		
4-5	16.3	19.1	22.6	2.2	13.4	8.0	0.0	1.5	1.5	2.6	0.0	5.6	26.4	98		
6-8	13.9	35.2	30.8	6.8	20.1	17.5	7.1	8.0	7.1	11.8	6.5	23.9	47.8	170		
9-11	13.7	32.9	36.8	18.6	35.2	21.6	7.4	11.6	10.2	13.5	12.1	18.1	56.3	109		
12-17	15.9	39.0	53.0	15.1	43.9	28.5	11.0	15.3	10.3	25.0	11.0	20.9	62.0	218		
18-23	6.0	35.6	44.6	8.0	45.9	25.2	7.0	13.3	11.5	17.5	13.1	19.5	60.7	79		
6-23	13.5	36.2	42.3	12.3	35.6	23.5	8.6	12.2	9.5	17.9	10.1	21.1	56.5	576		
Total	14.9	27.6	32.1	8.7	25.7	17.0	5.5	7.9	6.2	11.8	6.7	15.0	42.2	970		
<b>NONBREASTFEEDING CHILDREN</b>																
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	17		
2-3	(5.2)	(27.9)	(20.3)	(0.0)	(1.8)	(5.2)	(0.0)	(0.0)	(1.8)	(0.0)	(0.0)	(4.1)	(41.6)	29		
4-5	(8.1)	(21.2)	(9.9)	(12.5)	(4.0)	(13.9)	(0.0)	(4.0)	(0.0)	(10.0)	(5.9)	(11.2)	(37.7)	25		
6-8	13.2	28.4	32.9	7.1	24.0	7.9	4.1	3.8	5.4	8.0	2.7	10.9	45.6	55		
9-11	9.0	36.7	30.6	14.2	33.5	13.1	6.2	10.1	8.5	11.2	6.4	21.0	59.6	77		
12-17	15.7	36.3	43.6	11.5	39.5	27.5	7.6	16.9	9.0	20.6	10.5	18.9	60.6	339		
18-23	18.0	34.1	48.8	17.3	42.3	23.6	10.9	13.4	8.9	18.5	7.5	18.2	58.9	191		
6-23	15.4	35.0	42.7	13.1	38.3	23.1	8.1	14.0	8.6	17.9	8.5	18.3	58.8	661		
<b>Total</b>	<b>15.1</b>	<b>34.2</b>	<b>40.4</b>	<b>12.5</b>	<b>36.9</b>	<b>22.2</b>	<b>7.3</b>	<b>13.0</b>	<b>7.9</b>	<b>16.9</b>	<b>7.9</b>	<b>17.0</b>	<b>56.8</b>	<b>732</b>		

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.)

<sup>1</sup> Other milk includes fresh, tinned and powdered animal milk

<sup>2</sup> Does not include plain water. Includes juice, juice drinks, clear broth, or other non-milk liquids.

<sup>3</sup> Includes fortified baby food

<sup>4</sup> Includes [list fruits and vegetables included in the questionnaire such as pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A]

**Table 7.5** Infant and young child feeding (IYCF) practices

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF practices based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, by background characteristics, PLHDS 2020

Background characteristic	Among breastfed children 6-23 months, percentage fed:			Number of breastfed children 6-23 months	Among non-breastfed children 6-23 months, percentage fed:			Number of non-breastfed children 6-23 months	Among all children 6-23 months, percentage fed:			Number of children 6-23 months		
	4+ food groups <sup>1</sup>	Minimum meal frequency <sup>2</sup>	Both 4+ food groups and minimum meal frequency		Milk or milk products <sup>3</sup>	4+ food groups <sup>1</sup>	Minimum meal frequency <sup>4</sup>		With 3 IYCF practices <sup>5</sup>	Breast milk, milk or milk products <sup>6</sup>	4+ food groups <sup>1</sup>		Minimum meal frequency <sup>7</sup>	With 3 IYCF practices
<b>Age</b>														
6-8	8.5	30.4	5.6	170	17.3	4.8	25.5	0.0	55	79.8	7.6	29.2	4.2	225
9-11	15.3	28.4	7.0	109	10.5	7.5	13.0	0.7	77	63.0	12.1	22.0	4.4	186
12-17	19.3	37.3	10.4	218	22.5	17.0	23.6	2.4	339	52.9	17.9	29.0	5.5	557
18-23	15.9	36.4	10.1	79	23.1	15.0	19.3	4.5	191	45.6	15.3	24.3	6.1	270
<b>Sex</b>														
Male	15.1	33.1	8.5	304	23.9	14.4	23.2	3.4	384	66.8	11.0	20.6	4.2	649
Female	14.7	33.8	8.1	272	17.6	14.3	19.2	1.8	348	64.3	11.5	19.5	3.4	588
<b>Type of residence</b>														
Urban	28.7	39.9	16.5	187	28.7	24.0	26.1	5.7	228	71.2	18.8	22.5	7.3	390
Rural	17.6	43.1	9.3	159	21.5	16.0	24.4	2.0	201	66.7	13.0	24.6	3.9	343
Nomadic	1.9	21.5	1.0	231	14.5	6.0	15.7	0.7	304	59.9	3.3	14.7	0.7	503
<b>Region</b>														
Sool	3.9	36.6	3.9	99	13.6	6.0	21.5	1.0	123	61.8	3.8	22.2	1.8	212
Sanaag	14.8	38.8	11.1	115	22.9	6.6	25.1	2.2	157	65.4	7.4	22.0	4.4	255
Bari	15.2	26.6	10.4	113	19.6	13.7	15.9	1.4	154	66.6	10.3	14.9	3.7	258
Nugaal	17.8	46.4	10.6	57	19.7	17.3	21.9	3.0	75	65.0	13.7	23.8	4.6	126
Mudug	19.6	28.8	7.1	192	24.9	24.2	22.3	4.6	222	67.3	17.8	20.0	4.4	387
<b>Mother's education</b>														
No Education	9.0	29.5	4.6	453	19.4	12.1	19.8	1.9	604	64.1	8.3	18.2	2.3	995
Primary	34.4	41.2	18.2	91	23.9	23.9	26.4	5.1	97	70.3	22.1	24.6	8.3	181



**Table 7.5** (Cont'd) Infant and young child feeding (IYCF) practices

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF practices based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, by background characteristics, PLHDS 2020

Background characteristic	Among breastfed children 6-23 months, percentage fed:				Among non-breastfed children 6-23 months, percentage fed:				Among all children 6-23 months, percentage fed:				Number of children 6-23 months	
	4+ food groups <sup>1</sup>	Minimum meal frequency <sup>2</sup>	Both 4+ food groups and minimum meal frequency	Number of breastfed children 6-23 months	Milk or milk products <sup>3</sup>	4+ food groups <sup>1</sup>	Minimum meal frequency <sup>4</sup>	With 3 IYCF practices <sup>5</sup>	Number of non-breastfed children 6-23 months	Breast milk, milk or milk products <sup>6</sup>	4+ food groups <sup>1</sup>	Minimum meal frequency <sup>7</sup>		With 3 IYCF practices
Secondary	34.8	66.2	30.7	24	42.9	31.9	36.0	11.1	(23.2)	(78.4)	(26.0)	(40.1)	(16.5)	48
Higher	*	*	*	7	23.7	8.2	23.7	0.0	*	*	*	*	*	14
<b>Wealth quintile</b>														
Lowest	2.8	22.8	1.5	156	13.1	8.7	18.5	1.2	178	61.4	4.5	16.1	1.1	319
Second	3.6	26.4	2.0	99	21.3	5.3	16.8	0.4	157	62.6	3.3	16.0	0.8	233
Middle	16.8	42.8	10.1	90	20.3	18.6	21.6	4.4	128	66.1	12.5	21.8	4.7	207
Fourth	21.2	39.2	12.8	113	24.1	17.6	23.2	4.0	163	65.1	14.9	22.3	5.6	264
Highest	32.8	40.8	16.9	119	28.7	26.2	29.1	3.8	106	74.5	23.0	25.3	7.7	216
<b>Total</b>	<b>14.9</b>	<b>33.4</b>	<b>8.3</b>	<b>576</b>	<b>20.8</b>	<b>14.3</b>	<b>21.3</b>	<b>2.6</b>	<b>732</b>	<b>65.6</b>	<b>11.2</b>	<b>20.1</b>	<b>3.8</b>	<b>1237</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Food groups: a. infant formula, milk other than breast milk, cheese or yogurt or other milk products; b. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; c. vitamin A-rich fruits and vegetables (and red palm oil); d. other fruits and vegetables; e. eggs; f. meat, poultry, fish, and shellfish (and organ meats); g. legumes and nuts.

<sup>2</sup> For breastfed children, minimum meal frequency is receiving solid or semi-solid food at least twice a day for infants 6-8 months and at least three times a day for children 9-23 months. Includes two or more feedings of commercial infant formula, fresh, tinned and powdered animal milk, and yogurt.

<sup>3</sup> For non-breastfed children age 6-23 months, minimum meal frequency is receiving solid or semi-solid food or milk feeds at least four times a day.

<sup>4</sup> Non-breastfed children age 6-23 months are considered to be fed with a minimum standard of three infant and young child feeding practices if they receive other milk or milk products at least twice a day, receive the minimum meal frequency and receive solid or semi-solid foods from at least four food groups not including the milk/milk product group.

<sup>5</sup> Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula, fresh, tinned, and powdered animal milk, and yogurt.

<sup>6</sup> Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 4.

**Table 7.6** Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, the percentages who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey, and among all children 6-59 months, the percentages who were given vitamin A supplements in the six months preceding the survey, who were given iron supplements in the past seven days, and who were given deworming medication by background characteristics, PLHDS 2020

Background characteristics	Among youngest children age 6-23 months living with the mother:			Among all children age 6-59 months:			
	Percentage who consumed foods rich in vitamin A in past 24 hours <sup>1</sup>	Percentage who consumed foods rich in iron in past 24 hours <sup>2</sup>	Number of children age	Percentage given iron supplements in past 7 days	Percentage given deworming medication in past 6 months <sup>3</sup>	Percentage given vitamin A supplements in past 6 months	Number of children
<b>Age in months</b>							
6-8	18.1	11.1	234	4.3	2.8	6.9	234
9-11	23.8	15.6	191	5.0	2.7	8.7	191
12-17	34.4	25.1	583	4.8	5.8	9.8	583
18-23	29.8	21.0	291	5.0	8.3	8.1	291
24-35	n/a	n/a	n/a	7.7	6.9	10.8	1,005
36-47	n/a	n/a	n/a	6.1	4.9	9.4	1,038
48-59	n/a	n/a	n/a	5.5	5.9	8.0	967
<b>Sex</b>							
Male	29.8	21.4	683	6.2	6.1	9.9	2,249
Female	27.9	18.9	616	5.6	5.3	8.4	2,059
Breastfeeding	27.5	19.5	605	7.4	7.1	10.6	750
Not breastfeeding	30.1	20.9	694	5.6	5.5	8.9	3,559
<b>Mother's age</b>							
15-19	27.5	7.8	95	2.5	1.6	6.8	157
20-29	26.9	19.3	694	6.6	6.4	9.7	2,214
30-39	33.3	24.8	443	4.9	5.1	8.5	1,658
40-49	22.6	17.7	66	9.1	7.0	10.6	279
<b>Type of residence</b>							
Urban	41.5	31.6	403	11.6	10.8	17.3	1,431
Rural	34.9	21.5	372	6.2	6.2	9.9	1,249
Nomadic	14.9	10.7	524	0.8	1.0	1.5	1,628
<b>Region</b>							
Sool	15.4	10.5	219	2.8	2.6	4.6	692
Sanaag	21.6	15.1	273	4.0	3.3	8.1	865
Bari	28.2	18.0	267	6.4	6.7	14.1	892
Nugaal	38.3	26.2	133	8.9	8.2	14.7	423
Mudug	38.3	28.4	407	7.4	7.5	7.4	1,436
<b>Education</b>							
No Education	24.2	16.4	1,040	4.8	4.8	7.6	3,477
Primary	43.9	33.4	196	11.7	9.4	15.9	637
Secondary	58.1	41.4	48	5.2	7.2	14.5	146
Higher	*	*	15	(12.7)	(22.1)	18.1	49
<b>Wealth quintiles</b>							
Lowest	15.8	12.2	331	0.5	1.6	1.8	1,045
Second	18.5	12.0	245	3.1	3.3	5.1	815
Middle	36.0	22.4	221	7.2	5.6	10.2	794
Fourth	32.6	25.9	273	9.8	9.5	15.3	930
Highest	47.6	31.9	229	10.5	9.8	15.6	725
<b>Total</b>	<b>28.9</b>	<b>20.2</b>	<b>1,299</b>	<b>5.9</b>	<b>5.8</b>	<b>9.2</b>	<b>4,308</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed

n/a = Not applicable

Figures in parentheses are based on 25-49 unweighted cases.

Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A, and red palm oil 1

Includes meat (including organ meat), fish, poultry, and eggs



**Table 7.7** Nutritional status of women

Among women aged 15-49, the percentage with height under 145 cm, mean Body Mass Index (BMI), and the percentage with specific BMI levels, by background characteristics, PLHDS 2020

Background Characteristics	Body Mass Index 1										
	Height		Normal			Thin		Overweight/obese			Number of women
	Percentage below 145 cm	Number of women	Mean body max index (BMI)	18.5-24.9 (Total normal)	<18.5 (Total thin)	17.0-18.4 (Mildly thin)	<17 (Moderately and severely thin)	>=25.0 (Total over weight and obese)	25.0-29.9 (Overweight)	30.0+ (obese)	
<b>Age</b>											
15-19	7.4	491	21.9	62.4	21.0	12.8	8.3	16.6	11.6	5.0	443
20-29	3.0	288	22.1	63.1	17.3	9.4	7.9	19.6	15.7	3.9	247
30-39	11.6	90	22.3	62.3	18.8	12.1	6.7	18.9	12.5	6.4	68
40-49	10.6	55.6	(23.8)	(58.4)	(12.0)	(9.2)	(2.8)	(29.5)	(21.4)	(8.1)	42
<b>Type of residence</b>											
Urban	5.9	399	23.2	62.8	10.9	7.3	3.5	26.4	18.7	7.7	352
Rural	11.4	268	22.0	63.4	19.5	11.4	8.1	17.1	12.9	4.2	216
Nomadic	2.8	258	20.5	60.9	31.6	17.9	13.7	7.5	6.1	1.3	233
<b>Region</b>											
Sool	7.5	110	22.2	59.0	22.3	11.7	10.6	18.7	14.7	4.0	91
Sanaag	9.6	125	21.4	53.1	31.0	19.2	11.8	15.9	11.2	4.7	98
Bari	10.3	165	22.0	50.7	27.5	15.2	12.3	21.8	16.0	5.9	121
Nugaal	3.7	117	23.1	64.5	10.7	4.9	5.8	24.8	18.0	6.8	106
Mudug	4.8	408	22.1	68.7	15.2	10.1	5.1	16.1	11.7	4.4	384
<b>Education</b>											
No education	6.3	665	22.0	61.4	21.0	12.6	8.4	17.5	12.6	4.9	585
Primary	10.2	135	22.7	66.0	14.0	7.2	6.8	20.1	17.6	2.5	106
Secondary	7.8	78	22.5	66.0	14.1	10.5	3.6	19.9	11.1	8.8	70
Higher education	0.0	47	22.4	60.4	15.8	7.7	8.1	23.8	19.3	4.5	39

**Table 7.7** (Cont'd) Nutritional status of women

Among women aged 15-49, the percentage with height under 145 cm, mean Body Mass Index (BMI), and the percentage with specific BMI levels, by background characteristics, PLHDS 2020

Background Characteristics	Body Mass Index <sup>1</sup>										
	Height		Normal		Thin		Overweight/obese			Number of women	
	Percentage below 145 cm	Number of women	Mean body max index (BMI)	18.5-24.9 (Total normal)	<18.5 (Total thin)	17.0-18.4 (Mildly thin)	<17 (Moderately and severely thin)	>=25.0 (Total over weight and obese)	25.0-29.9 (Overweight)		30.0+ (obese)
<b>Wealth quintile</b>											
Lowest	4.8	259	20.6	63.1	29.5	16.4	13.1	7.4	6.6	0.8	231
Second	8.1	115	22.1	62.4	20.7	13.0	7.7	16.9	12.7	4.2	97
Middle	11.1	169	22.5	58.4	20.2	13.4	6.7	21.5	14.9	6.5	142
Fourth	6.5	195	23.0	65.6	8.6	4.5	4.1	25.8	19.7	6.1	166
Highest	4.4	187	23.1	61.8	13.7	9.1	4.7	24.5	16.0	8.6	164
<b>Total</b>	<b>6.6</b>	<b>925</b>	<b>22.1</b>	<b>62.4</b>	<b>19.2</b>	<b>11.5</b>	<b>7.7</b>	<b>18.4</b>	<b>13.5</b>	<b>4.9</b>	<b>801</b>

Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Excludes pregnant women and women with a birth in the preceding 2 months



**Table 7.8** Micronutrient intake among mothers

Among women age 15-49 with a child born in the 5 years preceding the survey, percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child, and percentage who took deworming medication during the pregnancy of the last child according to background characteristics, PLHDS 2020

Background Characteristics	Number of days women took iron tablets or syrup during pregnancy of last birth					Percentage of women who took deworming medication during pregnancy of last birth	Number of women
	None	<60	60-89	90+	Total		
<b>Age</b>							
15-19	74.7	20.9	1.7	2.7	100.0	2.1	97
20-29	72.7	22.0	2.5	2.8	100.0	1.8	285
30-39	76.6	20.6	1.9	0.9	100.0	2.2	236
40-49	79.7	18.0	0.6	1.7	100.0	0.0	89
<b>Type of residence</b>							
Urban	58.4	34.2	3.0	4.4	100.0	2.7	258
Rural	74.6	22.8	1.6	1.0	100.0	1.5	208
Nomadic	93.7	4.9	1.2	0.3	100.0	0.9	240
<b>Region</b>							
Sool	84.8	13.5	0.6	1.2	100.0	0.0	93
Sanaag	81.6	12.2	3.2	3.1	100.0	0.0	131
Bari	68.5	27.8	2.3	1.4	100.0	2.1	189
Nugaal	65.6	28.2	3.5	2.7	100.0	4.1	73
Mudug	76.1	20.9	1.0	2.0	100.0	2.4	220
<b>Education</b>							
No Education	82.4	15.2	1.4	1.0	100.0	1.2	562
Primary	47.4	44.1	4.2	4.4	100.0	3.3	92
Secondary	(52.4)	(40.5)	(2.7)	(4.3)	100.0	0.0	38
Higher	*	*	*	*	*	*	15
<b>Wealth quintile</b>							
Lowest	94.2	4.5	1.4	0.0	100.0	1.4	159
Second	87.1	10.6	1.2	1.1	100.0	0.0	110
Middle	78.5	20.6	0.9	0.0	100.0	3.5	130
Fourth	61.6	32.0	3.0	3.5	100.0	0.7	135
Highest	58.2	34.0	3.0	4.8	100.0	2.6	173
<b>Total</b>	<b>75.1</b>	<b>20.9</b>	<b>2.0</b>	<b>2.0</b>	<b>100.0</b>	<b>1.7</b>	<b>706</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.



A woman wearing a black hijab and a colorful floral skirt is walking away from the camera on a dusty street. The scene is set at dusk or dawn, with a warm, golden light in the sky. In the background, there are buildings, trees, and a cross visible on a pole. The overall atmosphere is quiet and somewhat somber.

CHAPTER 8

# HIV/AIDS-Related Knowledge, Beliefs and Attitude



## Key Findings

### KNOWLEDGE ABOUT HIV/AIDS



**65%**

of women age 15-49 in Puntland have heard of HIV/AIDS

### COMPREHENSIVE KNOWLEDGE ABOUT HIV/AIDS



**6%**

of women aged 15-49 have comprehensive knowledge about HIV/AIDS

### KNOWLEDGE OF MOTHER-TO-CHILD TRANSMISSION OF HIV/AIDS



**40%**

of mothers know that HIV can be transmitted from mother to child during pregnancy, **43 percent** during delivery and **44 percent** by breastfeeding respectively

### DISCRIMINATORY ATTITUDES TOWARDS PEOPLE LIVING WITH HIV/AIDS



**43%**

of women have discriminatory attitudes towards people living with HIV/AIDS

### SELF-REPORTED PREVALENCE OF SEXUALLY TRANSMITTED INFECTIONS (STIS) AND STI SYMPTOMS



**9%**

of ever-married women aged 15-49 reported that they had STIs in the 12 months preceding the survey



# 8

## Chapter 8

# HIV/AIDS-Related Knowledge, Beliefs and Attitude

The PLHDS collected information on the knowledge and attitudes around Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) and knowledge of other sexually transmitted infections (STIs) from all ever-married women. The survey also collected data on self-reported prevalence of sexually transmitted infections among ever-married women.

The objective of this chapter is to provide data and trends on HIV/AIDS knowledge, attitudes, and behaviour, including HIV/AIDS prevention methods, mother-to-child transmission of HIV/AIDS and stigma.

HIV/AIDS is not an epidemic in Puntland and most people in Puntland and Somalia associate HIV/AIDS with people who commit sexual sins. The HIV/AIDS prevalence among the adult population in Puntland was estimated to be very low, at about 0.59 percent with an estimated figure of 3,832 and estimated deaths of 246. But later rounds in 2014 of ANC sentinel surveillance found mean HIV prevalence rates of 0.22 percent in Puntland (UNAIDS, 2014). However, the actual prevalence may be higher as a result of undetected infections.

The future course of the situation of HIV/AIDS in Puntland depends on many variables: levels of knowledge about HIV/AIDS among the general population, social stigmatization, modification of risk behaviour, access to high-quality services for STIs, provision and uptake of HIV counseling and testing, and access to care and antiretroviral therapy (ART), including prevention and treatment of opportunistic infections <sup>1</sup>.

## Knowledge of HIV/AIDS

The PLHDS obtained information from women aged 15-49 on their knowledge, perceptions, and behaviour related to HIV/AIDS, as well as awareness of modes of HIV/AIDS transmission. The survey also collected information on knowledge about which behaviour could prevent the spread of HIV/AIDS. Respondents were asked

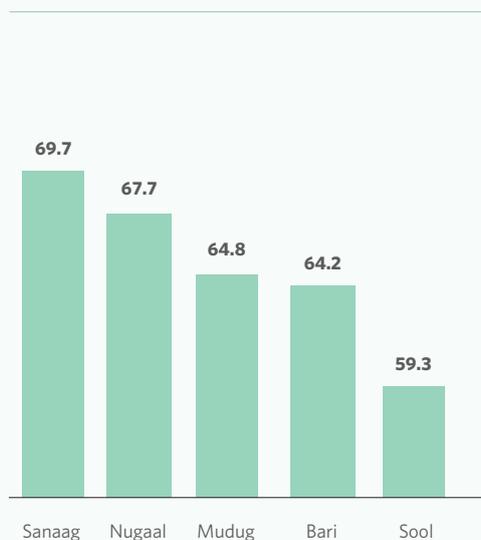
# 65%

of women aged 15-49  
have heard of HIV/AIDS

<sup>1</sup> These are infections that occur more often, and are more severe, in people with weak immune systems.

**Figure 8.1**

Knowledge of HIV/AIDS by region



Percent of women aged 15-49 who had ever heard about HIV/AIDS by region

whether they had heard of HIV/AIDS and those who had heard were then asked questions on how the infection could be avoided.

Table 8.1 provides information on women's awareness of HIV/AIDS. Overall, 65 percent of women aged 15-49 have heard of HIV/AIDS, the national awareness level among women of the same age bracket is 66 percent. The proportion of women who have heard of HIV/AIDS was lower among those in nomadic and rural areas at 47 and 67 percent respectively than urban areas at 79 percent. Among the regions, Sanaag had the highest HIV/AIDS awareness at 70 percent while Sool had the lowest awareness at 59 percent (Figure 8.1).

Fifty-seven percent of women who have not attended school had heard about HIV/AIDS, compared to 96 percent of those with higher education. Awareness of HIV/AIDS is higher among the wealthier households at 83 percent compared to poorer households at 47 percent (Figure 8.2). It is worrying that less than half of women residing in the nomadic areas and those from poor households are not aware of HIV/AIDS.

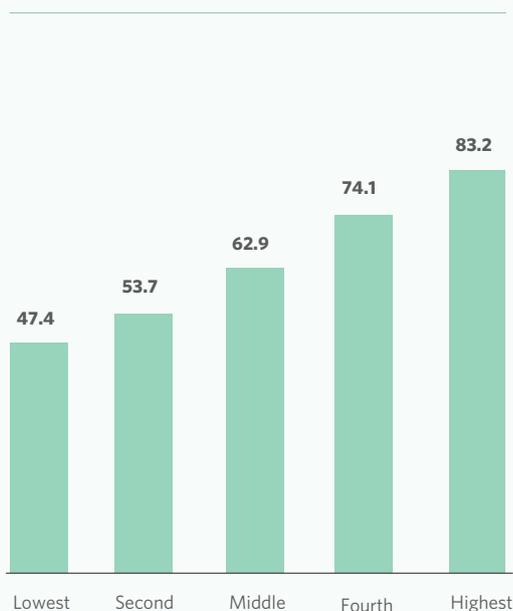
## Misconceptions about HIV/AIDS

Table 8.2 presents data on the misconceptions about HIV/AIDS transmission in Puntland (e.g. that HIV/AIDS can be transmitted by mosquito bites and that it can be transmitted by sharing food with someone who has HIV/AIDS). Thirty-nine percent of women were aware that a healthy-looking person can be carrying the HIV/AIDS virus. Thirty percent of women know that HIV/AIDS cannot be transmitted through mosquito bites and 38 percent of women know that the HIV/AIDS virus cannot be transmitted by supernatural means. Thirty-four percent of women understand that people cannot be infected by sharing food with a person who has HIV/AIDS.

Table 8.2 indicates that only 13 percent of all women aged 15-49 rejected the two most common misconceptions about HIV/AIDS in Puntland (i.e. HIV/AIDS can be transmitted by mosquito bites or HIV/AIDS virus cannot be transmitted by supernatural means) and are also aware that a healthy-looking person can have HIV/AIDS. Knowledge of HIV/AIDS increased with levels of education from 5 percent among those with no education to 17 percent among those with higher level of education (Figure 8.3). The Table also includes a composite measure on knowledge of HIV/AIDS. Only 6 percent of the interviewed women have comprehensive knowledge of HIV/AIDS.

**Figure 8.2**

Knowledge of HIV/AIDS by wealth quintile



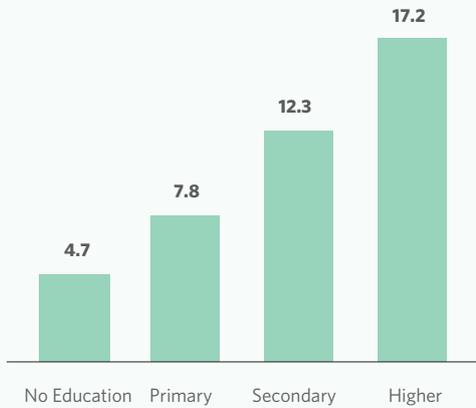
Percent of women aged 15-49 who had ever heard about HIV/AIDS by wealth quintile

Among women residing in the urban, 23 percent are likely to reject the two common most misconceptions compared to 2 percent among those residing in the nomadic areas. Comprehensive



**Figure 8.3**

Women with comprehensive knowledge about HIV/AIDS



Percent of women aged 15-49 with comprehensive knowledge about HIV/AIDS by level of education

knowledge is higher among women in the urban at 8 percent and lowest among those in the nomadic at 4 percent. Comprehensive knowledge is highest among women aged 20-24 at 9 percent compared to 4 percent among women aged 40-49. Percentage of women with comprehensive knowledge reduces with increase in age. There are no observed variations in terms of age on the likelihood of rejecting the two most common misconceptions on HIV/AIDS.

Across the regions, women in Nugaal are more likely to reject the two most common misconceptions on HIV/AIDS at 22 percent while those in Sool are the least likely at 8 percent. Comprehensive knowledge is highest among women residing in Bari.

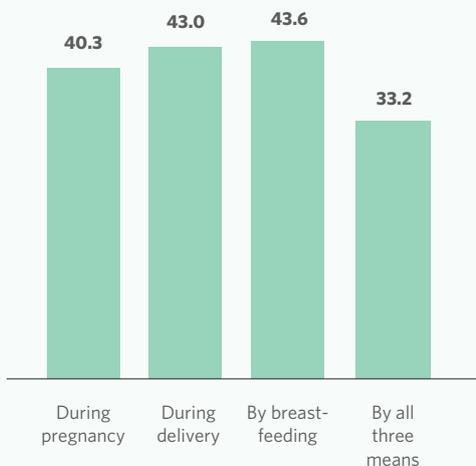
Eight percent of women with no education are least likely to reject the two most common misconceptions on HIV/AIDS compared to 42 percent among women with higher education (Figure 8.3 and Table 8.2).

## Knowledge about Mother-to-Child Transmission

To assess knowledge about mother-to-child transmission of HIV/AIDS, both ever-married and never-married women interviewed in the PLHDS were asked whether HIV/AIDS can be transmitted from a mother to her child during pregnancy, during delivery, and through breastfeeding. They were also asked whether the risk of mother-to-child transmission (MTCT) of HIV/AIDS can be reduced by the mother taking special drugs during pregnancy.

**Figure 8.4**

Knowledge of prevention of mother-to-child transmission of HIV/AIDS



Percent of women aged 15-49 who know that HIV/AIDS can be transmitted from mother to child

Table 8.3 presents data on the knowledge about mother-to-child transmission among women aged 15-49 by background characteristics (see also Figure 8.4). It shows that 40 percent of women know that HIV/AIDS can be transmitted during pregnancy, 43 percent know that it can be transmitted during delivery, and 44 percent know that it can be transmitted through breastfeeding, whereas 33 percent of the respondents believe HIV/AIDS can be transmitted by all three means. Twenty-nine percent of the women know that the risk of mother-to-child transmission can be reduced if the mother takes special drugs during pregnancy.

Among the places of residence, knowledge of prevention of mother-to-child transmission of HIV/AIDS is highest in urban areas at 37 percent and lowest in nomadic areas at 17 percent. There are variations among the regions on the knowledge of prevention of mother-to-child transmission of HIV/AIDS; it is highest in Nugaal at 36 percent and lowest in Sool at 25 percent.

Knowledge of prevention of mother-to-child transmission of HIV/

**40%**

of women know that HIV/AIDS can be transmitted during pregnancy

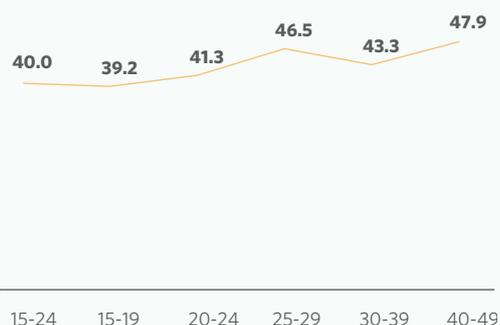
AIDS is higher among women with higher education at 68 percent compared to women with no education at 22 percent.

## Attitude Towards People Living with HIV/AIDS

Like the rest of Somalia, many people in Puntland believe that HIV/AIDS is a disease for people who have committed bad deeds. Extensive stigma and discrimination against people living with HIV/AIDS can adversely affect both people's willingness to be tested and their adherence to ART. For instance, people may hesitate to take a HIV test because they are afraid of how other people will react if the test result is positive.

**Figure 8.5**

Discriminatory attitudes towards people living with HIV/AIDS by age



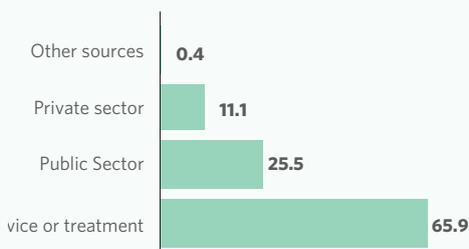
Percent of women aged 15-49 with discriminatory attitudes towards people living with HIV/AIDS

HIV/AIDS-related stigma and discrimination undermine HIV/AIDS prevention as it stops people seeking information about how to reduce their risk of exposure to HIV/AIDS and adopt safer behaviour, as they believe such inquiries may raise suspicion about their status. Tackling stigma and discrimination is an important factor for the success of programmes targeting HIV/AIDS prevention and control.

In the PLHDS, both ever-married and never-married women who had heard of HIV/AIDS were asked several questions to assess the level of stigma associated with HIV/AIDS. Respondents were asked about their willingness or unwillingness to take care of a member of their family with HIV/AIDS in their own household, to buy vegetables from an infected shopkeeper or vendor, and to let others know the HIV/AIDS status of family members.

**Figure 8.6**

Discriminatory attitudes towards people living with HIV/AIDS by education



Percent of women aged 15-49 with discriminatory attitudes towards people living with HIV/AIDS

Table 8.4 presents data for women aged 15-49 who have heard of HIV/AIDS and their attitudes towards people living with HIV/AIDS, by background characteristics. Overall, 52 percent of women think that children living with HIV/AIDS should not attend school with children who are not infected by HIV/AIDS. In addition, 58 percent of the women said they would not buy fresh vegetables from a shopkeeper who is HIV-positive. Further, 43 percent of the respondents had discriminatory attitudes towards people living with HIV/AIDS.

As presented in Figure 8.5 and Table 8.4 younger women and never married are less likely to discriminate against people with HIV/AIDS compared to older women and women who are currently married. Forty-eight percent of women residing in the rural areas have discriminatory attitudes towards people living with HIV/AIDS compared to 40 percent and 41 percent among those residing in the nomadic and urban areas respectively. Stigma against people with HIV/AIDS is lower among people residing in Mudug region at 36 percent and higher among people residing in Sanaag region at 52 percent.



# 58%

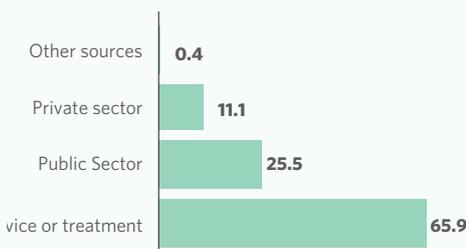
of the women said they would not buy fresh vegetables from a shopkeeper who is HIV-positive

# 34%

of women who had an STI or STI symptoms sought advice or treatment from public and private sectors

**Figure 8.7**

Source of advice or treatment for STIs



Percent of women aged 15-49 reporting an STI or symptoms of an STI in the past 12 months who sought advice or treatment

Figure 8.6 indicates that stigma against people with HIV/AIDS is higher among women with no education at 46 percent and lowest among those with higher level of education at 23 percent. Forty-five percent of women from lowest wealth quintile and 39 percent of those from the highest wealth quintile have discriminatory attitudes towards people living with HIV/AIDS (Table 8.4).

## Self-reporting of Sexually Transmitted Infections

The PLHDS gathered information about sexually transmitted infections or symptoms. Ever-married women aged 15-49 were asked whether they had a sexually transmitted infection or symptoms (bad smell, abnormal discharge from the vagina, or a genital sore or ulcer) in the 12 months prior to the survey.

Table 8.5 shows the self-reported prevalence of STIs and STI symptoms. Only 9 percent of ever-married women reported that they had an STI in the 12 months preceding the survey, 8 percent had a bad smell, or an abnormal discharge, and 4 percent had a genital sore or ulcer. In total, 11 percent of women reported having an STI/ genital discharge/ sore or ulcer symptoms.

Variations in self-reported prevalence of STIs and STI symptoms by background characteristics are also presented in Table 8.5. The prevalence of STIs or STI symptoms is higher among currently married women at 9 percent compared to 6 percent among those who are divorced/separated or widowed. The prevalence varies by age, education, and wealth quintile. The proportion of those presenting with STI/ genital discharge/ sore or ulcer is highest among those aged 30-39 at 12 percent and lowest among those aged 15-19 at 6 percent. The prevalence of STIs is almost twice as high among urban and rural women, compared to nomadic women at 10, 11 and 5 percent respectively. The proportion of those presenting with STI/ genital discharge/ sore or ulcer is highest in urban areas at 14 percent and lowest in nomadic areas at 5 percent.

Among the regions, the proportion of those presenting with STIs is highest in Bari and Nugaal at 11 percent each and lowest in Sanaag at 6 percent.

Table 8.6 and Figure 8.7 show the percentage of women aged 15-49 reporting an STI or symptoms of an STI in the 12 months preceding the survey who sought advice or treatment. According to the findings, women are likely to seek treatment in more than one place.

Thirty-four percent of women who had an STI or STI symptoms sought advice or treatment from public and private sectors; 26 percent of ever-married women who had an STI/STI symptoms

sought advice from the public health sector and 11 percent got advice from the private sector. Sixty-six percent of the ever-married women who had an STI or STI symptoms did not seek advice or treatment.



Extensive stigma and discrimination against people living with HIV/ADS can adversely affect both people's willingness to be tested and their adherence to ART



**Table 8.1** Knowledge of HIV

Percentage of women aged 15-49 who had heard about HIV/AIDS by background characteristics, PLHDS 2020		
Background characteristics	Percentage of women who had ever heard about HIV/AIDS	Number of women
<b>Age</b>		
15-19	57.6	1,666
20-24	69.2	926
25-29	67.7	956
30-39	69.3	1,353
40-49	66.1	525
<b>Type of residence</b>		
Urban	79.4	2,102
Rural	66.8	1,524
Nomadic	47.0	1,800
<b>Region</b>		
Sool	59.3	742
Sanaag	69.7	990
Bari	64.2	1,254
Nugaal	67.7	554
Mudug	64.8	1,886
<b>Education</b>		
No Education	57.4	3,997
Primary	82.4	873
Secondary	92.1	411
Higher	95.8	145
<b>Wealth quintile</b>		
Lowest	47.4	1,166
Second	53.7	868
Middle	62.9	1,003
Fourth	74.1	1,154
Highest	83.2	1,235
<b>Total 15-49</b>	<b>65.1</b>	<b>5,426</b>

**Table 8.2** Comprehensive knowledge about HIV/AIDS

Percentage of women aged 15-49 who say that a healthy-looking person can have HIV/AIDS and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of HIV/AIDS, and the percentage with a comprehensive knowledge about HIV/AIDS by background characteristics, PLHDS 2020

Background characteristics	Percentage of women who say that:				Percentage who say that a healthy-looking person can have HIV/AIDS and who reject the two most common local misconceptions <sup>1</sup>	Percentage with a comprehensive knowledge about HIV/AIDS <sup>2</sup>	Number of respondents
	A healthy-looking person can have HIV/AIDS	HIV/AIDS cannot be transmitted by mosquito bites	HIV/AIDS cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has HIV/AIDS			
<b>Age</b>							
15-19	35.2	27.0	34.0	31.7	12.7	5.6	1,666
20-24	42.5	32.0	40.6	35.8	13.0	8.5	926
25-29	40.3	30.6	39.0	35.7	13.5	6.5	956
30-39	40.5	32.5	39.4	36.7	13.3	5.5	1,353
40-49	38.7	27.5	36.0	32.0	12.8	4.3	525
<b>Type of residence</b>							
Urban	53.0	42.8	52.0	50.7	23.0	8.4	2,102
Rural	40.7	28.8	38.1	34.0	12.5	5.9	1,524
Nomadic	21.2	15.8	20.2	15.6	2.1	3.7	1,800
<b>Region</b>							
Sool	34.1	20.8	32.4	24.8	7.5	5.9	742
Sanaag	38.4	29.9	36.5	36.5	10.4	4.7	990
Bari	38.9	33.2	37.9	35.8	14.0	7.3	1,254
Nugaal	45.5	34.9	45.4	39.8	22.0	3.9	554
Mudug	39.4	29.8	37.6	34.5	13.5	6.8	1,886
<b>Education</b>							
No Education	31.2	23.6	30.2	26.3	8.3	4.7	3,997
Primary	55.0	39.1	54.0	52.5	21.0	7.8	873
Secondary	67.9	59.2	61.7	63.3	32.3	12.3	411
Higher	74.9	67.2	72.0	66.3	42.4	17.2	145
<b>Total 15-49</b>	<b>39.0</b>	<b>29.9</b>	<b>37.6</b>	<b>34.4</b>	<b>13.1</b>	<b>6.1</b>	<b>5,426</b>

<sup>1</sup> The two most common local misconceptions are that HIV/AIDS can be spread by mosquitoes and supernatural means.

<sup>2</sup> Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having an uninfected husband can reduce the chance of getting AIDS, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV.



**Table 8.3** Knowledge of prevention of mother-to-child transmission of HIV/AIDS

Percentage of women aged 15-49 who know that HIV/AIDS can be transmitted from mother to child by breastfeeding and that the risk of mother-to-child transmission (MTCT) of HIV/AIDS can be reduced by the mother taking special drugs during pregnancy, by background characteristics, PLHDS 2020

Background characteristics	Percentage who know that HIV/AIDS can be transmitted from mother to child				Percentage who know that the risk of MTCT can be reduced by mother taking special drugs	Number of respondents
	During pregnancy	During delivery	By breastfeeding	By all three means		
<b>Age</b>						
15-19	36.0	37.1	39.9	28.9	27.3	1,666
20-24	41.9	45.7	47.5	34.8	32.5	926
25-29	42.4	45.8	44.7	35.5	28.9	956
30-39	43.0	46.4	45.9	36.7	29.1	1,353
40-49	40.3	43.5	40.7	30.5	26.1	525
<b>Type of residence</b>						
Urban	50.5	54.3	55.4	40.7	37.3	2,102
Rural	43.4	46.8	45.3	34.9	30.8	1,524
Nomadic	25.8	26.7	28.4	22.9	17.1	1,800
<b>Region</b>						
Sool	42.4	42.1	44.5	38.2	24.8	742
Sanaag	43.4	46.4	48.3	36.8	28.8	990
Bari	39.2	42.1	42.9	30.7	29.5	1,254
Nugaal	48.2	52.8	52.0	43.8	35.6	554
Mudug	36.3	39.3	38.8	27.8	27.8	1,886
<b>Education</b>						
No Education	33.8	35.6	36.0	28.3	22.3	3,997
Primary	53.1	58.0	60.4	42.2	40.0	873
Secondary	64.3	69.0	68.3	49.8	53.8	411
Higher	75.9	84.3	83.3	65.9	67.9	145
<b>Total 15-49</b>	<b>40.3</b>	<b>43.0</b>	<b>43.6</b>	<b>33.2</b>	<b>28.8</b>	<b>5,426</b>

**Table 8.4** Discriminatory attitudes towards people living with HIV/AIDS

Women aged 15-49 who have heard of HIV/AIDS, and have discriminatory attitudes towards people living with HIV/AIDS, according to background characteristics, PLHDS 2020

Background characteristics	Women			Number of women who have heard of HIV/AIDS
	Percentage who do not think that children living with HIV/AIDS should be able to attend school with children who are HIV negative	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV/AIDS	Percentage with discriminatory attitudes towards people living with HIV/AIDS <sup>1</sup>	
<b>Age</b>				
15-24	50.6	54.8	40.0	1,600
15-19	50.3	54.1	39.2	959
20-24	51.0	55.7	41.3	640
25-29	52.4	61.3	46.5	648
30-39	50.8	59.8	43.3	938
40-49	55.8	66.2	47.9	347
<b>Marital status</b>				
Never-married	48.2	53.6	37.5	1,094
Married	53.0	60.6	45.4	2,075
Divorced/widowed	52.4	61.0	44.3	364
<b>Type of residence</b>				
Urban	49.7	58.4	40.9	1,669
Rural	58.2	62.9	48.2	1,017
Nomadic	46.8	53.1	40.2	847
<b>Region</b>				
Sool	55.2	61.7	47.3	440
Sanaag	59.6	67.5	52.3	690
Bari	52.1	58.7	42.4	806
Nugaal	50.7	60.4	42.6	375
Mudug	45.4	51.4	36.3	1,222
<b>Education</b>				
No Education	54.4	60.8	46.3	2,296
Primary	49.2	59.1	40.4	719
Secondary	43.9	48.9	33.7	379
Higher	34.8	42.3	23.2	139
<b>Wealth quintile</b>				
Lowest	52.0	56.7	45.1	552
Second	45.2	54.3	38.3	467
Middle	54.0	61.7	43.9	631
Fourth	57.1	62.5	47.4	856
Highest	47.7	55.9	39.4	1,027
<b>Total 15-49</b>	<b>51.5</b>	<b>58.4</b>	<b>42.9</b>	<b>3,532</b>

<sup>1</sup> Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative and/or would not buy fresh



**Table 8.5** Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Among women aged 15-49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the 12 months preceding the survey, by background characteristics, PLHDS 2020

Background characteristics	Percentage of respondents who reported having in the past 12 months:				Number of ever-married women
	STI	Bad-smelling/ abnormal genital discharge	Genital sore or ulcer	STI/ genital discharge/ sore or ulcer	
<b>Age</b>					
15-19	4.1	4.6	2.2	6.3	300
20-24	7.3	6.4	3.1	9.2	633
25-29	8.6	6.9	3.2	10.2	889
30-39	10.1	9.6	4.6	12.1	1,334
40-49	8.4	7.5	4.5	11.2	519
<b>Marital status</b>					
Married	9.0	7.6	4.1	10.5	3,161
Divorced/ separated/ widowed	6.0	7.9	2.3	10.5	514
<b>Type of residence</b>					
Urban	10.4	10.1	4.9	14.2	1,271
Rural	11.2	9.7	5.4	12.8	1,074
Nomadic	4.6	3.7	1.5	5.3	1,330
<b>Region</b>					
Sool	7.9	7.1	3.5	9.5	527
Sanaag	6.4	5.2	1.4	7.5	720
Bari	10.8	10.2	4.9	14.1	870
Nugaal	11.3	9.4	4.8	13.7	372
Mudug	7.6	7.1	4.3	9.3	1,186
<b>Education</b>					
No Education	7.9	7.2	3.5	9.8	3,011
Primary	10.0	8.7	4.9	12.5	481
Secondary	15.9	12.7	5.6	19.0	135
Higher	(11.7)	(10.2)	(5.1)	(13.6)	49
<b>Wealth quintile</b>					
Lowest	5.1	4.0	2.1	5.5	859
Second	5.9	5.3	1.9	7.3	666
Middle	10.9	10.5	5.6	14.2	685
Fourth	11.2	11.4	5.9	14.4	748
Highest	10.1	7.6	3.8	12.1	717
<b>Total 15-49</b>	<b>8.5</b>	<b>7.7</b>	<b>3.8</b>	<b>10.5</b>	<b>3,675</b>

Note: Figures in parentheses are based on 25-49 unweighted cases.

**Table 8.6** Women seeking treatment for STIs

Percentage of women aged 15-49 reporting an STI or symptoms of an STI in the past 12 months who sought advice or treatment, PLHDS 2020

<b>Background characteristics</b>	<b>Percentage of Women</b>
<b>Public Sector</b>	25.5
Government Hospital	10.1
Referral Health Center	2.6
MCH/HC	14.3
Primary Health Unit (PHU)	0.3
Mobile Clinic	0.4
Other Public Sector	
<b>Private sector</b>	11.1
Clinical	8.8
Pharmacy	2.8
Other Private Medical Sector	0.1
<b>Other sources</b>	0.4
<b>No advice or treatment</b>	65.9
Number with STD or symptoms of STD	387
Number of women	387

Note: The categories are not mutually exclusive and the sum of percentages may exceed 100 percent.

A photograph of two women in traditional Middle Eastern attire, including headscarves and long dresses, standing in a desert landscape. The woman on the left is wearing a light-colored headscarf and a dark dress. The woman on the right is wearing a white headscarf with a dark patterned border and a white dress with a dark patterned border. They are standing in a desert landscape with some buildings in the background.

CHAPTER 9

# Gender Based Violence

# Key Findings

## EXPERIENCE OF PHYSICAL VIOLENCE



**15%**

of women aged 15-49 in Puntland have experienced physical violence since the age of 12.

## PHYSICAL VIOLENCE BY PLACE OF RESIDENCE



**18%**

of women in urban areas experience physical violence, the highest by type of residence

## PHYSICAL VIOLENCE BY REGION



**19%**

of women in Bari experience physical violence, this being the highest by region

## PERPETRATORS OF THE VIOLENT ACTS



**52%**

of women believe that husbands are the most common perpetrators of violent acts against women in Puntland

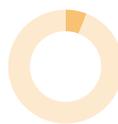
## WHERE VIOLENT ACTS TAKE PLACE



**67%**

of women aged 15-49 believe that most violent acts against women take place at homes

## VIOLENCE DURING PREGNANCY



**6%**

of women aged 15-49 experienced physical violence during pregnancy

## HELP-SEEKING BEHAVIOUR



**15%**

of ever-married women aged 15-49 who had experienced physical or sexual violence had sought help



# 9

## Chapter 9

# Gender Based Violence

In 2015, the UN General Assembly adopted 17 Sustainable Development Goals (SDGs), including Goal 5, which calls for the elimination of all forms of violence and discriminatory acts against all women and girls. Violence against women can be described as a violation of human rights, and as a form of discrimination against women, resulting in physical, sexual, psychological and economic harm. It may lead to depression, anxiety disorders, post-traumatic stress disorder, permanent injuries, sleeplessness and, sometimes, death. Over the years, Somali women have overlooked some forms of violence as norms, as is the case in many countries.

## Measurements of Violence

Puntland Health and demographic report was generated from the main Somali Health and Demography Survey data. The survey had sections designated for the collection of information on domestic violence and other forms of discrimination against women. Information was obtained from ever-married women and never-married women aged 15-49 who were either usual residents, or guests who slept in the house the night preceding the day of the interview. Enumerators asked the respondents questions on their opinions regarding the definition of domestic violence, opinions on the most common perpetrators of violent acts against women, experiences of violence, whether physical, sexual or emotional, perpetrators of physical violence. They also asked respondents about their experience of violence during pregnancy, spousal violence, injuries due to spousal violence, and help-seeking behaviours for those who have experienced violence.

Specifically, the enumerators asked never-married and ever-married women in Puntland about physical violence perpetrated on them. The survey also measured sexual and emotional violence committed by the current spouse (for currently married women) and by the most recent spouse (for divorced or widowed women).

The collection of data on GBV is often marred by under-reporting due to the culture of silence around the topic. In order to encourage disclosure, respondents were asked about any experiences they have had with specific acts of violence.

The collection of data on GBV is often marred by under-reporting due to the culture of silence around the topic. In order to encourage disclosure, respondents were asked about any experiences they have had with specific acts of violence. This ensured there were no misunderstandings on the meaning of 'violence' among respondents.



The following set of questions were asked to the respective respondents. 'Did the perpetrator ever:'

**Physical violence:** push you, shake you, or throw something at you; kick you, drag you, or beat you up; try to choke you or burn you on purpose; or threaten or attack you with a knife, gun, or any other weapon.

**Sexual violence:** physically force you to have sexual intercourse with him even when you did not want to, physically force you to perform any other sexual acts you did not want to, force you with threats or in any other way to perform sexual acts you did not want to, in the last 12 months preceding the survey, or physically force you to have sexual intercourse.

**Emotional violence:** say or do something to humiliate you in front of others, threaten to hurt or harm you or someone close to you, or insult you or make you feel bad about yourself.

In the survey, women were asked questions regarding sexual spousal violence acts. These questions were not asked to never-married women, because the questions would be considered anomalous given the cultural context in Somalia.

## Ethical Considerations in PLHDS

Ensuring the confidentiality and privacy of respondents was obligatory for the enumerators during and after the interviews. All the enumerators were provided rigorous training sessions on how to build rapport with the respondents, make a good impression, obtain respondents' consent, assuring confidentiality, and interviewing the respondents alone. In addition to the general training sessions, efforts were made to continuously remind the enumerators about the need to ensure the complete privacy of respondents.

Moreover, for the GBV section, enumerators had to seek consent and explain to the respondents before each interview began. Respondents were informed on the use of the information collected, and that the outcome of the survey will be used to inform policies and formulate programs that address the identified needs and gaps in Somali women's lives.

The women interviewed for this section were only eligible when their privacy was completely secured. This was to avoid any repercussions to the respondent and interviewer, given the sensitivity of the subject in the Somali cultural context. In addition, the enumerators (midwives and medical practitioners) who collected this information from respondents were all women to minimize any sensitivities involved and ensure respondents felt comfortable discussing this topic.

Ensuring the confidentiality and privacy of respondents was obligatory for the enumerators during and after the PLHDS interviews.



## Opinions about Domestic Violence

All women respondents sampled for the PLHDS in Puntland were asked about their views about domestic violence. Specifically, they were asked whether domestic violence means:

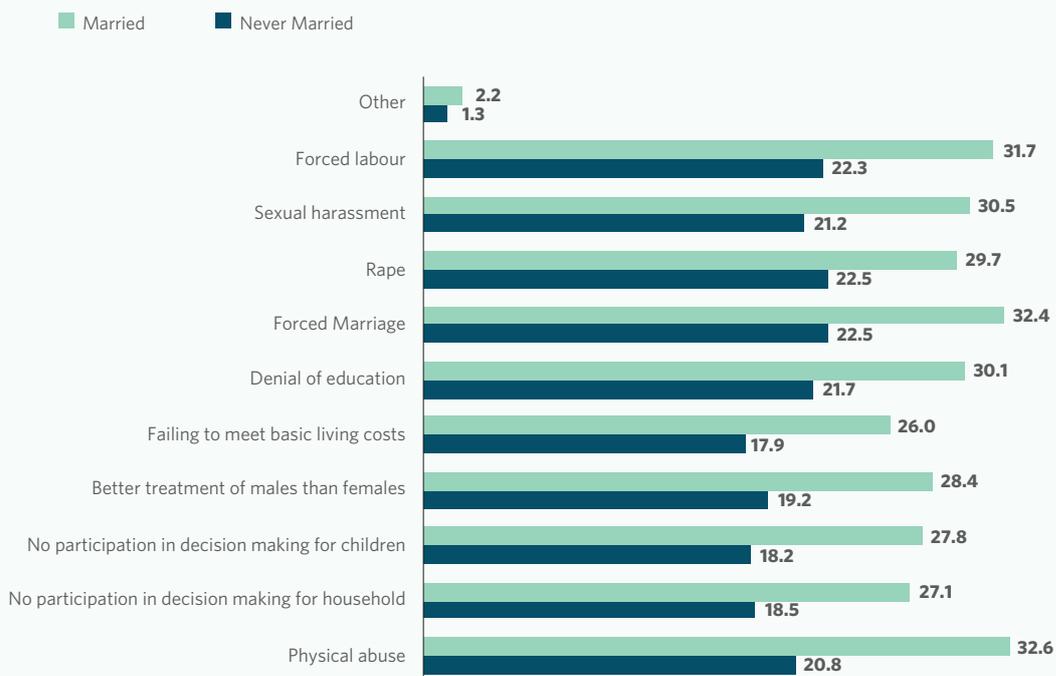
- Physical abuse
- No participation in household decision-making
- No participation in decision-making regarding children
- Better treatment of males than females
- Failure to meet basic living costs
- Denial of education
- Forced marriage
- Rape
- Sexual harassment
- Forced labor

**Educational attainment plays a role in the understanding of domestic violence. Women with secondary and higher education generally have a better understanding of acts that constitute domestic violence than women with no education or primary education**

Table 9.1 shows the percentage of women aged 15-49 who understand domestic violence to mean specific acts according

**Figure 9.1**

Acts that mean domestic violence by marital status



Percent of women aged 15-49 who understand domestic violence to mean various specified acts

# 50%

of women considered physical abuse, denial of education, forced marriage, rape, sexual harassment, forced labour as forms of domestic violence

to their background characteristics. Findings show that over half of women in Puntland believed that most of the specified acts asked constituted domestic violence. Over 50 percent of women considered physical abuse, denial of education, forced marriage, rape, sexual harassment, forced labour as forms of domestic violence. These state level figures are not much different from national estimates.

Women from urban areas have a better understanding of acts that constitute domestic violence compared to women from both rural and nomadic areas. For instance, 64 percent of women in urban areas identify physical abuse as an act of violence against women, while the corresponding percentages for women from rural and nomadic areas are 57 and 54 percent respectively.

In Puntland, ever-married women aged 15-49 are more knowledgeable than never-married women on the understanding of domestic violence (Figure 9.1). This contradicts the national-level findings, where never-married women are more knowledgeable than ever-married women.

Educational attainment plays a role in the understanding of domestic violence. Women with secondary and higher education generally have a better understanding of acts that constitute domestic violence than women with no education or primary education

At region level, Physical abuse, denial of education right, forced marriage and rape were the acts that women in all regions in Puntland identified with the highest scores compared other crimes in the list.

## Women's Experience of Physical Violence

Table 9.2 presents women aged 15-49 who had ever experienced physical violence since the age of 12 and those that reported they experienced physical violence in the 12 months preceding the survey. The result shows that 15 percent of women aged 15-49 have experienced physical violence since the age of 12, while 8 percent had experienced often or sometimes physical violence in the 12 months preceding the survey.

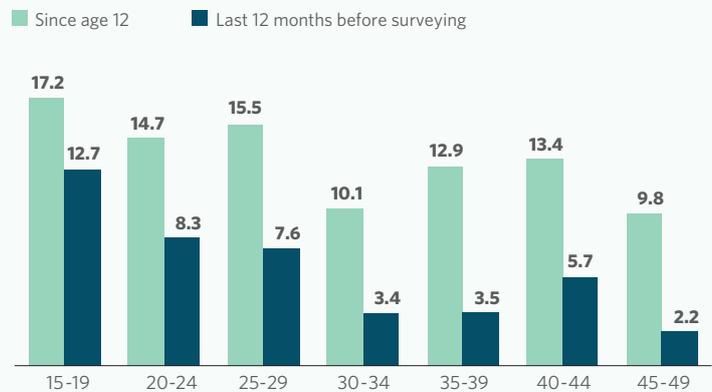
Similar to the national data, younger women in Puntland are more likely to experience physical violence compared to the other age groups; 17 percent of women aged 15-19 had experienced physical violence since the age of 12 and 13 percent experienced physical violence in the 12 months preceding the survey. Among older women aged 45-49, 10 percent had ever experienced physical violence since the age of 12 while 2 percent reported facing physical



Similar to the national data, younger women in Puntland are more likely to experience physical violence compared to the other age groups

**Figure 9.2**

Physical violence against women by age



Percent of women aged 15-49 who have ever experienced physical violence since age 12 and percentage who have experienced violence during the 12 months preceding the survey

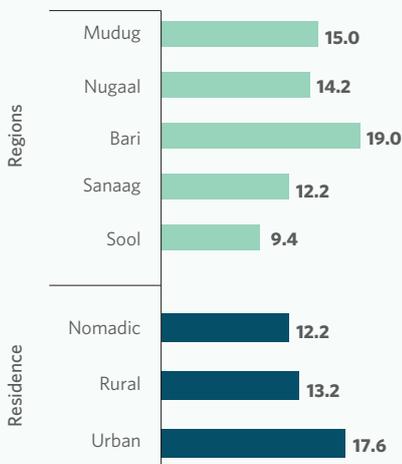
violence in the 12 months preceding the survey (Figure 9.2).

Additionally, Physical violence in Puntland is highest among urban women at 18 percent and lowest among Nomadic women at 12 percent (Figure 9.3).

As depicted in figure 9.3, Bari and Mudug regions have the highest rate at 19 and 15 percent respectively, of women aged between 15-49 years that have ever experienced physical violence since age 12, while Sool region has the lowest rate at 9 percent. There is a significant variance in terms of women’s education level and the possibility she could experience physical violence. Women with higher education attainment reported the highest rate of physical violence at 19 percent while women who never attended school and those who have attained secondary level reported the lowest rate of 14 percent. Furthermore, in terms of wealth status, women from the middle wealth quintile reported the highest rate of physical violence at 19 percent. Seventeen percent of women from the highest wealth quintile reported to have ever experienced physical violence, while women from the lowest and second wealth quintiles reported the lowest rate of physical violence at 13 percent.

**Figure 9.3**

Physical violence against women

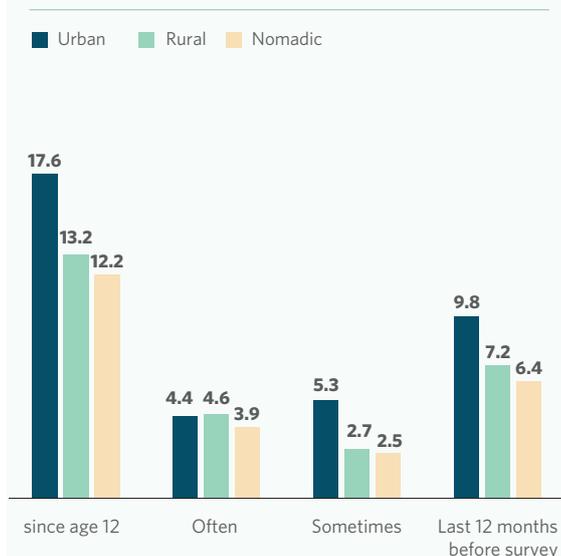


Percentage of women aged 15-49 who have ever experienced physical violence since age 12 by region and residence

## Perpetrators of Physical Violence

Table 9.3 illustrates the opinions of women aged 15-49 regarding who they consider are the most common perpetrators of violence against women. More than half (52 percent) of women believe that husbands are the most individuals that commit violent acts against women in Puntland. However, husband violence decreases with the age among women. For example, 45 percent of women aged

**Figure 9.4**  
Physical Violence Frequency



Percentage of women aged 15-49 who have ever experienced physical violence by the residence

**54%**

of women in urban areas are more subjected to violent acts by the husband

45-49 experienced husband violence, compared to 57 percent of women aged 15-19.

Among the regions, the proportion of women who reported husbands as perpetrators of violence against women was highest in Sanaag at 59 percent and lowest in Bari at 45 percent.

At residence level, women in urban areas are more subjected to violent acts by the husband at 54 percent than rural and nomadic areas at 51 and 49 percent respectively.

Furthermore, data shows that other relative's group are the second perpetrators after husbands in perpetrating violence against women at 17 percent. Fathers/stepfathers are the third in perpetrating violence against women at 16 percent. Daughter or son are the least perpetrators; they commit 3 percent of the all physical violence against women. Employer/someone at work were reported as perpetrators of violence acts against women at 5 percent.

As part of the survey, women aged 15-49 who had experienced physical violence since the age of 12 were asked who committed the acts of violence against them. Respondents could report multiple perpetrators based on their experience.

As presented in Table 9.4, 58 percent of ever-married women aged 15-49 in Puntland who had experienced physical violence reported the most common perpetrators were their respective husbands. A similar indicator at the national level was reported at 62 percent (SHDS, 2020). Twenty-four percent of ever-married women stated that the mother/stepmother had committed the acts of violence against them. Among never-married women, 28 percent reported perpetrators were their mothers/stepmothers, while 30 percent of never-married women had experienced physical violence perpetrated by a relative that is not an immediate family member.

### Violence during Pregnancy

Ever-married women who had been pregnant before were asked about their experiences of physical violence during pregnancy. Specifically, they were asked whether anyone had ever hit, slapped, kicked, or done anything else that hurt them physically. Table 9.5 presents the findings on ever-married women aged 15-49 in Puntland who had experienced violence during pregnancy. Six percent experienced violence during pregnancy which is the same as the National level percentage. Furthermore, the data shows that 12 percent of currently divorced women had experienced violence during pregnancy, compared to 10 percent at National level. Women in urban areas experienced more violence during pregnancy at 9 percent than rural and nomadic women at 3 percent each; this indicator does not vary much between the Puntland report and



# 12%

of currently divorced women had experienced violence during pregnancy

national level report.

Among the regions, women in Bari and Nugal are more likely to experience physical violence during pregnancy at 9 percent each, compared to Sool and Sanaag at percent 3 each.

## Spousal Violence

Table 9.6 presents spousal violence experienced by the ever-married women aged 15-49 who reported emotional, physical or sexual violence by their current or most recent husband in the 12 months preceding the survey. Eleven percent of ever-married women had been physically abused by a spouse, while 4 percent experienced emotional abuse by a spouse. The patterns of spousal violence increase with the number of children a woman has. Five percent of women with five or more children reported spousal violence compared to 2 percent of women with no children. Women from urban areas experienced more physical abuse than women in rural and nomadic areas at 16, 9 and 8 percent, respectively. Among the regions, women in Bari and Nugal are more likely to have experienced spousal violence at 17 percent compared to Sool at 11 percent.

## Injuries to Women due to Spousal Violence

Table 9.7 presents findings among ever-married women aged 15-49 who had sustained injuries due to domestic violence committed by their current or most recent spouses. Thirty-two percent of ever-married women who have ever experienced physical violence by their current or most recent husband reported having had injuries as a result, compared to 35 percent at the National level.

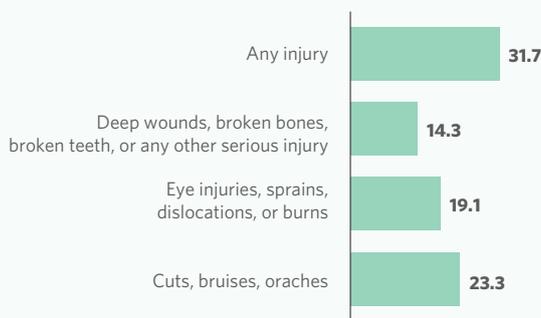
Among ever-married women aged 15-49 who had experienced any violence, 23 percent reported they had cuts, bruises or aches; 19 percent had eye injuries, dislocations, sprains or burns; and 14 percent had deep wounds, broken bones or teeth, or any other serious wounds as a result of spousal violence.

## Help-seeking Behaviors

Help-seeking behaviors refer to women's responses to their experiences of violence committed by anyone. The interviewers inquired whether women who had been subjected to violence had sought any help. Table 9.8 shows that only 15 percent of ever-married women aged 15-49 who had experienced emotional, physical or sexual violence had sought help, compared to 17

**Figure 9.5**

Injuries to women due to spousal violence



Percent of ever-married women aged 15-49 who have experienced specific types of spousal violence by types of injuries resulting from the violence

**25%**

of women experiencing both physical and sexual violence only were more likely to seek help

percent at the National level. Further, the findings show that women experiencing both physical and sexual violence only were more likely to seek help at 25 percent compared to those who experienced sexual violence only at 3 percent or physical violence only at 12 percent. There is not much difference between formerly married women and currently married women who had been subjected to violence in terms of seeking help with proportions of 11 and 16 percent, respectively compared to 29 and 16 percent respectively at the National level.

The findings further show that urban and rural women are more likely to seek help at 19 and 17 percent respectively compared to women from nomadic areas at 7 percent. The corresponding national proportions for this indicator for urban, rural and nomadic places of residence are 23, 12 and 10 percent respectively.

### Places where Violence Against Women Usually Happens

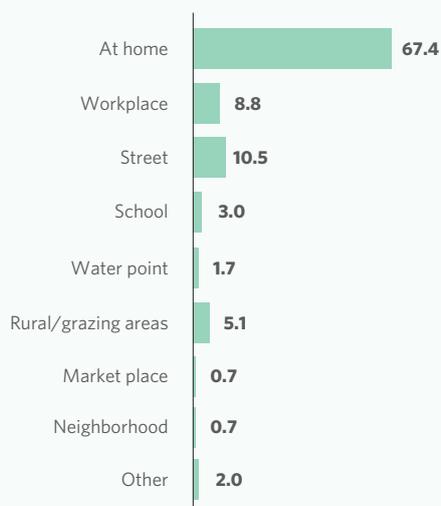
Table 9.9 shows opinions regarding the most common places of violent acts against women. Women believe that the most violent crimes against women take place at homes, and streets at 67 and 11 percent respectively. The level of home violence generally increases with age of women. For example, 73 percent of women of aged 45-49 experienced home violence, compared to 65 percent of women aged 15-19.

The differences of home violence are minimal among the places of residence; urban at 68 percent, rural at 65 percent and nomadic at 68 percent. Among the regions, Sanaag and Sool have the highest rates of women who had been subjected to home violence at 78 and 73 percent respectively, and slightly lower in Bari and Nugal at 62 and 60 percent respectively. Never-married women are less likely to experience violence at home than ever married women at 63 percent and 71 percent respectively.

Among the women with no education, 68 percent reported home violence, compared to 65 percent of women with higher education. Women from the lowest wealth quintile households are more likely to experience violence at work at 13 percent compared to the other wealth quintiles at 9 percent and less.

**Figure 9.6**

Place of violence act



Percent distribution of all women aged 15-49 according to the place where violence most violence occurs.



**Table 9.1** Acts that mean domestic violence

Percentage of all women aged 15-49 who understand domestic violence to mean various specified acts, by background characteristics, PLHDS 2020

Background characteristics	Opinion/acts that mean domestic violence										Total number of Women	
	Physical abuse	No participation in decision making for household	No participation in decision making for children	Better treatment of males than females	Failing to meet basic living costs	Denial of education	Forced Marriage	Rape	Sexual harassment	Forced labour		Other
<b>Age</b>												
15-19	61.9	53.9	52.9	57.2	53.0	63.2	66.6	66.1	62.2	66.1	3.4	1,666
20-24	62.6	53.1	54.6	56.4	52.0	62.2	65.6	62.8	63.0	65.0	6.0	926
25-29	56.6	46.5	48.2	49.1	43.8	52.3	56.7	52.3	52.1	54.6	4.4	956
30-34	55.9	45.1	46.5	45.9	41.9	50.3	52.9	49.7	50.5	52.7	3.4	734
35-39	55.9	48.6	49.8	48.0	45.8	51.4	55.9	48.4	51.8	52.7	3.9	619
40-44	53.7	46.8	46.6	47.2	44.8	53.0	55.6	46.7	50.9	53.0	2.5	345
45-49	50.8	46.7	44.7	46.3	44.2	51.1	50.5	49.5	50.1	52.8	3.2	180
<b>Type of residence</b>												
Urban	63.6	54.1	54.0	56.7	50.8	63.8	65.7	61.9	61.3	63.8	4.9	2,102
Rural	57.3	49.4	50.6	51.2	47.8	59.5	60.9	56.5	55.8	58.3	3.5	1,524
Nomadic	54.2	45.6	46.4	47.4	45.1	46.9	53.7	51.9	52.0	54.8	3.4	1,800
<b>Regions</b>												
Sool	61.5	50.8	52.1	52.4	48.5	60.7	63.5	62.2	59.8	61.5	4.7	742.0
Sanaag	64.9	59.0	60.3	62.1	54.1	64.4	67.7	65.8	64.5	67.6	10.4	990.1
Bari	43.7	37.8	37.1	38.9	36.0	45.0	48.2	45.8	42.4	46.8	0.7	1,253.9
Nugaal	58.8	44.3	45.0	44.3	41.1	52.1	56.6	49.4	51.3	53.2	3.2	553.7
Mudug	64.3	54.7	55.2	57.6	54.7	61.0	64.5	60.3	62.4	64.1	2.8	1,886.3
<b>Marital Status</b>												
Never Married	20.8	18.5	18.2	19.2	17.9	21.7	22.5	22.5	21.2	22.3	1.3	1,751
Married	32.6	27.1	27.8	28.4	26.0	30.1	32.4	29.7	30.5	31.7	2.2	3,161
Divorced	3.8	3.1	3.2	3.2	2.9	3.7	3.9	3.5	3.6	3.8	0.3	361
Widowed	1.5	1.3	1.3	1.3	1.2	1.5	1.5	1.4	1.4	1.5	0.2	152

**Table 9.1** (Cont'd) Acts that mean domestic violence

Percentage of all women aged 15-49 who understand domestic violence to mean various specified acts, by background characteristics, PLHDS 2020

Background characteristics	Opinion/acts that mean domestic violence										Total number of Women	
	Physical abuse	No participation in decision making for household	No participation in decision making for children	Better treatment of males than females	Failing to meet basic living costs	Denial of education	Forced Marriage	Rape	Sexual harassment	Forced labour		Other
<b>Education</b>												
No Education	55.8	47.4	48.2	49.2	46.5	52.7	56.9	53.4	53.6	56.4	3.8	3,997
Primary	64.0	53.4	55.1	57.5	49.9	65.5	67.0	64.6	62.3	65.3	4.4	873
Secondary	71.5	63.2	59.2	63.3	56.5	74.4	74.9	70.5	68.5	68.4	4.5	411
Higher	71.0	62.5	61.4	64.5	57.3	72.6	76.5	76.4	75.0	75.2	5.3	145
<b>Wealth Quintile</b>												
Lowest	62.5	52.3	53.8	55.5	52.5	54.2	61.5	58.5	60.6	63.1	3.5	1,166
Second	46.2	39.5	39.2	39.8	37.8	42.8	47.1	46.9	45.0	47.4	3.4	868
Middle	55.0	46.4	47.4	48.2	44.8	54.6	56.4	52.8	51.8	55.4	4.1	1,003
Fourth	65.5	56.6	57.1	59.7	55.3	65.8	67.9	62.5	61.0	63.5	4.5	1,154
Highest	60.5	51.9	51.7	53.4	47.0	63.1	64.9	61.3	61.2	63.2	4.4	1,235
<b>Total</b>	<b>58.7</b>	<b>50.0</b>	<b>50.5</b>	<b>52.0</b>	<b>48.1</b>	<b>57.0</b>	<b>60.4</b>	<b>57.1</b>	<b>56.7</b>	<b>59.3</b>	<b>4.0</b>	<b>5,426</b>



**Table 9.2** Experience of physical violence

Percentage of women aged 15-49 who have ever experienced physical violence since age 12 and percentage who have experienced violence during the 12 months preceding the survey, by background characteristics, PLHDS 2020

Background Characteristics	Percentage who have experienced physical violence in the past 12 months				Total number of Women
	Ever experienced physical violence since age 12	Often	Sometimes	often or sometimes	
<b>Age</b>					
15-19	17.2	7.4	5.3	12.7	1,666
20-24	14.7	3.8	4.4	8.3	926
25-29	15.5	4.1	3.5	7.6	956
30-34	10.1	1.4	2.0	3.4	734
35-39	12.9	2.0	1.4	3.5	619
40-44	13.4	3.1	2.7	5.7	345
45-49	9.8	1.3	0.9	2.2	180
<b>Type of residence</b>					
Urban	17.6	4.4	5.3	9.8	2,102
Rural	13.2	4.6	2.7	7.2	1,524
Nomadic	12.2	3.9	2.5	6.4	1,800
<b>Region</b>					
Sool	9.4	2.3	2.5	4.8	742
Sanaag	12.2	2.5	3.0	5.5	990
Bari	19.0	6.1	5.8	11.9	1,254
Nugaal	14.2	3.0	3.5	6.5	554
Mudug	15.0	5.1	3.1	8.2	1,886
<b>Current Marital Status</b>					
Never Married	6.1	2.7	2.0	4.7	1,751
Married	7.1	1.3	1.4	2.8	3,161
Divorced	1.0	0.2	0.2	0.4	361
Widowed	0.2	0.1	0.0	0.1	152
<b>Education Level</b>					
No Education	14.0	4.1	3.3	7.3	3,997
Primary	16.5	5.2	4.6	9.8	873
Secondary	13.8	4.0	3.7	7.7	411
Higher	19.2	5.7	8.2	13.9	145
<b>Wealth Quintile</b>					
Lowest	12.0	4.4	2.2	6.6	1,166
Second	12.4	2.3	3.4	5.6	868
Middle	19.0	5.4	5.0	10.5	1,003
Fourth	12.8	3.8	3.2	7.0	1,154
Highest	16.5	5.1	4.5	9.6	1,235
<b>Total</b>	<b>14.6</b>	<b>4.3</b>	<b>3.6</b>	<b>7.9</b>	<b>5,426</b>

**Table 9.3** Opinions regarding the most common perpetrator of violent acts against women

Percent distribution of all women according to the person who, in their opinion, is the most common perpetrator of violent acts against women, by background characteristics, PLHDS 2020

Background Characteristics	Individual who commits the most violent acts against women										Total number of Women	
	Husband	Mother/Step-mother	Father/Step-father	Sister/Brother	Daughter/Son	Other Relative	In-laws	Teacher	Employer/Someone at work	Police/A Soldier		
<b>Age</b>												
15-19	56.6	18.1	19.1	9.4	4.5	21.2	7.2	12.7	5.5	8.1	1,666	
20-24	53.6	14.4	15.7	7.1	1.8	16.6	8.2	10.5	6.1	7.5	926	
25-29	51.3	13.3	13.4	5.7	2.0	14.6	6.6	6.3	4.3	5.4	956	
30-34	48.3	10.0	13.8	4.1	1.4	10.0	7.1	6.7	3.0	4.2	734	
35-39	44.5	11.6	15.4	5.6	2.1	15.0	4.4	6.5	3.6	6.5	619	
40-44	46.3	11.3	13.8	5.0	2.0	11.7	4.0	4.2	2.7	4.1	345	
45-49	45.1	7.4	13.5	9.0	2.3	12.1	5.0	6.2	1.7	5.7	180	
<b>Type of residence</b>												
Urban	54.4	13.0	16.9	7.6	2.6	16.2	6.3	10.9	5.8	8.0	2,102	
Rural	50.8	15.2	18.4	7.8	2.9	15.0	5.8	8.9	4.3	8.1	1,524	
Nomadic	49.1	14.3	12.4	5.4	2.5	17.0	7.7	6.7	3.3	3.4	1,800	
<b>Region</b>												
Sool	54.1	10.9	13.1	6.8	1.2	16.2	3.3	3.1	4.7	6.5	742	
Sanaag	59.4	18.7	16.9	6.2	1.3	10.7	5.2	3.8	1.8	3.1	990	
Bari	44.8	14.6	14.2	4.0	1.8	8.4	3.6	6.9	3.8	7.0	1,254	
Nugaal	50.2	11.8	8.5	4.8	0.9	8.0	2.5	5.4	4.7	6.5	554	
Mudug	51.5	13.1	19.7	9.9	5.1	26.4	11.9	16.2	6.4	7.9	1,886	
<b>Current marital status</b>												
Never Married	58.5	19.7	19.9	10.4	4.6	21.3	8.3	14.5	6.7	8.9	1,751	
Married	48.7	11.0	13.7	5.0	1.8	13.6	5.9	6.3	3.5	5.2	3,161	
Divorced	46.8	12.7	14.4	5.7	1.4	14.0	5.9	6.5	3.7	6.6	361	
Widowed	44.0	13.4	16.3	8.6	1.7	13.5	3.7	4.6	4.0	4.5	152	
<b>Education</b>												
No Education	49.9	13.2	15.1	7.0	2.8	16.1	6.8	7.8	4.1	5.5	3,997	



**Table 9.3** (Cont'd) Opinions regarding the most common perpetrator of violent acts against women

Percent distribution of all women according to the person who, in their opinion, is the most common perpetrator of violent acts against women, by background characteristics, PLHDS 2020

Background Characteristics	Individual who commits the most violent acts against women										Total number of Women
	Husband	Mother/Step-mother	Father/Step-father	Sister/Brother	Daughter/Son	Other Relative	In-laws	Teacher	Employer/Someone at work	Police/A Soldier	
Primary	56.2	17.3	18.0	6.4	1.6	15.0	5.3	11.2	4.9	8.1	873
Secondary	52.7	14.2	19.5	7.7	3.9	19.4	7.0	12.5	7.9	10.8	411
Higher	68.7	16.4	12.6	5.4	1.1	12.5	8.4	16.0	5.2	10.3	145
<b>Wealth quintile</b>											
Lowest	52.5	15.2	14.0	6.3	3.5	21.9	10.9	8.7	4.5	4.4	1,166
Second	46.0	13.1	12.8	5.4	1.0	9.7	2.4	2.8	2.5	4.1	868
Middle	49.4	11.8	18.4	7.9	3.3	15.9	7.2	9.0	3.9	7.5	1,003
Fourth	53.2	15.3	16.4	8.2	3.2	19.0	6.6	12.3	4.6	8.6	1,154
Highest	55.1	14.2	17.2	6.6	2.0	12.6	5.1	10.2	6.4	7.3	1,235
<b>Total</b>	<b>51.6</b>	<b>14.0</b>	<b>15.8</b>	<b>6.9</b>	<b>2.7</b>	<b>16.1</b>	<b>6.6</b>	<b>8.9</b>	<b>4.5</b>	<b>6.5</b>	<b>5,426</b>

**Table 9.4** Persons committing physical Violence

Among women age 15-49 who have experienced physical violence since age 10, percentage who report specific persons who committed the violence according to the respondents current marital status, PLHDS 2020

Background characteristics	Ever Married	Never Married	Total
<b>Persons committing violence</b>			
Husband	58.4	n/a	33.7
Mother/step-mother	24.1	27.8	24.4
Father/step-father	11.0	13.5	11.0
Sister/brother	10.4	15.9	11.3
Daughter/son	2.4	17.6	7.2
Other Relative	6.7	29.1	13.6
Mother-in-law	1.9	n/a	10.5
Father-in-law	0.1	n/a	8.3
Other-in-law	0.1	n/a	1.1
Neighbour	6.2	6.6	6.3
Teacher	5.0	1.9	3.4
Employer/someone at work	1.1	9.5	3.4
Police/soldier	1.0	n/a	0.6
Militia/gangs	0.9	n/a	0.5
Other	2.5	n/a	1.4
<b>Number of women</b>	<b>455</b>	<b>215</b>	<b>670</b>

n/a- not applicable



**Table 9.5** Experience of violence During pregnancy

Among of ever married women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, by background characteristics, PLHDS 2020

Background Characteristics	Percentage who have experienced violence during pregnancy	Total number of Women
<b>Age</b>		
15-19	1.8	300
20-24	2.7	633
25-29	3.7	889
30-34	2.5	717
35-39	2.5	616
40-44	3.8	339
45-49	3.1	180
<b>Type of residence</b>		
Urban	4.0	1,271
Rural	3.3	1,074
Nomadic	1.6	1,330
<b>Region</b>		
Sool	1.8	527
Sanaag	2.0	720
Bari	4.3	870
Nugaal	4.2	372
Mudug	2.6	1,186
<b>Marital Status</b>		
Married	3.0	3,161
Divorced	2.6	361
Widowed	1.4	152
<b>Education</b>		
No Education	3.0	3,011
Primary	2.4	481
Secondary	3.1	135
Higher	(3.1)	49
<b>Wealth quintile</b>		
Lowest	1.3	859
Second	3.1	666
Middle	5.3	685
Fourth	2.9	748
Highest	2.5	717
<b>Total</b>	<b>2.9</b>	<b>3,675</b>

Note: Figures in parentheses are based on 25-49 unweighted cases.

**Table 9.6** Spousal violence by background characteristics

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical or sexual violence committed by their husband, by background characteristics, PLHDS 2020

Background Characteristics	Percentage of women whose husband did:							Number of ever married women
	Physical Abuse	Sexual Violence	Emotional	Physical and Sexual violence	Physical and Sexual and Emotional violence	Physical or Sexual violence	Physical or Sexual or Emotional violence	
<b>Age</b>								
15-19	9.9	2.7	5.6	1.4	0.0	11.2	15.7	298
20-24	9.8	3.1	2.5	2.0	0.6	10.9	12.3	627
25-29	13.5	4.1	5.1	3.1	0.6	14.5	17.1	873
30-39	10.3	3.0	4.4	2.2	0.8	11.0	13.2	1,298
40-49	11.2	3.8	2.6	2.1	0.0	12.8	14.2	510
<b>Type of residence</b>								
Urban	16.1	4.3	5.9	3.1	0.6	17.3	20.3	1,251
Rural	9.1	3.8	2.5	2.5	0.5	10.5	11.8	1,038
Nomadic	7.8	2.1	3.6	1.5	0.6	8.5	10.7	1,317
<b>Region</b>								
Sool	7.4	2.8	2.7	1.1	0.2	9.1	10.3	522
Sanaag	11.3	2.2	2.3	1.7	0.3	11.7	13.4	715
Bari	14.3	4.6	5.1	4.0	0.9	14.9	17.0	827
Nugaal	10.2	4.4	6.8	2.1	0.3	12.4	17.1	365
Mudug	10.5	3.2	4.3	2.1	0.8	11.6	14.0	1,176
<b>Number of living children</b>								
0	1.1	0.4	0.5	0.3	0.1	1.2	1.6	416
1-2	2.8	0.9	0.9	0.7	0.1	3.0	3.5	846
3-4	3.1	0.8	1.1	0.6	0.2	3.4	3.8	1,011
5+	4.1	1.2	1.5	0.8	0.1	4.5	5.4	1,332
<b>Marital status</b>								
Currently Married	10.6	3.5	4.7	2.4	0.6	11.8	14.4	3,104
Formerly Married	13.8	2.3		2.0	0.0	14.2	14.2	501
<b>Employed in the 12 months preceding the survey</b>								
employed	14.3	7.7	5.5	5.2	0.0	16.8	20.4	320
Not employed	10.7	2.9	3.9	2.0	0.6	11.6	13.8	3,285
<b>Education</b>								
No Education	10.2	3.4	4.1	2.4	0.6	11.3	13.6	2,952
Primary	14.8	3.4	3.6	2.2	0.4	16.0	17.9	474
Secondary	15.7	2.5	6.1	2.5	1.3	15.7	18.8	130
Higher	(13.1)	(3.1)	(0.0)	(1.1)	(0.0)	(15.2)	(15.2)	49
<b>Wealth</b>								
Lowest	7.6	2.1	3.9	1.4	0.6	8.3	10.7	853
Second	10.1	3.3	2.5	2.3	0.5	11.0	12.1	656
Middle	14.5	5.9	6.6	4.8	1.2	15.6	18.8	661
Fourth	10.5	3.3	2.6	1.6	0.2	12.2	13.4	726
Highest	13.5	2.7	4.9	1.9	0.4	14.3	17.7	709
<b>Total</b>	<b>11.1</b>	<b>3.4</b>	<b>4.1</b>	<b>2.3</b>	<b>0.6</b>	<b>12.1</b>	<b>14.3</b>	<b>3,606</b>

Note: Husband/spouse refers to the current husband for currently married women and the most recent husband for divorced, or widowed women



**Table 9.7** Injuries to women due to spousal violence

Percentage of ever-married women aged 15-49 who have experienced specific types of spousal violence by types of injuries resulting from the violence, according to whether they ever experienced violence or experienced it in the 12 months preceding the survey, PLHDS 2020

Background characteristic	Injuries experienced				Number of women
	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any injury	
<b>Experienced any violence</b>					
Ever	23.3	19.1	14.3	31.7	225
In the past 12 Months	25.7	21.4	14.3	34.1	192
<b>Age</b>					
15-19	*	*	*	*	14
20-24	(16.3)	(9.6)	(3.2)	(23.56)	43
25-29	24.7	21.5	12.9	34	70
30-34	(16.3)	(14.3)	(11.7)	(28.0)	37
35-39	(34.5)	(28.4)	(22.9)	(34.5)	39
40-44	*	*	*	*	20
45-49	*	*	*	*	7
<b>Total 15-49</b>	<b>23.3</b>	<b>19.1</b>	<b>14.3</b>	<b>31.7</b>	<b>225</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

**Table 9.8** Help seeking to stop violence

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical or sexual violence committed by background characteristics, PLHDS 2020				
Background Characteristics	Sought help		Total	Number of ever married women
	Yes	No		
<b>Type of violence experienced</b>				
Physical Abuse	11.8	88.2	100.0	187
Sexual Violence	*	*	100.0	17
Physical and Sexual violence	24.6	75.4	100.0	93
<b>Age</b>				
15-19	*	*	100.0	22
20-24	11.9	88.1	100.0	51
25-29	16.9	83.1	100.0	86
30-34	13.2	86.8	100.0	51
35-39	18.0	82.0	100.0	52
40-44	*	*	100.0	23
45-49	*	*	100.0	11
<b>Type of residence</b>				
Urban	18.9	81.1	100.0	154
Rural	16.6	83.4	100.0	69
Nomadic	6.7	93.3	100.0	74
<b>Region</b>				
Sool	15.0	85.0	100.0	34
Sanaag	22.1	77.9	100.0	37
Bari	22.6	77.4	100.0	89
Nugaal	11.2	88.8	100.0	41
Mudug	7.8	92.2	100.0	96
<b>Number of living children</b>				
0	(20.2)	(79.8)	100.0	24
1-2	8.7	91.3	100.0	69
3-4	12.1	87.9	100.0	93
5+	21.0	79.0	100.0	111
<b>Marital status</b>				
Currently Married	15.8	84.2	100.0	269
Formerly Married	*	*	100.0	28
<b>Employment in the 12 months</b>				
Employed	(25.7)	(74.3)	100.0	33
Not employed	14.0	86.0	100.0	264
<b>Education</b>				
No Education	17.0	83.0	100.0	238
Primary	9.5	90.5	100.0	47
Secondary	*	*	100.0	10
Higher	*	*	100.0	3
<b>Wealth quintile</b>				
Lowest	(5.7)	(94.3)	100.0	48
Second	(20.7)	(79.3)	(100)	45
Middle	18.5	81.5	100.0	89
Fourth	9.7	90.3	100.0	57
Highest	19.7	80.3	100.0	58
<b>Total</b>	<b>15.3</b>	<b>84.0</b>	<b>100.0</b>	<b>297</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.



**Table 9.9** Opinions regarding the most common places of violent acts against women

Percent distribution of all women aged 15-49 according to the place where, in their opinion, most of the violent acts against women occur, by background characteristics, PLHDS 2020											
Background characteristics	Where do most violent acts take place										Total number of Women
	At home	Workplace	Street	School	Water point	Rural/ grazing areas	Market place	Neighborhood	Other	Total	
<b>Age</b>											
15-19	65.2	10.6	10.8	4.3	1.9	4.8	0.0	0.0	2.4	100.0	1,571
20-24	66.9	8.6	10.2	2.9	1.8	6.6	0.4	0.2	2.4	100.0	737
25-29	67.8	10.0	10.7	1.7	1.9	4.0	1.9	1.1	1.0	100.0	651
30-34	69.4	6.3	8.9	2.4	1.7	6.3	1.6	2.1	1.3	100.0	468
35-39	71.3	6.2	11.7	2.3	0.4	5.0	0.5	1.6	1.0	100.0	386
40-44	70.1	5.9	11.3	2.0	3.5	2.7	1.2	0.2	3.0	100.0	227
45-49	73.1	4.0	8.5	0.6	0.0	7.7	1.2	2.2	2.7	100.0	97
<b>Type of residence</b>											
Urban	68.4	8.8	12.1	3.8	1.0	3.1	0.9	0.7	1.2	100.0	1,694
Rural	65.4	6.4	12.2	3.5	2.6	5.7	0.8	1.1	2.3	100.0	1,163
Nomadic	67.9	11.0	6.9	1.6	2.0	7.3	0.4	0.3	2.6	100.0	1,280
<b>Region</b>											
Sool	72.3	3.7	8.9	0.8	1.3	10.4	1.1	0.7	0.7	100.0	562
Sanaag	78.2	3.0	6.9	2.6	1.2	3.0	0.2	0.2	4.7	100.0	791
Bari	62.1	6.1	17.7	5.1	3.6	4.0	0.4	0.3	0.7	100.0	836
Nugaal	60.1	5.6	16.9	3.6	0.6	6.4	1.1	0.2	5.5	100.0	427
Mudug	65.0	16.1	7.3	2.8	1.5	4.6	0.8	1.2	0.7	100.0	1,521
<b>Marital Status</b>											
Never Married	62.8	10.9	11.2	4.6	2.0	6.2	0.0	0.0	2.4	100.0	1,749
Married	71.4	7.2	9.7	1.9	1.6	4.3	1.1	1.2	1.8	100.0	2,047
Divorced	68.9	7.6	12.8	2.1	1.1	3.6	2.6	0.8	0.4	100.0	244
Widowed	64.1	6.6	10.4	2.4	3.3	8.0	0.6	1.6	3.1	100.0	96
<b>Education</b>											
No Education	68.2	9.5	9.8	2.0	2.0	5.3	0.7	0.6	1.9	100.0	2,899
Primary	67.7	4.9	11.0	5.4	1.1	5.7	0.9	0.8	2.4	100.0	733
Secondary	61.6	11.0	13.9	5.7	1.1	3.3	0.9	0.8	1.7	100.0	372
Higher	64.8	10.3	13.8	4.4	2.2	3.8	0.0	0.0	0.8	100.0	134
<b>Wealth</b>											
Lowest	67.7	13.4	7.4	1.8	1.6	4.8	0.4	0.5	2.5	100.0	908
Second	68.3	5.1	8.7	1.0	3.3	9.8	0.5	0.4	2.9	100.0	558
Middle	65.8	9.4	14.1	2.3	1.8	3.4	0.9	1.2	1.2	100.0	748
Fourth	69.1	7.0	9.3	4.7	1.4	4.6	0.9	0.6	2.2	100.0	943
Highest	66.1	8.0	12.9	4.3	1.3	4.6	0.8	0.6	1.4	100.0	980
<b>Total</b>	<b>67.4</b>	<b>8.8</b>	<b>10.5</b>	<b>3.0</b>	<b>1.7</b>	<b>5.1</b>	<b>0.7</b>	<b>0.7</b>	<b>2.0</b>	<b>100.0</b>	<b>4,137</b>



CHAPTER 10

# Female Genital Mutilation/Cutting

TOPAZ  
STAINLESS



# Key Findings

## PREVALENCE



**99%**

of the women in Puntland aged 15-49 have undergone Female Genital Mutilation/Cutting (FGM/C)

## TYPES PRACTICED



**59%**

of women aged 15-49, have undergone Pharaonic type of Female Circumcision, the most severe form, which involves the removal of the entire clitoris and flesh.

## RELIGIOUS REQUIREMENT



**75%**

of women aged 15-49 believe that FGM/C is a religious requirement

## AGE AT FEMALE CIRCUMCISION



**70%**

of women aged 15-49 underwent FGM/C practice at age of 5-9 while **29 percent** underwent the same practice at age 10-14 years

## ATTITUDES



**79%**

of the women aged 15-49 want the FGM/C practice to continue



# 10

## Chapter 10

# Female Genital Mutilation/Cutting

Female Genital Mutilation/Cutting (FGM/C) has been practiced in Puntland for many decades. The practice is considered harmful, because it poses a potential risk to the health and well-being of women and girls who are subjected to it. FGM/C is regarded as a violation of the Convention on the Rights of the Child (General Assembly, United Nations, 1990).

In the PLHDS, both ever-married women and never-married women were asked a series of questions about FGM/C, including whether they had been subjected to it. Women who had undergone the practice were asked at which age it was done, the type of FGM/C they underwent, their religious and cultural perception about the practice, and opinions on whether the practice should continue or not.

Mothers with daughters were asked if their daughters underwent female circumcision, the age at which it happened, and the type of FGM/C performed among other questions.

The PLHDS used the definitions below of types of female circumcision:

- a. Excision of the clitoral hood (prepuce), with or without excision of part or all the clitoris (Sunni)
- b. Excision of the clitoris with partial or total excision of the labia minora (Intermediate)
- c. Excision of part or all of the external genitalia and stitching/narrowing of the vaginal opening; or all other procedures that involve pricking, piercing, stretching; or incising of the clitoris and/or labia; introduction of corrosive substances into the vagina to narrow it (Pharaonic)

## Prevalence of Female Genital Mutilation/Cutting

Table 10.1 presents the percentage of women aged 15-49 who have undergone female circumcision by background characteristics. Overall, 99 percent of women in Puntland have undergone female circumcision. Pharaonic is the most common type, which has been

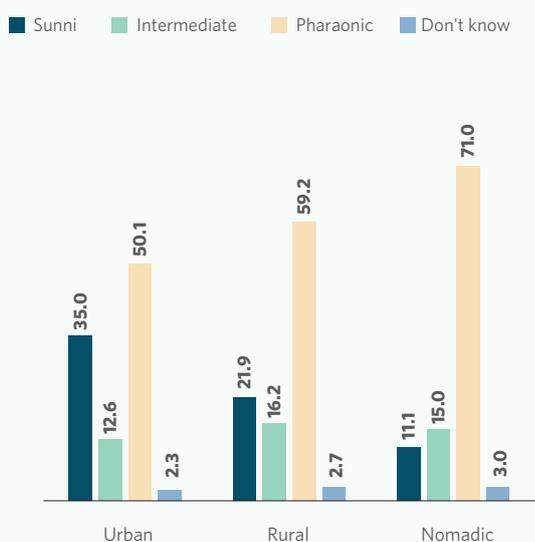
# 99%

percent of women in Puntland have undergone female circumcision

performed on 59 percent of the women. The findings show that 14 percent of women have undergone the Intermediate type, while 24 percent have undergone the Sunni type. Three percent did not know the type of female circumcision they had undergone earlier in their lives.

**Figure 10.1**

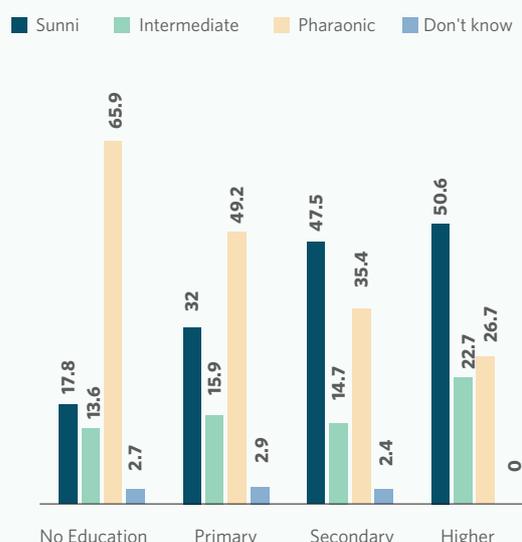
Type of FGM/C by type of residence



Percent distribution of women aged 15-49 by types of FGM/C

**Figure 10.2**

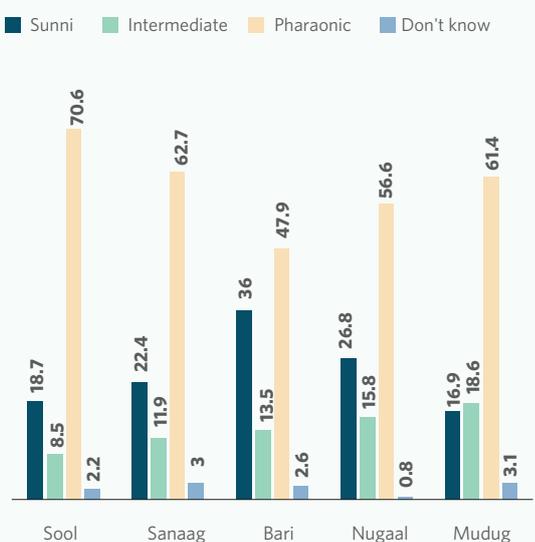
Type of FGM/C by level of education



Percent distribution of women aged 15-49 by types of FGM/C

**Figure 10.3**

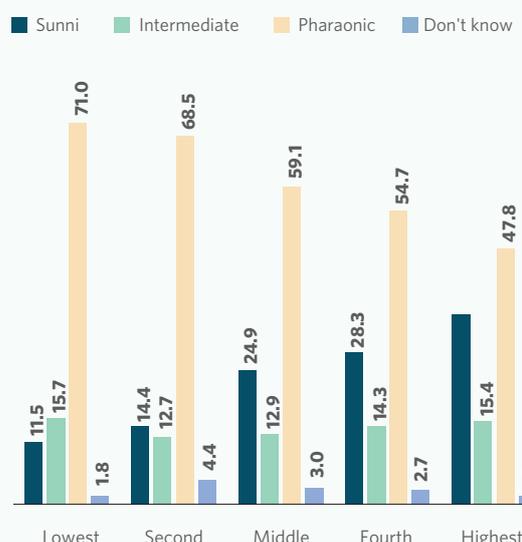
Type of FGM/C by region



Percent distribution of women aged 15-49 by types of FGM/C

**Figure 10.4**

Type of FGM/C by wealth status

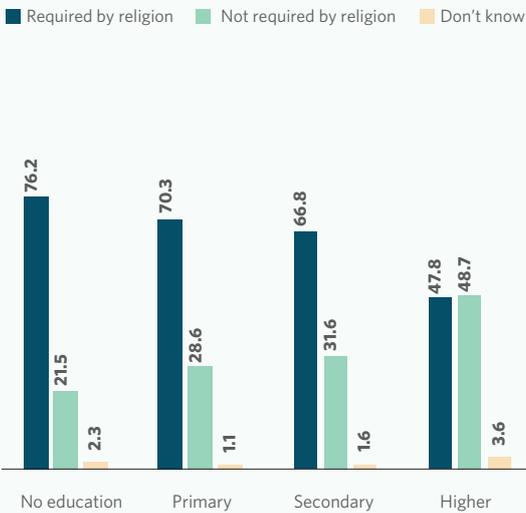


Percent distribution of women aged 15-49 by types of FGM/C



**Figure 10.5**

Opinions on FGM/C by level of education



Percent distribution of women aged 15-49 by whether FGM/C is required by religion according to education

Among the places of residence, the highest percentage of the worst form of FGM/C –the Pharaonic type was recorded in nomadic areas at 71 percent, followed by rural and urban areas at 59 and 50 percent respectively. Conversely, Sunni type of FGM/C is second highest in urban areas at 35 percent, followed by rural and nomadic areas at 22 and 11 percent respectively (Figure 10.1)

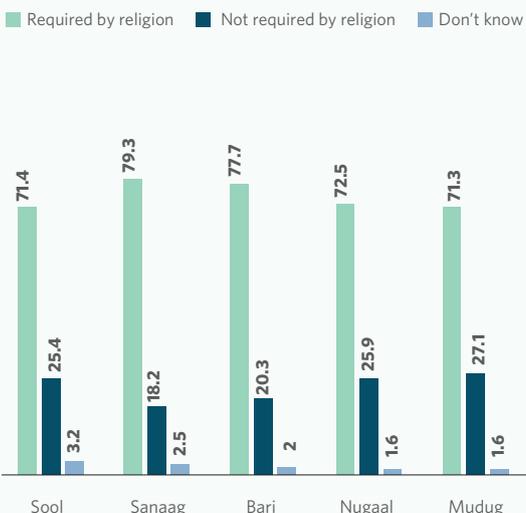
Figure 10.2 shows that 66 percent of women with no education underwent the worst type of female circumcision. Twenty-seven percent of women with the highest level of education underwent the less severe form of female circumcision. Further investigation is needed to understand this relationship because at the time the respondents underwent female circumcision, their guardians e.g. parents or grandparents had made the decision on the type of female circumcision to be performed.

Figure 10.3 shows that Sool region has the largest proportion of women who have undergone Pharaonic type of FGM/C at 71 percent while Bari has least proportion of Pharaonic type at 48 percent. Bari has the highest proportion of women who have undergone Sunni type of FGM/C at 36 percent compared to Mudug at 17 percent.

Figure 10.4 shows that 71 percent of women from the lowest wealth quintile underwent Pharaonic type compared to 48 percent of the women from highest wealth quintile.

**Figure 10.6**

Opinions on FGM/C by region



Percent distribution of women aged 15-49 by whether FGM/C is required by religion according to region

## Opinions on Female Genital Mutilation/Cutting

Table 10.2 presents the percentage distribution of women aged 15-49 by their religious beliefs regarding FGM/C practices, according to their ages and other background characteristics. Among circumcised women, 75 percent believe that FGM/C is a religious requirement. There is little variation in the women's beliefs by age as 79 percent of the women within the age group 15-19 believe it is a religious requirement, compared to 73 percent of those in the age group 45-49.

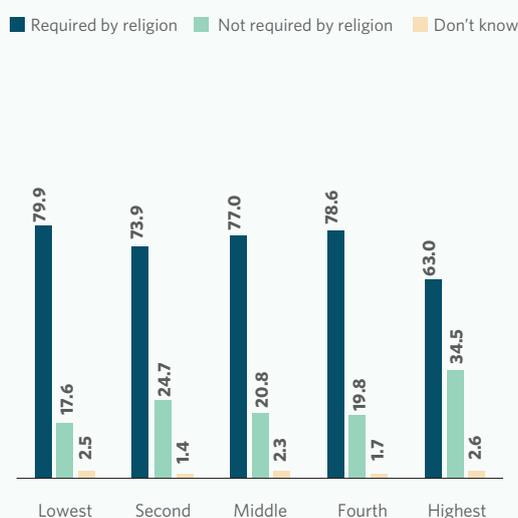
There is little variation on beliefs around FGM/C practices by place of residence; nomadic had the highest proportion of women who believe it is a religious requirement at 79 percent, followed by rural and urban areas at 77 and 69 percent respectively.

There is a notable variation in opinions among women in terms of education— 76 percent of women with no education believe that it is a religious requirement to undergo FGM/C, compared to 48 percent of those with higher education (Figure 10.5).

Among the regions, there is a slight variation regarding beliefs on religious requirement to undergo FGM/C. Sanaag and Bari

**Figure 10.7**

Opinions on FGM/C by wealth status



Percent distribution of women aged 15-49 by whether FGM/C is required by religion based on wealth status

regions have the largest proportion of women who believe that it is a religious requirement to undergo FGM/C at 79 and 78 percent respectively, while Sool and Mudug have the lowest proportion at 71 percent each (Figure 10.6).

Wealth status plays a role in shaping women’s beliefs about FGM/C: 80 percent of women from the poorest households believe FGM/C is a religious requirement compared to 63 percent from wealthiest households who hold the same beliefs (Figure 10.7).

## Age at Female Genital Mutilation/Cutting

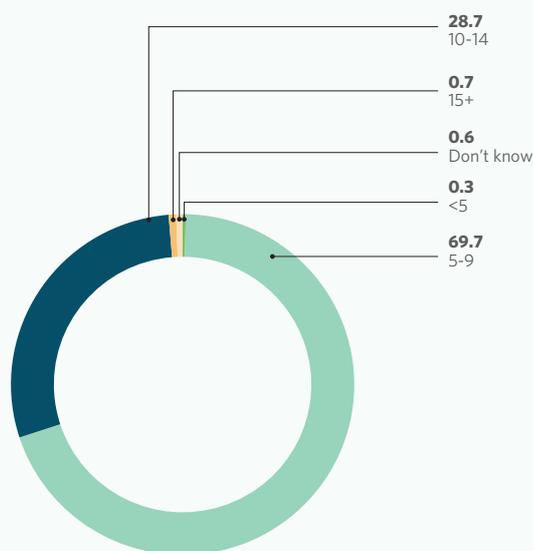
Table 10.3 shows the percent distribution of women aged 15-49 by the age when they had undergone FGM/C, according to their background characteristics. Women were asked how old they were when they underwent FGM/C. In Puntland, FGM/C is performed throughout childhood. Seventy percent of women in Puntland were circumcised when they were between ages 5 - 9 compared to 71 percent at the national level. Further 29 percent of the women were circumcised between ages 10-14, less than 1 percent at age 15 or older, and less than 1 percent were circumcised when they were younger than 5 years (Figure 10.8).

The current levels of education of women aged 15-49 and wealth status of Households tend to have little effect or influence on the age at which women underwent FGM/C.

Among the places of residence, the percentage of women who were circumcised at the age of 5-9 was highest in urban areas at 72 percent compared to nomadic and rural areas at 70 and 67 percent respectively (Figure 10.9).

**Figure 10.8**

Age at female genital mutilation/cutting



Percent distribution of women aged 15-49 who underwent FGM/C by age when it was done

## Female Genital Mutilation/Cutting Practice on Daughters

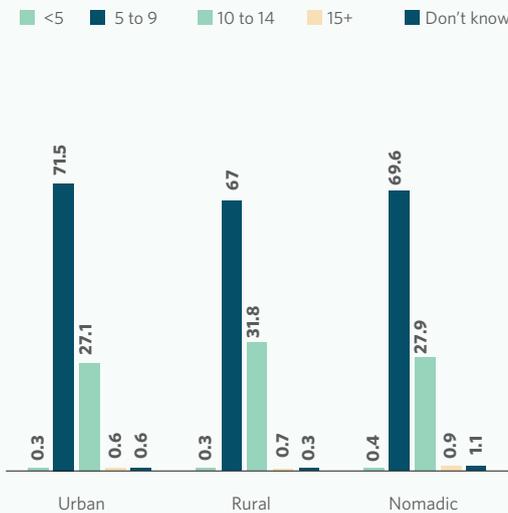
Ever-married women aged 15-49 who had daughters were asked if any of their daughters had undergone FGM/C and, if so, how old the girl was when she underwent the practice, and who performed it among other questions. It should be noted that mothers may not have been able to recall the exact age at which their daughters underwent FGM/C.

Table 10.4 shows the percent of girls of age 0-14 years who underwent female circumcision by age and their mothers’ background characteristics. The results indicate that about 3 percent of girls were cut at the age of 0-4, 25 percent of daughters were cut at the ages of 5-9 and 74 percent of daughters within the age of 10-14 years underwent the practice. In terms of place of



**Figure 10.9**

Age at female genital mutilation/cutting by type of residence



Percent distribution of women aged 15-49 who underwent FGM/C by age when it was done

residence, the prevalence of FGM/C among girls aged 10-14 was 71 percent in urban areas, 75 percent in rural areas and 76 percent in nomadic areas.

The age at FGM/C for daughters differs from that of their mothers. In fact, majority of mothers underwent FGM/C at ages 5-9 years and in contrast, the daughters were circumcised at slightly older ages of 10-14. The educational level of the mother has an influence on the FGM/C practice on their daughters. Twenty-five percent of the daughters of mothers with no education were circumcised at the age of 0-14 years compared to 4 percent of the daughters of mothers with higher education. Meanwhile, the wealth quintile has no major impact on the prevalence of FGM/C.

Among the regions, the prevalence of circumcision of girls aged 10-14 is highest in Mudug at 87 percent and lowest in Sool at 64 percent.

## Attitudes towards Female Genital Mutilation/Cutting

Both ever-married and never-married women aged 15-49 were asked whether the FGM/C practice should be continued or stopped. Table 10.5 shows the percentage distribution of women aged 15-49 by their opinion on the practice of FGM/C. Overall 79 percent of the women believe that FGM/C practice should continue, while 16 percent believe that the practice should be stopped.

The opinion on whether the practice of FGM/C should be continued or not, decreased as the wealth status of the household increased. Eighty-three percent of women from the poorest households would like the practice to continue compared to 72 percent of women from wealthier households.

Figure 10.7 shows that the percentage of women who believe that the practice needs to be continued is highest in nomadic areas at 84 percent and lowest in urban areas with 73 percent.

Among the regions, the percentage of women who believe that FGM/C practice needs to be continued is highest in Mudug at 83 percent and lowest in Sool at 70 percent (Figure 10.10).

Figure 10.11 provides a comparison between those with no schooling and those with higher education on the discontinuation of FGM / C. Eighty-one percent of women without education agree that FGM / C practice should be continued, compared to 58 percent of women with higher education. The proportion with higher education who would like the practice to be continued at the national level is 44 percent.

The opinion on whether the practice of FGM/C should be continued or not, decreased as the wealth status of the household increased

**Figure 10.10**

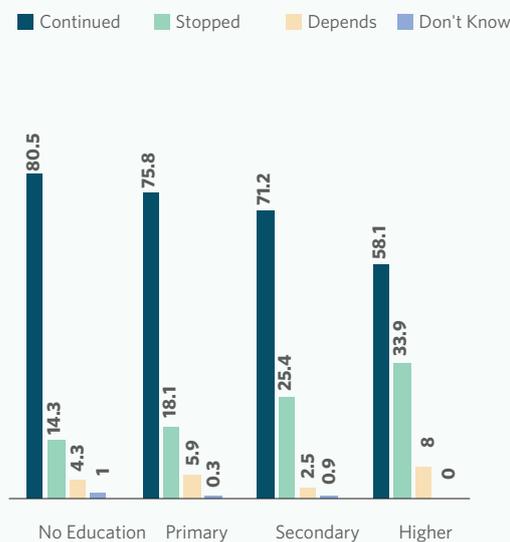
Opinion on continuation of FGM/C by region and type of residence



Percent distribution of women aged 15-49 by opinion to continue FGM/C

**Figure 10.11**

Opinions on continuation of female circumcision by level of education



Percent distribution of women aged 15-49 by opinion on continuation of FGM/C



**FGM/C practice is considered harmful, because it poses a potential risk to the health and well-being of women and girls who are subjected to it**


**Table 10.1** Prevalence of female circumcision

Background characteristics	Percentage of women who have undergone FGM/C	Number of women	Type of circumcision				Total	Number of women who have undergone FGM/C
			Sunni	Intermediate	Pharaonic	Don't know		
<b>Age</b>								
15-19	99.0	1,446	37.8	14.8	42.2	5.1	100.0	1,431
20-24	98.7	816	24.5	19.2	53.7	2.5	100.0	806
25-29	99.3	820	18.7	14.3	65.8	1.2	100.0	814
30-34	99.4	627	14.4	13.2	71.0	1.4	100.0	623
35-39	99.1	516	12.4	9.7	76.4	1.4	100.0	511
40-44	99.8	275	9.1	12.0	78.3	0.6	100.0	275
45-49	100.0	153	11.6	9.3	79.1	0.0	100.0	153
<b>Type of residence</b>								
Urban	99.2	1,825	35.0	12.6	50.1	2.3	100.0	1,810
Rural	99.0	1,325	21.9	16.2	59.2	2.7	100.0	1,312
Nomadic	99.2	1,504	11.1	15.0	71.0	3.0	100.0	1,491
<b>Region</b>								
Sool	99.6	660	18.7	8.5	70.6	2.2	100.0	657
Sanaag	99.9	928	22.4	11.9	62.7	3.0	100.0	927
Bari	98.7	1,051	36.0	13.5	47.9	2.6	100.0	1,038
Nugaal	99.3	468	26.8	15.8	56.6	0.8	100.0	465
Mudug	98.8	1,547	16.9	18.6	61.4	3.1	100.0	1,527
<b>Education</b>								
No Education	99.0	3,355	17.8	13.6	65.9	2.7	100.0	3,322
Primary	99.8	792	32.0	15.9	49.2	2.9	100.0	791
Secondary	98.9	374	47.5	14.7	35.4	2.4	100.0	370
Higher	98.1	133	50.6	22.7	26.7	0.0	100.0	131
<b>Wealth quintile</b>								
Lowest	99.2	1,022	11.5	15.7	71.0	1.8	100.0	1,014
Second	99.5	693	14.4	12.7	68.5	4.4	100.0	690
Middle	98.1	805	24.9	12.9	59.1	3.0	100.0	790
Fourth	99.6	1,017	28.3	14.3	54.7	2.7	100.0	1,013
Highest	99.2	1,116	35.0	15.4	47.8	1.8	100.0	1,107
<b>Total</b>	<b>99.1</b>	<b>4,654</b>	<b>23.6</b>	<b>14.4</b>	<b>59.4</b>	<b>2.6</b>	<b>100.0</b>	<b>4,614</b>

**Table 10.2** Opinions about whether circumcision is required by religion

Percent distribution of women age 15-49 who have heard of female circumcision by opinion on whether their religion requires female circumcision, according to background characteristics, PLHDS 2020

Background characteristics	Religion			Total number of Women
	Required by religion	Not required by religion	Don't know	
<b>Circumcision status</b>				
Circumcised	74.7	23.2	2.1	3,075
Not circumcised	(62.2)	(37.8)	(0)	21
<b>Age</b>				
15-19	78.6	17.8	3.7	242
20-24	73.7	24.1	2.3	549
25-29	71.8	26.7	1.5	758
30-34	75.8	22.0	2.2	613
35-39	74.4	23.2	2.4	514
40-44	79.5	18.4	2.2	269
45-49	73.0	25.9	1.1	151
<b>Type of residence</b>				
Urban	68.8	29.4	1.7	1,059
Rural	76.5	21.0	2.5	909
Nomadic	78.5	19.3	2.2	1,127
<b>Regions</b>				
Sool	71.4	25.4	3.2	462
Sanaag	79.3	18.2	2.5	667
Bari	77.7	20.3	2.0	698
Nugaal	72.5	25.9	1.6	298
Mudug	71.3	27.1	1.6	971
<b>Education</b>				
No education	76.2	21.5	2.3	2,506
Primary	70.3	28.6	1.1	433
Secondary	66.8	31.6	1.6	114
Higher Education	47.8	48.7	3.6	42
<b>Wealth quintile</b>				
Lowest	79.9	17.6	2.5	767
Second	73.9	24.7	1.4	535
Middle	77.0	20.8	2.3	529
Fourth	78.6	19.8	1.7	628
Highest	63.0	34.5	2.6	636
<b>Total</b>	<b>74.6</b>	<b>23.3</b>	<b>2.1</b>	<b>3,096</b>

Note: Figures in parentheses are based on 25-49 unweighted cases.



**Table 10.3** Age at female genital mutilation/cutting

Percent distribution of women aged 15-49 who underwent FGM/C by age when it was done, according to background characteristics, PLHDS 2020

Background characteristics	Age at Circumcision					Total	Number of Circumcised women
	<5	5 to 9	10 to 14	15+	Don't know		
<b>Age</b>							
15-19	1.0	71.9	25.8	0.6	0.7	100.0	1,431
20-24	0.1	71.4	27.4	0.7	0.4	100.0	806
25-29	0.0	71.6	26.6	0.7	1.1	100.0	814
30-39	0.0	65.5	33.1	0.8	0.6	100.0	1,134
40-49	0.0	65.9	32.9	1.0	0.1	100.0	428
<b>Type of residence</b>							
Urban	0.3	71.5	27.1	0.6	0.6	100.0	1,810
Rural	0.3	67.0	31.8	0.7	0.3	100.0	1,312
Nomadic	0.4	69.6	27.9	0.9	1.1	100.0	1,491
<b>Regions</b>							
Sool	0.1	63.5	35.4	1.0	0.1	100.0	657
Sanaag	0.1	67.2	31.1	0.9	0.8	100.0	927
Bari	0.0	73.7	25.2	0.8	0.3	100.0	1,038
Nugaal	0.5	78.6	19.8	0.9	0.2	100.0	465
Mudug	0.7	68.2	29.4	0.4	1.2	100.0	1,527
<b>Education</b>							
No education	0.3	68.5	29.9	0.7	0.6	100.0	3,322
Primary	0.3	71.2	26.7	1.0	0.9	100.0	791
Secondary	0.6	72.8	25.5	0.4	0.7	100.0	370
Higher education	0.8	80.5	18.7	0.0	0.0	100.0	131
<b>Wealth Quintiles</b>							
Lowest	0.6	68.3	29.5	1.0	0.6	100.0	1,014
Second	0.0	72.9	25.0	0.6	1.5	100.0	690
Middle	0.2	69.7	29.1	0.9	0.2	100.0	790
Fourth	0.3	67.0	31.6	0.6	0.4	100.0	1,013
Highest	0.3	71.2	27.2	0.6	0.7	100.0	1,107
<b>Total</b>	<b>0.3</b>	<b>69.6</b>	<b>28.7</b>	<b>0.7</b>	<b>0.6</b>	<b>100.0</b>	<b>4,614</b>

**Table 10.4** Circumcision of girls aged 0-14 by mother's background characteristics

Percentage of girls age 0-14 who are circumcised, according to age and mother's background characteristics, PLHDS 2020					
Background characteristics	Circumcision of girls by age			Total girls 0-14 circumcised	Total girls
	0-4	5-9	10-14		
<b>Mother's Circumcisions</b>					
Circumcised	2.8	25.4	73.8	24.1	4,697
Not Circumcised	(0)	(0)	(0)	26.3	30
<b>Type of residence</b>					
Urban	3.1	25.3	71.4	24.3	1,619
Rural	4.4	28.2	74.8	26.8	1,387
Nomadic	1.5	22.9	76.1	22.1	1,721
<b>Regions</b>					
Sool	3.7	21.3	64.2	20.3	782
Sanaag	2.7	23.9	67.3	23.0	1,041
Bari	2.4	28.8	71.6	27.4	1,056
Nugaal	3.2	30.0	79.8	25.2	457
Mudug	2.5	24.3	86.6	24.5	1,391
<b>Education</b>					
No Education	2.8	26.5	74.4	25.2	3,885
Primary	3.0	22.6	76.0	22.1	671
Secondary	4.5	10.6	55.1	13.4	126
Higher	(0)	(9.1)	(0)	(3.5)	45
<b>Wealth</b>					
Lowest	2.5	22.1	68.9	21.1	1,112
Second	2.2	25.2	74.6	23.5	893
Middle	2.6	28.5	75.1	26.5	852
Fourth	3.6	25.9	77.4	25.5	1,015
Highest	3.2	25.8	75.3	25.1	856
<b>Total</b>	<b>2.8</b>	<b>25.3</b>	<b>74.1</b>	<b>24.2</b>	<b>4,727</b>

Note: Figures in parentheses are based on 25-49 unweighted cases  
The circumcision status of girls is reported by their mothers.


**Table 10.5** Opinions about whether practice of circumcision should continue

Percent distribution of women age 15-49 who head of female circumcision by opinion on whether the practice of circumcision should be continue by background characteristics, PLHDS 2020

Background characteristics	Opinion to continue circumcision or not				Total	Number of women
	Continued	Stopped	Depends	Don't Know		
<b>Female circumcision status</b>						
Circumcised	79.2	15.5	4.5	0.8	100.0	3,075
Not circumcised	(83.3)	(16.7)	(0)	(0)	100.0	21
<b>Age</b>						
15-19	79.3	14.8	6.0	0.0	100.0	242
20-24	77.1	17.0	4.5	1.5	100.0	549
25-29	78.6	15.3	5.4	0.8	100.0	758
30-34	81.6	13.1	4.6	0.7	100.0	613
35-39	77.9	17.8	3.3	1.1	100.0	514
40-44	80.5	14.9	3.8	0.8	100.0	269
45-49	82.3	14.8	2.9	0.0	100.0	151
<b>Type of residence</b>						
Urban	72.8	22.7	3.8	0.7	100.0	1,059
Rural	81.2	15.0	3.5	0.3	100.0	909
Nomadic	83.6	9.1	5.9	1.4	100.0	1,127
<b>Regions</b>						
Sool	70.2	21.7	7.6	0.5	100.0	462
Sanaag	79.1	12.2	7.5	1.2	100.0	667
Bari	80.3	17.4	1.9	0.4	100.0	698
Nugaal	78.4	17.4	3.5	0.7	100.0	298
Mudug	83.0	12.8	3.1	1.1	100.0	971
<b>Education</b>						
No Education	80.5	14.3	4.3	1.0	100.0	2,506
Primary	75.8	18.1	5.9	0.3	100.0	433
Secondary	71.2	25.4	2.5	0.9	100.0	114
Higher	(58.1)	(33.9)	(8.0)	(0)	100.0	42
<b>Wealth</b>						
Lowest	83.1	9.5	5.7	1.7	100.0	767
Second	78.0	14.8	6.1	1.1	100.0	535
Middle	80.4	16.8	2.2	0.6	100.0	529
Fourth	81.8	14.2	3.6	0.3	100.0	628
Highest	71.8	23.3	4.5	0.3	100.0	636
<b>Total</b>	<b>79.2</b>	<b>15.5</b>	<b>4.5</b>	<b>0.8</b>	<b>100.0</b>	<b>3,096</b>

Note: Figures in parentheses are based on 25-49 unweighted cases.



CHAPTER 11

# Women's Empowerment

Maamulka Doorashada 2016  
إجراءات الانتخابات لعام 2016  
2016 ELECTORAL PROCESS

SANDUUQA  
COD BIXINTA  
MAAMUL GOBOLEEDKA:  
**PUNTLAND**  
DOORASHADA KURDHA

# Key Findings

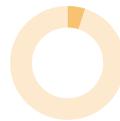
## FINANCIAL DECISIONS



**93%**

of women decide on how their cash earnings will be spent either individually or jointly with their husbands, while **67 percent** of women jointly or individually make decisions on how the husbands' cash earnings will be spent

## ACCESS TO FINANCIAL SERVICES



**4%**

of women aged 15-49 have a bank account. **73 percent** of women own a mobile phone and **61 percent** of those who own a mobile phone uses it for financial transactions

## PARTICIPATION IN DECISION-MAKING



**36%**

of currently married women aged 15-49 make decisions on their own health care by themselves or jointly with their husband

## ATTITUDES TOWARDS WIFE BEATING



**35%**

of all women aged 15-49 believe that a husband is justified in beating his wife for at least one of the six specified reasons.



# 11

## Chapter 11

# Women's Empowerment

This chapter focuses on women's empowerment in Puntland in terms of employment, earnings, control over earnings and ownership of assets. It also explores women's ownership and use of bank accounts and mobile phones. The PLHDS asked specific questions to define two different indicators of women's empowerment: their participation in household decision-making and attitudes towards wife beating.

Over the years, several attempts have been made to improve life for Somali women. The Provisional Constitution of Somalia has several positive implications for the status of women involvement in leadership and decision making. However, most Somali women are still either excluded from decision-making and asset ownership or operate through a patriarchal filter in these areas - mainly due to cultural restrictions on their movement, and asset ownership.

## Women's Employment

Table 11.1 shows the percentage distribution of currently married women who were employed in the 12 months preceding the survey by age and by type of earnings. Generally, employment is assumed to go hand in hand with payment for work done. However, not all Somali women receive earnings for the work they do, and among those who do receive earnings, not all receive cash. Sixty-seven percent of currently married women who were employed at any time in the 12 months preceding the survey received earnings in cash, 14 percent were paid in cash and in kind, 6 percent received their earnings in kind only and the remaining 13 percent were not paid at all.

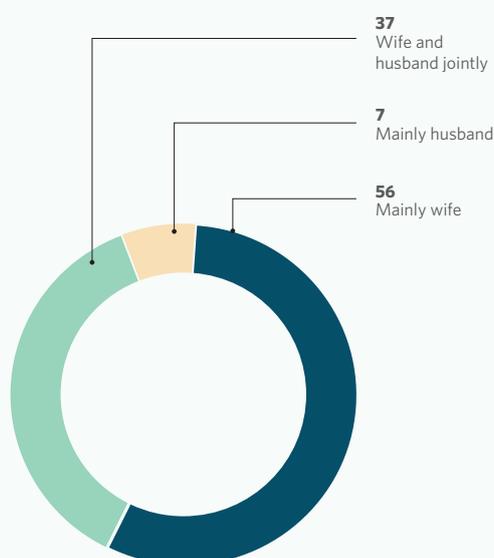
## Control over Wives' Earnings

Access to/and control of financial resources are critical variables for women's empowerment and poverty reduction. Employment and cash earnings are more likely to contribute to the economic and social empowerment of women, particularly if they perceive their earnings as significant relative to those of their husband and important to the welfare of the household. It can contribute to improving power and autonomy in decision making that impact on women as individuals and their families.

**The Provisional Constitution of Somalia has several positive implications for the status of women involvement in leadership and decision making**

**Figure 11.1**

Control over wives' earnings



Percent distribution of currently married women aged 15-49 with income for the last 12 months preceding survey and who makes decisions over their cash earnings

# 56%

of currently married women reported that they decide on their own how their earnings will be used

To assess women's autonomy, currently married women aged 15-49 who earned cash for their work in the 12 months preceding the survey were asked who the main decision maker is regarding the use of their earnings. This information allowed an assessment of women's control over their own earnings. Table 11.2 and Figure 11.1 show the degree of control women have over the use of their earnings, with 56 percent of currently married women reported that they decide on their own how their earnings will be used, while 37 percent decide jointly with their husbands. Seven percent reported their husband is the main decision maker and controls their cash earnings.

Table 11.2a shows that, 31 percent of women earn more than their husbands, while 37 percent earn less than their husbands. Only 2 percent earn an equal amount to their husbands' earnings. Twenty-three percent of the currently married women did not know whether their earnings were low or higher than their husbands', mostly because they are not privy to information about their husbands' earnings.

## Control over Husbands' Earnings

Table 11.2b shows that 31 percent of the currently married women aged 15-49 whose husbands earn cash report that decisions about the use of the husbands' cash earnings are made jointly, and slightly fewer women, at 33 percent, reported that the husband is the main decision maker. Thirty-six percent reported that the wife is the main decision maker on how the husband's cash earnings are used.

## Ownership of Assets

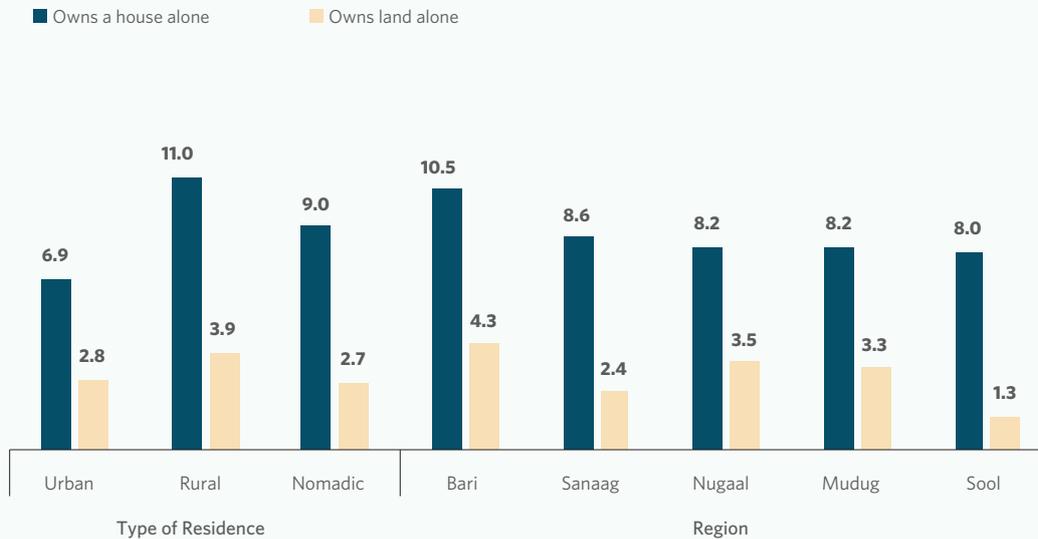
Ownership of and control over assets, such as land and housing, are important factors that contribute to improving women's status. Ownership of land and property plays an important role in strengthening women's agency. Land is a key productive and economic asset. It provides opportunity and multiple benefits to individuals and households, including a secure place to live, livelihood, protection during emergencies, and collateral when needed. In the PLHDS, ever-married women were asked whether they own a house and land alone or jointly with their husband.

Table 11.3 shows the percent distribution of ever-married women aged 15-49 by ownership of a house and land. Women are more likely to own a house than land. Overall, 3 percent of women own land and 9 percent own a house alone. The ownership of property increases with increasing age. For example, 24 percent of women of age 45-49 years own a house, compared to 2 percent of women aged 15-19. A similar pattern is also observed in land ownership. Eight percent of women aged 45-49 own land, compared to less



**Figure 11.2**

Ownership of assets



Percent distribution of ever married women aged 15-49 by ownership of housing and land by type of residence and region

than one percent of women aged 15-19.

Figure 11.2 shows percent distribution of asset ownership by geographical areas. It shows that women in rural areas are more likely to own a house at 11 percent compared to women in nomadic and rural areas at 9 and 7 percent respectively. Similarly, women in rural areas are more likely to own land at 4 percent compared to women in urban and nomadic areas at 3 percent each.

Among the regions, women in Bari are more likely to own a house at 11 percent compared to women in Sool, Mudug and Nugaal at 8 percent. A similar trend is observed in the ownership of land where Bari and Nugaal have the highest proportion at 4 percent compared to Sool with the lowest proportion at 1 percent.

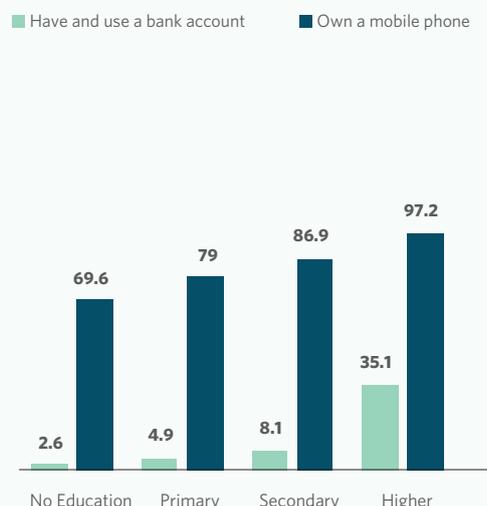
## Ownership and Use of Bank Accounts and Mobile Phones

**73%**

of women own a mobile phone

Ownership of a bank account and a mobile phone are reflections of autonomy, social functioning, and financial independence. In the PLHDS, women were asked if they had an account in a bank or any other financial institution that they themselves used, and if they owned a mobile phone. Those who owned a mobile phone were further asked if they used the phone for financial transactions. Table 11.4 shows that only 4 percent of women have a bank account

**Figure 11.3**  
Ownership of bank account and mobile phones



Percent of women aged 15-49 who have and use a bank account and own a mobile phone by education level

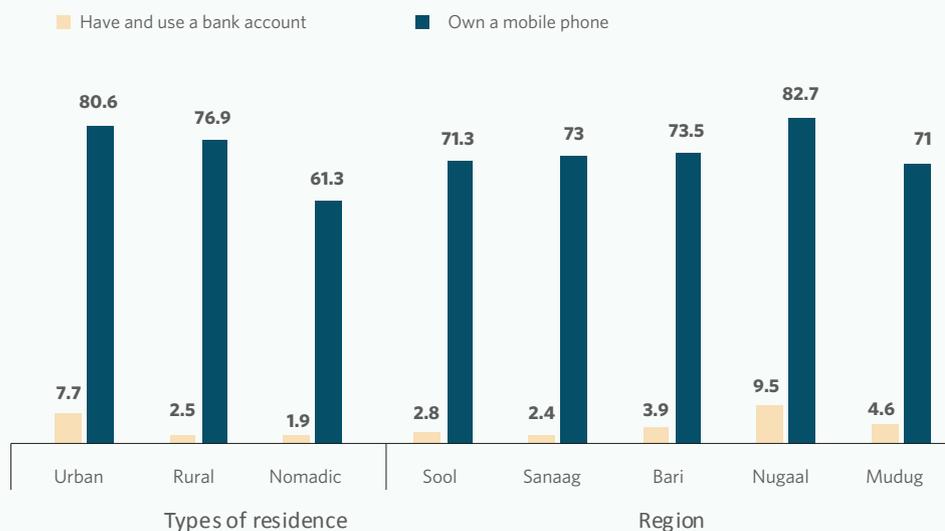
that they use. However, three-quarters (73 percent) of women own a mobile phone, and among those with a mobile phone, 61 percent use their phones for financial transactions. This could be attributed to the devaluation of the Somali shilling and lack of small denomination, as well as convenience, which makes mobile money the preferred mode of payment for women throughout the country

The percentage of women who have a bank account and a mobile phone increases as education levels increase. For example, among women with no education, 3 percent own and use a bank account compared to 35 percent of women with higher education. Similarly, among women with no education, 70 percent have mobile phones, compared to 97 percent of those with higher education (Figure 11.3).

Women from the highest wealth quintile are more likely than women from other wealth quintiles to have and use a bank account, own a mobile phone and use a mobile phone for financial transactions. Women from the wealthiest households, at 10 percent own and use a bank account, compared to those from the poorest households at 2 percent. Forty-two percent of women from the poorest households use a mobile phone for financial transactions, compared to 82 percent of women from the wealthiest households (Table 11.4).

Women in urban areas are more likely to have and use a bank

**Figure 11.4**  
Ownership of bank account and mobile



Percent of women aged 15-49 who have and use a bank account and own a mobile phone by type of residence and region



Women from the highest wealth quintile are more likely than women from other wealth quintiles to have and use a bank account, own a mobile phone and use a mobile phone for financial transactions

account, own a mobile phone and use a mobile phone for financial transactions than those from rural and nomadic areas. Eighty-one percent of women from urban areas own a mobile phone compared to rural and nomadic women at 77 and 61 percent respectively.

The percentages of those with a bank account, mobile phone and use mobile phones for financial transactions are much higher in Nugaal region than in other regions. Seventy-two percent of women in Nugaal use mobile phones for financial transactions compared to women in Sool and Bari at 57 percent (Table 11.4).

## Women's Participation in Decision-Making

Participation in household decision-making is an essential aspect of women's empowerment and reflects women's status and the level of influence women have within their own household and environment. As part of the PLHDS, currently married women were asked about their participation in decisions about their own health care, major household purchases and visits they make to their family or relatives.

Table 11.5 shows that 48 percent of women indicated that decisions on their own health care are made mainly by their husbands, 24 percent make decisions regarding their own health care jointly with their husbands, while 26 percent mainly make these decisions on their own. A similar pattern is observed regarding major household purchases, with 39 percent of women indicating that their husbands make decisions for major household purchases. Forty-eight percent of women state their husbands make decisions for visits to family or relatives. Generally, men have more influence in household decision-making than women.

**48%**

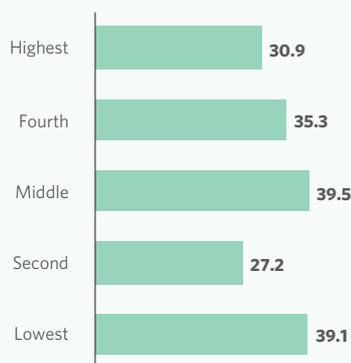
of women indicated that decisions on their own health care are made mainly by their husbands

## Attitudes Towards Wife Beating

As part of the PLHDS, all women aged 15-49 were asked if they agree that a husband is justified in hitting or beating his wife under each of the following five circumstances: she neglects household duties, she argues with him, she goes out without telling him, she wastes resources, she neglects the children, and she refuses to have sex with him. If respondents answer "yes" in at least one circumstance, they are considered to have attitudes justifying wife beating.

Table 11.6 shows 35 percent of all women believe that a husband is justified in beating his wife for at least one of the six specified reasons. Overall, 23 percent of the women believe that wife beating is justified if the wife neglects household duties. Twenty-two percent believe that wife beating is justified if she argues with

**Figure 11.5**  
Attitude towards wife beating



Percent of women aged 15-49 who agree with at least one specific reason for wife beating by wealth quintile

**There is a positive relationship between women's disapproval of wife beating and their participation in decision making**

him, while 22 percent believe that wife beating is justified if she neglects the children.

The percentage who believe that a husband is justified in beating his wife for at least one of the six specified reasons, generally decreases as the age of women increases. It is high among young women aged 15 -19 at 45 percent compared to older women aged 45 -49 at 20 percent.

## Summary Indices of Women's Empowerment

Responses from women on their participation in making household decisions and their attitudes towards wife beating can be summarized into two separate indices. The first index is the number of decisions in which women participate alone or jointly with their husbands (see Table 11.5 for the list of decisions). This index ranges in value from 0 to 3 and is positively related to women's empowerment, which means, the higher the value, the greater the respondent's level of empowerment. It reflects the degree of decision-making and control that women can exercise in areas that directly affect their lives and environments.

Table 11.7 shows that there is a positive relationship between women's disapproval of wife beating and their participation in decision making. The percentage of women who disagree with all the reasons that justify wife beating increases with the increase of the index, from 63 percent among women who do not participate in any of the household decisions to 70 percent of women who participate in all three decisions.

The second index is the number of reasons why the respondent believes that a husband is justified in beating his wife (see Table 11.6 for the list of reasons). This index ranges in value from 0 to 6. A lower score on this indicator is interpreted as reflecting a greater sense of autonomy, self-esteem, and a higher status.

The percentage of women participating in all the household decisions decreases with the number of reasons women accept as justifying wife beating, from 40 percent among women who do not agree that wife beating is justified for any reason to 26 percent among women who accept that wife beating is justified in one to two specified reasons.



**Table 11.1** Employment and cash earnings of currently married women and men

Percentage of currently married women age 15-49 who were employed at any time in the past 12 months and the percent distribution of currently married women employed in the past 12 months by type of earnings, according to age, PLHDS 2020

Age	Among currently married respondents:	Number of respondents	Percent distribution of currently married respondents employed in past 12 months, by type of earnings				Total	Number of respondents
	Percentage employed in past 12 months		Cash only	Cash and in-kind	In-kind only	Not paid		
15 - 19	4.7	246	*	*	*	*	100.0	12
20 - 24	4.7	552	(44.8)	(19.2)	(4.9)	(31.1)	100.0	26
25 - 29	8.2	794	74.4	7.0	4.1	14.6	100.0	65
30 - 34	10.0	626	70.6	13.4	8.4	7.6	100.0	63
35 - 39	12.8	535	78.0	9.1	5.4	7.5	100.0	68
40 - 44	16.6	276	(50.3)	(26.7)	(2.2)	(20.8)	100.0	46
45 - 49	19.5	128	(71.6)	(15.5)	(4.9)	(8.0)	100.0	25
<b>Total 15-49</b>	<b>9.6</b>	<b>3,161</b>	<b>67.2</b>	<b>14.0</b>	<b>5.6</b>	<b>13.1</b>	<b>100.0</b>	<b>304</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

**Table 11.2a** Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, PLHDS 2020

Background characteristics	Person who decides how wife's cash earnings are used:				Respondent earns more than husband/partner				Total	Number of women	
	Mainly wife	Wife and husband jointly	Mainly husband	Total	More than him	Less than him	About the same	Husband has no earnings			Don't know
<b>Age</b>											
15-19	*	*	*	100.0	*	*	*	*	*	100.0	9
20-24	*	*	*	100.0	*	*	*	*	*	100.0	17
25-29	58.8	35.5	5.7	100.0	26.6	53.0	0.0	2.2	18.3	100.0	53
30-34	51.5	29.8	18.6	100.0	15.7	45.8	8.2	5.0	25.3	100.0	53
35-39	54.8	38.9	6.3	100.0	38.7	26.4	0.0	6.4	28.6	100.0	59
40-44	(61.9)	(36.6)	(1.5)	100.0	(35.3)	(29.0)	(4.3)	(15.8)	(15.6)	100.0	35
45-49	(62.3)	(37.7)	(0)	100.0	(38.5)	(31.7)	(0.0)	(12.3)	(17.6)	100.0	22
<b>Number of living children</b>											
0	(55.0)	(39.3)	(5.7)	100.0	(33.3)	(30.1)	(0.0)	(7.6)	(29.0)	100.0	27
1-2	(47.3)	(52.7)	(0)	100.0	(31.0)	(30.6)	(0.0)	(7.4)	(31.1)	100.0	29
3-4	52.6	38.2	9.2	100.0	34.9	40.2	4.7	6.0	14.2	100.0	68
5+	60.6	31.8	7.6	100.0	29.1	37.5	2.1	7.4	23.9	100.0	122
<b>Type of residence</b>											
Urban	50.5	43.0	6.5	100.0	32.1	40.0	1.5	7.5	18.9	100.0	140
Rural	63.4	29.4	7.2	100.0	31.4	33.7	3.9	6.2	24.7	100.0	98
Nomadic	*	*	*	100.0	*	*	*	*	*	100.0	9
<b>Region</b>											
Sool	*	*	*	100.0	*	*	*	*	*	100.0	11
Sanaag	(58.4)	(40.0)	(1.6)	100.0	(28.0)	(18.4)	(0.0)	(16.5)	(37.1)	100.0	35
Bari	51.2	39.0	9.8	100.0	30.1	49.5	1.7	3.6	15.1	100.0	103
Nugaal	(53.9)	(41.8)	(4.2)	100.0	(41.3)	(35.6)	(0.0)	(6.2)	(16.9)	100.0	32
Mudug	63.2	29.8	6.9	100.0	32.2	27.7	4.6	4.6	30.9	100.0	66



**Table 11.2a** (Cont'd) Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, PLHDS 2020

Background characteristics	Person who decides how wife's cash earnings are used:				Respondent earns more than husband/partner				Total	Number of women	
	Mainly wife	Wife and husband jointly	Mainly husband	Total	More than him	Less than him	About the same	Husband has no earnings			Don't Know
<b>Highest educational level</b>											
No education	57.5	34.3	8.2	100.0	30.6	35.5	2.9	6.6	24.4	100.0	184
Primary	(56.8)	(38.5)	(4.6)	100.0	(25.1)	(44.7)	(0.0)	(14.3)	(15.9)	100.0	32
Secondary	*	*	*	100.0	*	*	*	*	*	100.0	13
Higher Education	*	*	*	100.0	*	*	*	*	*	100.0	17
<b>Wealth quintile</b>											
Lowest	*	*	*	100.0	8.0	*	*	*	*	100.0	9
Second	(56.3)	(33.4)	(10.3)	100.0	(31.4)	(41.6)	(6.3)	(7.0)	(13.6)	100.0	36
Middle	51.1	43.7	5.1	100.0	31.0	43.0	2.2	7.1	16.7	100.0	69
Fourth	57.1	35.1	7.8	100.0	35.4	31.6	0.0	8.7	24.3	100.0	63
Highest	56.0	37.5	6.5	100.0	30.6	36.9	2.9	5.3	24.3	100.0	70
<b>Total</b>	<b>56.2</b>	<b>36.9</b>	<b>6.9</b>	<b>100.0</b>	<b>31.4</b>	<b>36.6</b>	<b>2.4</b>	<b>7.0</b>	<b>22.6</b>	<b>100.0</b>	<b>247</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed, PLHDS, 2020

**Table 11.2b** Control over husband's cash earnings

Percent distributions of currently married women age 15-49 whose husbands receive cash earnings by person who decides how husband's cash earnings are used, according to background characteristics, PLHDS 2020						
Background characteristics	Person who decides how husband's cash earnings are used				Total	Number of currently married women
	Mainly wife	Wife and husband	Mainly husband	Other		
<b>Age group</b>						
15-19	*	*	*	*	100.0	15
20-24	(21.7)	(41.1)	(30.7)	(6.4)	100.0	24
25-29	37.8	23.7	38.6	0.0	100.0	59
30-34	30.0	26.3	43.7	0.0	100.0	53
35-39	29.2	47.0	23.8	0.0	100.0	56
40-44	(42.4)	(28.9)	(28.7)	(0.0)	100.0	39
45-49	(47.3)	(21.3)	(31.4)	(0.0)	100.0	22
<b>Number of living children</b>						
0	(48.4)	(22.5)	(29.1)	(0.0)	100.0	28
1-2	(25.4)	(43.9)	(30.7)	(0.0)	100.0	39
3-4	34.6	29.3	36.1	0.0	100.0	77
5+	36.8	29.8	32.2	1.2	100.0	125
<b>Type of residence</b>						
Urban	33.0	31.6	34.4	1.0	100.0	144
Rural	45.7	30.0	24.4	0.0	100.0	92
Nomadic	(19.2)	(30.9)	(50.0)	(0.0)	100.0	32
<b>Region</b>						
Sool	*	*	*	*	100.0	18
Sanaag	(47.7)	(30.7)	(21.5)	(0.0)	100.0	38
Bari	28.5	22.7	48.7	0.0	100.0	106
Nugaal	(35.2)	(46.7)	(18.1)	(0.0)	100.0	41
Mudug	42.1	29.6	26.1	2.3	100.0	66
<b>Education</b>						
No education	38.2	29.2	32.7	0.0	100.0	204
Primary	(33.2)	(33.2)	(33.6)	(0.0)	100.0	35
Secondary	*	*	*	*	100.0	12
Higher	*	*	*	*	100.0	18
<b>Wealth quintile</b>						
Lowest	(29.8)	(16.5)	(53.7)	(0.0)	100.0	22
Second	(25.6)	(37.0)	(37.4)	(0.0)	100.0	42
Middle	39.3	30.7	30.0	0.0	100.0	73
Fourth	34.4	38.6	27.0	0.0	100.0	58
Highest	40.8	26.0	31.2	2.0	100.0	74
<b>Total</b>	<b>35.7</b>	<b>30.9</b>	<b>32.8</b>	<b>0.6</b>	<b>100.0</b>	<b>269</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.


**Table 11.3** Ownership of assets

Percent distribution of ever married women age 15-49 by ownership of housing and land, according to background characteristics, PLHDS 2020												
Background characteristic	Owns a house alone or jointly					Total	Owns land alone or jointly				Total	Total number of Women
	Alone	Jointly	Both alone and jointly	Does not own	Alone		Jointly	Both alone and jointly	Does not own			
<b>Age</b>												
15-19	1.8	2.6	2.7	92.9	100.0	0.8	1.4	0.9	97.0	100.0	1,666	
20-24	6.2	13.0	9.9	70.8	100.0	1.6	6.1	4.1	88.1	100.0	926	
25-29	10.1	17.0	12.2	60.7	100.0	4.1	8.1	5.8	82.1	100.0	956	
30-34	12.7	19.0	13.6	54.7	100.0	4.1	9.7	4.3	81.9	100.0	734	
35-39	15.5	20.6	15.9	47.9	100.0	6.0	8.5	5.3	80.2	100.0	619	
40-44	16.6	21.4	18.2	43.8	100.0	5.8	8.3	6.8	79.1	100.0	345	
45-49	24.3	15.4	15.6	44.8	100.0	8.2	8.1	4.4	79.3	100.0	180	
<b>Type of residence</b>												
Urban	6.9	9.8	5.5	77.9	100.0	2.8	3.6	1.9	91.7	100.0	2,102	
Rural	11.0	10.0	11.4	67.6	100.0	3.9	4.1	3.8	88.2	100.0	1,524	
Nomadic	9.0	18.8	14.1	58.1	100.0	2.7	10.4	5.8	81.1	100.0	1,800	
<b>Region</b>												
Sool	8.0	12.7	12.3	67.1	100.0	1.3	4.1	3.1	91.5	100.0	742	
Sanaag	8.6	15.1	10.9	65.4	100.0	2.4	5.7	3.5	88.5	100.0	990	
Bari	10.5	12.2	9.7	67.6	100.0	4.3	7.4	4.8	83.5	100.0	1,254	
Nugaal	8.2	9.8	12.8	69.2	100.0	3.5	4.9	4.0	87.6	100.0	554	
Mudug	8.2	13.0	8.0	70.9	100.0	3.3	6.2	3.4	87.1	100.0	1,886	
<b>Education</b>												
No education	9.8	15.0	11.7	63.4	100.0	3.7	7.3	4.5	84.5	100.0	3,997	
Primary	6.3	8.0	5.8	79.9	100.0	1.8	2.5	1.5	94.2	100.0	873	
Secondary	5.2	4.9	4.0	85.9	100.0	0.6	2.2	1.4	95.8	100.0	411	
Higher	3.5	3.5	4.4	88.6	100.0	1.7	1.0	2.9	94.3	100.0	145	
<b>Wealth quintile</b>												
Lowest	9.9	20.6	12.9	56.6	100.0	3.1	10.8	4.0	82.1	100.0	1,166	
Second	7.1	16.0	14.4	62.4	100.0	2.0	8.0	7.3	82.7	100.0	868	
Middle	12.0	11.4	8.4	68.3	100.0	4.3	5.2	3.5	87.1	100.0	1,003	
Fourth	9.5	8.3	9.3	72.9	100.0	4.5	3.5	2.1	89.9	100.0	1,154	
Highest	5.5	8.7	6.0	79.8	100.0	1.6	2.8	2.9	92.6	100.0	1,235	
<b>Total number of Women</b>	<b>8.7</b>	<b>12.8</b>	<b>10.0</b>	<b>68.4</b>	<b>100.0</b>	<b>3.1</b>	<b>6.0</b>	<b>3.8</b>	<b>87.2</b>	<b>100.0</b>	<b>5,426</b>	

**Table 11.4** Ownership and use of bank accounts and mobile phones

Percentage of women age 15-49 who use an account in a bank or other financial institution, percentage who own a mobile phone among women who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, PLHDS 2020

Background characteristic	Have and use a bank account	Own a mobile phone	Number of women	Use mobile phone for financial transactions	Number of women who own a mobile phone
<b>Age</b>					
15-19	3.0	54.8	1,666	44.9	912
20-24	4.8	78.1	926	66.4	723
25-29	4.9	82.4	956	68.9	788
30-34	5.5	82.2	734	67.5	603
35-39	3.9	81.7	619	69.3	505
40-44	5.2	81.4	345	68.1	281
45-49	5.0	87.3	180	72.8	157
<b>Type of residence</b>					
Urban	7.7	80.6	2,102	72.5	1,694
Rural	2.5	76.9	1,524	67.1	1,172
Nomadic	1.9	61.3	1,800	42.6	1,104
<b>Region</b>					
Sool	2.8	71.3	742	56.5	529
Sanaag	2.4	73.0	990	58.7	722
Bari	3.9	73.5	1,254	57.4	921
Nugaal	9.5	82.7	554	72.3	458
Mudug	4.6	71.0	1,886	63.2	1,339
<b>Education</b>					
No Education	2.6	69.6	3,997	55.1	2,782
Primary	4.9	79.0	873	73.8	689
Secondary	8.1	86.9	411	80.1	357
Higher	35.1	97.2	145	96.0	141
<b>Wealth quintile</b>					
Lowest	1.9	58.8	1,166	42.2	685
Second	1.8	65.9	868	46.4	572
Middle	2.5	70.1	1,003	57.1	703
Fourth	4.2	79.2	1,154	72.1	914
Highest	9.8	88.7	1,235	82.1	1,096
<b>Total</b>	<b>4.3</b>	<b>73.2</b>	<b>5,426</b>	<b>61.1</b>	<b>3,970</b>



**Table 11.5** Participation in decision making

Percent distribution of currently married women age 15-49 by person who usually makes decisions about various issues, PLHDS, 2020							
Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Total	Number
Own health care	23.0	35.9	40.1	0.4	0.0	100.0	3,161
Major household purchases	22.9	36.5	39.4	0.0	0.1	100.0	3,161
Visits to her family or relatives	26.4	24.1	48.3	0.0	0.0	100.0	3,161

**Table 11.6** Attitude toward wife beating: Women

Background characteristics	Husband is justified in hitting or beating his wife if she:						Percentage who agree with at least one specified reason	Number of women
	neglects household duties	she argues with him	Goes out without telling him	wastes resources	Neglects the children	refuses to have sex with him		
<b>Age</b>								
15-19	28.9	28.8	26.3	29.6	28.3	27.5	44.5	1,666
20-24	24.6	23.0	22.9	22.7	22.3	21.5	36.1	926
25-29	18.2	16.9	16.8	18.2	19.6	18.6	28.6	956
30-34	18.6	18.1	17.8	17.6	17.7	17.7	28.5	734
35-39	21.2	21.7	18.4	18.4	20.5	20.3	30.2	619
40-44	18.7	16.7	15.7	19.2	18.5	16.7	27.5	345
45-49	14.8	13.4	14.1	15.9	13.7	16.2	19.5	180
<b>Employment</b>								
Not employed	18.7	18.3	17.0	18.5	18.5	18.8	28.7	3,260
Employed for cash	22.2	23.4	19.6	19.4	19.6	19.0	28.7	255
Employed, not for cash	13.2	18.5	9.7	21.7	13.2	23.9	31.7	65
<b>Number of living children</b>								
0	28.6	27.5	26.3	27.9	27.4	26.3	43.7	2,179
1-2	18.2	19.2	15.9	20.0	18.0	19.0	28.9	858
3-4	19.9	17.7	18.8	17.6	19.6	19.6	29.4	1,039
5+	19.0	19.0	17.1	18.6	18.8	17.6	27.4	1,351
<b>Type of residence</b>								
Urban	22.5	23.2	21.8	23.4	23.3	21.5	35.1	2,102
Rural	22.4	23.0	20.6	22.0	23.4	22.1	35.2	1,524
Nomadic	23.7	20.3	20.2	21.5	20.1	21.6	33.5	1,800
<b>Region</b>								
Sool	24.7	25.6	21.6	26.3	24.4	25.4	33.3	742
Sanaag	27.4	27.6	26.2	28.4	27.8	26.8	37.0	990
Bari	22.0	23.8	18.8	23.9	21.7	20.9	36.5	1,254
Nugaal	16.3	16.7	18.1	16.1	20.1	17.3	30.4	554
Mudug	22.3	18.5	20.2	18.5	19.6	19.4	33.8	1,886
<b>Mother's education</b>								
No education	22.8	21.1	19.6	21.8	21.4	21.3	33.6	3,997
Primary	22.5	24.9	22.6	24.0	23.6	23.6	36.6	873
Secondary	22.2	24.7	27.0	23.1	24.5	20.0	36.6	411
Higher	30.7	29.4	30.2	26.4	32.0	26.4	45.1	145
<b>Wealth quintile</b>								
Lowest	29.3	24.5	23.8	26.2	24.2	26.6	39.1	1,166
Second	16.5	16.5	16.3	17.8	16.8	17.4	27.2	868
Middle	26.8	27.3	22.0	26.3	25.3	25.5	39.5	1,003
Fourth	21.5	22.8	22.5	22.6	24.2	20.4	35.3	1,154
Highest	19.4	19.3	19.2	18.6	20.1	18.2	30.9	1,235
<b>Total</b>	<b>22.9</b>	<b>22.2</b>	<b>20.9</b>	<b>22.4</b>	<b>22.3</b>	<b>21.7</b>	<b>34.6</b>	<b>5,426</b>

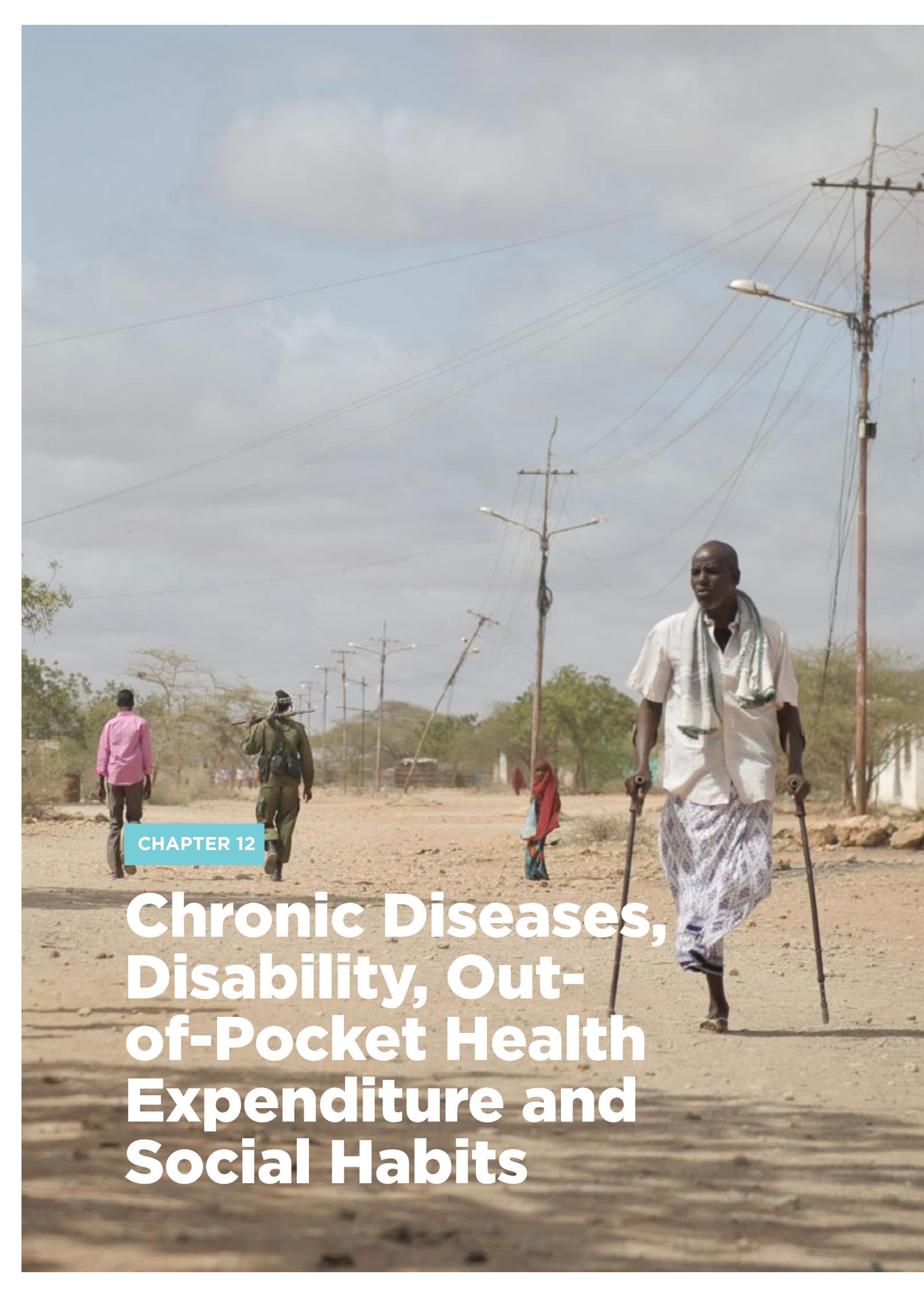


**Table 11.7** Indicators of women's empowerment

Percentage of currently married women age 15-49 who participate in all decision making and the percentage who disagree with all of the reasons justifying wife-beating, by value on each of the indicators of women empowerment, PLHDS 2020

<b>Empowerment indicator</b>	<b>Percentage who participate in all decision making</b>	<b>Percentage who disagree with all the reasons justifying wife beating</b>	<b>Number of women</b>
<b>Number of decisions in which women participate</b>			
0	0.0	62.6	884
1-2	0.0	65.5	1,073
3	100.0	70.4	1,205
<b>Number of reasons for which wife beating is justified</b>			
0	40.3	100.0	2,104
1+	33.7	n/a	1,058



A photograph of a man with a cane walking on a dirt road in a rural setting. The man is wearing a white shirt and a patterned wrap around his waist. He is using two black canes to support himself. In the background, there are other people walking, including a man in a pink shirt and a woman in a red headscarf. There are utility poles with many wires along the road. The sky is overcast.

CHAPTER 12

# Chronic Diseases, Disability, Out- of-Pocket Health Expenditure and Social Habits



## Key Findings

### CHRONIC DISEASES



**5%** of Puntland household members suffer from at least one chronic disease; this proportion rises with age

### PREVALENCE OF MOST COMMON DISEASES



**32%** Blood pressure anomalies/hypertension

### DISABILITY



**14%** of the population in Puntland suffers from disabilities

### ONSET OF DISABILITY

Ageing-related and congenital (birth-related) problems are the main causes of disability at **25** and **13 percent** respectively

### CARE OF DISABLED PERSONS



**41%** of disabled people in Puntland had not received any care or support for their disability during the 12 months preceding the survey

### OUT-OF-POCKET HEALTH EXPENDITURE



**49%** percent of households paid their health expenses from their income



# 12

## Chapter 12

# Chronic Diseases, Disability, Out-of-Pocket Health Expenditure and Social Habits

This chapter presents information on the prevalence, diagnosis, and treatment of chronic diseases in Puntland. It also offers information on the prevalence of disability, the origin and age at onset of disability, and care and support available for people with disabilities. Based on the findings of the PLHDS, information on out-of-pocket health expenditure and selected social habits is also presented in this chapter.

## Introduction

Chronic diseases are defined broadly as conditions that last 1 year or more and require ongoing medical attention or limit activities of daily living or both according to the National Center for Chronic Disease and Prevention and Health Promotion of the United States of America (CDC, 2020). Chronic diseases generally cannot be prevented by vaccines or cured by medication and can lead to long-term disability. They place burdens and demands on a health care system and are a leading cause of death worldwide.

The PLHDS obtained information from household respondents whether each household member suffered from one or more chronic diseases and whether the disease was diagnosed by a physician and treated. Further to this, the survey gathered information about household members suffering from any physical, mental, or other state that limited them from engaging in their normal activities.

Interviewers obtained information from the household respondents if any household member had been injured. If the answer to any of these questions was affirmative, follow-up questions were asked about the type of disease, disability, and/or injury.

Interviewers also gathered information on sicknesses that families experienced over the one month preceding the survey, in addition to expenditure on health services received.

## Prevalence of Chronic Diseases

Table 12.1 presents data on household members who have at least one chronic disease. Overall, 5 percent of household members in

Chronic diseases generally cannot be prevented by vaccines or cured by medication and can lead to long-term disability. They place burdens and demands on a health care system and are a leading cause of death worldwide

**Figure 12.1**

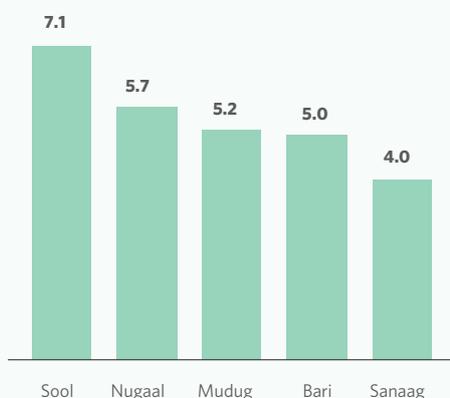
Prevalence of chronic diseases by age



Percentage of household members who have at least one chronic disease by age

**Figure 12.2**

Prevalence of chronic diseases by region



Percentage of household members who have at least one chronic disease by region

Puntland were reported to be suffering from at least one chronic disease, compared to 6 percent at the national level.

Urban household members have a slightly higher reported prevalence of chronic diseases at 7 percent compared to rural and nomadic household members at 5 and 4 percent respectively. Six percent of women have at least one chronic disease compared to men at 4 percent.

As noted, disease prevalence increases rapidly with increasing age. The prevalence of people with at least one chronic disease generally increases from 1 percent in the age group 0-4 years to 33 percent in people over 70 years of age (see Table 12.1 and Figure 12.1). The prevalence of at least one chronic disease is highest among urban household members at 7 percent compared to rural and nomadic household members at 5 and 4 percent respectively.

Household members in Sool Region have a slightly higher reported prevalence of chronic diseases at 7 percent compared to household members in the other regions. Sanaag region had least prevalence of chronic diseases at 4 percent.

The prevalence of at least one chronic disease increased from 4 percent of those in the lowest wealth quintile or poorest households to 6 percent of those in the wealthiest or highest quintile.

**5%**

of household members in Puntland were reported to be suffering from at least one chronic disease



# 4%

of household members are reported to have been diagnosed by a physician

## Diagnosis and Treatment of Chronic Diseases

Table 12.2 presents data on the distribution of household members who have specific chronic diseases diagnosed by a physician and those who get treatment regularly. The findings show that, overall, 4 percent of household members are reported to have been diagnosed by a physician and 2 percent are undergoing regular treatment for a chronic disease.

Five percent of women had at least one chronic disease compared to men at 4 percent. Same percentage of women and men are undergoing regular treatment for the diseases, at 2 percent each. More urban residents reported having been diagnosed by a physician, at 6 percent, compared to rural and nomadic residents at 4 and 2 percent, respectively. Similarly, more urban residents at 3 percent, reported they received treatment for chronic diseases, compared to rural and nomadic residents at 2 and 1 percent respectively. Despite there being health facilities available within the cities, the difference in the overall frequency of diagnosis and treatment between urban and rural settings is small.

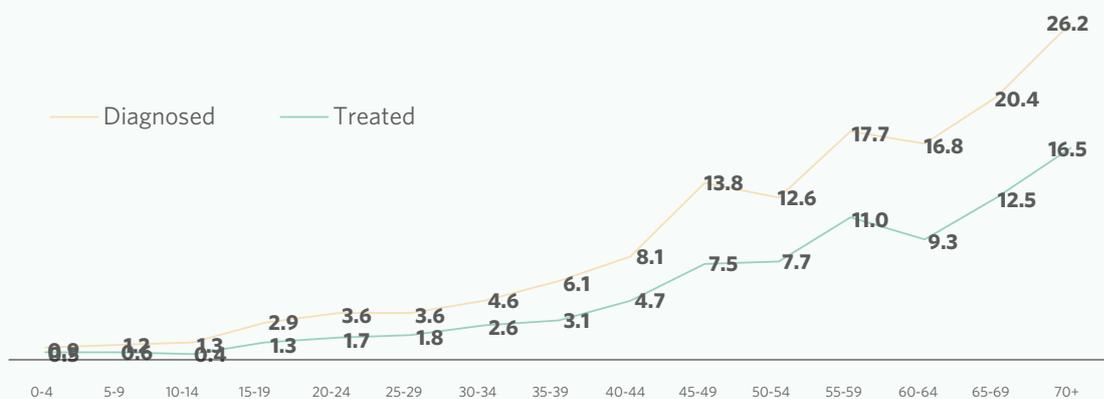
Despite there being health facilities available within the cities, the difference in the overall frequency of diagnosis and treatment between urban and rural settings is small

The percentage of household members diagnosed by a physician with at least one chronic disease and those who received treatment regularly increased as wealth levels increased. Five percent of household members in the wealthiest or highest wealth quintile were diagnosed by a physician, while 4 percent received treatment. In contrast, 3 percent of household members from the lowest wealth quintile or poorest households were diagnosed by a physician, and 1 percent received treatment.

Figure 12.3 compares household members whose chronic diseases

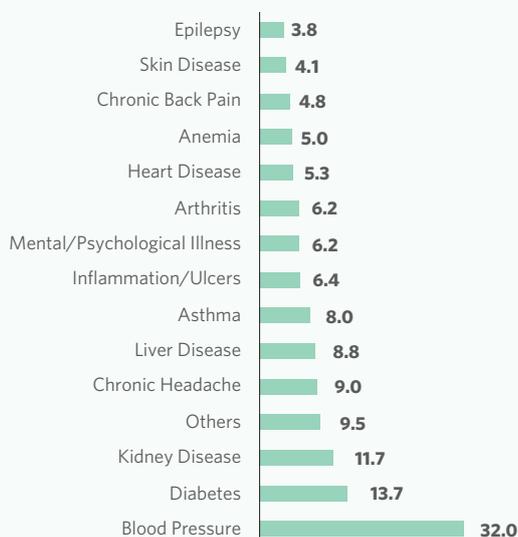
**Figure 12.3**

Chronic diseases diagnosed and treated by age



Percentage of household members who have at least one chronic disease, diagnosed by a physician, and who get treatment

**Figure 12.4**  
Common chronic diseases



Percentage of household members who have specific chronic diseases diagnosed by a physician

**32%**

of household members have are blood pressure anomalies/hypertension, which is the most common chronic disease

were diagnosed by a physician against those who get treatment for chronic diseases regularly. The findings indicate that more of those diagnosed in the younger age groups are treated, compared to those in the older age groups. In the age group 10-14 years, 1 percent were diagnosed by a physician, while 1 percent received treatment. In the age group 60-64 years, 17 percent were reported to have been diagnosed by a physician, while 9 percent received treatment for chronic diseases they have.

Table 12.3 and figure 12.4 presents the prevalence of the most common specific chronic diseases in Puntland diagnosed by a physician, by type of condition, place of residence and sex. The findings show that the most common chronic diseases household members have are blood pressure anomalies/hypertension, which affects 32 percent of household members, and diabetes, which affects 14 percent of the household members. Twelve percent of household members are suffering from kidney diseases, and another 9 percent suffer from chronic headaches. Nine percent are suffering from liver disease and eight percent of household members are suffering from Asthma and another 7 percent have gastritis/ulcers and 6 percent have mental illness. Other diseases that are common include Arthritis at 6 percent, heart disease at 5 percent, chronic back pain at 5 percent, and anaemia at 5 percent.

The table shows that more rural and urban residents were diagnosed with blood pressure, at 37 and 31 percent respectively, compared to those residing in nomadic areas, at 26 percent. More urban residents, at 17 percent, than rural residents, at 12 percent, were diagnosed with diabetes. Even fewer cases of diabetes were diagnosed among nomadic households, at 7 percent. More women than men were reported to have been diagnosed with hypertension and kidney disease at 36 percent versus 26 percent, and 13 percent versus 10 percent respectively. More men than women were reported to have been diagnosed with diabetes, mental illnesses, and liver diseases, at 17 percent versus 11 percent, 7 percent versus 6 percent, and 10 versus 8 percent respectively.

The findings further show that, overall, more nomadic household members than urban and rural ones were diagnosed with kidney diseases, liver diseases, chronic back pain and anaemia, at 13, 16, 12 and 7 percent respectively.

### Prevalence of Disability

Table 12.4 presents data on the distribution of the prevalence of disability of household members by sex, age, wealth quintiles and residence. It should be noted that respondents' reports of disability were not verified by a clinical diagnosis; therefore, the percentages presented should be interpreted with caution.



# 17%

of urban residents were diagnosed with diabetes

Overall, more nomadic household members than urban and rural ones were diagnosed with kidney diseases, liver diseases, chronic back pain and anaemia

Overall, 4 percent of the population in Puntland suffers from disabilities, according to findings from the PLHDS<sup>1</sup>. The prevalence of disability among females and males is the same, at 4 percent. In the youngest age group, 4 percent of under-fives suffer from disabilities. The prevalence of disability is 3-15 percent in the age groups 5-9 to 65-69 before rising to 30 percent for those aged 70 years and above. The pattern of people suffering from disabilities in both urban and rural areas is the same at 5 percent each compared to nomadic areas at 2 percent.

The most common disability reported in all the three Type of residences was challenges with sight, at 2 percent in both urban and rural areas and 1 percent in nomadic areas.

Household members in Mudug, Nugaal and Sool have higher prevalence of disability with 5 percent each, compared to Sanaag and Bari at 3 percent each.

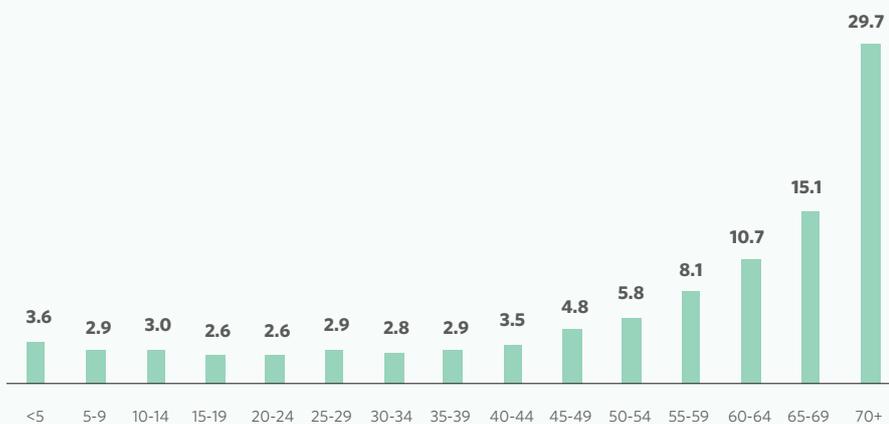
Household members from the lowest wealth quintile or poorest households have lower prevalence of disabilities at 3 percent compared to the other wealth quintiles. Household members from the other four wealth quintiles had prevalence of disability ranging from 4 and 6 percent.

Figure 12.5 presents the prevalence of disability by age group. It shows a "J-shaped" curve, with the prevalence of disability increasing sharply with age for those aged 70 years and above.

<sup>1</sup> The SHDS questionnaires referred to visual and hearing impairments, speech/communication challenges, mobility impairment, learning challenges, self-care challenges and mental health challenges as disabilities.

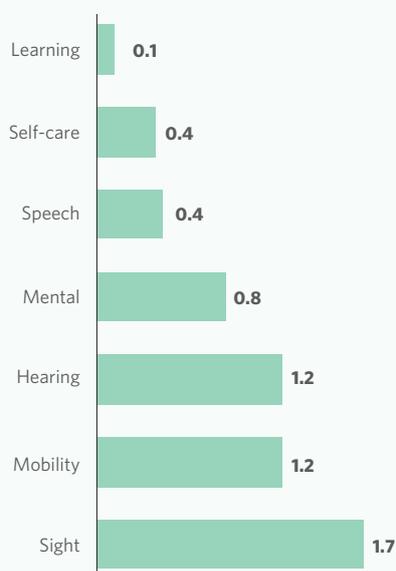
**Figure 12.5**

Disability prevalence by age



| Prevalence of household members with disabilities

**Figure 12.6**  
Common types of disabilities



Percentage of household members suffering from specific types of disabilities

**4%**

of the population in Puntland suffers from disabilities

**25%**

of disabilities could be accounted to ageing

Figure 12.6 shows the prevalence of the most common types of disabilities. These include disabilities in sight, hearing and mobility impairments, followed by mental health and speech disabilities.

### Origin and Age at Onset of Disability

Table 12.5 presents data on the onset and causes of disability. For any household member with a disability, respondents were asked about the main reason for or cause of the disability. The analysis indicates that ageing and congenital (birth-related) problems were the main cause of disabilities. Ageing accounts for 25 percent and congenital problems accounts for 13 percent of disabilities, whereas other diseases and injuries/accidents each account for an additional 21 and 12 percent respectively. The percentage of those suffering from congenital causes of disability declines with increasing age, while disabilities associated with ageing increases with increasing age. The findings from age groups 40-44 to 65-69 needs to be interpreted with caution because of the small sample sizes.

Ageing accounts for a larger proportion of disabilities among women, at 30 percent, than men, at 19 percent, while congenital diseases account for a larger proportion of disabilities among men, at 15 percent than women, at 11 percent.

Table 12.6 presents data on the age at onset of disability. Differences by type of residence are minimal. Differences by sex and age group are substantial. As expected, by definition, for younger disabled people, the onset of disability occurred at an earlier age. Overall, 29 percent of household population reported onset of disability to have started when they were under the age of five (Figure 12.7). Thirty-six percent of males and 24 percent of females stated that they had first experienced their disabilities under the age of five. Also, the most common disability reported to have started during this period is speech, at 58 percent. Slightly more urban household members, at 29 percent, reported their disabilities started while they were under the age of five, compared to nomadic and rural areas at 32 and 28 percent respectively.

Among the regions, the percentage of those whose onset of disability was under the age of five was highest in Nugaal at 34 percent and lowest in Sool at 23 percent.

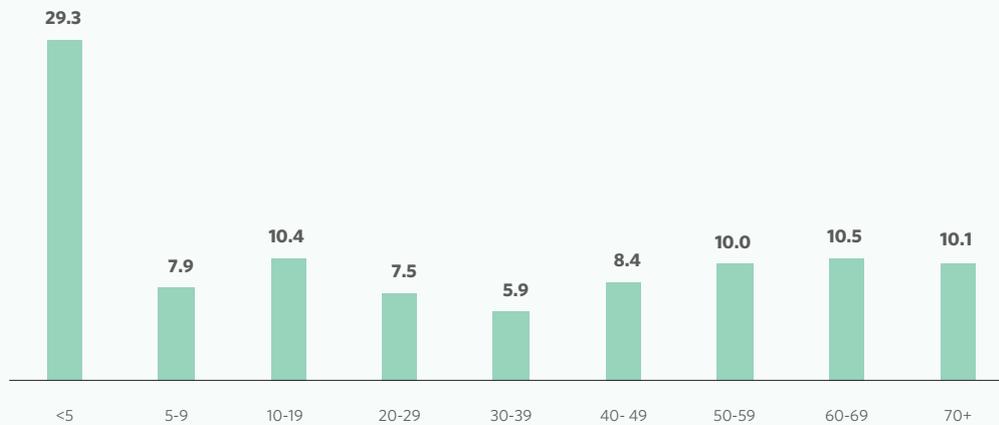
### Care and Support for Persons with Disabilities

Table 12.7 presents the percentage distribution of persons with disabilities who received any kind of care and support for their conditions during the 12 months prior to the survey, by background



**Figure 12.7**

Age at onset of disability



| Percentage distribution of disabled people according to age at onset of disability

characteristics. This includes medical care, welfare, financial support, and nutritional support. The findings indicate that 41 percent of persons with disabilities in Puntland had not received any care or support for their condition in the 12 months preceding the survey.

Sixty-one percent of disabled household members received medical care, while 1 percent received welfare, 3 percent received financial support and less than 1 percent received nutritional support. Forty-one percent of both men and women said they had not received any medical care, welfare, financial or nutritional support for their disability in the 12 months preceding the survey.

## Household Out-of-Pocket Health Expenditure

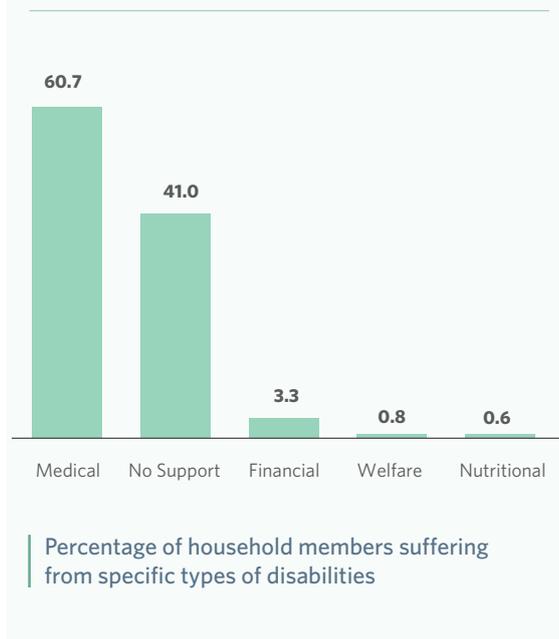
Out-of-pocket payments are expenditures borne directly by a patient where insurance does not cover the cost of the health service (OECD 2006). These expenses could be medical as well as non-medical. Out-of-pocket medical expenditures could be payments towards doctors' fees, medicine, diagnostics, operations, ambulance services, etc. (OECD 2006). Overall, health expenditure could amount to catastrophic levels that plunge families deeper into poverty. The World Bank defines catastrophic health expenditure as payments for health services exceeding 40 percent of household disposable income after subsistence needs are met.

**29%**

of household population reported onset of disability to have started when they were under the age of five

**Figure 12.8**

Support received by household members for people with disabilities



Overall, health expenditure could amount to catastrophic levels that plunge families deeper into poverty

**60%**

of households in Puntland had at least one household member sick in the last month preceding the survey and sought advice or treatment for the household member

Since the collapse of the Somali health care infrastructure three decades ago, most of the Somali households have not had any form of financial protection and were forced to make out-of-pocket payments when they fell sick. Often, families’ resort to borrowing money or selling assets to meet these expenditures.

The PLHDS collected information on out-of-pocket expenditure. In the Household Questionnaire, households were asked whether advice or treatment was sought for any household member’s health conditions and the source this advice or treatment was obtained. They were also asked how much money the household spent on treatment and health care services in the one month preceding the survey. The survey also gathered information about what financial sources the household used to pay for any health expenditure.

Table 12.8 shows that 60 percent of households in Puntland had at least one household member sick in the last month preceding the survey and sought advice or treatment for the household member.

Figure 12.9 shows that 20 percent of households had visited a government hospital for advice or treatment compared to 24 percent who had visited private hospitals, clinics, or doctors. Seven percent of households had sought advice or treatment from pharmacies compared to 9 percent from Mother Child Health (MCH) clinics and/or health centres (HC).

Figure 12.10 indicates that 68 percent of urban households and 67 percent of rural households sought medical advice or treatment for their health problems. Nomadic households were the least likely to seek medical advice and treatment, at 32 percent.

Furthermore, Figure 12.10 shows that the percentage of the household members who sought medical advice and treatment was highest in Nugaal region at 70 percent and lowest in Sool at 51 percent.

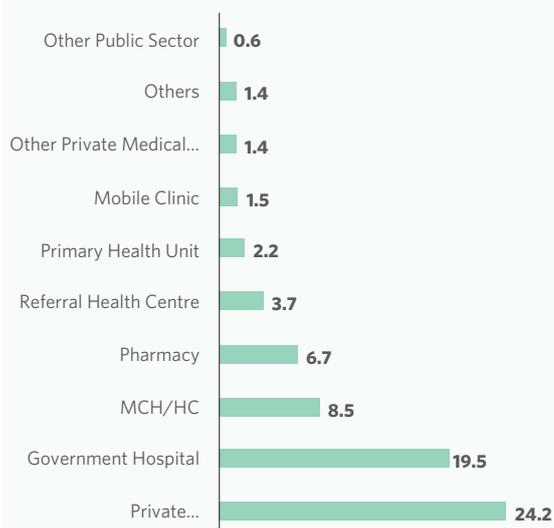
Table 12.9 and Figure 12.11 presents data on the financial sources that households in Puntland used to pay for health expenditures. Forty-nine percent of households reported they pay for their health expenses from their income. Twenty-two percent of households reported their relatives or friends supported them to pay their health expenses. Fifteen percent borrowed money to pay for their health expenditure and 13 percent of the households sold assets to cover their health expenses. Only 3 percent of households used insurance for their health expenses.

Three percent of households in urban and rural areas used insurance to cover their health expenditure. Fifty-seven percent of the urban and 43 percent rural households used their income to pay for medical expenses compared to 31 percent of nomadic households.



**Figure 12.9**

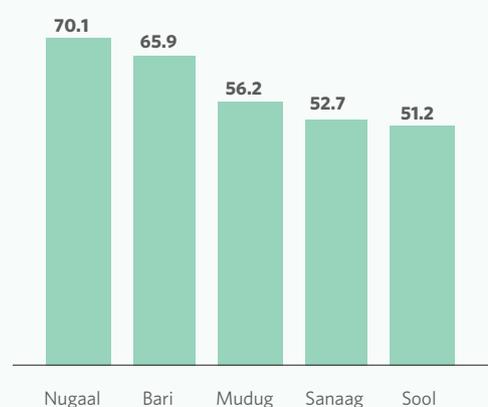
Source of advice or treatment



Percentage of household members who have been sick and where they sought advice/treatment

**Figure 12.10**

Household members who sought any advice or treatment



Percentage of household members who have been sick and sought any advice or treatment by region

Among the regions, Nugaal has the highest percentage of households who pay for their health expenses from their income at 66 percent compared to Sool with the lowest percentage at 33 percent. The data also shows that households from Sanaag region are more likely to borrow money when paying for health expenses at 32 percent compared to Nugaal at 10 percent.

Table 12.10 presents data on the amount of money the household spent on treatment and health care services during the month before the start of the survey. The largest proportion of households at 28 percent had spent between US\$1 and US\$49 for treatment and health care services during this period. Similarly, 24 percent of the respondents had spent between US\$50 and US\$99, 22 percent had spent US\$100 - US\$199 and 19 percent had spent US\$300 or more.

## Tobacco Use and *Khat*<sup>2</sup> Chewing

Tobacco use is not only a risk factor for medical conditions, but it also contributes to poverty by diverting household spending from basic needs, such as food and shelter, to tobacco. This spending behaviour is difficult to curb because tobacco is so addictive. The economic costs of tobacco use are substantial and include significant health care costs for treating the disease caused by tobacco use as well as the lost human capital that results from tobacco-attributable morbidity and mortality (WHO 2019).

Information about the use of tobacco and chewing of Khat was collected from household members aged 10 years or older, who were asked whether they smoke or use any kind of tobacco or chew Khat.

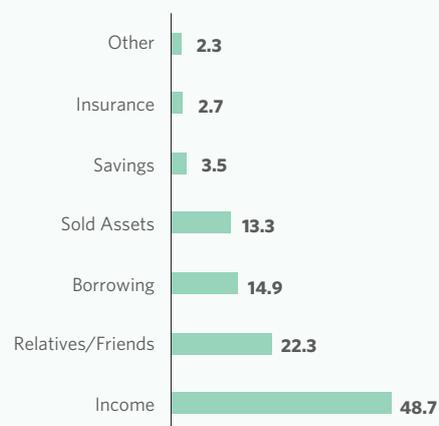
Table 12.11 presents the percentage of household members who smoke cigarettes or use tobacco, by background characteristics. The findings indicate that 5 percent of Puntland household members smoke cigarettes or use tobacco products. Cigarette smoking or any other use of tobacco is rare among women at 1 percent, whereas 9 percent of men smoke or use other tobacco products. The use of tobacco generally increases with increasing age.

The use of tobacco or smoking by household members slightly varies by place of residence; urban and nomadic areas have the highest proportion at 5 percent and 6 percent compared to rural areas at 3 percent.

Among the regions, the proportion of household members in Sanaag who had been smoking or using tobacco was slightly higher at 6 percent and lower in Mudug at 3 percent.

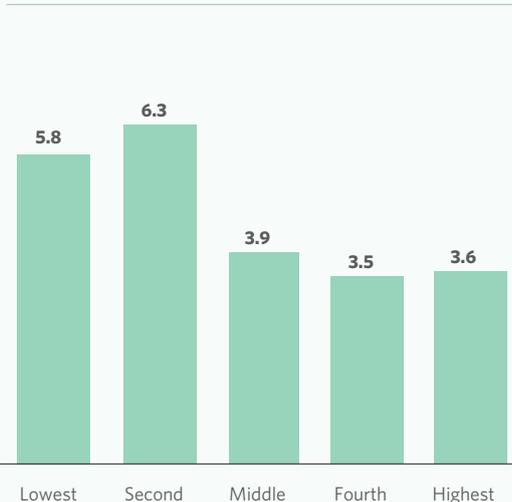
Figure 12.12 shows that the use of tobacco or cigarette smoking decreases with increasing household wealth.

**Figure 12.11**  
Source of payment of health services



Percentage distribution of financial sources used for health services in the month preceding the survey by households

**Figure 12.12**  
Smoking/tobacco use



Percentage of household members who smoke cigarettes or use tobacco by wealth quintile

Household members with no education and those with secondary-level of education are more likely to smoke at 5 and 4 percent respectively, than household members with primary-level education or higher education at 2 and 3 percent respectively.

Table 12.12 presents the distribution of household members who chew Khat by background characteristics. It shows that 5 percent of members of Puntland households chew Khat or have chewed Khat compared to 5 percent nationally. There are notable gender differences in this practice; less than one percent of women chew or have chewed Khat, compared to 9 percent of men. Among all age groups, it can be noted that the practice of chewing Khat generally increases with the age of household members, peaking at 12 percent at the age group 45-49 but start declining from there.

Rural dwellers are less likely to chew Khat at 3 percent, compared to people living in urban and nomadic households at 5 percent each.

Khat consumption varied among the household members in the regions. The proportion of those who chew Khat is highest in Sanaag at 7 percent compared to Mudug which is lowest at 3 percent.

Khat consumption also varied among people with different education levels and wealth status—6 percent of household members with no education and 4 percent of household members with secondary education chewed Khat, while 2 percent of those with primary education and 3 percent of those with higher education chewed Khat. Comparison by wealth quintiles indicates that the poorer household members are more likely to chew Khat.

Figure 12.13 compares the percentage of household members who chew Khat and household members who smoke cigarettes or use any sort of tobacco. It shows that both the use of tobacco and chewing of Khat generally increases with age and reaches a peak at the ages 45-49 and then declines in the older ages.



**Table 12.1** Prevalence of chronic diseases

Percentage of household members who have at least one chronic disease diagnosed by a physician, and who get treatment regularly, by background characteristics, PLHDS 2020

Background characteristics	Percentage of HH members who have at least one chronic disease	Number of Persons
<b>Sex of household member</b>		
Male	4.4	15,436
Female	6.1	16,635
<b>Age</b>		
0-4	1.4	6,324
5-9	2.0	6,151
10-14	1.7	4,712
15-19	3.4	3,563
20-24	4.8	1,958
25-29	5.3	1,840
30-34	5.8	1,617
35-39	8.5	1,311
40-44	10.5	1,092
45-49	16.4	517
50-54	15.3	1,003
55-59	21.8	373
60-64	20.9	598
65-69	23.2	177
70+	33.2	835
<b>Type of residence</b>		
Urban	6.6	12,310
Rural	5.2	9,991
Nomadic	3.6	9,771
<b>Region</b>		
Sool	7.1	4,587
Sanaag	4.0	5,720
Bari	5.0	8,343
Nugaal	5.7	3,953
Mudug	5.2	9,468
<b>Wealth quintile</b>		
Lowest	3.9	10,274
Second	5.6	4,904
Middle	6.1	6,697
Fourth	6.1	5,982
Highest	5.7	4,214
<b>Total <sup>1</sup></b>	<b>5.3</b>	<b>32,071</b>

<sup>1</sup> Total includes household members with information on age missing.

**Table 12.2** Prevalence of chronic diseases diagnosed by a physician

Percentage of household members who have at least one chronic disease diagnosed by a physician, and who get treatment regularly, by background characteristics, PLHDS 2020

Background characteristics	Percentage of HH members who have at least one chronic diagnosed by physician	Percentage of HH Members who have at least one chronic and get treated	Number of Persons
<b>Sex</b>			
Male	3.5	2.0	15,436
Female	4.6	2.4	16,635
<b>Age</b>			
0-4	0.9	0.5	6,324
5-9	1.2	0.6	6,151
10-14	1.3	0.4	4,712
15-19	2.9	1.3	3,563
20-24	3.6	1.7	1,958
25-29	3.6	1.8	1,840
30-34	4.6	2.6	1,617
35-39	6.1	3.1	1,311
40-44	8.1	4.7	1,092
45-49	13.8	7.5	517
50-54	12.6	7.7	1,003
55-59	17.7	11.0	373
60-64	16.8	9.3	598
65-69	20.4	12.5	177
70+	26.2	16.5	835
<b>Type of residence</b>			
Urban	5.5	3.2	12,310
Rural	4.0	2.3	9,991
Nomadic	2.2	0.9	9,771
<b>Region</b>			
Sool	5.1	2.3	4,587
Sanaag	3.4	1.9	5,720
Bari	3.8	1.8	8,343
Nugaal	4.6	3.0	3,953
Mudug	3.9	2.4	9,468
<b>Wealth quintile</b>			
Lowest	2.5	1.0	10,274
Second	3.8	1.9	4,904
Middle	4.9	2.6	6,697
Fourth	5.2	3.1	5,982
Highest	5.2	3.7	4,214
<b>Total <sup>1</sup></b>	<b>4.0</b>	<b>2.2</b>	<b>32,071</b>

<sup>1</sup>Total includes household members with information on age missing.


**Table 12.3** Prevalence of specific chronic diseases

Percentage of household members who have specific chronic diseases diagnosed by a physician, by place of residence and sex, PLHDS 2020

Type of disease	Type of residence			Sex of household member		Total
	Urban	Rural	Nomadic	Male	Female	
Blood Pressure	31.1	36.9	26.0	25.9	36.4	32
Diabetes	16.6	12.3	7.4	17.2	11.2	14
Inflammation/ Ulcers	7.6	5.4	4.4	5.4	7.1	6
Anemia	5.8	2.6	7.1	3.8	5.9	5
Sickle Cell Anemia	0.4	1.0	0.6	0.7	0.6	1
Heart Disease	6.1	5.0	3.3	3.7	6.4	5
Kidney Disease	12.1	10.4	12.8	10.3	12.6	12
Liver Disease	8.1	5.9	15.9	10.2	7.8	9
Arthritis	6.0	6.2	6.7	4.8	7.2	6
Tuberculosis	2.7	2.1	1.5	3.0	1.9	2
Chronic Headache	8.2	9.9	9.7	8.6	9.3	9
Stroke	2.5	2.2	1.7	3.6	1.4	2
Epilepsy	3.5	5.1	2.2	4.5	3.2	4
Prostatic Hypertrophy	1.2	0.8	6.6	2.2	1.9	2
Cataract	1.3	1.0	0.9	1.0	1.3	1
Chronic Back Pain	3.8	2.8	11.5	3.9	5.4	5
Mental/ Psychological Illness	7.1	5.4	5.1	6.6	6.0	6
Skin Disease	5.0	1.8	5.6	2.7	5.1	4
Cancerous Tumors	0.8	0.9	2.2	0.7	1.3	1
Asthma	7.9	7.7	8.7	8.0	7.9	8
Others	8.0	9.4	14.5	9.8	9.3	10
Household numbers	676	405	220	539	762	1,301

**Table 12.4** Prevalence of disability and common types of disability

Prevalence of household members with disabilities, and percentage who suffer from specific types of disabilities, by background characteristics, PLHDS 2020										
Background Characteristics	Prevalence of disabled persons	Total	Among household members with disabilities, percentage who suffer from specific types of disabilities							Number of household members with disabilities
			Sight	Hearing	Speech	Learning	Mobility	Self-care	Mental	
<b>Sex of household member</b>										
Male	3.8	15,436	1.4	1.0	0.4	0.1	1.1	0.3	0.8	592
Female	4.4	16,635	1.9	1.3	0.4	0.1	1.2	0.4	0.8	724
<b>Age</b>										
<5	3.6	6,324	1.3	1.0	0.5	0.0	1.1	0.2	0.8	231
5-9	2.9	6,151	0.7	0.8	0.5	0.1	0.8	0.2	0.8	176
10-14	3.0	4,712	1.2	0.8	0.4	0.1	0.6	0.4	0.6	140
15-19	2.6	3,563	0.9	0.8	0.3	0.1	0.7	0.2	0.7	91
20-24	2.6	1,958	0.9	0.9	0.1	0.1	0.6	0.2	0.6	50
25-29	2.9	1,840	0.7	1.1	0.1		0.8	0.2	1.0	54
30-34	2.8	1,617	(0.6)	(0.5)	(0.4)	(0.1)	(0.7)	(0.2)	(1.3)	45
35-39	2.9	1,311	(0.6)	(0.9)	(0.3)	(0.1)	(0.8)	(0.7)	(0.8)	37
40-44	3.5	1,092	(1.2)	(0.6)	(0.3)	(0.1)	(1.3)	(0.2)	(0.7)	38
45-49	4.8	517	(1.3)	(0.9)	(0.0)	(0.3)	(1.5)	(0.3)	(1.1)	25
50-54	5.8	1,003	2.3	0.8	0.1	0.0	2.0	0.6	0.8	59
55-59	8.1	373	5.0	(1.5)	(0.1)	(0.4)	(2.3)	(1.0)	(0.0)	30
60-64	10.7	598	6.8	2.6	0.5	0.2	2.6	0.9	0.6	64
65-69	15.1	177	(11.0)	(3.9)	(0.7)	(0.0)	(3.8)	(2.2)	(0.0)	27
70+	29.7	835	19.2	10.9	2.5	1.8	9.7	3.0	3.1	248
<b>Type of residence</b>										
Urban	5.1	12,310	2.1	1.4	0.6	0.2	1.4	0.6	1.3	632
Rural	5.1	9,991	2.1	1.5	0.5	0.1	1.7	0.3	0.8	511
Nomadic	1.8	9,771	0.8	0.5	0.2	0.1	0.4	0.2	0.2	173
<b>Region</b>										
Sool	4.5	4,587	2.3	1.4	0.3	0.1	1.2	0.4	0.8	208
Sanaag	3.0	5,720	1.2	0.8	0.2	0.3	1.0	0.1	0.5	174
Bari	3.4	8,343	0.8	1.1	0.3		1.0	0.3	0.7	284
Nugaal	4.7	3,953	1.8	1.2	0.6	0.1	1.0	0.2	1.2	184
Mudug	4.9	9,468	2.4	1.4	0.6	0.1	1.5	0.7	1.0	466
<b>Wealth quintile</b>										
Lowest	2.5	10,274	1.0	0.7	0.2	0.1	0.6	0.3	0.4	253
Second	6.1	4,904	2.1	2.1	0.7	0.0	1.5	0.5	1.1	297
Middle	4.6	6,697	2.1	1.2	0.5	0.1	1.2	0.3	1.0	310
Fourth	5.0	5,982	2.2	1.3	0.4	0.2	1.8	0.5	1.0	302
Highest	3.7	4,214	1.5	1.0	0.6	0.2	1.3	0.3	1.0	155
<b>Total</b> <sup>1</sup>	<b>4.1</b>	<b>32,071</b>	<b>1.7</b>	<b>1.2</b>	<b>0.4</b>	<b>0.1</b>	<b>1.2</b>	<b>0.4</b>	<b>0.8</b>	<b>1,316</b>

<sup>1</sup> Total includes household members with missing information on age.

A person may have two reported diseases; consequently, the percentages reflect this information


**Table 12.5** Origin of disabilities

Background Characteristics	Origin of disabilities										people with disability
	Congenital	Contagious	"Child birth conditions"	Other Disease	Abuse	Aging	Injury Accident	Witchcraft	Other	Don't know	
<b>Sex</b>											
Male	14.9	8.2	10.5	21.8	0.4	19.1	12.5	0.2	4.1	8.3	362
Female	11.0	8.6	5.1	20.3	0.3	29.5	11.8	0.2	5.9	7.2	454
<b>Age</b>											
<5	(41.1)	(9.3)	(21.1)	(7.7)	(4.2)	(0.0)	(11.1)	(1.1)	(0.0)	(4.4)	36
5-9	25.0	13.0	20.9	25.2	0.0	0.0	4.9	0.0	0.8	10.2	73
10-14	23.3	8.5	19.3	23.9	0.0	0.0	13.9	0.0	1.4	9.7	68
15-19	(30.1)	(4.2)	(10.3)	(34.0)	(0.0)	(0.0)	(11.0)	(1.5)	(2.4)	(6.5)	39
20-24	(25.1)	(5.1)	(10.5)	(30.1)	(0.0)	(0.0)	(17.7)	(0.0)	(3.4)	(8.1)	36
25-29	(13.7)	(5.1)	(13.9)	(21.4)	(0.0)	(0.0)	(19.2)	(1.4)	(3.1)	(22.3)	40
30-34	(15.7)	(12.8)	(4.2)	(25.2)	(0.0)	(0.0)	(19.4)	(0.0)	(17.1)	(5.5)	36
35-39	(17.4)	(25.7)	(4.5)	(33.5)	(0.0)	(0.0)	(14.1)	(0.0)	(0.0)	(4.7)	34
40-44	(17.4)	(7.3)	(10.9)	(36.6)	(0.0)	(0.0)	(20.9)	(0.0)	(1.8)	(5.0)	34
45-49	(2.3)	(13.0)	(2.5)	(24.5)	(6.2)	(5.0)	(13.0)	(0.0)	(21.8)	(11.6)	24
50-54	5.0	7.2	2.3	23.6	0.0	12.2	26.4	0.0	9.4	13.9	51
55-59	(5.5)	(10.7)	(0.0)	(7.3)	(0.0)	(25.3)	(31.9)	(0.0)	(4.1)	(15.1)	30
60-64	2.1	4.7	3.8	24.2	0.0	51.4	4.1	0.0	4.3	5.4	57
65-69	(0.0)	(9.7)	(0.0)	(19.2)	(0.0)	(49.4)	(10.9)	(0.0)	(8.3)	(2.4)	26
70+	2.5	5.9	0.6	12.8	0.0	62.4	5.7	0.0	6.0	4.1	234
<b>Type of residence</b>											
Urban	10.6	7.8	8.1	20.8	0.8	21.1	14.5	0.2	7.5	8.7	358
Rural	16.7	7.2	6.7	21.2	0.0	28.1	11.4	0.2	2.8	5.7	286
Nomadic	10.9	11.7	7.5	21.0	0.0	27.6	8.3	0.2	3.9	8.9	173
<b>Region</b>											
Sool	8.1	13.4	3.1	24.6	0.0	33.7	8.2	0.0	4.0	5.0	132
Sanaag	13.6	15.1	7.6	11.1	0.0	28.6	13.6	1.0	1.4	8.0	113
Bari	13.5	9.5	2.6	21.2	0.0	17.1	18.6	0.0	5.3	12.1	163
Nugaal	10.4	3.5	10.5	17.0	0.0	21.1	19.7	0.3	4.5	13.1	114
Mudug	15.1	4.9	11.0	24.6	1.0	25.4	6.7	0.0	7.1	4.2	294
<b>Total</b>	<b>12.8</b>	<b>8.4</b>	<b>7.5</b>	<b>21.0</b>	<b>0.4</b>	<b>24.9</b>	<b>12.1</b>	<b>0.2</b>	<b>5.1</b>	<b>7.7</b>	<b>816</b>

Note: Figures in parentheses are based on 25-49 unweighted cases

**Table 12.6** Age at onset of disability

Percentage distribution of disabled people according to age at onset of disability, by background characteristics, PLHDS 2020										
Background characteristics	Age at the onset of disability									Number of households
	<5	9-May	19-Oct	20-29	30-39	40-49	50-59	60-69	70+	
<b>Sex</b>										
Male	36.2	9.7	9.0	7.0	6.7	6.3	7.8	8.3	8.9	358
Female	23.8	6.5	11.5	7.8	5.3	10.1	11.8	12.2	11.0	454
<b>Age</b>										
<5	(100.0)									36
5-9	83.2	16.8								73
10-14	61.4	16.4	22.2							67
15-19	(46.5)	(12.0)	(41.5)							39
20-24	(52.7)	(17.3)	(22.5)	(7.4)						36
25-29	(26.3)	(10.7)	(26.2)	(36.9)						40
30-34	(22.0)	(17.5)	(14.6)	(36.3)	(9.6)					36
35-39	(30.1)	(8.0)	(21.3)	(20.7)	(19.8)					34
40-44	(27.1)	(9.6)	13.3	(13.7)	(34.4)	(1.8)				34
45-49	*	*	*	*	*	*				24
50-54	8.2	1.3	5.7	5.4	15.8	47.7	15.9			49
55-59	(9.8)	(10.8)	(4.1)	(10.2)	(14.9)	(15.2)	(35.0)			30
60-64	9.5	3.2	0.7	6.1	3.2	19.1	47.9	10.5		57
65-69	*	*	*	*	*	*	*	*		24
70+	4.1	2.9	3.4	1.6	1.5	6.4	13.8	31.4	34.9	234
<b>Types of disability</b>										
Sight	15.8	6.7	7.8	4.0	6.5	13.8	13.6	16.3	15.4	346
Hearing	30.8	8.5	10.0	6.7	3.2	8.8	7.3	12.5	12.1	237
Speech	58.2	11.2	2.0	4.3	2.5	2.1	5.3	3.8	10.5	86
Learning	25.8	2.8	3.6	5.5	9.0	2.3	12.0	18.6	20.6	28
Mobility	24.3	5.5	9.1	8.3	7.6	6.5	11.7	12.8	14.1	234
Self-Care	20.8	3.3	9.3	12.5	10.7	10.9	7.3	6.6	18.6	76
Mental	45.7	7.3	12.5	14.2	3.9	4.4	6.3	1.2	4.5	142
<b>Type of residence</b>										
Urban	29.3	8.1	12.2	9.4	5.7	7.8	9.6	9.2	8.7	358
Rural	27.6	5.8	8.8	6.7	5.4	8.8	11.2	12.0	13.6	286
Nomadic	32.1	11.1	9.4	4.6	7.2	9.3	8.7	10.6	7.1	169
<b>Region</b>										
Sool	22.8	6.0	13.2	7.2	5.6	8.9	8.4	16.4	11.5	132
Sanaag	29.7	4.2	7.5	6.1	7.5	4.7	12.5	16.4	11.3	113
Bari	32.3	14.5	10.1	6.1	4.8	4.0	11.7	8.7	7.7	163
Nugaal	34.3	6.0	15.2	6.6	7.2	12.3	7.7	3.5	7.3	114
Mudug	28.4	7.3	8.7	9.1	5.5	10.7	9.7	9.2	11.4	290
<b>Total</b>	<b>29.3</b>	<b>7.9</b>	<b>10.4</b>	<b>7.5</b>	<b>5.9</b>	<b>8.4</b>	<b>10.0</b>	<b>10.5</b>	<b>10.1</b>	<b>812</b>

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.


**Table 12.7** Care and support received for persons with disabilities

Percentage distribution of disabled people who received any kind of care, and support for their disabilities in the last 12 months by background characteristics, PLHDS 2020

Background characteristics	Care and Support Received					Number of Persons
	Medical	Welfare	Financial	Nutritional	No Support	
<b>Sex of household member</b>						
Male	59.6	0.9	3.8	0.7	41.2	592
Female	61.7	0.6	2.9	0.6	40.9	724
<b>Age</b>						
0-4	18.7	0.0	2.5	0.5	75.5	231
5-9	40.5	0.7	3.1	1.4	59.1	176
10-14	49.6	0.9	2.1	0.0	41.2	140
15-19	40.5	0.0	6.7	1.8	56.1	91
20-24	73.7	3.0	0.0	0.0	32.6	50
25-29	67.5	2.8	4.8	0.0	35.0	54
30-34	(75.5)	(1.2)	(2.9)	(0.0)	(23.2)	45
35-39	(86.4)	(0.0)	(4.0)	(0.0)	(16.6)	37
40-44	91.4	1.6	5.6	4.0	(17.4)	38
45-49	(97.6)	(0.0)	(0.0)	(0.0)	(2.4)	25
50-54	86.9	0.0	1.0	0.0	17.8	59
55-59	(84.1)	(0.0)	(14.1)	(0.0)	(10.7)	30
60-64	85.8	0.0	4.0	0.0	26.6	64
65-69	(95.5)	(2.2)	(0.0)	(0.0)	(15.2)	27
70+	89.5	1.2	3.4	0.7	23.6	248
<b>Type of residence</b>						
Urban	56.2	0.8	2.8	0.8	45.4	632
Rural	54.8	0.8	3.6	0.6	48.1	511
Nomadic	94.7	0.4	4.3	0.0	3.8	173
<b>Region</b>						
Sool	61.0	3.1	3.1	0.0	35.8	208
Sanaag	65.1	0.0	1.6	0.0	38.4	174
Bari	56.3	0.2	1.6	0.0	44.7	284
Nugaal	61.3	0.0	2.8	2.0	43.6	184
Mudug	61.4	0.6	5.4	1.0	41.1	466
<b>Wealth quintile</b>						
Lowest	81.9	0.5	3.7	0.0	20.9	253
Second	53.1	0.8	1.6	1.0	45.0	297
Middle	55.8	1.9	4.5	0.0	43.6	310
Fourth	59.6	0.2	1.6	1.0	47.8	302
Highest	52.6	0.0	7.1	1.6	47.7	155
<b>Total</b>	<b>60.7</b>	<b>0.8</b>	<b>3.3</b>	<b>0.6</b>	<b>41.0</b>	<b>1,316</b>

Note: Figures in parentheses are based on 25-49 unweighted cases.

**Table 12.9** Financial sources used to pay for health services

Percentage distribution of financial sources used for health services by households in the last month by background characteristics, PLHDS 2020								
Background characteristics	Financial sources for health services							Number of households
	Income	Insurance	Savings	Borrowing	Relatives/ Friends	Sold Assets	Other	
<b>Type of residence</b>								
Urban	57.4	3.2	4.1	15.7	22.9	13.2	1.9	230
Rural	42.6	2.9	1.9	15.3	17.7	10.2	1.6	180
Nomadic	31.4	0.0	6.2	9.5	35.5	24.9	6.7	52
<b>Region</b>								
Sool	33.2	0.0	2.7	10.5	18.1	10.4	7.9	46
Sanaag	56.1	1.2	0.0	31.7	21.4	10.7	6.0	51
Bari	41.1	2.7	2.7	13.7	21.1	11.9	1.4	157
Nugaal	66.4	0.0	2.0	9.7	4.9	8.1	0.6	62
Mudug	51.7	5.3	6.5	13.8	32.5	19.0	1.0	146
<b>Total</b>	<b>48.7</b>	<b>2.7</b>	<b>3.5</b>	<b>14.9</b>	<b>22.3</b>	<b>13.3</b>	<b>2.3</b>	<b>462</b>

**Table 12.10** Amount in health expenses

Amount of money that households incurred for health services in the last month by background characteristics, PLHDS 2020							
	Amount in health expenses in US\$						Number of Households
	1-49	50-99	100 -199	200- 299	300+	Total	
<b>Type of residence</b>							
Urban	36.9	25.7	20.6	3.0	13.8	100.0	209
Rural	23.5	19.4	22.3	8.8	26.0	100.0	176
Nomadic	8.6	35.9	23.6	14.2	17.7	100.0	52
<b>Regions</b>							
Sool	(33.2)	(17.9)	(20.2)	(13.7)	(14.9)	100.0	44
Sanaag	(21.1)	(25.9)	(16.1)	(6.6)	(30.3)	100.0	48
Bari	29.1	23.9	21.5	4.0	21.5	100.0	144
Nugaal	28.5	27.8	26.9	4.0	12.8	100.0	59
Mudug	27.9	24.8	21.9	8.3	17.0	100.0	142
<b>Wealth quintile</b>							
Lowest	24.0	28.5	20.8	8.6	18.1	100.0	124
Second	31.4	26.5	24.7	2.8	14.7	100.0	92
Middle	23.5	26.1	18.4	4.4	27.6	100.0	86
Fourth	42.4	24.1	17.7	5.8	9.9	100.0	66
Highest	23.4	12.0	27.1	12.1	25.4	100.0	69
<b>Total</b>	<b>28.1</b>	<b>24.4</b>	<b>21.6</b>	<b>6.7</b>	<b>19.2</b>	<b>100.0</b>	<b>437</b>

Note: Figures in parentheses are based on 25-49 unweighted cases

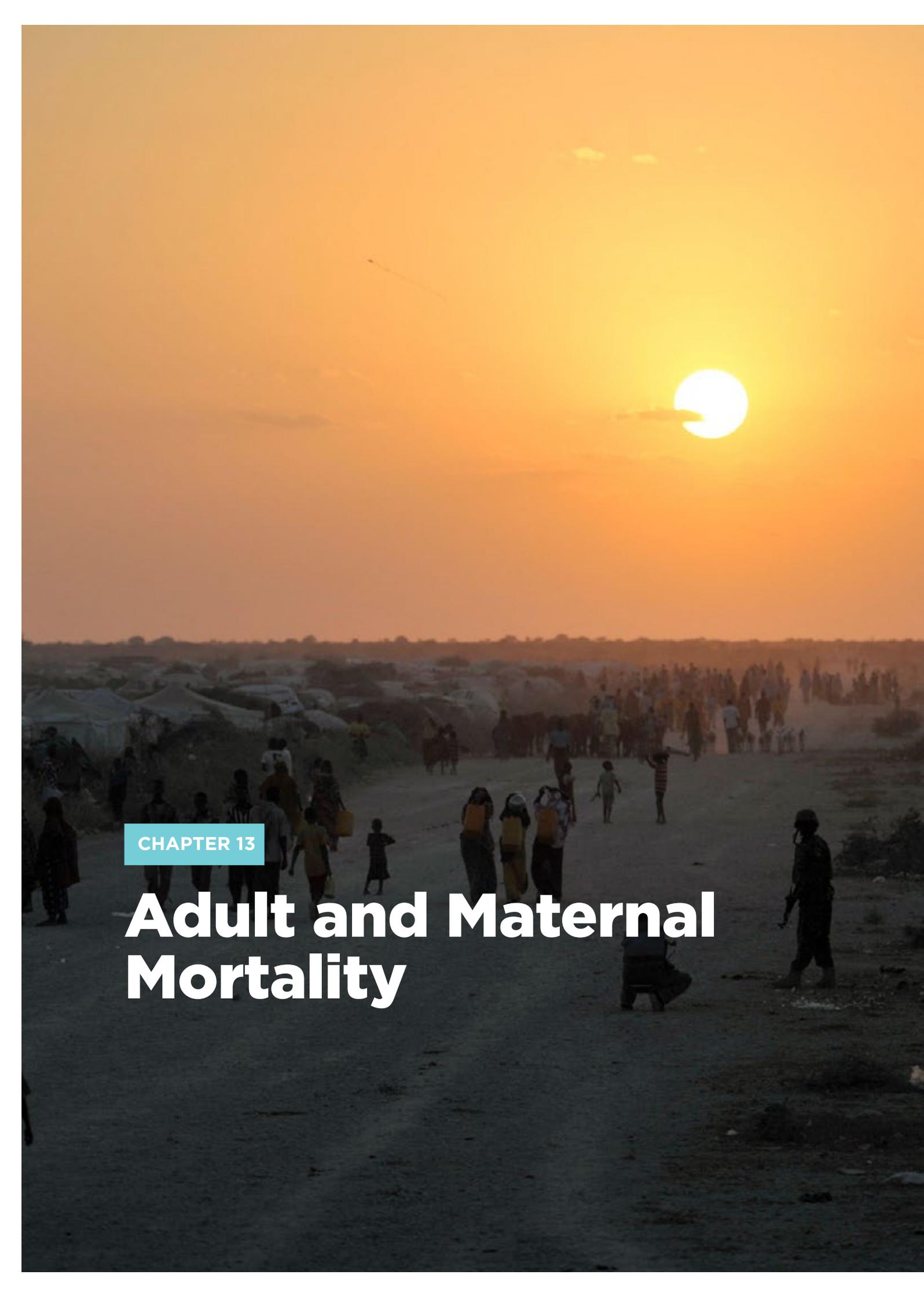


**Table 12.11** Smoking or using tobacco

Percentage of household members who smoke cigarettes or use tobacco by background characteristics, PLHDS 2020		
Background characteristics	Percentage of household members who smoke cigarettes or use tobacco	Number of Household members
<b>Sex</b>		
Male	8.8	9,037
Female	1.2	10,559
<b>Age</b>		
10-14	0.6	4,712
15-19	1.5	3,563
20-24	4.9	1,958
25-29	7.0	1,840
30-34	9.8	1,617
35-39	8.8	1,311
40-44	9.4	1,092
45-49	12.4	517
50-54	6.2	1,003
55-59	7.4	373
60-64	6.8	598
65-69	4.5	177
70+	4.5	835
<b>Type of residence</b>		
Urban	4.9	7,750
Rural	3.4	6,041
Nomadic	5.9	5,805
<b>Region</b>		
Sool	5.3	2,796
Sanaag	6.4	3,597
Bari	4.8	5,093
Nugaal	4.4	2,479
Mudug	3.4	5,631
<b>Education</b>		
No Education	5.7	13,320
Primary	2.2	4,178
Secondary	3.7	1,537
Higher	2.7	561
<b>Wealth quintile</b>		
Lowest	5.8	6,077
Second	6.3	2,863
Middle	3.9	4,065
Fourth	3.5	3,789
Highest	3.6	2,803
<b>Total</b>	<b>4.7</b>	<b>19,596</b>

**Table 12.12** Using of Khat

Percentage of household members who use Khat by background characteristics, PLHDS 2020		
Background characteristics	Percentage of household members who use Khat	Number of Household members
<b>Sex</b>		
Male	9.0	9,037
Female	0.7	10,559
<b>Age</b>		
10-14	0.5	4,712
15-19	1.1	3,563
20-24	4.7	1,958
25-29	7.2	1,840
30-34	10.3	1,617
35-39	8.2	1,311
40-44	10.4	1,092
45-49	11.6	517
50-54	5.8	1,003
55-59	7.1	373
60-64	6.4	598
65-69	3.6	177
70+	2.9	835
<b>Type of residence</b>		
Urban	4.8	7,750
Rural	3.4	6,041
Nomadic	5.3	5,805
<b>Regions</b>		
Sool	5.0	2,796
Sanaag	6.5	3,597
Bari	4.7	5,093
Nugaal	4.1	2,479
Mudug	3.1	5,631
<b>Education</b>		
No Education	5.5	13,320
Primary	2.1	4,178
Secondary	3.6	1,537
Higher	2.9	561
<b>Wealth quintile</b>		
Lowest	5.3	6,077
Second	6.2	2,863
Middle	4.1	4,065
Fourth	3.2	3,789
Highest	3.5	2,803
<b>Total</b>	<b>4.5</b>	<b>19,596</b>

A large group of people, including men, women, and children, are gathered in a dusty, open area, likely a refugee camp. The scene is set during sunset, with a bright orange and yellow sky and a large sun low on the horizon. The ground is dark and uneven, and the overall atmosphere is somber and crowded.

CHAPTER 13

# Adult and Maternal Mortality

# Key Findings

## ADULT MORTALITY

Women and men who have reached age 15 have a probability of dying before age 50 of **7 percent** and **26 percent**, respectively.

## MATERNAL MORTALITY RATIO (MMR)

The Maternal Mortality Ratio is estimated at **622 maternal deaths** per **100,000 live births**.

## LIFETIME RISK OF MATERNAL MORTALITY (LTR)

The lifetime risk of maternal mortality is **1 in 24 women** would be expected to die from pregnancy-related causes during their reproductive lifetime.



# 13

## Chapter 13

# Adult and Maternal Mortality

This chapter presents adult and maternal mortality measures for Puntland. The chapter includes a summary measure (35q15) that represents the probability of dying between exact ages 15 and 50—that is, between the 15<sup>th</sup> and 50<sup>th</sup> birthdays.

Adult and maternal mortality indicators can be used to assess the health status of a population. In most developing countries, reproductive health is a major concern, hence the need for reliable data on maternal deaths.

Estimation of mortality rates requires complete and accurate data on adult and maternal deaths. To obtain an estimate of adult mortality, the PLHDS collected data for Puntland from all listed households on the occurrence of deaths in the households over the two years preceding the survey. For the deaths of women in reproductive age, questions were asked on the time and cause of death to determine if any of the death was maternity-related, which permits the estimation of maternal mortality.

## Adult Mortality

Normally, direct estimates of male and female adult mortality are obtained from information collected in the sibling history table in a survey of this kind. However, the male and female adult mortality table presented in this report is obtained from data on deaths which occurred two years preceding the survey. This data was collected to assist in obtaining a more recent estimate of adult mortality. The age-specific death rates are computed by dividing the number of deaths in each age group by the total person-years of exposure in that age group during a specified reference period. Direct estimates of age-specific mortality rates for males and females are shown in Table 13.1. The direct estimates are presented for the period of 7 years of exposure. The data is aggregated in five-year age groups for the age range of 15 to 49 years. Overall, there are more male deaths than female deaths (females 180, males 216). The death rate of men aged 15 to 49 years (6.64 deaths per 1,000 population) is higher than the death rate of women of the same age group (1.64 deaths per 1,000 population). Among the population in the female reproductive age, death rate is highest among the age group 35-39 at 3.08 deaths per 1,000 population, which is also the

To obtain an estimate of adult mortality, the PLHDS collected data for Puntland from all listed households on the occurrence of deaths in the households over the two years preceding the survey



peak child bearing age group in Puntland. The male mortality rates are highest at the upper ages of 35-39 and 45-49 at 10.73 and 19.95 deaths per 1,000 population respectively.

## Maternal Mortality

### Introduction

A maternal death is the death of a woman while pregnant, during delivery or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental causes (WHO, 2019). This time-specific definition includes all deaths occurring during the specified period, even if the death is due to causes that are not pregnancy-related, except violence, which is specified in the survey questionnaire. Age-specific maternal mortality rates are calculated by dividing the number of maternal deaths by years of exposure. The Maternal Mortality Ratio (MMR), which is calculated as the number of maternal deaths per 100,000 live births, is a more widely used measure of maternal mortality as it avoids the complications in the estimation of “exposure”.

The leading causes of maternal mortality are postpartum hemorrhage, pre-eclampsia / eclampsia, obstructed labour and sepsis. The key determinants of maternal mortality in Puntland include: insecurity, poor distribution and limited health facilities, low quality of interventions, limited capacity in planning, management and evaluation, the cultural and geographic isolation of women (“Health profile”, 2015).

Although MMR is a good indicator for maternal health in the country, its calculation is challenging due to the absence of vital registration of maternal deaths. The MMR data was collected during the listing because it needs a large sample size. During the data collection, deaths of women aged 15-49 who died within the 2 years preceding the survey were recorded.

### Female and Maternal Deaths

Table 13.3 shows female deaths by cause. A total of 131 female deaths in the age range 15 to 49 were reported in the 24 months preceding the survey. The highest number of female deaths (30) were observed among women aged 25-29, while the lowest (6) was observed among women aged 15 - 19.

With respect to the timing of the death in relation to the pregnancy, deaths that occurred during the pregnancy, childbirth, or within 42 days after the birth or termination of a pregnancy, were recorded separately. From the survey; 44 women died while they were

The leading causes of maternal mortality are postpartum hemorrhage, pre-eclampsia / eclampsia, obstructed labour and sepsis



**44 women died while they were pregnant, whereas 22 women died while they were giving birth and 10 women died within six weeks after delivery**

pregnant, whereas 22 women died while they were giving birth and 10 women died within six weeks after delivery. However, 13 out of the 131 female deaths were due to accidental causes.

The number of female deaths due to maternal (while they were pregnant, or giving birth or within six weeks post-delivery, with the exception of accidents or violence) causes was 63. The number varied by age and ranged from 20 among women aged 25-29 to 2 deaths among women aged 15-19 and 40-44.

## Maternal Mortality Estimation

The maternal mortality estimates presented in this report were obtained from data collected using the direct estimation method, which relies on asking questions about maternal deaths in a household during a recent interval of time, normally one to two years. This method provides up-to-date estimates but is time-consuming and costly because it requires a large sample size to obtain single-point estimates with sufficiently narrow confidence intervals to enable monitoring of time trends.

### a. Maternal Mortality Rate (MMRate)

Rates in demographic statistics are defined as occurrence/exposure ratios. The Maternal Mortality Estimation Inter-Agency Group (MMEIG), which leads the international work on maternal mortality and includes WHO, UNFPA, UNICEF, World Bank Group and the United Nations Population Division, calculates the Maternal Mortality Rate (MMRate) as the number of maternal deaths divided by the person-years lived by women of reproductive age in a population (WHO 2019). The MMRate is thus an indicator of the risk of maternal death among women of reproductive age. The MMRate is usually multiplied by a factor of 1,000.

Based on the PLHDS data, the MMRate for Puntland was estimated at 1.3803 maternal deaths per 1,000 woman-years of exposure. This implies that one to two in every 1,000 women aged 15-49 in the state die due to pregnancy related complications in a given year.

### b. Maternal Mortality Ratio (MMR)

As pointed out earlier, the Maternal Mortality Ratio (MMR) is calculated as the number of maternal deaths during a given time period per 100,000 live births during the same time period (WHO 2019). It thus, links the risk of maternal death relative to the frequency of childbearing. The Maternal Mortality Ratio is considered a more useful indicator of maternal mortality, since it measures the obstetric risk associated with each live birth (WHO, 2015). As pointed out earlier it also avoids the complications in the estimation of the "exposure" segment.

**The Maternal Mortality Ratio is one of 26 indicators used to assess progress towards Sustainable Development Goals (SDG) 3: ensuring healthy lives and promoting well-being for all at all ages**

**The high maternal mortality can be attributed to high fertility rates, low contraceptive prevalence rate, low skilled birth attendance rate, inadequate access to maternal health services, inadequate access to emergency obstetric care and FGM among other factors**

The Maternal Mortality Rate can be converted to Maternal Mortality Ratio (expressed as deaths per 100,000 live births) by dividing the Maternal Mortality Rate by the General Fertility Rate (GFR) that prevailed during the same period and multiplying the result by 100,000. The Maternal Mortality Ratio (MMR) for Puntland is 622 deaths per 100,000 live births compared to 692 deaths per 100,000 at the national level. This means that in Puntland State, for every 1,000 live births, approximately 6 women die during pregnancy, childbirth, or within two months of childbirth.

The Maternal Mortality Ratio is one of 26 indicators used to assess progress towards Sustainable Development Goals (SDG) 3: ensuring healthy lives and promoting well-being for all at all ages. Reducing maternal mortality is one of the country's targets. The National Development Plan target was to reduce the MMR from 732 to 600 per 100,000 live births by 2019.

The high maternal mortality can be attributed to high fertility rates, low contraceptive prevalence rate, low skilled birth attendance rate, inadequate access to maternal health services, inadequate access to emergency obstetric care and FGM among other factors. (WHO, 2017)

#### c. Pregnancy-Related Maternal Mortality Rate

Pregnancy-Related Mortality Rate is the number of pregnancy-related deaths per 1,000 women aged 15-49. Pregnancy related mortality rates by 5-year age groups are calculated by dividing the number of pregnancy-related deaths in each age group by the total person-years of exposure of the women to the risk of dying in that age group during the period and then multiplying by 1,000. PRMR does not exclude deaths due to accident or violence. The number of deaths is the number of women aged 15-49 reported as having died during pregnancy or delivery, or in the 2 months following the delivery, by their age group at the time of death. The pregnancy-related mortality rate among women aged 15-49 is 1.6699 pregnancy-related deaths per 1,000 woman-years of exposure.

#### d. Pregnancy-Related Mortality Ratio (PRMR)

When the indicator is computed from data on maternal deaths regardless of the cause, the indicator is referred to as Pregnancy-Related Mortality Ratio (PRMR). A maternal death as explained earlier refers to any death of a woman while pregnant, during birth or within 42 days of termination of pregnancy, from any cause but not from accident or an act of violence. A pregnancy related death on the other hand refers to any death of a woman while pregnant, during birth or within two months of termination of pregnancy, regardless of the cause of death. Before 2016, pregnancy related death was used in computing Maternal Mortality Ratio. The



For every 1000 live births, about 7 women die during pregnancy, childbirth or within 42 days of childbirth.

distinction between pregnancy related and strictly maternal deaths was overlooked. Changes were proposed by the World Health Organization (WHO) to exclude deaths due to accident or acts of violence. Questions were therefore added to the DHS questionnaire to identify deaths due to accident or violence. The revised Maternal Mortality Ratio (MMR) is not comparable to MMR trends prior to 2016.

Pregnancy-Related Mortality Ratio (PRMR) is the number of pregnancy-related deaths per 100,000 live births. The PRMR is calculated by dividing the age-standardized pregnancy-related mortality rate for women aged 15-49 by the general fertility rate (GFR) times 100,000. The Pregnancy-Related Maternal Mortality Ratio for the Puntland State is 752 deaths per 100,000 live births compared to 746 deaths per 100,000 live births at the national level. For every 1000 live births, about 7 women die during pregnancy, childbirth or within 42 days of childbirth.

#### e. Lifetime Risk of Maternal Mortality (LTR)

**Lifetime Risk of Maternal Mortality (LTR)** is defined as the risk of an individual woman dying from pregnancy or childbirth during her reproductive lifetime, or stated in other words, it is the probability that a 15-year-old girl will eventually die from a maternal cause. It takes into account both the probability of becoming pregnant and the probability of dying, as a result of pregnancy accumulated across a woman's reproductive years.

LTR reflects the risk that a woman who survives to age 15 will die of maternal causes at some point during her reproductive lifespan, given current rates of maternal mortality and fertility. Thus, in a high-fertility setting, a woman faces the risk of maternal death multiple times, and her lifetime risk of death will be higher than in a low-fertility setting.

The Life Time Risk (LTR) of Maternal Mortality for Puntland according to PLHDS data is 0.04093, meaning that 1 in 24 women entering the child bearing age (15) today will die of pregnancy related complications before end of child bearing (age 50).

#### f. Lifetime Risk of Pregnancy- Related Death

**Lifetime Risk of Pregnancy-Related Death** is calculated as  $1 - (1 - \text{PRMR}) \text{ TFR}$ , where PRMR represents the pregnancy related mortality ratio and TFR represents the total fertility rate. At the fertility and mortality rates prevailing in 2018-2019, 4 percent of women would be expected to die from pregnancy-related causes during their reproductive lifetime (i.e., a lifetime risk of 1 in 24).

**Table 13.1** Adult mortality rates

Direct estimates of female and male mortality rates for the two years preceding the survey, by five-year age groups, PLHDS 2020					
Age	Deaths (2 years preceding the survey)	Deaths in 1 year	Deaths in 7 years	Exposure (7 years)	Mortality rates <sup>1</sup>
<b>FEMALE</b>					
15-19	6	3	21	109,514	0.19
20-24	21	11	74	66,847	1.11
25-29	34	17	121	67,948	1.77
30-34	40	20	139	46,605	2.98
35-39	39	20	138	44,654	3.08
40-44	23	12	82	29,121	2.81
45-49	16	8	57	21,072	2.71
<b>Total 15-49</b>	<b>180</b>	<b>90</b>	<b>631</b>	<b>385,762</b>	<b>1.64<sup>a</sup></b>
<b>MALE</b>					
15-19	13	6	45	32,065	1.39
20-24	22	11	77	18,155	4.25
25-29	45	22	157	18,082	8.70
30-34	37	19	130	14,413	9.04
35-39	41	20	143	13,341	10.73
40-44	22	11	78	11,518	6.75
45-49	36	18	126	6,307	19.95
<b>Total 15-49</b>	<b>216</b>	<b>108</b>	<b>756</b>	<b>113,880</b>	<b>6.64<sup>a</sup></b>

<sup>1</sup> Expressed per 1,000 population  
<sup>a</sup>Age-adjusted rate

**Table 13.2** Adult Mortality probabilities

The probability of dying between the ages of 15 and 50 for women and men for the seven years preceding the survey, PLHDS 2020		
Survey	Women 35q15 <sup>1</sup>	Men 35q15 <sup>1</sup>
PL, 2020	71	263

<sup>1</sup>The probability of dying between exact ages 15 and 50, expressed per 1,000 person-years of exposure

**Table 13.3** Female Deaths by Cause, Number of Female Deaths Overall, by Time of Death and by Cause during the 24 Months Prior to the Survey, by Age Group Corresponding to Female's Reproductive Age, PLHDS 2020

Age Group	Female Deaths	Time of death			Cause of death	
		While pregnant	While giving birth	Within 6 weeks after delivery	From accident or violence	Maternal
15 - 19	6	0	2	0	0	2
20 - 24	21	16	1	1	4	15
25 - 29	30	11	10	1	2	20
30 - 34	18	4	6	1	3	8
35 - 39	19	7	3	5	3	12
40 - 44	17	1	0	1	0	2
45 - 49	12	4	1	1	2	4
<b>Total</b>	<b>131</b>	<b>44</b>	<b>22</b>	<b>10</b>	<b>13</b>	<b>63</b>







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# Glossary

**Adult mortality**

The probability that a 15-year-old will die before reaching his/her 60th birthday, if subjected to age-specific mortality rates between those ages for the specified year.

**Antenatal care (ANC)/Prenatal care**

Care provided by skilled health care professionals (which include doctors/clinical officers or nurses/midwives/auxiliary midwives) to pregnant women in order to ensure the best health conditions for both mother and baby during pregnancy.

**Complementary foods**

Foods other than breast milk or infant formula (liquids, semi-solids, and solids) introduced to an infant to provide nutrients.

**Crude Birth Rate (CBR)**

The total number of births occurring in a given year per 1,000 population.

**Dwelling residence**

A structure which is used for housing purposes only.

**Household roster**

Includes listing of all household members and their characteristics, such as each member's age, sex, relationship with the head of household, education and literacy status.

**Fecundity**

Reflects a woman's ability to conceive and her ability to carry the pregnancy to term.

**Fertility**

The frequency of childbearing within a given population.

**General Fertility Rate (GFR)**

The annual number of births in a population per 1,000 women aged 15-49.

**Gini coefficient**

Measure of the deviation of the distribution of income among individuals or households within a country from a perfectly equal distribution. A value of 0 represents absolute equality, a value of 100 absolute inequality.

**Infant and young child feeding (IYCF)**

Includes early initiation (within one hour of birth) of exclusive breastfeeding, exclusive breastfeeding for the first six months of life, followed by nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond.

**Intermediate (Type II)**

A form of female circumcision that involves partial or total removal of the clitoris and the labia minora.

**Khat**

A stimulant drug that comes from a shrub that grows in East Africa and southern Arabia. Like chewing tobacco, leaves of the khat shrub are chewed and held in the cheek to release their chemicals. Cathinone and cathine are the stimulants in khat that make a person feel intoxicated.

**Lifetime Risk (LTR) of Maternal Mortality**

The risk of an individual woman dying from pregnancy or childbirth during her reproductive lifetime, taking into account both the probability of becoming pregnant and the probability of dying, as a result of pregnancy accumulated across a woman's reproductive years. It reflects the risk that a woman who survives to age 15 will die of maternal causes at some point during her reproductive lifespan, given current rates of maternal mortality and fertility.

**Lifetime Risk (LTR) of Pregnancy-Related Death**

This indicator is the same as the LTR, except that the calculation of this indicator includes deaths due to accidents and violence.

**Live birth**

The complete expulsion from its mother of a product of conception, regardless of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life—e.g. beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles—whether or not the umbilical cord has been cut or the placenta is attached.

**Maternal death**

The death of a woman while pregnant or within 42 days of termination of pregnancy, regardless of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

**Maternal Mortality Ratio (MMR)**

The number of women who die because of complications of pregnancy or childbearing in a given year per 100,000 live births in that year, excluding deaths due to accident or violence.

**MMRate**

The number of women who die because of complications of pregnancy or childbearing in a given year per 1,000 women of childbearing age in the population.

**Nomad**



A person with no permanent residence, who depends on livestock for livelihood, and who moves from one place to another in search of pastures and water for their livestock.

#### **Pharaonic (Type III & IV)**

A form of female circumcision that involves narrowing of the vaginal opening with the creation of a covering seal by cutting, appositioning and stitching together the labia minora or the labia majora, with or without excision of the clitoris.

#### **Postnatal care**

Is the care given to the mother and her newborn baby immediately after the birth and for the first six weeks of life.

#### **Pregnancy-Related Mortality Ratio (PRMR)**

The number of women who die because of complications of pregnancy or childbearing in a given year per 100,000 live births in that year including deaths due to accident or violence.

#### **Reproductive age for women**

Women in the childbearing age usually within the age group 15-49.

#### **Sampling**

The process of selecting certain members or a subset of the population to make statistical inferences from them and to estimate characteristics of the whole population.

#### **Sampling frame**

The list from which units are drawn for the sample. The 'list' may be an actual listing of units, or some other description of the population, such as a map from which areas will be sampled.

#### **Skilled delivery**

A child delivery assisted by an accredited health professional – such as a doctor/clinical officer or nurse/midwife/nurse – who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns.

#### **Sunna/sunni (Type I)**

A form of female circumcision, which involves the partial or total removal of the clitoris and/or the prepuce.

#### **Vaccination**

Stimulates one's immune system to produce antibodies, exactly like it would if they were exposed to the disease. After getting vaccinated, a person develops immunity to that disease, without having to get the disease first.

#### **Wealth quintile**

A measure of wealth or poverty status of the household based on the ownership of assets and the characteristics of the person's household. Household characteristics in many instances may be considered to be a better or more valid reflection of living standards than monetary income, since they capture long-term

wealth and cover both monetary and non-monetary wealth. A quintile represents information for a fifth (20%) of the population. A household is classified into a quintile based on the score where the fifth quintile represents a wealthiest household and vice versa.

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## **Chronic diseases**

### **Anaemia**

A medical condition in which the red blood cell count or haemoglobin is less than normal.

### **Arthritis**

Joint disease that causes swelling of the joints, pain, stiffness and decreased range of motion.

### **Blood pressure**

The pressure of the blood on the walls of the arteries as the heart pumps it around a body. A systolic blood pressure reading of 140 or more is high blood pressure (also called hypertension).

### **Cardiovascular (heart) disease**

Refers to conditions that involve narrowed or blocked blood vessels that can lead to a heart attack, chest pain (angina) or stroke. Other heart conditions, such as those that affect your heart's muscle, valves or rhythm, also are considered forms of heart disease

### **Cataract**

Clouding of the eye's natural lens, which lies behind the iris and the pupil. Cataract is the most common cause of loss of vision loss in people over age 40 and is the principal cause of blindness in the world.

### **Chronic back pain/spinal problem**

Pain in the back or a problem with the spine that which lasts for 3 months or more. People who have chronic back pain may have limited range of motion and/or tenderness upon touch. People with spinal problem experience pain and other symptoms, such as numbness, tingling or weakness.

### **Chronic headache**

This is headache that occurs for more than four hours on more than 15 days per month

### **Diabetes**

Often referred to as diabetes mellitus, this describes a group of metabolic diseases in which the person has high blood glucose (blood sugar), either because insulin production is inadequate, or because the body's cells do not respond properly to insulin, or both.

### **Epilepsy**

Chronic disorder, characterized by recurrent, unprovoked seizures which occur because of a sudden surge of electrical activity in the brain.

### **Inflammation/ulcers**

Sores in the lining of the rectum and colon. Ulcers form where inflammation has killed the cells that usually line



the colon, then bleed and produce pus.

### **Kidney diseases**

Affect the body's ability to clean blood, filter extra water out of blood and help control blood pressure.

### **Liver disease**

Symptoms of liver disease often include swelling of the abdomen and legs, bruising easily, changes in the colour of your stool and urine, and jaundice, or yellowing of the skin and eyes.

### **Lung disease**

Disorders that affect the lungs, the organs that allow us to breathe. The three most common lung diseases are asthma, chronic obstructive pulmonary disease (COPD), and lung cancer. Asthma is a chronic (long-term) lung disease that inflames and narrows the airways. Asthma causes recurring periods of wheezing (a whistling sound when you breathe), chest tightness, shortness of breath, and coughing. The coughing often occurs at night or early in the morning. COPD refers to chronic obstructive bronchitis and emphysema. Both diseases limit airflow into and out of the lungs and make breathing difficult. Lung cancer is a disease in which abnormal (malignant) lung cells multiply and grow without control.

### **Mental/psychological illness**

A condition that affects a person's thinking, feeling or mood. Such conditions may affect someone's ability to relate to others and function each day.

### **Prostatic hypertrophy also known as prostatic hyperplasia**

Histologic diagnosis characterized by proliferation of the cellular elements (enlargement) of the prostate. Chronic bladder outlet obstruction (BOO) secondary to BPH may lead to urinary retention, renal insufficiency, recurrent urinary tract infections, gross haematuria, and bladder calculi.

### **Sickle-cell anaemia/thalassemia**

Belongs to a group of diseases called sickle-cell diseases (SCD) that are inherited red blood cell disorders. People with SCD have abnormal haemoglobin, called haemoglobin S or sickle haemoglobin, in their red blood cells. Sickle-cell anaemia is the most common and severe kind of SCD. Characteristic features of this disorder include a low number of red blood cells (anaemia), repeated infections, and periodic episodes of pain

### **Skin disease**

A condition or disease affecting the skin. It's anything that irritates, clogs, or inflames your skin causing symptoms such as redness, swelling, burning, and itching.

### **Stroke**

Occurs when the blood supply to your brain is interrupted or reduced. This deprives your brain of oxygen and nutrients, which can cause your brain cells to die. A stroke can sometimes cause temporary or permanent disabilities, depending on how long the brain lacks blood flow and which part was affected. Complications may include: paralysis or loss of muscle

movement; difficulty talking or swallowing; memory loss or thinking difficulties; emotional problems; pain and numbness; changes in behaviour and ability for self-care.

### **Tumor**

Also known as a neoplasm, is an abnormal mass of tissue which may be solid or fluid-filled. Tumors can be benign (not cancerous), pre-malignant (pre-cancerous), or malignant (cancerous).

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## **Literacy and school attendance**

### **Gross Attendance Ratio (GAR)**

The total number of students attending a given education level, regardless of age, expressed as a percentage of the eligible official school-age population for that level in a given school year.

### **Literacy**

Is the ability to read and write, with an understanding of a short simple statement about one's everyday life.

### **Net Attendance Ratio (NAR)**

The total persons attending in a given education level who have an age that is within the age range appropriate for the level of education they are enrolled in. The NAR is expressed as a percentage of the eligible official school-age population for a particular level in a given school year corresponding with the population.

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## **Types of disability**

### **Hearing**

Hearing loss, also known as hearing impairment, is a partial or total inability to hear. Hearing loss may be caused by genetics, ageing, exposure to noise, some infections, birth complications, trauma to the ear, and certain medications or toxins.

### **Learning**

A learning disability is a neurological disorder. In simple terms, a learning disability results from a difference in the way a person's brain is "wired." Children with learning disabilities are as smart as or smarter than their peers. But they may have difficulty reading, writing, spelling, reasoning, recalling and/or organizing information if left to figure things out by themselves or if taught in conventional ways.

### **Mental**

A mental disorder, also called a mental illness or psychiatric disorder is a behavioural or mental pattern that may cause suffering or a poor ability to function in life. Persons with mental disorders often have significant changes in thinking, emotion and/or behaviour; distress and/or problems functioning in social, work or family activities.



### Mobility

Mobility impairment refers to the inability of a person to use one or more of his/her extremities, or a lack of strength to walk, grasp, or lift objects. The use of a wheelchair, crutches, or a walker may be utilized to aid in mobility.

### Self-care

Self-care disability refers to a person with a physical, mental, or emotional condition lasting six months or more, who has difficulty in doing any of the activities such as dressing, bathing, or getting around inside the home.

### Sight

Visual impairment (vision impairment, vision disability) is a decreased ability to see to a degree that causes problems not fixable by usual means, such as glasses or medication. Visual impairment can be due to disease, trauma, or congenital or degenerative conditions. Terms such as "partially sighted", "low vision", "legally blind" and "totally blind" are used to describe visual impairments.

### Speech

Speech disorders or speech impediments are a type of communication disorder where 'normal' speech is disrupted. This can mean stuttering, lisps, etc. Someone who is unable to speak due to a speech disorder is considered mute.

## Types of toilet facilities

### Flush/pour flush toilet

A flush toilet uses a cistern or holding tank for flushing water and has a water seal, which is a U-shaped pipe, below the seat or squatting pan that prevents the passage of flies and odours.

A pour flush toilet uses a water seal, but unlike a flush toilet, it uses water poured by hand for flushing (no cistern is used).

### Open field/defecation

Open defecation is the practice of people defecating outside in an open field or in the bush and not into a designated toilet.

### Piped sewer system

A system of sewer pipes (also called sewerage) that is designed to collect human excreta (faeces and urine) and wastewater and remove them from the household environment. Sewerage systems consist of facilities for collection, pumping, treating and disposing of human excreta and wastewater.

### Piped to pit latrine

A system that flushes excreta to a hole in the ground.

### Piped to septic tank

An excreta collection device consisting of a water-tight settling tank normally located underground, away from the house or toilet.

### Piped to somewhere else

A system in which the excreta is deposited in or nearby the household environment in a location other than a sewer, septic tank, or pit, e.g. excreta may be flushed to the street, yard/plot, drainage ditch or other location.

### Pit latrine

Excreta are deposited without flushing directly into a hole in the ground.

### Pit latrine with slab

A dry pit latrine whereby the pit is fully covered by a slab or platform that is fitted either with a squatting hole or seat. The slab or platform should be solid and can be made of any type of material (such as concrete, logs with earth or mud, or cement). The slab or platform should adequately cover the pit so that pit contents are not exposed other than through the squatting hole or seat.

### Pit latrine without slab/open pit

A latrine without a squatting slab, platform or seat. An open pit is a rudimentary hole in the ground where excreta is collected.

### Ventilated improved pit (VIP) latrine

A dry pit latrine ventilated by a pipe extending above the latrine roof. The open end of the vent pipe is covered with gauze mesh or fly-proof netting.

If the vent pipe is not covered by a gauze mesh or fly-



proof netting, the facility should be classified as a pit latrine with slab not a VIP latrine. The inside of the VIP latrine is kept dark. If the door of the VIP super-structure is missing so that it is no longer dark inside the latrine, the facility should be classified as a pit latrine with slab, not a VIP latrine.

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## Water sources

### Bottled water

Water that is bottled and sold to the household in bottles.

### Cart with small tank

Water is obtained from a provider who transports water into a community using a cart and then sells the water. The means for pulling the cart may be motorized or non-motorized (for example, a donkey).

### Piped into dwelling

Pipe connected with in-house plumbing to one or more taps, e.g. in the kitchen and bathroom. Sometimes called a house connection.

### Piped to yard/plot

Pipe connected to a tap outside the house in the yard or plot. Sometimes called a yard connection.

### Piped to neighbour

Pipe connected to neighbour's dwelling, yard or plot.

### Protected dug well

A dug well that is (1) protected from runoff water through a well lining or casing that is raised above ground level and a platform that diverts spilled water away from the well and (2) covered so that bird droppings and animals cannot fall down the hole. Both conditions must be observed for a dug well to be considered as protected.

### Protected spring

A spring protected from runoff, bird droppings, and animals by a "spring box" which is typically constructed of brick, masonry, or concrete and is built around the spring so that water flows directly out of the box into a pipe without being exposed to outside pollution.

### Public tap or standpipe

Public water point from which community members may collect water. A standpipe may also be known as a public fountain or public tap. Public standpipes can have one or more taps and are typically made of brick-work, masonry or concrete.

### Rainwater

Rain that is collected or harvested from surfaces by roof or ground catchment and stored in a container, tank or cistern.

### Tanker truck

Water is obtained from a provider who uses a truck to transport water into the community. Typically the

provider sells the water to households.

### Tube well or borehole

A deep hole that has been bored or drilled with the purpose of reaching ground water supplies. Water is delivered from a tube well or borehole through a pump which may be human, animal, wind, electric, diesel or solar-powered.

### Unprotected dug well

A dug well which is (1) unprotected from runoff water; (2) unprotected from bird droppings and animals; or (3) both.

### Unprotected spring

A spring that is subject to runoff and/or bird droppings or animals. Unprotected springs typically do not have a "spring box".

### Surface water

Water located above ground and includes rivers, dams, lakes, ponds, streams, canals, and irrigation channels.

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## Water treatment

### Adding bleach/chlorine

Use of free chlorine to treat drinking water. Free chlorine may be in the form of liquid sodium hypochlorite, solid calcium hypochlorite, or bleaching powder.

### Boiling

Heating water using fuel.

### Let it stand and settle

Holding or storing water undisturbed and without mixing long enough for larger particles to settle out or sediment by gravity.

### Solar disinfection

Exposing water, which is stored in buckets, containers, or vessels, to sunlight.

### Straining water through a cloth

Pouring water through a cloth which acts as a filter for collecting particulates from the water.

### Using a water filter (ceramic/sand/composite/etc.)

Running water through media to remove particles and at least some microbes from water. Media used in filtering systems usually include ceramic, sand and composite.



# APPENDIX A



## SAMPLING DESIGN

The Puntland Health and Demographic Survey (PLHDS 2020) was designed to provide estimate of maternal mortality and estimates for fertility, child mortality and other relevant indicators at national and regional level, and separately for urban, rural and nomadic places of residence. The target population were women in the reproductive ages (15 to 49 years of age) and children who are under five years of age and reside in households in the country at the time of the survey.

### Sampling Frame

The sampling frame required to achieve the objective of PLHDS is a complete list of households in the country. The households form Ultimate Sampling Units (USUs), allowing probability sampling to be implemented. The existence of such a list of households, a list in which every household is associated with one and only one household of the list, is the cornerstone of probability sampling. The fact that there was no population and housing census implemented in Puntland ever, meant that there was neither complete list of households nor statistical units often referred to as enumeration areas (EAs) available to be used as a sampling frame. The PLHDS therefore begun with the construction of a sampling frame for urban, rural and nomadic places of residence.

### Constructing Sampling Frame for Urban and Rural areas

Through the use of up-to-date high-resolution satellite imagery, as well as on-the-ground knowledge of the digitizing team, all dwelling structures in urban and rural places of residence/ areas were digitized. Enumeration Areas were formed on-screen through a spatial count of dwelling structures in a Geographic Information System (GIS) software. Thereafter, a sample ground verification of the digitized structures was carried out for large urban and rural areas and necessary adjustments made to the sampling frame. Each of the created EA had a minimum of 50 and a maximum of 149 dwelling structures. A total of 2,923 such EAs, also referred to as primary sampling units (PSUs), were digitized;

1,869 in urban areas and 1,054 in rural areas. However, because of accessibility constraints and some of them became less than 50 households, not all digitized areas were included in the final sampling frame, 2,806 PSU (1,869 in urban and 937 in rural) formed the final frame.

In the first stage, a selection of 35 EAs in every stratum of every design domain was carried out using probability proportional to size (PPS) sampling of digitized dwelling structures. The design domain coincided with the five regions, which are the country's first-level administrative divisions. Listing of households was carried out in each of the 35 selected EAs to obtain the total number of households. During listing, information on births and deaths was obtained through the maternal mortality questionnaire. The purpose for collecting these data from such a large number of PSUs (with estimated 80 households per PSU) was to enable the estimation of the Maternal Mortality Ratio (MMR) through a direct which requires a big sample. The data collected in this first phase was edited and a summary of households listed per PSU formed the sampling frames for the second phase. In the second stage, 10 PSUs were sampled; out of the possible 35 that were listed, using probability proportional to the number of listed households.

### Constructing Sampling Frame for Nomads

The sampling frame for the nomadic population was constructed using information provided by Nomadic Link Workers (NLWs) and Community gate keepers (Clan elders). These NLWs are associated with nomads through clan affiliation and have linkages with clan elders who reside in rural villages that are frequented by nomads to buy essential commodities and to sell their livestock and livestock products. The NLWs were contacted and asked to provide information on the temporary nomadic settlements (TNS), which they were responsible for. The information included TNS names, estimated number of households in these TNSs, seasons of the year when the TNS is in use, and location of the TNS from the nearest settlement (village), as well as their own telephone numbers. This list of TNS formed the sampling frame for nomads with



estimated number of households in each TNS being the measure of size.

The nomadic frame was therefore comprised of an updated list of temporary nomadic settlements (TNS) obtained from nomadic link workers (NLWs) who are tied to these nomadic settlements. A total of 920 TNS formed the PLHDS nomadic sampling frame. During data collection in the nomadic areas, households were listed in each TNS as part of verifying the list of households, a day earlier than the day of enumeration. The main reason of listing was to obtain current and complete list of households. During listing, coordinates of all household structures were recorded. A sample of 30 households was then selected by the listing team (using the same method as in urban and rural areas) and given to the supervisors of the enumerating team on their first day of enumeration. Thereafter, supervisors allocated households to be interviewed to enumerators. The main survey enumerating team collected these data from the 30 sampled households while the listing team collected from all the remaining households in the TNS. All households in each of the allocated 10 PSUs were serialized based on their location in the PSU and 30 of these households were selected systematically for DHS type survey. The serialization was done to ensure that households selected for interview would distributed throughout the PSU.

Nomadic households stay temporarily in certain locations referred to as temporary nomadic settlements (TNS) for as long as pasture and water are available. The duration of stay in these locations is mainly dependent on the amount of rain that fall within that season and how long the season will last. The survey therefore had to be undertaken within that window of opportunity. Nomadic households start moving to a different location as soon as pasture and water are depleted. With the long rains, they would be stationed in one location between 60 to 90 days and for the short rains 45 days. The remaining dry seasons, they move far away including across other regions and neighbouring countries in search of water and pasture.

## Adjustments to the Sampling Frame

The number of households in each stratum in the sampling frame was adjusted based on findings from household listing exercise. The adjustment factor, at the stratum level, was obtained by dividing the total number of listed households in the stratum by the total number of digitized dwelling structures in the stratum which formed the original sampling frame. The adjusted sampling frame was then used in computing the strata sampling fractions and hence strata design weights.

## Sample Design

The PLHDS followed a stratified multi-stage probability cluster sample design. The sample design in urban and rural was three-stage stratified cluster sample design, while in nomadic areas the design was a two-stage stratified cluster sample design. The primary sampling units (PSUs) were selected with a probability proportionate to the number of dwelling structures which constituted the sampling frame. The second-stage sampling units (SSUs), for rural and urban areas, were selected with a probability proportionate to the number of listed households which constituted the frame. The ultimate sampling units (USUs), for rural, urban and nomadic areas were systematically selected from listed households in the cluster. Each administrative region was stratified into urban, rural and nomadic areas, yielding a total of 15 sampling strata.

## Sample Allocation

To ensure that the survey precision is comparable across regions, PSUs were allocated equally to all regions. In the first stage, a total of 403 PSUs were selected from 15 strata with 173 PSUs from urban, 160 PSUs from rural and 70 PSUs from nomadic areas, representing about 13% of the total frame of all PSUs. In the second stage, a total of 60 PSUs were allocated to urban and rural strata each and the same 70 PSUs to nomadic areas yielding a total of 170 PSUs. In the third stage for urban and rural and second stage for nomadic areas, 30 households were allocated to each PSU.



## Sample selection in urban and rural areas

In the first stage, a selection of 35 PSUs (EAs) in every stratum was carried out using PPS of dwelling structures. Listing of households was conducted and hence the number of households in each of the sampled 35 PSUs in each stratum were obtained. In the second stage 10 SSUs were selected, from the 35 listed PSUs, using PPS to the listed households. Finally, a systematic selection of 30 households from each of the 10 PSUs listed was done using the DHS Program excel sheet template for household selection.

## Sample selection in nomadic areas

In nomadic areas, a sample of 10 EAs (in this case TNS) were selected from each nomadic stratum, with probability proportional to the number of estimated households. A complete listing of households was carried out in the selected TNS followed by selection of 30 households for the main survey interview. In those TNS with 30 or less households, all households were interviewed for the main survey and the MMR questionnaire was administered. All eligible ever-married women aged 12 to 49 and never-married women aged 15 to 49 were interviewed in the selected households, while the household questionnaire was administered to all households selected. All households in each sampled TNS were administered the maternal mortality questionnaire.

## First stage sample allocation and selection

- Equally allocate 35 PSUs to urban and rural areas and 10 TNS to all 15 strata.
- PSUs were selected using Probability Proportional to Size (PPS) sampling of digitized dwelling structures
- All households in the selected PSUs were listed and additional information on births and deaths during the 24 months preceding the survey was obtained for use in computing the maternal mortality ratio (MMR).

## Second stage sample allocation and selection

- Equally allocate 10 SSUs to all 15
- Secondary sampling units (SSUs) were selected using PPS sampling of listed households

## Third stage sample allocation and selection (2nd stage in nomadic areas)

Thirty households were selected systematically and household questionnaire administered. Further, in all the selected households, an ever-married questionnaire was administered to all ever married women aged 12-49 and never-married questionnaire administered to never-married women aged 15-49. In addition, information was obtained from children under the age of five.

## Design Weights and sampling weights

Design weights and sampling (survey) weights were computed for every household and ever-married women and never-married women selected to participate in the PLHDS 2020. A design weight is the inverse of probability of selecting a housing unit to be interviewed. Sampling weight of a household is the design weight corrected for non-response including other adjustments where necessary. Design weights for each stage of the sample selection were computed as shown in the following steps;

**First Stage: Selection of 35 PSUs from every urban stratum and rural stratum; and 10 PSUs from nomadic in stratum,**

$PSU_h$  = number of PSUs to be sampled in stratum  $h$ ; and

$MOS_{hi}$  = number of dwelling structures for PSU<sub>*i*</sub> in stratum  $h$ .

The probability of selecting PSU<sub>*i*</sub> in stratum  $h$  is



$$P_{hi} = \frac{m_h \times MOS_{hi}}{\sum_{i \in h} MOS_{hi}}$$

**Second Stage: Selection of 10 SSUs from every urban and rural stratum from the 35 listed PSUs only,**

Let

$q$  = total number of SSUs to be sampled;

$MOS_{hij}$  = number of listed households for SSU<sub>*j*</sub> of PSU<sub>*i*</sub> in stratum *h*; and

$I_{SSU}$  = sampling interval for the selection of SSUs.

The conditional probability (CP) of selecting SSU<sub>*j*</sub> from PSU<sub>*i*</sub> in stratum *h* is;

$$CP_{hij} = \frac{q \times \left(\frac{MOS_{hij}}{P_{hi}}\right)}{\sum_{hij} \left(\frac{MOS_{hij}}{P_{hi}}\right)} = \frac{MOS_{hij}/P_{hi}}{I_{SSU}}$$

Design weight for enumeration areas:  
 $DW_{2ea} = 1/CP_{hij}$

**Third and last stage: Selection of 30 households from each PSU using DHS Program excel sheet template,**

let

$d_h$  = total number of housing units to be sampled within the stratum *h*;

$D_h$  = total number of housing units in the stratum *h* sampling frame;

Let,  $r = d_h/D_h$ , then the conditional probability of selecting housing unit *k* from SSU *j* of PSU<sub>*i*</sub> in stratum *h* is

$$CP_{hijk} = \frac{r}{P_{hi} \times CP_{hij}} = \frac{r \times I_{SSU}}{MOS_{hij}}$$

The overall probability of selecting housing unit *k* in SSU *j* of PSU *i* of stratum *h* is

$$P_{hijk} = P_{hi} \times CP_{hij} \times CP_{hijk} = r$$

The design weight for each household in cluster *i* of stratum *h* is the inverse of its overall selection probability:

$$W_{hijk} = 1/P_{hijk} = 1/r$$

Adjustment for non-response and computation of sampling weights

The design weight calculated above is based on sample design parameters. If there was no non-response at the cluster level, at the household level, at the individual level, or under-coverage, the design weight is enough for all analyses, for both household indicators and individual indicators. However, non-response was encountered in SHDS as is inevitable in such surveys. The response behaviour was different for clusters, households and individuals and all had to be accounted for.

The idea of correcting for unit non-response is to calculate a response rate for each homogeneous response group, then inflate the design weight by dividing it by the response rate for each response group. SHDS used the sampling stratum as the response group because the stratification was achieved by regrouping homogeneous sampling units in a single stratum (urban, rural or nomadic).

The following steps explain how the sampling weight was calculated.

**1. Primary Sampling Unit/Cluster level response rate**

Let  $q_h$  be the number of PSUs for the first stage and/or SSUs for the second stage selected in stratum *h*; let  $*q_h$  be the number of clusters (PSUs/SSUs) interviewed. The cluster level response rate in stratum *h* is therefore;

$$R_{CL} = *q_h/q_h$$

## 2. Household level response rate

Let  $k_{hj}$  be the number of households found, as recorded in the household questionnaire, in cluster  $j$  of stratum  $h$ ; let  $*k_{hj}$  be the number of households interviewed in the cluster. The household response rate in stratum  $h$  is calculated by;

$$R_{HH} = \sum d_{hj} * khj / \sum d_{hj} khj$$

where  $d_{hj}$  is the design weight of cluster  $j$  in stratum  $h$ ; the summation is over all clusters in the stratum  $h$ .

## 3. Individual response rate

Let  $h_{jl}$  be the number of eligible women found in cluster  $j$  of stratum  $h$ ; let  $*h_{jl}$  be the number of individuals interviewed. The individual response rate in stratum  $h$  is calculated as;

$$R_{ID} = \sum d_{hj} * hjl / \sum d_{hj} hjl$$

where  $d_{hj}$  is the design weight of cluster  $j$  in stratum  $h$ ; the summation is over all clusters in the stratum  $h$ .

The household sampling weight of cluster  $j$  in stratum  $h$  is calculated by dividing the household design weight by the product of the cluster response rate and the household response rate, for each of the sampling stratum:

$$*d_{hj} = d_{hj} / (R_{CL} * R_{HH})$$

The individual sampling weight of cluster  $j$  in stratum  $h$  is calculated by dividing the household sampling weight by the individual response rate, or equivalently, by dividing the household design weight by the product of the cluster response rate, the household response rate and the individual response rate, for each of the sampling strata:

$$d_{hj\_ID} = \frac{*d_{hj}}{R_{ID}} = \frac{d_{hj}}{(R_{ID} * R_{HH} * R_{CL})}$$

## Post-Stratification

The resulting sampling weight was adjusted for target population constructed by the SHDS team. The sampling frame had excluded areas that were not accessible, areas that had very few dwelling structures according to the satellite image and TNS with very few reported households. The adjusting factors, at the stratum level, were obtained by dividing the stratum target population by stratum sampling frame population. This ensured that the sum of the final weights equal is equal to the target population.

## Normalization

Lastly, the survey weights were normalized in order to give a total number of weighted cases that equals the total number of unweighted cases at the national level. Normalization was done by dividing the survey weight by the mean of the survey weight for the household weight and for the individual woman. The normalized weights are relative weights, which are valid for estimating means, proportions and ratios.

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**Table A.1** Household Distribution by region

Distribution of the households in the sampling frame by region and residence, PLHDS 2020

Regions	Households in the frame				Percentage of Totals to households	Percent Urban
	Urban	Rural	Nomadic	Total		
Sool	16,601	11,999	25,370	53,970	16.3	30.8
Sanaag	17,603	11,526	35,519	64,648	19.5	27.2
Bari	44,091	27,737	9,698	81,526	24.5	54.1
Nugaal	24,659	7,254	4,216	36,129	10.9	68.3
Mudug	29,730	20,685	45,418	95,833	28.9	31.0
<b>Total</b>	<b>132,684</b>	<b>79,201</b>	<b>120,221</b>	<b>332,106</b>	<b>100.0</b>	<b>40.0</b>

**Table A.2** Enumeration areas

Distribution of the enumeration areas (Temporary nomadic settlements) in the sampling frame and average number of households per enumeration area by region and residence, PLHDS 2020

Regions	Number of Enumeration areas in frame				Average number of Enumeration areas in frame			
	Urban	Rural	Nomadic	Total	Urban	Rural	Nomadic	Total
Sool	141	118	275	534	118	102	92	101
Sanaag	152	106	343	601	116	109	104	108
Bari	342	254	324	920	129	109	30	89
Nugaal	193	66	102	361	128	110	41	100
Mudug	230	171	294	695	129	121	154	138
<b>Total</b>	<b>1,058</b>	<b>715</b>	<b>1,338</b>	<b>3,111</b>	<b>125</b>	<b>111</b>	<b>90</b>	<b>107</b>

**Table A.3** First stage Sample allocation of clusters and households

Sample allocation of clusters and households for MMR survey and household listing by region, according to residence, PLHDS 2020

Regions	Allocation of clusters				Allocation of households			
	Urban	Rural	Nomadic	Total	Urban	Rural	Nomadic	Total
Sool	34	25	20	79	2022	1578	800	4400
Sanaag	35	35	20	90	2,503	2,383	834	5,720
Bari	35	34	10	79	3,244	2,243	350	5,837
Nugaal	35	35	10	80	3,163	2,708	439	6,310
Mudug	34	31	10	75	2,981	2,447	384	5,812
<b>Total</b>	<b>173</b>	<b>160</b>	<b>70</b>	<b>403</b>	<b>13,913</b>	<b>11,359</b>	<b>2,807</b>	<b>28,079</b>

**Table A.4** Second stage Sample allocation of clusters and households

Sample allocation of clusters and households for mian survey by region, according to residence, PLHDS 2020

Regions	Allocation of clusters				Allocation of households			
	Urban	Rural	Nomadic	Total	Urban	Rural	Nomadic	Total
Sool	10	10	20	40	324	420	585	1,329
Sanaag	10	10	20	40	387	431	582	1,400
Bari	10	10	10	30	298	300	292	890
Nugaal	10	10	10	30	294	283	302	879
Mudug	10	10	10	30	300	299	294	893
<b>Total</b>	<b>50</b>	<b>50</b>	<b>70</b>	<b>170</b>	<b>1,603</b>	<b>1,733</b>	<b>2,055</b>	<b>5,391</b>

**Table A.5** Sample allocation of completed women interviews

Sample allocation of expected number of completed women interviews by region, according to residence, SLHDS 2020

Regions	Ever-married women 15-49				Never-married women 15-49			
	Urban	Rural	Nomadic	Total	Urban	Rural	Nomadic	Total
Sool	193	266	423	882	178	82	112	372
Sanaag	284	315	379	978	170	136	93	399
Bari	201	196	192	589	106	66	86	258
Nugaal	201	181	206	588	123	70	57	250
Mudug	258	210	223	691	196	117	106	419
<b>Total</b>	<b>1,137</b>	<b>1,168</b>	<b>1,423</b>	<b>3,728</b>	<b>773</b>	<b>471</b>	<b>454</b>	<b>1,698</b>



# APPENDIX B

## Estimates of Sampling Errors

Sampling errors are important data quality parameters which give measure of the precision of the survey estimates. They aid in determining the statistical reliability of survey estimates.

The estimates from a sample survey are affected by two types of errors: non-sampling errors and sampling errors. Non-sampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the Somali Health and Demographic Survey (SHDS 2020) to minimise this type of error, non-sampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the SHDS 2020 is only one of many samples that could have been selected from the same population, using the same design and sample size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability among all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95% of all possible samples of identical size and design.

If the sample of respondents had been selected by simple random sampling, it would have

been possible to use straightforward formulas for calculating sampling errors. However, the SHDS 2020 sample was the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. The variance approximation procedure that account for the complex sample design used R program was estimated sampling errors in SHDS which is Taylor series linearization. The non-linear estimates are approximated by linear ones for estimating variance. The linear approximation is derived by taking the first-order Tylor series approximation. Standard variance estimation methods for linear statistics are then used to estimate the variance of the linearized estimator.

The Taylor linearisation method treats any linear statistic such as a percentage or mean as a ratio estimate,  $r = y/x$ , where  $y$  represents the total sample value for variable  $y$  and  $x$  represents the total number of cases in the group or subgroup under consideration. The variance of  $r$  is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1-f}{x^2} \sum_{h=1}^H \left[ \frac{n_h}{n_h-1} \left( \sum_{i=1}^{n_h} z_{hi}^2 - \frac{z_h^2}{n_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}, \text{ and } z_h = y_h - rx_h$$

where  $h$  represents the stratum, which varies from 1 to  $H$ ;

$n_h$  is the total number of clusters selected in the  $h$ th stratum;

$y_{hi}$  is the sum of the weighted values of variable  $y$  in the  $i$ th cluster in the  $h$ th stratum;

$x_{hi}$  is the sum of the weighted number of cases in the  $i$ th cluster in the  $h$ th stratum; and

$f$  is the overall sampling fraction, which is so small that it is ignored.



Sampling errors for the Benadir are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole. For each variable, the type of statistic (proportion) and the base population are given in Table B.1. Tables B.2 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) cases, the relative standard error (SE/R), and the 95% confidence limits (R $\pm$ 2SE) for each variable.

The confidence interval (e.g., as calculated for Proportion with improved water) can be interpreted as follows: the overall proportion of households' access to improved water for all interviewed households from Benadir sample is 0.977 (97.7%) and its standard error is 0.010. Therefore, to obtain the 95% confidence limits, one adds and subtracts twice the standard error to the sample estimate, that is, 0.977  $\pm$  2 x 0.010. There is a high probability (95%) that

the true proportion of households access to improved water services for all households is between 0.963 (96.3%) and 0.991 (99.1%).

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**Table B.1** List of selected variables for sampling errors, PLHDS 2020

Variable	Estimate	Base population
		Households
Proportion in Urban areas	Proportion	Total households
Proportion in rural areas	Proportion	Total households
Proportion in nomadic areas	Proportion	Total households
Proportion with improved water sources	Proportion	Total households
Proportion with unimproved water sources	Proportion	Total households
Proportion with water on premises	Proportion	Total households
Proportion with less than 30 minutes to a drinking water source	Proportion	Total households
Proportion with 30 minutes or longer to a drinking water source	Proportion	Total households
Proportion with basick drinking water service	Proportion	Total households
Proportion with limited drinking water service	Proportion	Total households
Proportion with flushed to piped sewer system	Proportion	Total households
Proportion with flush to septik tank	Proportion	Total households
Proportion with flush to pit latrine	Proportion	Total households
Proportion with flush to somewere else	Proportion	Total households
Proportion with ventilated improved pit latrine	Proportion	Total households
Proportion with pit latrine with slab	Proportion	Total households
Proportion with pit latrine without slap/open latrine	Proportion	Total households
Proportion with bucket toilet	Proportion	Total households
Proportion with no facility /bush/Field	Proportion	Total households
Proportion with other facility	Proportion	Total households
Proportion with electricity for lighting	Proportion	Total households
Proportion with solar for lighting	Proportion	Total households
Proportion using firewood for lighting	Proportion	Total households
Proportion torch for lighting	Proportion	Total households
Proportion with electricity connection	Proportion	Total households
Proportion with No education	Proportion	Total women
Proportion with Primary education	Proportion	Total women
Proportion with Secondary	Proportion	Total women
Proportion with Higher education	Proportion	Total women
Proportion with Literacy	Proportion	Total women
Proportion with Currently married	Proportion	Total women
Proportion with never married	Proportion	Total women
Proportion with formerly married	Proportion	Total women



Table B.2 Sampling errors for all samples, PLHDS 2020

Variable	Value (R)	Standard error (SE)	Number of cases		Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)		R-2SE	R+2SE
Proportion in Urban areas	0.35	0.005	1630	1909	0.014	0.34	0.36
Proportion in rural areas	0.32	0.006	1761	1740	0.019	0.308	0.332
Proportion in nomadic areas	0.33	0.004	2055	1797	0.012	0.322	0.338
Proportion with improved water sources	0.555	0.015	2649	3025	0.027	0.525	0.585
Proportion with unimproved water sources	0.445	0.015	2797	2421	0.034	0.415	0.475
Proportion with water on premises	0.487	0.018	2258	2652	0.037	0.451	0.523
Proportion with less than 30 minutes to a drinking water source	0.288	0.016	1784	1566	0.056	0.256	0.32
Proportion with 30 minutes or longer to a drinking water source	0.198	0.008	1189	1076	0.040	0.182	0.214
Proportion with basick drinking water service	0.478	0.014	2173	2604	0.029	0.45	0.506
Proportion with limited drinking water service	0.066	0.006	387	359	0.091	0.054	0.078
Proportion with flushed to piped sewer system	0.036	0.004	145	194	0.111	0.028	0.044
Proportion with flush to septik tank	0.044	0.005	176	238	0.114	0.034	0.054
Proportion with flush to pit latrine	0.256	0.011	1031	1362	0.043	0.234	0.278
Proportion wih flush to somewhere else	0.014	0.002	60	76	0.143	0.01	0.018
Proportion with ventilated improved pit latrine	0.056	0.006	322	298	0.107	0.044	0.068
Proportion with pit latrine with slab	0.081	0.006	487	432	0.074	0.069	0.093
Proportion with pit latrine without slap/open latrine	0.111	0.009	603	593	0.081	0.093	0.129
Proportion with bucket toilet	0.009	0.002	65	45	0.222	0.005	0.013
Proportion with no facility /bush/Field	0.373	0.013	2282	1989	0.035	0.347	0.399
Proportion with Other facility	0.01	0.002	71	57	0.200	0.006	0.014
Proportion with electricity for lighting	0.321	0.025	1477	1707	0.078	0.271	0.371
Proportion with solar for lighting	0.12	0.009	651	639	0.075	0.102	0.138
Proportion using firewood for lighting	0.034	0.004	201	180	0.118	0.026	0.042
Proportion torch for lighting	0.518	0.02	2925	2757	0.039	0.478	0.558
Proportion with electricity connection	0.315	0.025	1482	1716	0.079	0.265	0.365
Proportion with No education	0.074	0.009	114	114	0.122	0.056	0.092
Proportion with Primary education	0.565	0.021	895	873	0.037	0.523	0.607
Proportion with Secondary education	0.266	0.015	391	411	0.056	0.236	0.296
Proportion with Higher education	0.095	0.013	141	147	0.137	0.069	0.121
Proportion with Literacy	0.311	0.015	1638	1644	0.048	0.281	0.341
Proportion with Never married	0.323	0.017	1698	1751	0.053	0.289	0.357
Proportion with Currently married	0.583	0.016	3253	3161	0.027	0.551	0.615
Proportion with formerly married	0.095	0.009	475	514	0.095	0.077	0.113





# APPENDIX C

**Table C.1** Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), PLDHS 2020

Age	Male		Female		Age	Male		Female	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
0	563	3.7	544	3.3	36	57	0.4	100	0.6
1	570	3.7	523	3.2	37	41	0.3	74	0.5
2	651	4.3	640	3.9	38	87	0.6	163	1.0
3	657	4.3	710	4.3	39	48	0.3	76	0.5
4	682	4.5	649	4.0	40	500	3.3	290	1.8
5	681	4.5	630	3.8	41	34	0.2	23	0.1
6	679	4.5	641	3.9	42	69	0.5	46	0.3
7	570	3.7	573	3.5	43	31	0.2	30	0.2
8	621	4.1	575	3.5	44	18	0.1	17	0.1
9	481	3.2	498	3.0	45	192	1.3	142	0.9
10	584	3.8	563	3.4	46	25	0.2	18	0.1
11	388	2.6	392	2.4	47	10	0.1	21	0.1
12	539	3.5	511	3.1	48	42	0.3	28	0.2
13	412	2.7	470	2.9	49	17	0.1	18	0.1
14	381	2.5	460	2.8	50	335	2.2	340	2.1
15	356	2.3	436	2.7	51	21	0.1	76	0.5
16	347	2.3	388	2.4	52	39	0.3	105	0.6
17	293	1.9	349	2.1	53	20	0.1	46	0.3
18	369	2.4	432	2.6	54	18	0.1	30	0.2
19	207	1.4	293	1.8	55	93	0.6	128	0.8
20	351	2.3	404	2.5	56	36	0.2	33	0.2
21	110	0.7	149	0.9	57	18	0.1	17	0.1
22	159	1.0	204	1.2	58	20	0.1	21	0.1
23	121	0.8	204	1.2	59	18	0.1	17	0.1
24	100	0.7	160	1.0	60	253	1.7	237	1.4
25	274	1.8	353	2.2	61	20	0.1	19	0.1
26	101	0.7	161	1.0	62	14	0.1	19	0.1
27	107	0.7	199	1.2	63	14	0.1	16	0.1
28	164	1.1	261	1.6	64	8	0.1	15	0.1
29	72	0.5	135	0.8	65	54	0.4	67	0.4
30	432	2.8	466	2.8	66	4	0.0	6	0.0
31	57	0.4	65	0.4	67	3	0.0	9	0.1
32	113	0.7	147	0.9	68	5	0.0	13	0.1
33	59	0.4	101	0.6	69	9	0.1	14	0.1
34	56	0.4	69	0.4	70+	431	2.8	489	3.0
35	295	1.9	294	1.8	Total	15206	100.0	16412	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.



**Table C.2** Age distribution of eligible and interviewed women

De facto household population of women age 10-54, number and percent distribution of interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by 5-year age groups, PLHDS 2020

Age Group	Household population of women age 10-54	interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percentage	
10-14	2396	NA	NA	
15-19	1898	1544	28.8	81.3
20-24	1121	951	17.7	84.8
25-29	1109	954	17.8	86.0
30-34	848	744	13.9	87.7
35-39	707	618	11.5	87.4
40-44	406	344	6.4	84.7
45-49	227	204	3.8	89.9
50-54	597	NA	NA	NA
15-19	6316	5359	100.0	84.8

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of women and interviewed women are household weights. Age is based on the Household Questionnaire. NA = Not applicable





# APPENDIX D



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- Shamsa Abdullahi Mohamed: Supervisor
- Sabirin Abdisahal Mohamed: Supervisor
- Saida Aden Said: Enumerator
- Fadumo Ahmed Isse: Enumerator
- Dahabo Mohamud Abdirahman: Supervisor
- Deqa Hassan Ali: Enumerator
- Muhubo Abdulaziz Muhumed: Enumerator
- Bisharo Sahal Mohamed: Enumerator
- Maymun Abdirahman ali: Enumerator
- Fadumo Ahmed Jama: Enumerator
- Fardowso Ahmed Mohamed: Enumerator

- Ayan Mohamed Farah: Enumerator
- Jamad Farah Said: Enumerator
- Fartun Abdi Ali: Enumerator
- Miski Osman Mohamoud: Supervisor
- Maryan Abdirizak Warsame: Supervisor
- Ayan Mohamed Hassan: Enumerator
- Naima Ahmed Abdalla: Enumerator
- Awo Mohamoud Jama: Supervisor
- Sabad Abdirahman Warsame: Supervisor
- Sumayo Mohamud Ismail: Enumerator
- Sahro Mohamed Farah: Enumerator
- Nasteho Abdirizak Abshir: Enumerator
- Fowsio Mohamed Salah: Enumerator
- Asia Abdirahman Husein: Enumerator
- Fardawsa Mohamed Warsame: Enumerator
- Fardowsa Abdulkadir Hersi: Enumerator
- Fartuun Mohamed Abdullahi: Enumerator
- Maryam Hassan farah: Enumerator
- Sadia Abdissamad Abdille: Enumerator
- Najma Farah Jama: Enumerator
- Asia Dahir Mohamed: Enumerator
- Muna Abshir Mohamed: Enumerator
- Abdiweli Mohamed Adan: Supervisor
- Elmi Omar Haji Elmi : Supervisor
- Said Farah Bayr: Supervisor
- Jama Hassan Darood: Supervisor
- Mohamed Abdullahi Qasim: Supervisor
- Yaqub Jama Hirsi: Administrative Assistant

## FIELDWORK: MMR AND NOMADIC SURVEY

- Mohamed Said Hay: Supervisor
- Cabdiqafaar Abdicasiis Cabdiqaadir: Enumerator
- Samsam Abdirashid Mohamed: Enumerator
- Cabdirisaaq Maxamed Moxamud: Supervisor
- Samatar Saeed Nur: Enumerator
- Arwo abdikadir Mohamoud: Enumerator
- Fadumo Aden Hussien: Enumerator
- Aisha Hamud Mohamed: Supervisor
- Fowsiyo Mohamoud Ali: Enumerator
- Canab Cali Shire: Enumerator
- Ayduurus Mohamed adan: Supervisor
- Farhiyo Jama Nour: Enumerator
- Mohamed Omar Artan: Supervisor
- Husein Osman Hassan: Enumerator
- Ahmed Abdikarim Mohamed: Enumerator
- Mukhtar Abdullahi Cartan: Enumerator
- Shaakir Jama Mohamed: Enumerator
- Mohamed Abdissamad Awed: Supervisor
- Abditafah Mohamed Abdi: Enumerator
- Abdirahman Jama Shire: Enumerator
- Mohamoud Ibrahim Gure: Supervisor
- Sadik Abdulkadir Yusuf: Supervisor
- Faatima Ahmed Jama: Enumerator



- Mohamed Elmi Ali : Enumerator
- Mohamed Abdikadir Waberi: Enumerator
- Ifrah Abdirishiid Farah: Enumerator
- Abdikarim Mohamoud Ahmed: Supervisor
- Naima Mohamed Nour: Enumerator
- Hassan Ahmed Caydiid: Supervisor
- Sabad Abdirahman Warsame: Enumerator
- Shukri Abdiaziz Dahir: Enumerator
- Mohamed Ali Yusuf: Enumerator
- Zuhuur Ahmed Abas: Enumerator
- Kaltuun Muse Abdikariim: Enumerator
- Ahmed Yasin Ali: Enumerator
- Maryan Mohamed Ahmed: Enumerator
- Abdulahi Abdisalam Husein: Supervisor
- Maymuun Abdirahman Ali: Enumerator
- Mohamed Abdiweli Muuse: Enumerator
- Fartuun Ali Ismail: Enumerator
- Fardows Isse Farah: Enumerator

## TECHNICAL COORDINATION TEAM

- Abdi Mohamoud Ali: SHDS Director
- Abdinasir Ali Dahir: SHDS Technical Coordinator
- Osman Jama Ali : SHDS Finance
- Abdiaziz Mohamed Ali: Database Manager
- Mohamed Said Bashiir: Quality controller
- Hassan Ahmed Aidid: Quality controller
- Ahmed Nur Jama: GIS
- Mohamoud Ali said: Quality controller
- Adirisak Adan Shire: GIS
- Mohamoud Hussein Mohamed : Quality controller
- Dr Abdirisq Hassan Isse : Trainer
- Abdi Muse Kamil: Trainer
- Hodan Osman jama: GIS
- Dr Qabul Isse Haji: Trainer

## REGIONAL COORDINATORS

- Abdifatah Mohamed Abdulle: Regional Coordinator
- Mohamed Abdi Egal : Regional Coordinator
- Ayanle Abdullahi Ali: Regional Coordinator
- Abdirisak Ahmed Isse : Regional Coordinator
- Mohamed Farah Haji: Regional Coordinator





# APPENDIX E



# Household Questionnaire





**SOMALI HEALTH &  
DEMOGRAPHIC SURVEY  
2018-2019**

SOMALI MINISTRIE'S OF PLANNING AND HEALTH

QUESTIONNAIRE  
SERIAL NUMBER

REG. CODE	DIST CODE	EA CODE	HH SERIAL NO.	INTERVIEWER NO.							

**HOUSEHOLD QUESTIONNAIRE**

IDENTIFICATION																								
NAME				CODE																				
REGION				<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																				
PRE-WAR NAME OF THE DISTRICT				<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																				
CURRENT NAME OF THE DISTRICT				<table border="1"><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table>																				
SETTLEMENT/TOWN				<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>																				
EA TYPE (1=RURAL/IDP 2=URBAN/IDP 3=NOMADIC)				<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>																				
EA CODE				<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>																				
HOUSEHOLD SERIAL NUMBER IN THE EA				<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>																				
INTERVIEWER VISITS																								
	1	2	3	FINAL VISIT																				
DATE				DAY <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																				
				MONTH <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																				
				YEAR <table border="1"><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table>																				
INTERVIEWER'S NAME				INT. NO. <table border="1"><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table>																				
RESULT*				RESULT* <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																				
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																				
TIME																								
<p>*RESULT CODES:</p> <p>1 COMPLETED</p> <p>2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT</p> <p>3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME</p> <p>4 POSTPONED</p> <p>5 REFUSED</p> <p>6 DWELLING VACANT OR ADDRESS NOT A DWELLING</p> <p>7 DWELLING DESTROYED</p> <p>8 DWELLING NOT FOUND</p> <p>9 PARTLY COMPLETED</p> <p>96 OTHER _____ (SPECIFY)</p>				<p>TOTAL PERSONS IN HOUSEHOLD <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p> <p>TOTAL ELIGIBLE EVER MARRIED WOMEN <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p> <p>TOT ELIGIBLE NEVER MARRIED WOMEN <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p> <p>TOTAL CHILDREN 0-5 YEARS <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p> <p>LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p>																				
LANGUAGE OF QUESTIONNAIRE**	<table border="1"><tr><td>0</td><td>1</td></tr></table>	0	1	LANGUAGE OF INTERVIEW**	<table border="1"><tr><td></td><td></td></tr></table>			NATIVE LANGUAGE OF RESPONDENT**	<table border="1"><tr><td></td><td></td></tr></table>															
0	1																							
LANGUAGE OF QUESTIONNAIRE**	<b>ENGLISH</b>		**LANGUAGE CODES:																					
			01 ENGLISH	03 OTHER _____																				
			02 SOMALI	SPECIFY _____																				
NAME	SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED IN BY																				
DATE																								
CODE	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>					<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>					<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>					<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>								



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INTRODUCTION AND CONSENT

Hello. My name is \_\_\_\_\_. I am working with [NAME OF ORGANIZATION]. We are conducting a survey about health and related topics all over [NAME OF COUNTRY]. The information we collect will help the government to plan health and other services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 15 to 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. your participation in the survey is voluntary, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time. In case you need more information about the survey, you may contact the ministry of interior/planning and/or health.

Do you have any questions?  
May I begin the interview now?

SIGNATURE OF INTERVIEWER \_\_\_\_\_ DATE \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED . . . 1  
↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 → END

100	RECORD THE START TIME.	HOURS ..... <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table> MINUTES ..... <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>								



HOUSEHOLD SCHEDULE

		DEMOGRAPHIC CHARACTERISTICS								ELIGIBILITY			
LINE NO.	USUAL RESIDENTS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	YEAR OF BIRTH	MARITAL STATUS	IF AGE 12 OR OLDER	IF AGE 12 & EVER MARRIED	ELIGIBILITY		
1	2	3	4	5	6	7	8	9	9B	10	11	12	
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.  AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2B TO BE SURE THAT THE LISTING IS COMPLETE.  THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-32 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household?  SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME) in completed years?  IF 95 OR MORE, RECORD '95'.	What is (NAME)'s year of birth?	What is (NAME)'s current marital status?  1 = MARRIED 2 = DIVORCED 3 = ABANDONED 4 = WIDOWED 5 = NEVER-MARRIED	How old was (NAME) when he/she got married for the first time?  RECORD AGE IN YEARS  IF 95 OR MORE, RECORD '95'.	CIRCLE LINE NUMBER OF ALL EVER MARRIED WOMEN AGE 12-49	CIRCLE LINE NUMBER OF ALL NEVER MARRIED WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5	
01		<input type="text"/>	M F 1 2	Y N 1 2	Y N 1 2	IN YEARS <input type="text"/>	Y Y Y Y <input type="text"/>	<input type="checkbox"/>	IN YEARS <input type="text"/>	01	01	01	
02		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	02	02	02	
03		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	03	03	03	
04		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	04	04	04	
05		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	05	05	05	
06		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	06	06	06	
07		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	07	07	07	
08		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	08	08	08	
09		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	09	09	09	
10		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	10	10	10	

2A) Just to make sure that I have a complete listing: are there any other people such as small children or infants that we have not listed? YES  → ADD TO TABLE NO

2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here? YES  → ADD TO TABLE NO

- CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD**
- 01 = HEAD OF HOUSE NO
  - 02 = SPOUSE
  - 03 = SON OR DAUGHTER
  - 04 = SON-IN-LAW OR DAUGHTER-IN-LAW NO
  - 05 = GRANDCHILD
  - 06 = PARENT
  - 07 = PARENT-IN-LAW
  - 08 = BROTHER OR SISTER
  - 09 = NEPHEW/NIECE
  - 10 = BROTHER/SISTER-IN-LAW
  - 11 = OTHER RELATIVE
  - 12 = ADOPTED/FOSTER/STEPCHILD
  - 13 = NOT RELATED
  - 98 = DON'T KNOW



HOUSEHOLD SCHEDULE

LINE NO.	ORPHANHOOD				EDUCATION CHARACTERISTICS				LABOUR FORCE
	IF AGE 0-17 YEARS				IF AGE 6 YEARS OR OLDER		IF AGE 6-24 YEARS		IF AGE 10 YEARS OR OLDER
	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		LABOUR FORCE PARTICIPATION
	13	14	15	16	17	18	19	20	21
	Is (NAME)'s biological mother alive?	Does (NAME)'s natural mother usually live in this household?  IF YES: What is her name?  RECORD MOTHER'S LINE NUMBER.  IF NO, RECORD '00'.	Is (NAME)'s biological father alive?	Does (NAME)'s biological father usually live in this household?  IF YES: What is his name?  RECORD FATHER'S LINE NUMBER.  IF NO, RECORD '00'.	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended?  What is the highest grade (NAME) completed at that level?	Did (NAME) attend school at any time during the [2017-2018] school year?	During [this/that] school year, what level and grade [is/was] (NAME) attending?	What has (NAME) mostly been doing in the last 12 months?  1= WORKING (INCLUDING HOUSE WIVES HAVING ACTIVITY) 2 = NOT WORKING BUT LOOKING FOR WORK 3 = HOUSEWIFE NOT WORKING 4 = STUDENT 5 = RETIRED 6 = DISABLED 7 = OTHER NOT WORKING
01	Y N DK 1 2-8 ↓ GO TO 15	<input type="text"/>	Y N DK 1 2-8 ↓ GO TO 17	<input type="text"/>	Y N DK 1 2-8 ↓ GO TO 21	LEVEL GRADE <input type="text"/> <input type="text"/>	Y N 1 2-8 ↓ GO TO 21	LEVEL GRADE <input type="text"/> <input type="text"/>	<input type="text"/>
02	1 2-8 ↓ GO TO 15	<input type="text"/>	1 2-8 ↓ GO TO 17	<input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
03	1 2-8 ↓ GO TO 15	<input type="text"/>	1 2-8 ↓ GO TO 17	<input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
04	1 2-8 ↓ GO TO 15	<input type="text"/>	1 2-8 ↓ GO TO 17	<input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
05	1 2-8 ↓ GO TO 15	<input type="text"/>	1 2-8 ↓ GO TO 17	<input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
06	1 2-8 ↓ GO TO 15	<input type="text"/>	1 2-8 ↓ GO TO 17	<input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
07	1 2-8 ↓ GO TO 15	<input type="text"/>	1 2-8 ↓ GO TO 17	<input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
08	1 2-8 ↓ GO TO 15	<input type="text"/>	1 2-8 ↓ GO TO 17	<input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
09	1 2-8 ↓ GO TO 15	<input type="text"/>	1 2-8 ↓ GO TO 17	<input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
10	1 2-8 ↓ GO TO 15	<input type="text"/>	1 2-8 ↓ GO TO 17	<input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2-8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>

CODES FOR Qs. 18 AND 20: EDUCATION

LEVEL GRADE  
 0 = PRESCHOOL 00 = LESS THAN 1 YEAR COMPLETED  
 1 = PRIMARY (USE '00' FOR Q. 18 ONLY.  
 2 = SECONDARY THIS CODE IS NOT ALLOWED  
 3 = HIGHER FOR Q. 20.)  
 8 = DON'T KNOW 98 = DON'T KNOW  
 9 = KORANIC (if Koranic skip grade)

N



HOUSEHOLD SCHEDULE

LINE NO.	REGISTRATION OF BIRTHS	CHRONIC DISEASES				SOCIAL HABITS		DISABILITY			
	IF AGE 0-4 YEARS	23	24	25	26	27	28	29	30	31	32
	Does (NAME) have a birth certificate?  IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority?  1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DONT KNOW	I would now like to ask you some questions about the health of all family members. Does (NAME) suffer from any chronic disease?	What are the diseases suffered by (NAME)?  SEE CODES BELOW.	Has any physician informed (NAME) that (s)he suffers from this disease?	Does (NAME) get treatment regularly for this condition?	Does (NAME) smoke cigarettes, or any kind of tobacco?	Does (NAME) currently chew qat/khat?	Does (NAME) face any of the following limitations?  A= SIGHT? B= HEARING? C= SPEECH D= LEARNING E= MOBILITY F= SELF-CARE? G= MENTAL? H= NONE	What is the main reason for (NAME)'s disability?  SEE CODES BELOW.	How old was (NAME) when this condition started?  IF 95 OR MORE, RECORD '95'.	During the last 12 months did (NAME) get any of the following forms of support?  A= MEDICAL CARE B= WELFARE C= FINANCIAL D= NUTRITIONAL Y= NO SUPPORT
01	<input type="text"/>	Y N DK 1 2 8 ↓ GO TO 27	CODE A B C D E F G H I J K L M N O P Q R S T Y	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	CODE A B C D E F G H ↓ GO TO 101	CODE <input type="text"/>	IN YEARS <input type="text"/>	CODE A B C D Y
02	<input type="text"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="text"/>	<input type="text"/>	A B C D Y
03	<input type="text"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="text"/>	<input type="text"/>	A B C D Y
04	<input type="text"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="text"/>	<input type="text"/>	A B C D Y
05	<input type="text"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="text"/>	<input type="text"/>	A B C D Y
06	<input type="text"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="text"/>	<input type="text"/>	A B C D Y
07	<input type="text"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="text"/>	<input type="text"/>	A B C D Y
08	<input type="text"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="text"/>	<input type="text"/>	A B C D Y
09	<input type="text"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="text"/>	<input type="text"/>	A B C D Y
10	<input type="text"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="text"/>	<input type="text"/>	A B C D Y

**CODES FOR Q. 24: CHRONIC DISEASES**

A=BLOOD PRESSURE G=KIDNEY DISEASE  
 B=DIABETES H=LIVER DISEASE  
 C=INFLAMMATION/ULC I=ARTHRITIS  
 D=ANEMIA J=TUBERCULOSIS (TB)  
 E=SICKLE CELL ANEMI. K=CHRONIC HEADACHE  
 /THALASSEMIA L=STROKE  
 F=HEART DISEASE M=EPILEPSY

N=PROSTATIC R=SKIN DISEASE  
 HYPERTROPHY S= CANCEROUS TUMORS  
 O=CATARACT T=ASTHMA  
 P= CHRONIC BACK PAIN/ Y= OTHER  
 SPINAL PROBLEM (SPECIFY)  
 Q=MENTAL/PSYCHOLOGICAL ILLNESS

**CODES FOR Q. 30: CAUSE OF DIABILITY**

01=CONGENITAL 08=WITCHCRAFT  
 02=CONTAGIOUS 96=OTHER  
 03=CHILD BIRTH CONDITION (SPECIFY)  
 04=OTHER DISEASE  
 05=ABUSE 98=DONT KNOW  
 06=AGING  
 07=INJURY/ACCIDENT



HOUSEHOLD SCHEDULE

		DEMOGRAPHIC CHARACTERISTICS							ELIGIBILITY				
LINE NO.	USUAL RESIDENTS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	YEAR OF BIRTH	IF AGE 12 OR OLDER	MARITAL STATUS	IF AGE 12 & EVER MARRIED	ELIGIBILITY		
1	2	3	4	5	6	7	8	9	9B	10	11	12	
	<p>Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.</p> <p>AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2B TO BE SURE THAT THE LISTING IS COMPLETE.</p> <p>THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-32 FOR EACH PERSON.</p>	<p>What is the relationship of (NAME) to the head of the household?</p> <p>SEE CODES BELOW.</p>	<p>Is (NAME) male or female?</p>	<p>Does (NAME) usually live here?</p>	<p>Did (NAME) stay here last night?</p>	<p>How old is (NAME) in completed years?</p> <p>IF 95 OR MORE, RECORD '95'.</p>	<p>What is (NAME)'s year of birth?</p>	<p>What is (NAME)'s current marital status?</p> <p>1 = MARRIED 2 = DIVORCED 3 = ABANDONED 4 = WIDOWED 5 = NEVER-MARRIED</p>	<p>How old was (NAME) when he/she got married for the first time?</p> <p>RECORD AGE IN YEARS</p> <p>IF 95 OR MORE, RECORD '95'.</p>	<p>CIRCLE LINE NUMBER OF ALL EVER MARRIED WOMEN AGE 12-49</p>	<p>CIRCLE LINE NUMBER OF ALL NEVER MARRIED WOMEN AGE 15-49</p>	<p>CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5</p>	
11		<input type="text"/>	M F 1 2	Y N 1 2	Y N 1 2	IN YEARS <input type="text"/>	Y Y Y Y <input type="text"/>	<input type="text"/>	IN YEARS <input type="text"/>	11	11	11	
12		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	12	12	12	
13		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	13	13	13	
14		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	14	14	14	
15		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	15	15	15	
16		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	16	16	16	
17		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	17	17	17	
18		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	18	18	18	
19		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	19	19	19	
20		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	20	20	20	

\*K HERE IF CONTINUATION SHEET USED

**CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD**

- |                                    |                               |
|------------------------------------|-------------------------------|
| 01 = HEAD OF HOUSEHOLD             | 08 = BROTHER OR SISTER        |
| 02 = SPOUSE                        | 09 = NEPHEW/NIECE             |
| 03 = SON OR DAUGHTER               | 10 = BROTHER/SISTER-IN-LAW    |
| 04 = SON-IN-LAW OR DAUGHTER-IN-LAW | 11 = OTHER RELATIVE           |
| 05 = GRANDCHILD                    | 12 = ADOPTED/FOSTER/STEPCHILD |
| 06 = PARENT                        | 13 = NOT RELATED              |
| 07 = PARENT-IN-LAW                 | 98 = DON'T KNOW               |



## HOUSEHOLD SCHEDULE

LINE NO.	ORPHANHOOD				EDUCATION CHARACTERISTICS				LABOUR FORCE
	IF AGE 0-17 YEARS				IF AGE 6 YEARS OR OLDER		IF AGE 6-24 YEARS		IF AGE 10 YEARS OR OLDER
	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		LABOUR FORCE PARTICIPATION
	13	14	15	16	17	18	19	20	21
	Is (NAME)'s biological mother alive?	Does (NAME)'s natural mother usually live in this household?  IF YES: What is her name?  RECORD MOTHER'S LINE NUMBER.  IF NO, RECORD '00'.	Is (NAME)'s biological father alive?	Does (NAME)'s biological father usually live in this household?  IF YES: What is his name?  RECORD FATHER'S LINE NUMBER.  IF NO, RECORD '00'.	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended?  What is the highest grade (NAME) completed at that level?  SEE CODES BELOW.	Did (NAME) attend school at any time during the [2017-2018] school year?	During [this/that] school year, what level and grade [is/was] (NAME) attending?  SEE CODES BELOW.	What has (NAME) mostly been doing in the last 12 months?  1= WORKING (INCLUDING HOUSE WIVES HAVING ACTIVITY) 2 = NOT WORKING BUT LOOKING FOR WORK 3 = HOUSEWIFE NOT WORKING 4 = STUDENT 5 = RETIRED 6 = DISABLED 7 = OTHER NOT WORKING
11	Y N DK 1 2 8 ↓ GO TO 15	<input type="text"/> <input type="text"/>	Y N DK 1 2 8 ↓ GO TO 17	<input type="text"/> <input type="text"/>	Y N 1 2 8 ↓ GO TO 21	LEVEL GRADE <input type="text"/> <input type="text"/>	Y N 1 2 8 ↓ GO TO 21	LEVEL GRADE <input type="text"/> <input type="text"/>	<input type="text"/>
12	1 2 8 ↓ GO TO 15	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 17	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
13	1 2 8 ↓ GO TO 15	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 17	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
14	1 2 8 ↓ GO TO 15	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 17	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
15	1 2 8 ↓ GO TO 15	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 17	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
16	1 2 8 ↓ GO TO 15	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 17	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
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18	1 2 8 ↓ GO TO 15	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 17	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
19	1 2 8 ↓ GO TO 15	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 17	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>
20	1 2 8 ↓ GO TO 15	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 17	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	1 2 8 ↓ GO TO 21	<input type="text"/> <input type="text"/>	<input type="text"/>

**CODES FOR Qs. 18 AND 20: EDUCATION**

**LEVEL**                      **GRADE**  
 0 = PRESCHOOL    00 = LESS THAN 1 YEAR COMPLETED  
 1 = PRIMARY                      (USE '00' FOR Q. 18 ONLY.)  
 2 = SECONDARY                      THIS CODE IS NOT ALLOWED  
 3 = HIGHER                              FOR Q. 20.)  
 8 = DON'T KNOW    98 = DON'T KNOW



HOUSEHOLD SCHEDULE

LINE NO.	REGISTRATION OF BIRTHS	CHRONIC DISEASES				SOCIAL HABITS		DISABILITY			
	IF AGE 0-4 YEARS					IF AGE 10 YEARS OR OLDER					
	BIRTH REGISTRATION	23	24	25	26	27	28	29	30	31	32
	Does (NAME) have a birth certificate?  IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority?  1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW	I would now like to ask you some questions about the health of all family members. Does (NAME) suffer from any chronic disease?	What are the diseases suffered by (NAME)?  SEE CODES BELOW.	Has any physician informed (NAME) that (s)he suffers from this disease?	Does (NAME) get treatment regularly for this condition?	Does (NAME) smoke cigarettes, or any kind of tobacco?	Does (NAME) currently chew qat/khat?	Does (NAME) face any of the following limitations?  A= SIGHT? B= HEARING? C= SPEECH D= LEARNING E= MOBILITY F= SELF-CARE? G= MENTAL? H= NONE	What is the main reason for (NAME's) disability?  SEE CODES BELOW.	How old was (NAME) when this condition started?  IF 95 OR MORE, RECORD '95'.	During the last 12 months did (NAME) get any of the following forms of support?  A= MEDICAL CARE B= WELFARE C= FINANCIAL D= NUTRITIONAL Y= NO SUPPORT
11	<input type="checkbox"/>	Y N DK 1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	CODE A B C D E F G H ↓ GO TO 101	CODE <input type="checkbox"/>	IN YEARS <input type="checkbox"/>	CODE A B C D Y
12	<input type="checkbox"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="checkbox"/>	<input type="checkbox"/>	A B C D Y
13	<input type="checkbox"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="checkbox"/>	<input type="checkbox"/>	A B C D Y
14	<input type="checkbox"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="checkbox"/>	<input type="checkbox"/>	A B C D Y
15	<input type="checkbox"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="checkbox"/>	<input type="checkbox"/>	A B C D Y
16	<input type="checkbox"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="checkbox"/>	<input type="checkbox"/>	A B C D Y
17	<input type="checkbox"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="checkbox"/>	<input type="checkbox"/>	A B C D Y
18	<input type="checkbox"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="checkbox"/>	<input type="checkbox"/>	A B C D Y
19	<input type="checkbox"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="checkbox"/>	<input type="checkbox"/>	A B C D Y
20	<input type="checkbox"/>	1 2 8 ↓ GO TO 27	A B C D E F G H I J K L M N O P Q R S T Y	1 2 8	1 2 8	1 2 8	1 2 8	A B C D E F G H ↓ GO TO 101	<input type="checkbox"/>	<input type="checkbox"/>	A B C D Y

TICK HERE IF CONTINUATION SHEET USED

**CODES FOR Q. 24: CHRONIC DISEASES**

A=BLOOD PRESSURE G=KIDNEY DISEASE  
B=DIABETES H=LIVER DISEASE  
C=INFLAMMATION/ULC I=ARTHRITIS  
D=ANEMIA J=TUBERCULOSIS (TB)  
E=SICKLE CELL ANEMI, K=CHRONIC HEADACHE  
/THALASSEMIA L=STROKE  
F=HEART DISEASE M=EPILEPSY

N=PROSTATIC R=SKIN DISEASE  
HYPERTROPHY S= CANCEROUS TUMORS  
O=CATARACT T=ASTHMA  
P= CHRONIC BACK PAIN/ SPINAL PROBLEM Y= OTHER (SPECIFY)  
Q=MENTAL/PSYCHOLOGICAL ILLNESS

**CODES FOR Q. 30: CAUSE OF DIABILITY**

01=CONGENITAL 08=MAGIC  
02=CONTAGIOUS 96=OTHER  
03=CHILD BIRTH CONDITION (SPECIFY)  
04=OTHER DISEASE  
05=ABUSE 98=DON'T KNOW  
06=AGING  
07=INJURY/ACCIDENT



**OUT OF POCKET HOUSEHOLD HEALTH EXPENDITURE**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																																																																											
101	Has any member of the household been sick in the last one month?	YES ..... 1 NO ..... 2	→ 107																																																																																																											
102	Did you seek any advice or treatment for his/her condition?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 107 → 107																																																																																																											
103	Where did you seek advice or treatment for his or her condition?  PROBE TO IDENTIFY THE TYPE OF SOURCE.  IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	<b>PUBLIC SECTOR</b> GOVERNMENT HOSPITAL ..... A REFERRAL HEALTH CENTRE ..... B MCH/HC ..... C PRIMARY HEALTH UNIT (PHU) ..... D MOBILE CLINIC ..... E OTHER PUBLIC SECTOR _____ F (SPECIFY) <b>PRIVATE MEDICAL SECTOR</b> PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR ..... G PHARMACY ..... H OTHER PRIVATE MEDICAL SECTOR _____ I (SPECIFY) <b>OTHER SOURCE</b> SHOP ..... J OTHER _____ X (SPECIFY)																																																																																																												
104	Did he/she receive any of the following services? If YES, how much did the household incur on the health services received in the last one month?  RECORD AMOUNT IN USD.																																																																																																													
		<table border="0"> <thead> <tr> <th></th> <th>Y</th> <th>N</th> <th>DK</th> <th>AMOUNT (USD)</th> </tr> </thead> <tbody> <tr> <td>a) Consultation fees paid to General Medical Practitioners</td> <td>a) GENERAL PRACTITIONERS</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>b) Consultation fees paid to Specialists</td> <td>b) SPECIALISTS</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>c) Consultation fees paid to traditional medicine practitioners</td> <td>c) TRAD. MEDICINE MEN</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>d) Consultation fees paid to other health practitioners</td> <td>d) OTHER HLTH PRACT</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>e) Laboratory Tests</td> <td>e) LAB</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>f) Prescribed drugs</td> <td>f) PRESCRIBED DRUGS</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>g) Over the counter drugs</td> <td>g) OVER THE COUNTER DRUGS</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>h) Imaging (X-Rays, CT Scan ,MRI, Echography)</td> <td>h) IMAGING</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>i) Dialysis</td> <td>i) DIALYSIS</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>j) Chemotherapy</td> <td>j) CHEMOTHERAPY</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>k) Surgery</td> <td>k) SURGERY</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>l) Room facilities/Meals</td> <td>l) ACCOM + MEALS</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>m) Transport to the facility</td> <td>m) TRANSPORT</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>n) Birth spacing ?</td> <td>n) FAMILY PLANNING</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>o) Antenatal care (ANC)?</td> <td>o) ANC</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>p) Delivery (child birth)?</td> <td>p) DELIVERY</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> <tr> <td>q) Others</td> <td>q) OTHER _____ (SPECIFY)</td> <td>1</td> <td>2</td> <td>8</td> <td><input type="text"/></td> </tr> </tbody> </table>		Y	N	DK	AMOUNT (USD)	a) Consultation fees paid to General Medical Practitioners	a) GENERAL PRACTITIONERS	1	2	8	<input type="text"/>	b) Consultation fees paid to Specialists	b) SPECIALISTS	1	2	8	<input type="text"/>	c) Consultation fees paid to traditional medicine practitioners	c) TRAD. MEDICINE MEN	1	2	8	<input type="text"/>	d) Consultation fees paid to other health practitioners	d) OTHER HLTH PRACT	1	2	8	<input type="text"/>	e) Laboratory Tests	e) LAB	1	2	8	<input type="text"/>	f) Prescribed drugs	f) PRESCRIBED DRUGS	1	2	8	<input type="text"/>	g) Over the counter drugs	g) OVER THE COUNTER DRUGS	1	2	8	<input type="text"/>	h) Imaging (X-Rays, CT Scan ,MRI, Echography)	h) IMAGING	1	2	8	<input type="text"/>	i) Dialysis	i) DIALYSIS	1	2	8	<input type="text"/>	j) Chemotherapy	j) CHEMOTHERAPY	1	2	8	<input type="text"/>	k) Surgery	k) SURGERY	1	2	8	<input type="text"/>	l) Room facilities/Meals	l) ACCOM + MEALS	1	2	8	<input type="text"/>	m) Transport to the facility	m) TRANSPORT	1	2	8	<input type="text"/>	n) Birth spacing ?	n) FAMILY PLANNING	1	2	8	<input type="text"/>	o) Antenatal care (ANC)?	o) ANC	1	2	8	<input type="text"/>	p) Delivery (child birth)?	p) DELIVERY	1	2	8	<input type="text"/>	q) Others	q) OTHER _____ (SPECIFY)	1	2	8	<input type="text"/>	
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OUT OF POCKET HOUSEHOLD HEALTH EXPENDITURE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																								
105	In total, how much money did the household spend on treatment and healthcare services during the last one month?	AMOUNT (USD) ... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>																									
106	In the past one month, which of the following financial sources did your household use to pay for any health expenditure? (READ OUT AND CIRCLE 1 OR 2 AS APPROPRIATE)  a) Current income b) Health insurance c) Savings (including in bank) d) Borrow from banks/other institutions/relatives e) Support from relatives & friends f) Sold assets g) Other means	<table border="0"> <thead> <tr> <th></th> <th style="text-align: center;">YES</th> <th style="text-align: center;">NO</th> </tr> </thead> <tbody> <tr> <td>a) INCOME .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>b) INSURANCE .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>c) SAVINGS ..</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>d) BORROWING .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>e) RELATIVES/FRIENDS .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>f) SOLD ASSETS .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>f) OTHER _____</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table> <p style="text-align: center;">(SPECIFY)</p>		YES	NO	a) INCOME .....	1	2	b) INSURANCE .....	1	2	c) SAVINGS ..	1	2	d) BORROWING .....	1	2	e) RELATIVES/FRIENDS .....	1	2	f) SOLD ASSETS .....	1	2	f) OTHER _____	1	2	
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c) SAVINGS ..	1	2																									
d) BORROWING .....	1	2																									
e) RELATIVES/FRIENDS .....	1	2																									
f) SOLD ASSETS .....	1	2																									
f) OTHER _____	1	2																									
107	Does any household member have a health insurance policy?	YES ..... 1 NO ..... 2																									



## HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	What is the main source of drinking water for members of your household?	<b>PIPED WATER</b> PIPED INTO DWELLING ..... 11 PIPED TO YARD/PLOT ..... 12 PIPED TO NEIGHBOR ..... 13 PUBLIC TAP/STANDPIPE ..... 14  TUBE WELL OR BOREHOLE ..... 21 <b>DUG WELL</b> PROTECTED WELL ..... 31 UNPROTECTED WELL ..... 32 <b>WATER FROM SPRING</b> PROTECTED SPRING ..... 41 UNPROTECTED SPRING ..... 42  RAINWATER ..... 51 TANKER TRUCK ..... 61 CART WITH SMALL TANK ..... 71 WATER KIOSK ..... 72 SURFACE WATER (RIVER/DAM/LAKE/BERKAD /POND/STREAM/CANAL/MUQSIID/ IRRIGATION CHANNEL) ..... 81 BOTTLED WATER ..... 91  OTHER _____ 96 (SPECIFY)	→ 206
202	What is the main source of water used by your household for other purposes such as cooking and handwashing?	<b>PIPED WATER</b> PIPED INTO DWELLING ..... 11 PIPED TO YARD/PLOT ..... 12 PIPED TO NEIGHBOR ..... 13 PUBLIC TAP/STANDPIPE ..... 14  TUBE WELL OR BOREHOLE ..... 21 <b>DUG WELL</b> PROTECTED WELL ..... 31 UNPROTECTED WELL ..... 32 <b>WATER FROM SPRING</b> PROTECTED SPRING ..... 41 UNPROTECTED SPRING ..... 42  RAINWATER ..... 51 TANKER TRUCK ..... 61 CART WITH SMALL TANK ..... 71 SURFACE WATER (RIVER/DAM/LAKE/BERKAD LAKE/POND/STREAM/CANAL/MUQSIID/ IRRIGATION CHANNEL) ..... 81  OTHER _____ 96 (SPECIFY)	→ 206
203a	Where is the main source of water for drinking located?	IN OWN DWELLING ..... 1 IN OWN YARD/PLOT ..... 2 ELSEWHERE ..... 3	→ 204a
203b	How long does it take to go there, get water, and come back in minutes?	MINUTES ..... <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW ..... 998	
204a	Where is the main source of water for other purposes located?	IN OWN DWELLING ..... 1 IN OWN YARD/PLOT ..... 2 ELSEWHERE ..... 3	→ 205
204b	How long does it take to go there, get water, and come back in minutes?	MINUTES ..... <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW ..... 998	



HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
204c	What means does your household mostly use to fetch water i.e. from source to home?	WATER TANKER ..... 1 CAR/PICKUP/TRUCK ..... 2 CAMEL CART ..... 3 DONKEY CART ..... 4 WHEELBARROW ..... 5 ON FOOT ..... 6 OTHER _____ 96 (SPECIFY)	
205	CHECK 201 : CODE '14' OR '21' CIRCLED?  YES <input type="checkbox"/> NO <input type="checkbox"/> → 207		
206	In the past two weeks, was the water from this source not available for at least one full day?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
207	Do you do anything to the water to make it safer to drink?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 209
208	What do you usually do to make the water safer to drink? Anything else?  RECORD ALL MENTIONED.	BOIL ..... A ADD BLEACH/CHLORINE ..... B STRAIN THROUGH A CLOTH ..... C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC) ..... D SOLAR DISINFECTION ..... E LET IT STAND AND SETTLE ..... F OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	
209	What kind of toilet facility do members of your household usually use?  IF NOT POSSIBLE TO DETERMINE, ASK PERMISSION TO OBSERVE THE FACILITY.	<b>FLUSH OR POUR FLUSH TOILET</b> FLUSH TO PIPED SEWER SYSTEM ..... 11 FLUSH TO SEPTIC TANK ..... 12 FLUSH TO PIT LATRINE ..... 13 FLUSH TO SOMEWHERE ELSE ..... 14 FLUSH, DON'T KNOW WHERE ..... 15 <b>PIT LATRINE</b> VENTILATED IMPROVED PIT LATRINE ..... 21 PIT LATRINE WITH SLAB ..... 22 PIT LATRINE WITHOUT SLAB/OPEN PI ..... 23 COMPOSTING TOILET ..... 31 BUCKET TOILET ..... 41 HANGING TOILET/HANGING LATRINE ..... 51 NO FACILITY/BUSH/FIELD ..... 61 OTHER _____ 96 (SPECIFY)	→ 214
210	Do you share this toilet facility with other households?	YES ..... 1 NO ..... 2	→ 212
211	Including your own household, how many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 ..... <input type="text" value="0"/> <input type="text"/> 10 OR MORE HOUSEHOLDS ..... 95 DON'T KNOW ..... 98	
212	Where is this toilet facility located?	IN OWN DWELLING ..... A IN OWN YARD/PLOT ..... B ELSEWHERE ..... C	



## HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																			
213	In total, how many toilets does your household use?	NO. OF TOILETS ..... <input type="text"/> <input type="text"/>																																				
214	Whats the main source of energy for lighting?	ELECTRICITY ..... 01 SOLAR ..... 02 KEROSENE ..... 03 FIREWOOD ..... 04 TORCH ..... 05 OTHER ..... 96 (SPECIFY)																																				
215	Whats the main source of energy for cooking?	ELECTRICITY ..... 01 LPG ..... 02 KEROSENE ..... 03 FIREWOOD ..... 04 CHARCOAL ..... 05 STRAW/SHRUBS/GRASS ..... 06 AGRICULTURAL CROP ..... 07 ANIMAL DUNG ..... 08 NO FOOD COOKED IN HOUSEHOLI ..... 95 OTHER ..... 96 (SPECIFY)	→ 218																																			
216	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE ..... 1 IN A SEPARATE BUILDING ..... 2 OUTDOORS ..... 3 OTHER ..... 6 (SPECIFY)	→ 218																																			
217	Do you have a separate room which is used as a kitchen?	YES ..... 1 NO ..... 2																																				
218	How many rooms in this household are used for sleeping?	ROOMS ..... <input type="text"/> <input type="text"/>																																				
219	Does this household own any livestock including horses, donkeys and poultry?	YES ..... 1 NO ..... 2	→ 221																																			
220	How many of the following animals does this household own? IF NONE, RECORD '00'. IF 995 OR MORE, RECORD '995'. IF UNKNOWN, RECORD '998'. a) Camel? b) Cattle? c) Shoats? d) Donkeys e) Horses? f) Poultry?	a) CAMELS ..... <input type="text"/> b) CATTLE ..... <input type="text"/> c) SHOATS ..... <input type="text"/> d) DONKEYS ..... <input type="text"/> e) HORSES ..... <input type="text"/> f) POULTRY ..... <input type="text"/>																																				
221	Has this household lost any livestock in the last one year due to drought/flooding/disease etc?	YES ..... 1 NO ..... 2	→ 223																																			
222	How many of the following animals did this household loose? IF NONE, RECORD '00'. IF 995 OR MORE, RECORD '995'. a) Camel? b) Cattle? c) Shoats? d) Donkeys e) Horses? f) Poultry?	<table border="1"> <thead> <tr> <th></th> <th>DUE TO DROUGHT</th> <th>DUE TO FLOODS</th> <th>DUE TO DISEASE</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>a) CAMELS .....</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>b) CATTLE .....</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>c) SHOATS .....</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>d) DONKEYS .....</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>e) HORSES .....</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>f) POULTRY .....</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </tbody> </table>		DUE TO DROUGHT	DUE TO FLOODS	DUE TO DISEASE	TOTAL	a) CAMELS .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	b) CATTLE .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	c) SHOATS .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	d) DONKEYS .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	e) HORSES .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	f) POULTRY .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
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f) POULTRY .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																		



HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
223	Does any member of this household own any agricultural land?	YES .....	1	
		NO .....	2	→ 225
224	How many hectares of agricultural land do members of this household own?  IF 95 OR MORE, CIRCLE '950'.	UNIT	QUANTITY	
		HECTARES .....	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	
		QOODI .....	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	
		JABAAL .....	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	
		TALAABC .....	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	
		OTHER _____ (SPECIFY)	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	
		95 OR MORE .....	950	
		DON'T KNOW .....	998	
225	Does your household have:	YES	NO	
	a) A radio?	a) RADIO .....	1 2	
	b) A television?	b) TELEVISION .....	1 2	
	c) Non-mobile telephone?	c) NON-MOBILE TELEPHONE ..	1 2	
	d) A computer?	d) COMPUTER .....	1 2	
	e) Internet connectivity?	e) INTERNET .....	1 2	
	f) A refrigerator?	f) REFRIGERATOR .....	1 2	
	g) Air conditioner/fan?	g) AIR CONDITIONER/FA .....	1 2	
226	Does any member of this household own:	YES	NO	
	a) A watch?	a) WATCH .....	1 2	
	b) A mobile phone?	b) MOBILE PHONE .....	1 2	
	c) A bicycle?	c) BICYCLE .....	1 2	
	d) A motorcycle or motor scooter?	d) MOTORCYCLE/SCOOTER .....	1 2	
	e) Donkey cart?	e) DONKEY CART .....	1 2	
	f) A car or truck?	f) CAR/TRUCK .....	1 2	
	g) Boat/Canoe?	g) BOAT/CANOE .....	1 2	
	h) Tractor?	h) TRACTOR .....	1 2	
	i) Rickshaw?	i) RICKSHAW .....	1 2	
	j) Animal plough?	j) ANIMAL PLOUGH .....	1 2	
227	Does any member of this household have a bank account?	YES .....	1	
		NO .....	2	



ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
228	We would like to learn about the places that households use to wash their hands. Can you please show me where members of your household most often wash their hands?	OBSERVED, FIXED PLACE ..... 1 OBSERVED, MOBILE ..... 2 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT ..... 3 NOT OBSERVED, NO PERMISSION TO SE ..... 4 NOT OBSERVED, OTHER REASON ..... 5	→ 231
229	OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING.  RECORD OBSERVATION.	WATER IS AVAILABLE ..... 1 WATER IS NOT AVAILABLE ..... 2	
230	OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT AT THE PLACE FOR HANDWASHING.  RECORD OBSERVATION.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) ..... A ASH, MUD, SAND ..... B  NONE ..... Y	
231	OBSERVE MAIN MATERIAL OF THE FLOOR OF THE DWELLING.  RECORD OBSERVATION.	<b>NATURAL FLOOR</b> EARTH/SAND ..... 11 DUNG ..... 12 GRASS ..... 13 <b>RUDIMENTARY FLOOR</b> WOOD PLANKS ..... 21 PALM/BAMBOO ..... 22 <b>FINISHED FLOOR</b> PARQUET OR POLISHED WOOD ..... 31 VINYL OR ASPHALT STRIPS ..... 32 CERAMIC TILES ..... 33 CEMENT ..... 34 CARPET ..... 35  OTHER _____ 96 (SPECIFY)	
232	OBSERVE MAIN MATERIAL OF THE ROOF OF THE DWELLING.  RECORD OBSERVATION.	<b>NATURAL ROOFING</b> NO ROOF ..... 11 PALM LEAF/SOD ..... 12 <b>RUDIMENTARY ROOFING</b> PALM/BAMBOO ..... 21 CARDBOARD ..... 22 CANVAS SHEETS ..... 23 PLASTIC SHEETS ..... 24 CLOTH AND RAGS ..... 25 <b>FINISHED ROOFING</b> IRON SHEETS ..... 31 WOOD ..... 32 CERAMIC TILES ..... 33 CEMENT ..... 34 ROOFING SHINGLES ..... 35  OTHER _____ 96 (SPECIFY)	



ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP				
233	OBSERVE MAIN MATERIAL OF THE EXTERIOR WALLS OF THE DWELLING.  RECORD OBSERVATION.	<b>NATURAL WALLS</b> NO WALLS ..... 11 PALM LEAF/GRASS ..... 12 DIRT ..... 13 <b>RUDIMENTARY WALLS</b> BAMBOO/STICKS/WOOD WITH MUD ..... 21 STONE WITH MUD ..... 22 PLYWOOD ..... 23 IRON SHEETS ..... 24 CARDBOARD ..... 25 CANVAS SHEETS ..... 26 PLASTIC SHEETS ..... 27 CLOTH AND RAGS ..... 28 <b>FINISHED WALLS</b> CEMENT ..... 31 STONE WITH LIME/CEMENT ..... 32 BRICKS ..... 33 CEMENT BLOCKS ..... 34 WOOD PLANKS/SHINGLES ..... 36 OTHER ..... 96 (SPECIFY)					
234	In the past four weeks, did you worry that your household would not have enough food?	YES ..... 1 NO ..... 2	→ 236				
235	How often did this happen?	RARELY (ONCE OR TWICE IN 4 WKS) .. . . . 1 SOMETIMES (THREE TO TEN TIMES IN4 WKS) 2 OFTEN (MORE THAN TEN TIMES IN 4 WKS) .. 3					
236	In the past four weeks, did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?	YES ..... 1 NO ..... 2	→ 238				
237	How often did this happen?	RARELY (ONCE OR TWICE IN 4 WKS) .. . . . 1 SOMETIMES (THREE TO TEN TIMES IN4 WKS) 2 OFTEN (MORE THAN TEN TIMES IN 4 WKS) .. 3					
238	In the past four weeks, did you or any other household member have to eat fewer meals in a day because there was not enough food?	YES ..... 1 NO ..... 2	→ 240				
239	How often did this happen?	RARELY (ONCE OR TWICE IN 4 WKS) .. . . . 1 SOMETIMES (THREE TO TEN TIMES IN4 WKS) 2 OFTEN (MORE THAN TEN TIMES IN 4 WKS) .. 3					
240	In the last four weeks, were there cases where you did not have any kind of food to eat because of the lack of resources?	YES ..... 1 NO ..... 2	→ 242				
241	How often did this happen?	RARELY (ONCE OR TWICE IN 4 WKS) .. . . . 1 SOMETIMES (THREE TO TEN TIMES IN4 WKS) 2 OFTEN (MORE THAN TEN TIMES IN 4 WKS) .. 3					
242	In the last four weeks, were there cases where you or a family member went to bed hungry because there was not enough food or there was nothing to eat?	YES ..... 1 NO ..... 2	→ 244				
243	How often did this happen?	RARELY (ONCE OR TWICE IN 4 WKS) .. . . . 1 SOMETIMES (THREE TO TEN TIMES IN4 WKS) 2 OFTEN (MORE THAN TEN TIMES IN 4 WKS) .. 3					
244	In the last four weeks, were there cases where you or anyone from your family spent the whole day without eating because there was not enough food?	YES ..... 1 NO ..... 2	→ 301				
245	How often did this happen?	RARELY (ONCE OR TWICE IN 4 WKS) .. . . . 1 SOMETIMES (THREE TO TEN TIMES IN4 WKS) 2 OFTEN (MORE THAN TEN TIMES IN 4 WKS) .. 3					
246	RECORD THE END TIME.	HOURS ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> MINUTES ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>					



301	CHECK COLUMN 1 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 302; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
302	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 1.	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____
303	IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR ... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR ... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR ... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
304	CHECK 303: CHILD BORN IN 2014-2019?	YES ..... 1 NO ..... 2 (SKIP TO 311) ←	YES ..... 1 NO ..... 2 (SKIP TO 311) ←	YES ..... 1 NO ..... 2 (SKIP TO 311) ←
305	WEIGHT IN KILOGRAMS.	KG.... <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT .... 9994 REFUSED .....9995 OTHER .....9996	KG.... <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT .... 9994 REFUSED .....9995 OTHER .....9996	KG.... <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT .... 9994 REFUSED .....9995 OTHER .....9996
306	HEIGHT IN CENTIMETERS.	CM.... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> NOT PRESENT .... 9994 REFUSED .....9995 OTHER .....9996 (SKIP TO 308) ←	CM.... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> NOT PRESENT .... 9994 REFUSED .....9995 OTHER .....9996 (SKIP TO 308) ←	CM.... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> NOT PRESENT .... 9994 REFUSED .....9995 OTHER .....9996 (SKIP TO 308) ←
307	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN ..... 1 STANDING UP ..... 2	LYING DOWN ..... 1 STANDING UP ..... 2	LYING DOWN ..... 1 STANDING UP ..... 2
308	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> FIELDWORKER NUMBER	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> FIELDWORKER NUMBER	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> FIELDWORKER NUMBER



301	CHECK COLUMN 1 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 302; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
302	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 1.	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____
309	CHECK 303: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS ..... 1 ] (SKIP TO 311) ← OLDER ..... 2	0-5 MONTHS ..... 1 ] (SKIP TO 311) ← OLDER ..... 2	0-5 MONTHS ..... 1 ] (SKIP TO 311) ← OLDER ..... 2
310	LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD FROM COLUMN 1 OF HOUSEHOLD SCHEDULE.	LINE NUMBER ..... <input type="text"/> <input type="text"/> (RECORD '00' IF NOT LISTED)	LINE NUMBER ..... <input type="text"/> <input type="text"/> (RECORD '00' IF NOT LISTED)	LINE NUMBER ..... <input type="text"/> <input type="text"/> (RECORD '00' IF NOT LISTED)
311	GO BACK TO 303 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE CHILDREN, GO TO 401.			



## WEIGHT AND HEIGHT FOR CHILDREN AGE 0-5

		CHILD 4	CHILD 5	CHILD 6
302	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____
303	IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR ... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR ... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR ... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
304	CHECK 303: CHILD BORN IN 2014-2019?	YES ..... 1 NO ..... 2 (SKIP TO 311) ←	YES ..... 1 NO ..... 2 (SKIP TO 311) ←	YES ..... 1 NO ..... 2 (SKIP TO 311) ←
305	WEIGHT IN KILOGRAMS.	KG. .... <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT .... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. .... <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT .... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. .... <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT .... 9994 REFUSED ..... 9995 OTHER ..... 9996
306	HEIGHT IN CENTIMETERS.	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT .... 9994 REFUSED ..... 9995 OTHER ..... 9996 (SKIP TO 308) ←	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT .... 9994 REFUSED ..... 9995 OTHER ..... 9996 (SKIP TO 308) ←	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT .... 9994 REFUSED ..... 9995 OTHER ..... 9996 (SKIP TO 308) ←
307	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN ..... 1 STANDING UP ..... 2	LYING DOWN ..... 1 STANDING UP ..... 2	LYING DOWN ..... 1 STANDING UP ..... 2
308	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> FIELDWORKER NUMBER	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> FIELDWORKER NUMBER	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> FIELDWORKER NUMBER



## WEIGHT AND HEIGHT FOR CHILDREN AGE 0-5

		CHILD 4	CHILD 5	CHILD 6
302	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____
309	CHECK 303: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS ..... 1 <input type="checkbox"/> (SKIP TO 311) ← OLDER ..... 2	0-5 MONTHS ..... 1 <input type="checkbox"/> (SKIP TO 311) ← OLDER ..... 2	0-5 MONTHS ..... 1 <input type="checkbox"/> (SKIP TO 311) ← OLDER ..... 2
310	LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD FROM COLUMN 1 OF HOUSEHOLD SCHEDULE.	LINE NUMBER ..... <input type="text"/> <input type="text"/> (RECORD '00' IF NOT LISTED)	LINE NUMBER ..... <input type="text"/> <input type="text"/> (RECORD '00' IF NOT LISTED)	LINE NUMBER ..... <input type="text"/> <input type="text"/> (RECORD '00' IF NOT LISTED)
311	GO BACK TO 303 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE CHILDREN, GO TO 401.			



WEIGHT, HEIGHT MEASUREMENT FOR WOMEN AGE 12-49

401	CHECK COLUMN 10 & 11 IN ROSTER. RECORD THE LINE NUMBER, NAME AND MARITAL STATUS FOR ALL ELIGIBLE WOMEN IN 402 AND 403. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 1	WOMAN 2	WOMAN 3
402	CHECK HOUSEHOLD QUESTIONNAIRE:  LINE NUMBER FROM COLUMN 1.  NAME FROM COLUMN 2.	LINE NUMBER ..... <input type="text"/> <input type="text"/>  NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/>  NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/>  NAME _____
403	CHECK HOUSEHOLD QUESTIONNAIRE COLUMN 9 (MARITAL STATUS):	CODE 5 (NEVER IN UNION). 1 OTHER MARITAL STATU... 2	CODE 5 (NEVER IN UNION). 1 OTHER MARITAL STATU... 2	CODE 5 (NEVER IN UNION). 1 OTHER MARITAL STATU... 2
404	WEIGHT IN KILOGRAMS.	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996
405	HEIGHT IN CENTIMETERS.	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996
406	CHECK 403: MARITAL STATUS	CODE 5 (NEVER IN UNION). 1 (NEXT COLUMN) ← OTHER ..... 2	CODE 5 (NEVER IN UNION). 1 (NEXT COLUMN) ← OTHER ..... 2	CODE 5 (NEVER IN UNION). 1 (END) ← OTHER ..... 2
407A	ASK: Are you pregnant?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
408	GO BACK TO 402 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE;			



# Ever-married Woman's Questionnaire



**SOMALI HEALTH &  
DEMOGRAPHIC SURVEY  
2018-2019**

QUESTIONNAIRE  
SERIAL NUMBER

REG. CODE		DIST CODE		EA CODE		HH SERIAL NO.				INTERVIEWER NO.										

**EVER MARRIED WOMAN'S QUESTIONNAIRE**

IDENTIFICATION																				
NAME	CODE																			
REGION _____	<table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>																			
PRE-WAR NAME OF THE DISTRICT _____	<table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>																			
CURRENT NAME OF THE DISTRICT _____																				
SETTLEMENT/TOWN _____	<table border="1"> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </table>																			
EA TYPE (1=RURAL/IDP 2=URBAN/IDP 3=NOMADIC) .....	<table border="1"> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </table>																			
EA CODE .....	<table border="1"> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </table>																			
HOUSEHOLD SERIAL NUMBER IN THE EA .....	<table border="1"> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </table>																			
INTERVIEWER VISITS																				
	1	2	3	FINAL VISIT																
DATE	_____	_____	_____	DAY MONTH YEAR																
INTERVIEWER'S NAME	_____	_____	_____	INT. NO.																
RESULT*	_____	_____	_____	RESULT*																
NEXT VISIT: DATE TIME	_____	_____		TOTAL NUMBER OF VISITS																
<p>*RESULT CODES: 1 COMPLETED      4 REFUSED      7 NOT ELIGIBLE (LESS THAN 12 OR MORE THAN 49 YEARS)</p> <p>2 NOT AT HOME      5 PARTLY COMPLETED      8 OTHER _____ SPECIFY _____</p> <p>3 POSTPONED      6 INCAPACITATED</p>																				
LANGUAGE OF QUESTIONNAIRE**	<b>0 1</b>	LANGUAGE OF INTERVIEW**		NATIVE LANGUAGE OF RESPONDENT**																
LANGUAGE OF QUESTIONNAIRE**	<b>ENGLISH</b>	<p>**LANGUAGE CODES:</p> <p>01 ENGLISH      03 LANGUAGE _____ SPECIFY _____</p> <p>02 SOMALI</p>																		
NAME .....	SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED IN BY																
DATE .....	_____	_____	_____	_____																
CODE .....	<table border="1"> <tr><td></td><td></td><td></td><td></td></tr> </table>					<table border="1"> <tr><td></td><td></td><td></td><td></td></tr> </table>					<table border="1"> <tr><td></td><td></td><td></td><td></td></tr> </table>					<table border="1"> <tr><td></td><td></td><td></td><td></td></tr> </table>				



**SOMALI HEALTH &  
DEMOGRAPHIC SURVEY  
2018-2019**

QUESTIONNAIRE  
SERIAL NUMBER

REG. CODE		DIST CODE		EA CODE				HH SERIAL NO.				INTERVIEWER NO.							

**EVER MARRIED WOMAN'S QUESTIONNAIRE**

IDENTIFICATION																				
NAME				CODE																
REGION	_____			<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																
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INTERVIEWER VISITS																				
	1	2	3	FINAL VISIT																
DATE	_____	_____	_____	DAY <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																
INTERVIEWER'S NAME	_____	_____	_____	MONTH <table border="1"><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table>																
RESULT*	_____	_____	_____	YEAR <table border="1"><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table>																
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TIME	_____	_____	_____	RESULT* <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																
	_____	_____	_____	TOTAL NUMBER OF VISITS <table border="1"><tr><td></td></tr></table>																
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LANGUAGE OF QUESTIONNAIRE**	<table border="1"><tr><td>0</td><td>1</td></tr></table>	0	1	LANGUAGE OF INTERVIEW**	<table border="1"><tr><td></td><td></td></tr></table>			NATIVE LANGUAGE OF RESPONDENT**	<table border="1"><tr><td></td><td></td></tr></table>											
0	1																			
LANGUAGE OF QUESTIONNAIRE**	<b>ENGLISH</b>	**LANGUAGE CODES: 01 ENGLISH 03 LANGUAGE _____ SPECIFY 02 SOMALI																		
NAME .....	SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED IN BY																
DATE .....	_____	_____	_____	_____																
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## SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
109	CHECK 108:  CODE '2', '3' OR '4' <input type="checkbox"/> CIRCLED ↓	CODE '1' OR '5' CIRCLED <input type="checkbox"/>	→ 111
110	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK ..... 1 LESS THAN ONCE A WEEK ..... 2 NOT AT ALL ..... 3	
111	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK ..... 1 LESS THAN ONCE A WEEK ..... 2 NOT AT ALL ..... 3	
112	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK ..... 1 LESS THAN ONCE A WEEK ..... 2 NOT AT ALL ..... 3	
113	Do you own a mobile telephone?	YES ..... 1 NO ..... 2	→ 115
114	Do you use your mobile phone for any financial transactions?	YES ..... 1 NO ..... 2	
115	Do you have an account in a bank or other financial institution that you yourself use?	YES ..... 1 NO ..... 2	
116	Have you ever used the internet?	YES ..... 1 NO ..... 2	→ 119
117	In the last 12 months, have you used the internet?  IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES ..... 1 NO ..... 2	→ 119
118	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
119	Are you currently married?	YES ..... 1 NO ..... 2	→ 121
120	What is your marital status now: are you widowed or divorced?	WIDOWED ..... 1 DIVORCED ..... 2	
121	Have you been married only once or more than once?	ONLY ONCE ..... 1 MORE THAN ONCE ..... 2	
122	CHECK 121:  MARRIED ONLY ONCE <input type="checkbox"/> MARRIED MORE THAN ONCE <input type="checkbox"/>  a) In what month and year were you legally married (Nikaax/contract)? b) Now I would like to ask about your first husband. In what month and year were you legally married to him (Nikaax/contract)?	MONTH ..... <input type="text"/> <input type="text"/> DON'T KNOW MONTH ..... 98  YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR ..... 9998	
123	How old were you when you got legally married to your (first) husband (Nikaax)?	AGE ..... <input type="text"/> <input type="text"/>	



SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
124	<p>CHECK 121:</p> <p style="text-align: center;"> MARRIED ONLY ONCE <input type="checkbox"/>      MARRIED MORE THAN ONCE <input type="checkbox"/> </p> <p> a) In what month and year did you wed with your husband (Aqal gal)?      b) Now I would like to ask about your first husband. In what month and year did you wed with him (Aqal gal)? </p>	MONTH ..... <input type="text"/> <input type="text"/> DON'T KNOW MONTH ..... 98 YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR .....9998	
125	How old were you when you wedded with your (first) husband (Aqal gal)?	AGE ..... <input type="text"/> <input type="text"/> NOT YET WEDDED ..... 95	
126	Did the marriage contract (Nikaax) and wedding (Aqal gal) happen at the same time?	YES ..... 1 NO ..... 2	



## SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
201	Now I would like to ask about all the births you have had during your life. Have you been pregnant?	YES ..... 1 NO ..... 2	→ 239								
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES ..... 1 NO ..... 2	→ 204								
203	a) How many sons live with you? b) And how many daughters live with you?  IF NONE, RECORD '00'.	a) SONS AT HOME ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) DAUGHTERS AT HOME ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES ..... 1 NO ..... 2	→ 206								
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you?  IF NONE, RECORD '00'.	a) SONS ELSEWHERE ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) DAUGHTERS ELSEWHERE ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
206	Have you ever given birth to a boy or girl who was born alive but later died?  IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life but did not survive?	YES ..... 1 NO ..... 2	→ 208								
207	a) How many boys have died? b) And how many girls have died?  IF NONE, RECORD '00'.	a) BOYS DEAD ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) GIRLS DEAD ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL BIRTHS ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>									
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL ____ births during your life. Is that correct?  YES <input type="checkbox"/> NO <input type="checkbox"/> PROBE AND CORRECT 201-208 AS NECESSARY.										
210	CHECK 208:  ONE OR MORE BIRTHS <input type="checkbox"/> NO BIRTHS <input type="checkbox"/>		→ 226								



SECTION 2. REPRODUCTION

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.  
RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE ROWS. IF THERE ARE MORE THAN 10 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE SECOND ROW.

212	213	214	215	216	217	218	219	220	221
What name was given to your (first/next) baby?  RECORD NAME.  BIRTH HISTORY NUMBER.	Is (NAME) a boy or a girl?	Were any of these births twins?	On what day, month, and year was (NAME) born?	Is (NAME) still alive?	How old was (NAME) at (NAME)'s last birthday?  RECORD AGE IN COMPLETED YEARS.	Is (NAME) living with you?	RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	How old was (NAME) when (he/she) died?  IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday?  THEN ASK: Exactly how many months old was (NAME) when (he/she) died?  RECORD '00' IF LESS THAN A DAY; DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS;	Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
01	BOY 1 GIRL 2	SING 1 MULT 2	DAY <input type="text"/> MONTH <input type="text"/> YEAR <input type="text"/>	YES 1 NO 2 (SKIP TO)	AGE IN YEARS <input type="text"/>	YES 1 NO 2	HOUSEHOLD LINE NUMBER <input type="text"/> (NEXT BIRTH)	DAYS 1 <input type="text"/> MONTHS 2 <input type="text"/> YEARS 3 <input type="text"/>	
02	BOY 1 GIRL 2	SING 1 MULT 2	DAY <input type="text"/> MONTH <input type="text"/> YEAR <input type="text"/>	YES 1 NO 2 (SKIP TO)	AGE IN YEARS <input type="text"/>	YES 1 NO 2	HOUSEHOLD LINE NUMBER <input type="text"/> (SKIP TO 221)	DAYS 1 <input type="text"/> MONTHS 2 <input type="text"/> YEARS 3 <input type="text"/>	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH)
03	BOY 1 GIRL 2	SING 1 MULT 2	DAY <input type="text"/> MONTH <input type="text"/> YEAR <input type="text"/>	YES 1 NO 2 (SKIP TO)	AGE IN YEARS <input type="text"/>	YES 1 NO 2	HOUSEHOLD LINE NUMBER <input type="text"/> (SKIP TO 221)	DAYS 1 <input type="text"/> MONTHS 2 <input type="text"/> YEARS 3 <input type="text"/>	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH)
04	BOY 1 GIRL 2	SING 1 MULT 2	DAY <input type="text"/> MONTH <input type="text"/> YEAR <input type="text"/>	YES 1 NO 2 (SKIP TO)	AGE IN YEARS <input type="text"/>	YES 1 NO 2	HOUSEHOLD LINE NUMBER <input type="text"/> (SKIP TO 221)	DAYS 1 <input type="text"/> MONTHS 2 <input type="text"/> YEARS 3 <input type="text"/>	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH)
05	BOY 1 GIRL 2	SING 1 MULT 2	DAY <input type="text"/> MONTH <input type="text"/> YEAR <input type="text"/>	YES 1 NO 2 (SKIP TO)	AGE IN YEARS <input type="text"/>	YES 1 NO 2	HOUSEHOLD LINE NUMBER <input type="text"/> (SKIP TO 221)	DAYS 1 <input type="text"/> MONTHS 2 <input type="text"/> YEARS 3 <input type="text"/>	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH)



212	213	214	215	216	217 IF ALIVE:	218 IF ALIVE:	219 IF ALIVE:	220 IF DEAD:	221
What name was given to your (first/next) baby?  RECORD NAME.  BIRTH HISTORY NUMBER.	Is (NAME) a boy or a girl?	Were any of these births twins?	On what day, month, and year was (NAME) born?	Is (NAME) still alive?	How old was (NAME) at (NAME)'s last birthday?  RECORD AGE IN COMPLETED YEARS.	Is (NAME) living with you?	RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	How old was (NAME) when (he/she) died?  IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday?  THEN ASK: Exactly how many months old was (NAME) when (he/she) died?  RECORD '00' IF LESS THAN A DAY; DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS;	Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
06	BOY 1 GIRL 2	SING 1 MULT 2	DAY <input type="text"/> MONTH <input type="text"/> YEAR <input type="text"/>	YES 1 NO 2 (SKIP TO	AGE IN YEARS <input type="text"/>	YES 1 NO 2	HOUSEHOLD LINE NUMBER <input type="text"/> (SKIP TO 221)	DAYS 1 <input type="text"/> MONTHS 2 <input type="text"/> YEARS 3 <input type="text"/>	YES (ADD BIRTH) 1 NO (NEXT BIRTH) 2
07	BOY 1 GIRL 2	SING 1 MULT 2	DAY <input type="text"/> MONTH <input type="text"/> YEAR <input type="text"/>	YES 1 NO 2 (SKIP TO	AGE IN YEARS <input type="text"/>	YES 1 NO 2	HOUSEHOLD LINE NUMBER <input type="text"/> (SKIP TO 221)	DAYS 1 <input type="text"/> MONTHS 2 <input type="text"/> YEARS 3 <input type="text"/>	YES (ADD BIRTH) 1 NO (NEXT BIRTH) 2
08	BOY 1 GIRL 2	SING 1 MULT 2	DAY <input type="text"/> MONTH <input type="text"/> YEAR <input type="text"/>	YES 1 NO 2 (SKIP TO	AGE IN YEARS <input type="text"/>	YES 1 NO 2	HOUSEHOLD LINE NUMBER <input type="text"/> (SKIP TO 221)	DAYS 1 <input type="text"/> MONTHS 2 <input type="text"/> YEARS 3 <input type="text"/>	YES (ADD BIRTH) 1 NO (NEXT BIRTH) 2
09	BOY 1 GIRL 2	SING 1 MULT 2	DAY <input type="text"/> MONTH <input type="text"/> YEAR <input type="text"/>	YES 1 NO 2 (SKIP TO	AGE IN YEARS <input type="text"/>	YES 1 NO 2	HOUSEHOLD LINE NUMBER <input type="text"/> (SKIP TO 221)	DAYS 1 <input type="text"/> MONTHS 2 <input type="text"/> YEARS 3 <input type="text"/>	YES (ADD BIRTH) 1 NO (NEXT BIRTH) 2
10	BOY 1 GIRL 2	SING 1 MULT 2	DAY <input type="text"/> MONTH <input type="text"/> YEAR <input type="text"/>	YES 1 NO 2 (SKIP TO	AGE IN YEARS <input type="text"/>	YES 1 NO 2	HOUSEHOLD LINE NUMBER <input type="text"/> (SKIP TO 221)	DAYS 1 <input type="text"/> MONTHS 2 <input type="text"/> YEARS 3 <input type="text"/>	YES (ADD BIRTH) 1 NO (NEXT BIRTH) 2



SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
222	Have you had any live births since the birth of (NAME OF LAST BIRTH)?	YES ..... 1 (RECORD BIRTH(S) IN TABLE) ← NO ..... 2	
223	COMPARE 208 WITH NUMBER OF BIRTHS IN BIRTH HISTORY  NUMBERS ARE SAME <input type="checkbox"/> NUMBERS ARE DIFFERENT <input type="checkbox"/> (PROBE AND RECONCILE) ←		
224	CHECK 215: ENTER THE NUMBER OF BIRTHS IN 2014-2019	NUMBER OF BIRTHS ..... <input type="text"/> NONE ..... 0 → 226	
225	<p><b>C</b> FOR EACH BIRTH IN 2014-2019, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF COMPLETED MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.)</p>		
226	Are you pregnant now?	YES ..... 1 NO ..... 2 UNSURE ..... 8 → 230	
227	How many months pregnant are you? <b>PROBE:</b> WHAT WAS YOUR LAST MENSTRUAL PERIOD?  RECORD NUMBER OF COMPLETED MONTHS.  <b>C</b> ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS ..... <input type="text"/> <input type="text"/> MONTHS ..... <input type="text"/> <input type="text"/>	
228	When you got pregnant, were you expecting to get pregnant at that time?	YES ..... 1 NO ..... 2 → 230	
229	CHECK 208: TOTAL NUMBER OF BIRTHS  ONE OR MORE <input type="checkbox"/> ..... NONE <input type="checkbox"/> ..... a) Did you want to have a baby later on or did you want more children? b) Did you want to have a baby later on?	LATER ..... 1 NO MORE/NONE ..... 2	
230	Have you ever had a pregnancy that miscarried or ended in a stillbirth?	YES ..... 1 NO ..... 2 → 239	
231	When did the last such pregnancy end?	MONTH ..... <input type="text"/> <input type="text"/> YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	



## SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
232	CHECK 231:  LAST PREGNANCY ENDED IN 2014-2019 <input type="checkbox"/>			→ 234
			LAST PREGNANCY ENDED IN 2013 OR EARLIER <input type="checkbox"/>	→ 239
LINE NO.	233 In what month and year did the preceding such pregnancy end?	234 How many months pregnant were you when that pregnancy ended?	235 Since January 2014, have you had any other pregnancies that did not result in a live birth?	
01		<input type="text"/> <input type="text"/> NUMBER OF MONTHS	YES ..... 1 NO ..... 2	→ NEXT LINE → 236
02	<input type="text"/> <input type="text"/> MONTH <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> YEAR	<input type="text"/> <input type="text"/> NUMBER OF MONTHS	YES ..... 1 NO ..... 2	→ NEXT LINE → 236
03	<input type="text"/> <input type="text"/> MONTH <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> YEAR	<input type="text"/> <input type="text"/> NUMBER OF MONTHS	YES ..... 1 NO ..... 2	→ NEXT LINE → 236
04	<input type="text"/> <input type="text"/> MONTH <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> YEAR	<input type="text"/> <input type="text"/> NUMBER OF MONTHS	YES ..... 1 NO ..... 2	→ 236
236	<p><b>C</b> FOR EACH PREGNANCY THAT DID NOT END IN A LIVE BIRTH IN 2014-2019 OR LATER, ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS OF PREGNANCY.</p> <p>IF THERE ARE MORE THAN FOUR PREGNANCIES THAT DID NOT END IN A LIVE BIRTH, USE AN ADDITIONAL QUESTIONNAIRE STARTING ON THE SECOND LINE.</p>			
237	Did you have any miscarriages, abortions or stillbirths that ended before 2014?	YES ..... 1 NO ..... 2		→ 239
238	When did the last such pregnancy that terminated before 2014 end?	MONTH ..... <input type="text"/> <input type="text"/> YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		



SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
239	When did your last menstrual period start?  _____ (DATE, IF GIVEN)  CIRCLE DAYS AGO AND PUT 00 IF STARTED THE SAME DAY	DAYS AGO ..... 1 <input type="text"/> <input type="text"/> WEEKS AGO ..... 2 <input type="text"/> <input type="text"/> MONTHS AGO ..... 3 <input type="text"/> <input type="text"/> YEARS AGO ..... 4 <input type="text"/> <input type="text"/>  IN MENOPAUSE/ HAS HAD HYSTERECTOMY ..... 994 BEFORE LAST BIRTH ..... 995 NEVER MENSTRUATED ..... 996	
240	How old were you when you had your first menstrual period?	AGE IN YEARS ..... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	
241	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<input type="checkbox"/> → 243
242	Is this time just before her period begins, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGIN: ..... 1 RIGHT AFTER HER PERIOD HAS ENDE ..... 2 HALFWAY BETWEEN TWO PERIODS ..... 3  OTHER ..... 6 (SPECIFY) DON'T KNOW ..... 8	
243	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	



## SECTION 3. BIRTH SPACING

301	Now I would like to talk about birth spacing - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?	
01	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more	YES ..... 1 NO ..... 2
02	Injectables. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES ..... 1 NO ..... 2
03	Implants. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES ..... 1 NO ..... 2
04	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES ..... 1 NO ..... 2
05	Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES ..... 1 NO ..... 2
06	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES ..... 1 NO ..... 2
07	Emergency Contraception. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES ..... 1 NO ..... 2
08	Standard Days Method. PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse.	YES ..... 1 NO ..... 2
09	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES ..... 1 NO ..... 2
10	Rhythm Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES ..... 1 NO ..... 2
11	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES ..... 1 NO ..... 2
12	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD  _____ A (SPECIFY) YES, TRADITIONAL METHOD  _____ B (SPECIFY) NO ..... Y





SECTION 3. BIRTH SPACING (PAPER OPTION)

309	<p>CHECK 307:</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>YEAR IS 2014-2019 <input type="checkbox"/></p> <p><b>C</b> ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING.</p> <p>THEN CONTINUE</p> <p style="text-align: center;">↓</p> </div> <div style="width: 45%; border-left: 1px dashed black; padding-left: 10px;"> <p>YEAR IS 2013 OR EARLIER <input type="checkbox"/></p> <p><b>C</b> ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2014 .</p> <p>THEN</p> <p style="text-align: right;">(SKIP TO 324) ←</p> </div> </div>
310	<p>I would like to ask you some questions about the times you or your husband may have used a method to avoid getting pregnant during the last few years.</p> <p>USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2014. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.</p> <p><b>C</b> IN <b>COLUMN 1</b>, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH.</p> <p>ILLUSTRATIVE QUESTIONS:</p> <ol style="list-style-type: none"> <li>a) When was the last time you used a method? Which method was that?</li> <li>b) When did you start using that method? How long after the birth of (NAME)?</li> <li>c) How long did you use the method then?</li> </ol> <p><b>C</b> IN <b>COLUMN 2</b>, ENTER CODES FOR DISCONTINUATION NEXT TO THE LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 2 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1.</p> <p>ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT.</p> <p>ILLUSTRATIVE QUESTIONS:</p> <ol style="list-style-type: none"> <li>d) Why did you stop using the (METHOD)? Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason?</li> <li>e) IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER '0' IN EACH SUCH MONTH IN COLUMN 1.</li> </ol>



SECTION 3. BIRTH SPACING (CAPI OPTION)

309	<p>CHECK 307:</p> <p style="text-align: center;">YEAR IS 2014-2019 <input type="checkbox"/></p> <p><b>C</b> ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING.</p> <p style="text-align: center;">THEN CONTINUE ↓</p> <p style="text-align: center;">YEAR IS 2013 OR EARLIER <input type="checkbox"/></p> <p><b>C</b> ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2014 .</p> <p style="text-align: center;">THEN ↗ (SKIP TO 322) ←</p>			
310	<p>I would like to ask you some questions about the times you or your husband may have used a method to avoid getting pregnant during the last few years.</p> <p><b>C</b> USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2014. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.</p>			
		COLUMN 1	COLUMN 2	COLUMN 3
310A	MONTH AND YEAR OF START OF INTERVAL OF USE OR NON-USE.	MONTH <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> YEAR	MONTH <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> YEAR	MONTH <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> YEAR
310B	Between (EVENT) in (MONTH/YEAR) and (EVENT) in (MONTH/YEAR), did you or your husband use any method of contraception?	YES ..... 1 NO ..... 2 (SKIP TO 310I) ←	YES ..... 1 NO ..... 2 (SKIP TO 310I) ←	YES ..... 1 NO ..... 2 (SKIP TO 310I) ←
310C	Which method was that?	METHOD CODE .. <input type="text"/>	METHOD CODE .. <input type="text"/>	METHOD CODE .. <input type="text"/>
310D	How many months after (EVENT) in (MONTH/YEAR) did you start to use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF STARTING TO USE THE METHOD.	IMMEDIATELY ..... 00 MONTHS .. <input type="text"/> <input type="text"/> (SKIP TO 310F) ← DATE GIVEN ..... 95	IMMEDIATELY ..... 00 MONTHS .. <input type="text"/> <input type="text"/> (SKIP TO 310F) ← DATE GIVEN ..... 95	IMMEDIATELY ..... 00 MONTHS .. <input type="text"/> <input type="text"/> (SKIP TO 310F) ← DATE GIVEN ..... 95
310E	RECORD MONTH AND YEAR RESPONDENT STARTED USING METHOD.	MONTH <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> YEAR	MONTH <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> YEAR	MONTH <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> YEAR
310F	For how many months did you use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF TERMINATION OF USE.	MONTHS .. <input type="text"/> <input type="text"/> (SKIP TO 310H) ← DATE GIVEN ..... 95	MONTHS .. <input type="text"/> <input type="text"/> (SKIP TO 310H) ← DATE GIVEN ..... 95	MONTHS .. <input type="text"/> <input type="text"/> (SKIP TO 310H) ← DATE GIVEN ..... 95
310G	RECORD MONTH AND YEAR RESPONDENT STOPPED USING METHOD.	MONTH <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> YEAR	MONTH <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> YEAR	MONTH <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> YEAR
310H	Why did you stop using (METHOD)?	REASON STOPPED ..... <input type="text"/>	REASON STOPPED ..... <input type="text"/>	REASON STOPPED ..... <input type="text"/>
310I		GO BACK TO 310A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 311.	GO BACK TO 310A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 311.	GO BACK TO 310A IN NEW QUESTIONNAIRE; OR, IF NO MORE GAPS, GO TO 311.





SECTION 3. BIRTH SPACING

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
316	At that time, were you told about side effects or problems you might have with the method?	YES ..... 1 NO ..... 2	
317	Were you told what to do if you experienced side effects or problems?	YES ..... 1 NO ..... 2	
318	<p>CHECK 316:</p> <p style="text-align: center;"> <input type="checkbox"/> ANY 'YES'  <input type="checkbox"/> OTHER         </p> <p>           a) At that time, were you told about other methods of birth spacing that you could use?           <span style="margin-left: 100px;">b) When you obtained (CURRENT METHOD FROM 313) from (SOURCE OF METHOD FROM 314), were you told about other methods of birth spacing that you could use?</span> </p>	YES ..... 1 NO ..... 2	→ 320
319	Were you ever told by a health worker about other methods of birth spacing that you could use?	YES ..... 1 NO ..... 2	
320	<p>CHECK 304:</p> <p>CIRCLE METHOD CODE:</p> <p>IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.</p>	IUD ..... 03 INJECTABLES ..... 04 IMPLANTS ..... 05 PILL ..... 06 CONDOM ..... 07 FEMALE CONDOM ..... 08 EMERGENCY CONTRACEPTION ..... 09 STANDARD DAYS METHOD ..... 10 LACTATIONAL AMENORRHEA METHOI ..... 11 RHYTHM METHOD ..... 12 WITHDRAWAL ..... 13 OTHER MODERN METHOD ..... 95 OTHER TRADITIONAL METHOD ..... 96	→ 323 → 323



## SECTION 3. BIRTH SPACING

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
321	<p>Where did you obtain (CURRENT METHOD) the last time?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p><b>PUBLIC SECTOR</b></p> <p>GOVERNMENT HOSPITAL ..... 11</p> <p>REFERRAL HEALTH CENTRE ..... 12</p> <p>MCH/HC ..... 13</p> <p>PRIMARY HEALTH UNIT (PHU) ..... 14</p> <p>MOBILE CLINIC ..... 15</p> <p>COMMUNITY HEALTH WORKER ..... 16</p> <p>OTHER PUBLIC SECTOR</p> <p>_____ 17</p> <p>(SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/CLINIC/DOCTO ..... 21</p> <p>PHARMACY ..... 22</p> <p>OTHER PRIVATE MEDICAL SECTOR</p> <p>_____ 26</p> <p>(SPECIFY)</p> <p><b>OTHER SOURCE</b></p> <p>SHOP ..... 31</p> <p>FRIEND/RELATIVE ..... 32</p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p>	<p>→ 325</p>
322	Do you know of a place where you can obtain a method of birth spacing?	<p>YES ..... 1</p> <p>NO ..... 2</p>	
323	In the last 12 months, were you visited by a fieldworker?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 325
324	Did the fieldworker talk to you about birth spacing?	<p>YES ..... 1</p> <p>NO ..... 2</p>	
325	<p>CHECK 202: LIVING WITH CHILDREN</p> <p>YES <input type="checkbox"/>      NO <input type="checkbox"/></p> <p>a) In the last 12 months, have you visited a health facility for care for yourself or your children?</p> <p>b) In the last 12 months, have you visited a health facility for care for yourself?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 401
326	Did any staff member at the health facility speak to you about birth spacing methods?	<p>YES ..... 1</p> <p>NO ..... 2</p>	



SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 224: ONE OR MORE BIRTHS IN 2014-2019 <input type="checkbox"/> NO BIRTHS IN 2014-2019 <input type="checkbox"/> → 648						
402	CHECK 215. RECORD THE BIRTH HISTORY NUMBER IN 403 AND THE NAME AND SURVIVAL STATUS IN 404 FOR EACH BIRTH IN 2014-2019. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S).  Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately)						
403	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:33%;"></th> <th style="width:33%;">LAST BIRTH</th> <th style="width:33%;">NEXT-TO-LAST BIRTH</th> </tr> </thead> <tbody> <tr> <td>BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.</td> <td>BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/></td> <td>BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/></td> </tr> </tbody> </table>		LAST BIRTH	NEXT-TO-LAST BIRTH	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/>	BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/>
	LAST BIRTH	NEXT-TO-LAST BIRTH					
BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/>	BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/>					
404	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:33%;"></th> <th style="width:33%;">LAST BIRTH</th> <th style="width:33%;">NEXT-TO-LAST BIRTH</th> </tr> </thead> <tbody> <tr> <td>FROM 212 AND 216:</td> <td>NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/></td> <td>NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/></td> </tr> </tbody> </table>		LAST BIRTH	NEXT-TO-LAST BIRTH	FROM 212 AND 216:	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>
	LAST BIRTH	NEXT-TO-LAST BIRTH					
FROM 212 AND 216:	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>					
405	<table border="1" style="width:100%; border-collapse: collapse;"> <tbody> <tr> <td style="width:33%;">When you got pregnant with (NAME), did you want to get pregnant at that time?</td> <td style="width:33%;">           YES ..... 1            (SKIP TO 408) ←            NO ..... 2         </td> <td style="width:33%;">           YES ..... 1            (SKIP TO 426) ←            NO ..... 2         </td> </tr> </tbody> </table>	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES ..... 1 (SKIP TO 408) ← NO ..... 2	YES ..... 1 (SKIP TO 426) ← NO ..... 2			
When you got pregnant with (NAME), did you want to get pregnant at that time?	YES ..... 1 (SKIP TO 408) ← NO ..... 2	YES ..... 1 (SKIP TO 426) ← NO ..... 2					
406	<table border="1" style="width:100%; border-collapse: collapse;"> <tbody> <tr> <td style="width:33%;">           CHECK 208:            ONLY ONE BIRTH OR MORE THAN ONE BIRTH            a) Did you want to have a baby later on?         </td> <td style="width:33%;">           LATER ..... 1            NO MORE/NONE ..... 2            (SKIP TO 408) ←         </td> <td style="width:33%;">           LATER ..... 1            NO MORE/NONE ..... 2            (SKIP TO 426) ←         </td> </tr> </tbody> </table>	CHECK 208: ONLY ONE BIRTH OR MORE THAN ONE BIRTH a) Did you want to have a baby later on?	LATER ..... 1 NO MORE/NONE ..... 2 (SKIP TO 408) ←	LATER ..... 1 NO MORE/NONE ..... 2 (SKIP TO 426) ←			
CHECK 208: ONLY ONE BIRTH OR MORE THAN ONE BIRTH a) Did you want to have a baby later on?	LATER ..... 1 NO MORE/NONE ..... 2 (SKIP TO 408) ←	LATER ..... 1 NO MORE/NONE ..... 2 (SKIP TO 426) ←					
407	<table border="1" style="width:100%; border-collapse: collapse;"> <tbody> <tr> <td style="width:33%;">How much longer did you want to wait?</td> <td style="width:33%;">           MONTHS ..... 1 <input type="text"/> <input type="text"/>            YEARS ..... 2 <input type="text"/> <input type="text"/>            DON'T KNOW ..... 998         </td> <td style="width:33%;">           MONTHS ..... 1 <input type="text"/> <input type="text"/>            YEARS ..... 2 <input type="text"/> <input type="text"/>            DON'T KNOW ..... 998         </td> </tr> </tbody> </table>	How much longer did you want to wait?	MONTHS ..... 1 <input type="text"/> <input type="text"/> YEARS ..... 2 <input type="text"/> <input type="text"/> DON'T KNOW ..... 998	MONTHS ..... 1 <input type="text"/> <input type="text"/> YEARS ..... 2 <input type="text"/> <input type="text"/> DON'T KNOW ..... 998			
How much longer did you want to wait?	MONTHS ..... 1 <input type="text"/> <input type="text"/> YEARS ..... 2 <input type="text"/> <input type="text"/> DON'T KNOW ..... 998	MONTHS ..... 1 <input type="text"/> <input type="text"/> YEARS ..... 2 <input type="text"/> <input type="text"/> DON'T KNOW ..... 998					
408	<table border="1" style="width:100%; border-collapse: collapse;"> <tbody> <tr> <td style="width:33%;">Did you see anyone for antenatal care for this pregnancy?</td> <td style="width:33%;">           YES ..... 1            NO ..... 2            (SKIP TO 414) ←         </td> <td style="width:33%;"></td> </tr> </tbody> </table>	Did you see anyone for antenatal care for this pregnancy?	YES ..... 1 NO ..... 2 (SKIP TO 414) ←				
Did you see anyone for antenatal care for this pregnancy?	YES ..... 1 NO ..... 2 (SKIP TO 414) ←						
409	<table border="1" style="width:100%; border-collapse: collapse;"> <tbody> <tr> <td style="width:33%;">           Whom did you see?             Anyone else?             PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.         </td> <td style="width:33%;"> <b>HEALTH PERSONNEL</b>            DOCTOR ..... A            CLINICAL OFFICER ..... B            NURSE/MIDWIFE ..... C            AUXILIARY MIDWIFE ..... D  <b>OTHER PERSON</b>            TRADITIONAL BIRTH ATTENDANT ..... E            COMMUNITY HEALTH WORKER ..... F            OTHER _____ X            (SPECIFY)         </td> <td style="width:33%;"></td> </tr> </tbody> </table>	Whom did you see?  Anyone else?  PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	<b>HEALTH PERSONNEL</b> DOCTOR ..... A CLINICAL OFFICER ..... B NURSE/MIDWIFE ..... C AUXILIARY MIDWIFE ..... D <b>OTHER PERSON</b> TRADITIONAL BIRTH ATTENDANT ..... E COMMUNITY HEALTH WORKER ..... F OTHER _____ X (SPECIFY)				
Whom did you see?  Anyone else?  PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	<b>HEALTH PERSONNEL</b> DOCTOR ..... A CLINICAL OFFICER ..... B NURSE/MIDWIFE ..... C AUXILIARY MIDWIFE ..... D <b>OTHER PERSON</b> TRADITIONAL BIRTH ATTENDANT ..... E COMMUNITY HEALTH WORKER ..... F OTHER _____ X (SPECIFY)						



## SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH		NEXT-TO-LAST BIRTH	
		NAME _____		NAME _____	
410	<p>Where did you receive antenatal care for this pregnancy?</p> <p>Anywhere else?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____ (NAME OF PLACE)</p>	<p><b>HOME</b></p> <p>HER HOME ..... A</p> <p>OTHER HOME ..... B</p> <p><b>PUBLIC SECTOR</b></p> <p>GOVERNMENT HOSPITAL... C</p> <p>REFERRAL HEALTH CENTRE D</p> <p>MCH/HC ..... E</p> <p>PRIMARY HEALTH UNIT (PHU F</p> <p>MOBILE CLINIC ..... G</p> <p>OTHER PUBLIC SECTOR</p> <p>_____ H</p> <p>(SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/ CLINIC ..... I</p> <p>OTHER PRIVATE MEDICAL SECTOR</p> <p>_____ J</p> <p>(SPECIFY)</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>			
411	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS ..... <input type="text"/> <input type="text"/>			
		DON'T KNOW ..... 98			
412	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES ..... <input type="text"/> <input type="text"/>			
		DON'T KNOW ..... 98			
413	As part of your antenatal care during this pregnancy, were any of the following done at least once:		YES	NO	
	a) Was your blood pressure measured?	a) BP ..... 1	1	2	
	b) Did you give a urine sample?	b) URINE ..... 1	1	2	
	c) Did you give a blood sample?	c) BLOOD ..... 1	1	2	
414	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES ..... 1			
		NO ..... 2			
		(SKIP TO 417) ←			
		DON'T KNOW ..... 8			
415	During this pregnancy, how many times did you get a tetanus injection?	TIMES ..... <input type="text"/>			
		DON'T KNOW ..... 8			
416	CHECK 415:	2 OR MORE TIMES <input type="checkbox"/>		OTHER <input type="checkbox"/>	
		(SKIP TO 420) ←		↓	



SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH
		NAME _____	NAME _____
417	At any time before this pregnancy, did you receive any tetanus injections?	YES ..... 1 NO ..... 2 (SKIP TO 420) ← DONT KNOW ..... 8	
418	Before this pregnancy, how many times did you receive a tetanus injection?  IF 7 OR MORE TIMES, RECORD '7'.	TIMES ..... <input type="text"/> DONT KNOW ..... 8	
419	CHECK 418:  ONLY <input type="checkbox"/> ONE ↓      MORE <input type="checkbox"/> THAN ONE ↓ a) How many years ago did you receive that tetanus injection?      b) How many years ago did you receive the last tetanus injection prior to this pregnancy?	YEARS AGO ..... <input type="text"/> <input type="text"/>	
420	During this pregnancy, were you given or did you buy any iron tablets or iron syrup?  SHOW TABLETS/SYRUP.	YES ..... 1 NO ..... 2 (SKIP TO 422) ← DONT KNOW ..... 8	
421	During the whole pregnancy, for how many days did you take the tablets or syrup?  IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS ..... <input type="text"/> <input type="text"/> <input type="text"/> DONT KNOW ..... 998	
422	During this pregnancy, did you take any drug for intestinal worms?	YES ..... 1 NO ..... 2 DONT KNOW ..... 8	
423	During this pregnancy, did you take SP/Fansidar to keep you from getting malaria?	YES ..... 1 NO ..... 2 (SKIP TO 426) ← DONT KNOW ..... 8	
424	How many times did you take SP/Fansidar during this pregnancy? PROBE: MALARIA PREVENTION DRUG	TIMES ..... <input type="text"/> <input type="text"/>	
425	Did you get the SP/Fansidar during any antenatal care visit, during another visit to a health facility or from another source? IF MORE THAN ONE SOURCE, RECORD THE HIGHEST SOURCE ON THE LIST.	ANTENATAL VISIT ..... 1 ANOTHER FACILITY VISIT ..... 2 OTHER SOURCE ..... 6	



## SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH		NEXT-TO-LAST BIRTH	
		NAME _____		NAME _____	
426	When (NAME) was born, was (NAME) very large, larger than average, average, smaller than average, or very small?	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW ..... 8		VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW ..... 8	
427	Was (NAME) weighed at birth?	YES ..... 1 NO ..... 2 (SKIP TO 429) ← DON'T KNOW ..... 8		YES ..... 1 NO ..... 2 (SKIP TO 429) ← DON'T KNOW ..... 8	
428	How much did (NAME) weigh?  RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/>  KG FROM RECALL 2 <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/>  DON'T KNOW ..... 9998		KG FROM CARD 1 <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/>  KG FROM RECALL 2 <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/>  DON'T KNOW ..... 9998	
429	Who assisted with the delivery of (NAME)?  Anyone else?  PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED.  IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	<b>HEALTH PERSONNEL</b> DOCTOR ..... A CLINICAL OFFICER ..... B NURSE/MIDWIFE ..... C AUXILIARY MIDWIFE ..... D <b>OTHER PERSON</b> TRADITIONAL BIRTH ATTENDANT ..... E RELATIVE/FRIEND ..... F OTHER _____ X (SPECIFY) NO ONE ASSISTED ..... Y		<b>HEALTH PERSONNEL</b> DOCTOR ..... A CLINICAL OFFICER ..... B NURSE/MIDWIFE ..... C AUXILIARY MIDWIFE ..... D <b>OTHER PERSON</b> TRADITIONAL BIRTH ATTENDANT ..... E RELATIVE/FRIEND ..... F OTHER _____ X (SPECIFY) NO ONE ASSISTED ..... Y	



SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH		NEXT-TO-LAST BIRTH											
		NAME _____	NAME _____	NAME _____	NAME _____										
430	<p>Where did you give birth to (NAME)?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____ (NAME OF PLACE)</p>	<p><b>HOME</b></p> <p>HER HOME ..... 11 (SKIP TO 434) ←</p> <p>OTHER HOME ..... 12</p> <p><b>PUBLIC SECTOR</b></p> <p>GOVERNMENT HOSPITAL .. 21 REFERRAL HEALTH CENTRE 22 MCH/HC ..... 23 PRIMARY HEALTH UNIT (PHU) 24 MOBILE CLINIC ..... 25 OTHER PUBLIC SECTOR</p> <p>_____ 26 (SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/ CLINIC ..... 31 OTHER PRIVATE MEDICAL SECTOR</p> <p>_____ 36 (SPECIFY)</p> <p>OTHER ..... 96 (SPECIFY) (SKIP TO 434) ←</p>	<p><b>HOME</b></p> <p>HER HOME ..... 11 (SKIP TO 434) ←</p> <p>OTHER HOME ..... 12</p> <p><b>PUBLIC SECTOR</b></p> <p>GOVERNMENT HOSPITAL .. 21 REFERRAL HEALTH CENTRE 22 MCH/HC ..... 23 PRIMARY HEALTH UNIT (PHU) 24 MOBILE CLINIC ..... 25 OTHER PUBLIC SECTOR</p> <p>_____ 26 (SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/ CLINIC ..... 31 OTHER PRIVATE MEDICAL SECTOR</p> <p>_____ 36 (SPECIFY)</p> <p>OTHER ..... 96 (SPECIFY) (SKIP TO 434) ←</p>												
431	<p>How long after (NAME) was delivered did you stay there?</p> <p>IF LESS THAN ONE HOUR RECORD '00'; IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.</p>	<p>HOURS ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table></p> <p>DAYS ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table></p> <p>WEEKS ..... 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table></p> <p>DONT KNOW ..... 98</p>													
432	<p>Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out?</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 434) ←</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 434) ←</p>												
433	<p>When was the decision made to have the caesarean section? Was it before or after your labor pains started?</p>	<p>BEFORE ..... 1 AFTER ..... 2</p>	<p>BEFORE ..... 1 AFTER ..... 2</p>												
434	<p>Immediately after the birth, was (NAME) put on your chest?</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 434B) ←</p> <p>DONT KNOW ..... 8</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 459) ←</p> <p>DONT KNOW ..... 8</p>												
434A	<p>Was (NAME)'s bare skin touching your bare skin (kangaroo)?</p>	<p>YES ..... 1 NO ..... 2 DONT KNOW ..... 8</p>	<p>YES ..... 1 NO ..... 2 DONT KNOW ..... 8</p>												
434B	<p>CHECK 430: PLACE OF DELIVERY</p>	<p>CODE</p> <p>11, 12, OR 96 <input type="checkbox"/> OTHER <input type="checkbox"/></p> <p>CIRCLED</p> <p>(SKIP TO 449) ←</p>													



## SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH												
		NAME _____	NAME _____												
435	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility?	YES ..... 1 NO ..... 2 (SKIP TO 438) ←													
436	How long after delivery did the first check take place?  IF LESS THAN ONE HOUR RECORD '00'; IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAYS ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> WEEKS ..... 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DON'T KNOW ..... 98													
437	Who checked on your health at that time?  PROBE FOR MOST QUALIFIED PERSON.	<b>HEALTH PERSONNEL</b> DOCTOR ..... 11 CLINICAL OFFICER ..... 12 NURSE/MIDWIFE ..... 13 AUXILIARY MIDWIFE ..... 14 <b>OTHER PERSON</b> TRADITIONAL BIRTH ATTENDANT ..... 21 COMMUNITY HEALTH WORKER ..... 22 OTHER ..... 96 (SPECIFY)													
438	Now I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. Did anyone check on (NAME)'s health while you were still in the facility?	YES ..... 1 NO ..... 2 (SKIP TO 441) ← DON'T KNOW ..... 8													
439	How long after delivery was (NAME)'s health first checked?  IF LESS THAN ONE HOUR RECORD '00'; IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAYS ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> WEEKS ..... 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DON'T KNOW ..... 98													
440	Who checked on (NAME)'s health at that time?  PROBE FOR MOST QUALIFIED PERSON.	<b>HEALTH PERSONNEL</b> DOCTOR ..... 11 CLINICAL OFFICER ..... 12 NURSE/MIDWIFE ..... 13 AUXILIARY MIDWIFE ..... 14 <b>OTHER PERSON</b> TRADITIONAL BIRTH ATTENDANT ..... 21 COMMUNITY HEALTH WORKER ..... 22 OTHER ..... 96 (SPECIFY)													



SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH																		
		NAME _____	NAME _____																		
441	Now I want to talk to you about what happened after you left the facility. Did anyone check on your health after you left the facility?	YES ..... 1 NO ..... 2 (SKIP TO 445) ←																			
442	How long after delivery did that check take place?  IF LESS THAN ONE HOUR RECORD '00'; IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAYS ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> WEEKS ..... 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DON'T KNOW ..... 98																			
443	Who checked on your health at that time?  PROBE FOR MOST QUALIFIED PERSON.	<b>HEALTH PERSONNEL</b> DOCTOR ..... 11 CLINICAL OFFICER ..... 12 NURSE/MIDWIFE ..... 13 AUXILIARY MIDWIFE ..... 14 <b>OTHER PERSON</b> TRADITIONAL BIRTH ATTENDANT ..... 21 COMMUNITY HEALTH WORKER ..... 22 OTHER _____ 96 (SPECIFY)																			
444	Where did the check take place?  PROBE TO IDENTIFY THE TYPE OF SOURCE.  IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE)	<b>HOME</b> HER HOME ..... 11 OTHER HOME ..... 12 <b>PUBLIC SECTOR</b> GOVERNMENT HOSPITAL .. 21 REFERRAL HEALTH CENTRE 22 MCH/HC ..... 23 PRIMARY HEALTH UNIT (PHU) 24 MOBILE CLINIC ..... 25 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) <b>PRIVATE MEDICAL SECTOR</b> PRIVATE HOSPITAL/ CLINIC ..... 31 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY)																			
445	I would like to talk to you about checks on (NAME)'s health after you left (FACILITY IN 430). Did any health care provider or a traditional birth attendant check on (NAME)'s health in the six weeks after you left (FACILITY IN 430)?	YES ..... 1 NO ..... 2 (SKIP TO 457) ← DON'T KNOW ..... 8																			



## SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH												
		NAME _____	NAME _____												
446	<p>How many hours, days or weeks after the birth of (NAME) did that check take place?</p> <p>IF LESS THAN ONE HOUR RECORD '00'; IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.</p>	<p>HOURS ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table></p> <p>DAYS ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table></p> <p>WEEKS ..... 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table></p> <p>DON'T KNOW ..... 98</p>													
447	<p>Who checked on (NAME)'s health at that time?</p> <p>PROBE FOR MOST QUALIFIED PERSON.</p>	<p><b>HEALTH PERSONNEL</b></p> <p>DOCTOR ..... 11</p> <p>CLINICAL OFFICER ..... 12</p> <p>NURSE/MIDWIFE ..... 13</p> <p>AUXILIARY MIDWIFE ..... 14</p> <p><b>OTHER PERSON</b></p> <p>TRADITIONAL BIRTH ATTENDANT ..... 21</p> <p>COMMUNITY HEALTH WORKER ..... 22</p> <p>OTHER _____ 96 (SPECIFY)</p>													
448	<p>Where did this check of (NAME) take place?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____ (NAME OF PLACE)</p>	<p><b>HOME</b></p> <p>HER HOME ..... 11 ]</p> <p>OTHER HOME ..... 12 ]</p> <p><b>PUBLIC SECTOR</b></p> <p>GOVERNMENT HOSPITAL . . . 21 ]</p> <p>REFERRAL HEALTH CENTRE 22 ]</p> <p>MCH/HC ..... 23 ]</p> <p>PRIMARY HEALTH UNIT (PHU) 24 ]</p> <p>MOBILE CLINIC ..... 25 ]</p> <p>OTHER PUBLIC SECTOR _____ 26 ] (SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/ CLINIC ..... 31 ]</p> <p>OTHER PRIVATE MEDICAL SECTOR _____ 36 ] (SPECIFY)</p> <p>OTHER _____ 96 ] (SPECIFY)</p> <p>(SKIP TO 457) ←</p>													
449	<p>I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you gave birth to (NAME)?</p>	<p>YES ..... 1 ]</p> <p>NO ..... 2 ]</p> <p>(SKIP TO 453) ←</p>													



SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH						
		NAME _____	NAME _____						
450	<p>How long after delivery did the first check take place?</p> <p>IF LESS THAN ONE HOUR RECORD '00'; IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.</p>	<p>HOURS ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table></p> <p>DAYS ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table></p> <p>WEEKS ..... 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table></p> <p>DON'T KNOW ..... 98</p>							
451	<p>Who checked on your health at that time?</p> <p>PROBE FOR MOST QUALIFIED PERSON.</p>	<p><b>HEALTH PERSONNEL</b></p> <p>DOCTOR ..... 11</p> <p>CLINICAL OFFICER ..... 12</p> <p>NURSE/MIDWIFE ..... 13</p> <p>AUXILIARY MIDWIFE ..... 14</p> <p><b>OTHER PERSON</b></p> <p>TRADITIONAL BIRTH ATTENDANT ..... 21</p> <p>COMMUNITY HEALTH WORKER ..... 22</p> <p>OTHER _____ 96 (SPECIFY)</p>							
452	<p>Where did this first check take place?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE.</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.</p> <p>_____ (NAME OF PLACE)</p>	<p><b>HOME</b></p> <p>HER HOME ..... 11</p> <p>OTHER HOME ..... 12</p> <p><b>PUBLIC SECTOR</b></p> <p>GOVERNMENT HOSPITAL . . 21</p> <p>REFERRAL HEALTH CENTRE 22</p> <p>MCH/HC ..... 23</p> <p>PRIMARY HEALTH UNIT (PHU) 24</p> <p>MOBILE CLINIC ..... 25</p> <p>OTHER PUBLIC SECTOR _____ 26 (SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/ CLINIC ..... 31</p> <p>OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY)</p> <p>OTHER _____ 96 (SPECIFY)</p>							
453	<p>I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. In the six weeks after (NAME) was born, did any health care provider or a traditional birth attendant check on (NAME)'s health?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 457) ←</p> <p>DON'T KNOW ..... 8</p>							



## SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH						
		NAME _____	NAME _____						
454	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE HOUR RECORD '00'; IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS AFTER BIRTH ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> DAYS AFTER BIRTH ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> WEEKS AFTER BIRTH ..... 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> DON'T KNOW ..... 98							
455	Who checked on (NAME)'s health at that time?  PROBE FOR MOST QUALIFIED PERSON	<b>HEALTH PERSONNEL</b> DOCTOR ..... 11 CLINICAL OFFICER ..... 12 NURSE/MIDWIFE ..... 13 AUXILIARY MIDWIFE ..... 14 <b>OTHER PERSON</b> TRADITIONAL BIRTH ATTENDANT ..... 21 COMMUNITY HEALTH WORKER ..... 22  OTHER _____ 96 (SPECIFY)							
456	Where did this first check of (NAME) take place?  PROBE TO IDENTIFY THE TYPE OF SOURCE.  IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE)	<b>HOME</b> HER HOME ..... 11 OTHER HOME ..... 12  <b>PUBLIC SECTOR</b> GOVERNMENT HOSPITAL .. 21 REFERRAL HEALTH CENTRE 22 MCH/HC ..... 23 PRIMARY HEALTH UNIT (PHU) 24 MOBILE CLINIC ..... 25 OTHER PUBLIC SECTOR _____ (SPECIFY) 26  <b>PRIVATE MEDICAL SECTOR</b> PRIVATE HOSPITAL/ CLINIC ..... 31 OTHER PRIVATE MEDICAL SECTOR _____ (SPECIFY) 36  OTHER _____ 96 SPECIFY							



SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH			NEXT-TO-LAST BIRTH		
		NAME _____			NAME _____		
457	During the first two days after (NAME)'s birth, did any health care provider do the following:  a) Examine the cord? b) Measure (NAME)'s temperature?  c) Counsel you on danger signs for newborns? d) Counsel you on breastfeeding?  e) Observe (NAME) breastfeeding?  f) Checked the mother's temperature?  g) Counsel you on birth spacing?		YES NO DK				
		a) CORD .....	1 2 8				
		b) CHILD TEMP ..	1 2 8				
		c) SIGNS .....	1 2 8				
		d) COUNSEL BREAST- FEED .....	1 2 8				
		e) OBSERVE BREAST- FEED .....	1 2 8				
		f) MOTH TEMP ..	1 2 8				
		g) COUNSEL FI ..	1 2 8				
458	Has your menstrual period returned since the birth of (NAME)?	YES .....	1	(SKIP TO 460) ←			
		NO .....	2	(SKIP TO 461) ←			
459	Did your period return between the birth of (NAME) and your next pregnancy?				YES .....	1	
					NO .....	2	
					(SKIP TO 461) ←		
460	For how many months after the birth of (NAME) did you not have a period?	MONTHS .....	<input type="text"/>	<input type="text"/>	MONTHS .....	<input type="text"/>	
		DON'T KNOW .....	98		DON'T KNOW .....	98	
461	For how many months after the birth of (NAME) did you start seeing your husband?	MONTHS .....	<input type="text"/>	<input type="text"/>	MONTHS .....	<input type="text"/>	
		NOT STARTED .....	95		NOT STARTED .....	95	
		DON'T KNOW .....	98		DON'T KNOW .....	98	
		NO RESPONSE .....	99		NO RESPONSE .....	99	
462	Did you ever breastfeed (NAME)?	YES .....	1	(SKIP TO 464) ←	YES .....	1	
		NO .....	2		NO .....	2	
463	CHECK 404: IS CHILD LIVING?	LIVING <input type="checkbox"/>		DEAD <input type="checkbox"/>			
		(SKIP TO 468) ←		(SKIP TO 469) ←			
464	How long after birth did you first put (NAME) to the breast?  IF LESS THAN 1 HOUR, RECORD '00' HOURS; IF LESS THAN 24 HOURS, RECORD HOURS; OTHERWISE, RECORD DAYS.	IMMEDIATELY .....	00				
		HOURS .....	1	<input type="text"/>	<input type="text"/>		
		DAYS .....	2	<input type="text"/>	<input type="text"/>		
465	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES .....	1				
		NO .....	2				



## SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH		NEXT-TO-LAST BIRTH	
		NAME _____	NAME _____	NAME _____	NAME _____
466	CHECK 404: IS CHILD LIVING?	LIVING <input type="checkbox"/> ↓ (SKIP TO 468) ←	DEAD <input type="checkbox"/>	LIVING <input type="checkbox"/> ↓ (SKIP TO 468) ←	DEAD <input type="checkbox"/>
467	Are you still breastfeeding (NAME)?	YES ..... 1 NO ..... 2			
468	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8		YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
469		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501A.		GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501A.	



SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501A	CHECK 215 IN THE BIRTH HISTORY: ANY BIRTHS IN 2016-2019? ONE OR MORE BIRTHS IN 2016-2019 <input type="checkbox"/>	NO BIRTHS IN 2016-2019 <input type="checkbox"/> → 601	
502A	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE LAST CHILD BORN IN 2016-2019. NAME OF LAST BIRTH _____ BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/>		
503A	CHECK 216 FOR CHILD: LIVING <input type="checkbox"/>	DEAD <input type="checkbox"/> → 501B	
504A	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD ..... 1 → 507A YES, HAS ONLY AN OTHER DOCUMENT ..... 2 → 507A YES, HAS CARD AND OTHER DOCUMENT ..... 3 NO, NO CARD AND NO OTHER DOCUMENT ..... 4	
505A	Did you ever have a vaccination card for (NAME)?	YES ..... 1 NO ..... 2	
506A	CHECK 504A: CODE '2' CIRCLED <input type="checkbox"/>		CODE '4' CIRCLED <input type="checkbox"/> → 511A
507A	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN ..... 1 YES, ONLY OTHER DOCUMENT SEEN ..... 2 YES, CARD AND OTHER DOCUMENT SEEN ..... 3 NO CARD AND NO OTHER DOCUMENT SEEN... 4 → 511A	



SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																												
	NAME OF LAST BIRTH _____ BIRTH HISTORY NUMBER . . . . .	<table border="1"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>																																													
508A	<p>COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.</p> <table border="1"> <thead> <tr> <th></th> <th>DAY</th> <th>MONTH</th> <th>YEAR</th> </tr> </thead> <tbody> <tr><td>BCG</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV)/IPV 0 (BIRTH DOSE)</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV)/IPV 1</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV)/IPV 2</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV)/IPV 3</td><td></td><td></td><td></td></tr> <tr><td>DPT-HEP.B-HIB (PENTAVALENT) 1</td><td></td><td></td><td></td></tr> <tr><td>DPT-HEP.B-HIB (PENTAVALENT) 2</td><td></td><td></td><td></td></tr> <tr><td>DPT-HEP.B-HIB (PENTAVALENT) 3</td><td></td><td></td><td></td></tr> <tr><td>MEASLES</td><td></td><td></td><td></td></tr> <tr><td>VITAMIN A (MOST RECENT)</td><td></td><td></td><td></td></tr> </tbody> </table>		DAY	MONTH	YEAR	BCG				ORAL POLIO VACCINE (OPV)/IPV 0 (BIRTH DOSE)				ORAL POLIO VACCINE (OPV)/IPV 1				ORAL POLIO VACCINE (OPV)/IPV 2				ORAL POLIO VACCINE (OPV)/IPV 3				DPT-HEP.B-HIB (PENTAVALENT) 1				DPT-HEP.B-HIB (PENTAVALENT) 2				DPT-HEP.B-HIB (PENTAVALENT) 3				MEASLES				VITAMIN A (MOST RECENT)					
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509A	<p>CHECK 508A: 'BCG' TO 'MEASLES' ALL RECORDED?</p> <p>NO <input type="checkbox"/></p>	<p>YES <input type="checkbox"/></p>	→ 520A																																												
510A	<p>In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days?</p> <p>RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508A THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.</p>	<p>YES ..... 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 508A THEN WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN) (THEN SKIP TO 520A)</p> <p>NO ..... 2 DON'T KNOW ..... 8 (WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN) (THEN SKIP TO 520A)</p>																																													



SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/>	
511A	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 520A
512A	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
513A	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio or IPV, that is an injection on the arm to prevent polio?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 516A
514A	Did (NAME) receive the first oral polio or IPV vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS ..... 1 LATER ..... 2	
515A	How many times did (NAME) receive the oral polio or IPV vaccine?	NUMBER OF TIMES ..... <input type="text"/> DON'T KNOW ..... 8	
516A	Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the thigh sometimes at the same time as polio drops?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 518A
517A	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES ..... <input type="text"/> DON'T KNOW ..... 8	



## SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/>																	
518A	Has (NAME) ever received a measles vaccination, that is, an injection in the arm to prevent measles?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 520A																
519A	How many times did (NAME) receive the measles vaccine?	NUMBER OF TIMES ..... <input type="text"/> DON'T KNOW ..... 8																	
520A	In the last 7 days was (NAME) given:	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">YES</th> <th style="text-align: center;">NO</th> <th style="text-align: center;">DK</th> </tr> </thead> <tbody> <tr> <td>a) [LOCAL NAME FOR MULTIPLE MICRONUTRIENT POWDER]?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>b) [LOCAL NAME FOR READY TO USE THERAPEUTIC FOOD SUCH AS PLUMPY'NUT]?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>c) [LOCAL NAME FOR READY TO USE SUPPLEMENTAL FOOD]?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> </tbody> </table>		YES	NO	DK	a) [LOCAL NAME FOR MULTIPLE MICRONUTRIENT POWDER]?	1	2	8	b) [LOCAL NAME FOR READY TO USE THERAPEUTIC FOOD SUCH AS PLUMPY'NUT]?	1	2	8	c) [LOCAL NAME FOR READY TO USE SUPPLEMENTAL FOOD]?	1	2	8	
	YES	NO	DK																
a) [LOCAL NAME FOR MULTIPLE MICRONUTRIENT POWDER]?	1	2	8																
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c) [LOCAL NAME FOR READY TO USE SUPPLEMENTAL FOOD]?	1	2	8																
521A	CONTINUE WITH 501B.																		



SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501B	CHECK 215 IN THE BIRTH HISTORY: ANY MORE BIRTHS IN 2016-2019? MORE BIRTHS IN 2016-2019 <input type="checkbox"/> NO MORE BIRTHS IN 2016-2019 <input type="checkbox"/>		→ 601
502B	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE NEXT-TO-LAST CHILD BORN IN 2016-2019. NAME OF NEXT-TO-LAST BIRTH _____ BIRTH HISTORY NUMBER . . . . . <input type="text"/> <input type="text"/>		
503B	CHECK 216 FOR CHILD: LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>		→ 521B
504B	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD . . . . . 1 YES, HAS ONLY AN OTHER DOCUMENT . . . . . 2 YES, HAS CARD AND OTHER DOCUMENT . . . . . 3 NO, NO CARD AND NO OTHER DOCUMENT . . . . . 4	→ 507B → 507B
505B	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 NO . . . . . 2	
506B	CHECK 504B: CODE '2' CIRCLED <input type="checkbox"/> CODE '4' CIRCLED <input type="checkbox"/>		→ 511B
507B	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN . . . . . 1 YES, ONLY OTHER DOCUMENT SEEN . . . . . 2 YES, CARD AND OTHER DOCUMENT SEEN . . . . . 3 NO CARD AND NO OTHER DOCUMENT SEEN . . . . . 4	→ 511B



SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																												
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/>																																													
508B	<p>COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.</p> <table border="1"> <thead> <tr> <th></th> <th>DAY</th> <th>MONTH</th> <th>YEAR</th> </tr> </thead> <tbody> <tr><td>BCG</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV)/IPV 0 (BIRTH DOSE)</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV)/IPV 1</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV)/IPV 2</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV)/IPV 3</td><td></td><td></td><td></td></tr> <tr><td>DPT-HEP.B-HIB (PENTAVALENT) 1</td><td></td><td></td><td></td></tr> <tr><td>DPT-HEP.B-HIB (PENTAVALENT) 2</td><td></td><td></td><td></td></tr> <tr><td>DPT-HEP.B-HIB (PENTAVALENT) 3</td><td></td><td></td><td></td></tr> <tr><td>MEASLES</td><td></td><td></td><td></td></tr> <tr><td>VITAMIN A (MOST RECENT)</td><td></td><td></td><td></td></tr> </tbody> </table>		DAY	MONTH	YEAR	BCG				ORAL POLIO VACCINE (OPV)/IPV 0 (BIRTH DOSE)				ORAL POLIO VACCINE (OPV)/IPV 1				ORAL POLIO VACCINE (OPV)/IPV 2				ORAL POLIO VACCINE (OPV)/IPV 3				DPT-HEP.B-HIB (PENTAVALENT) 1				DPT-HEP.B-HIB (PENTAVALENT) 2				DPT-HEP.B-HIB (PENTAVALENT) 3				MEASLES				VITAMIN A (MOST RECENT)					
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SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/>	
511B	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 520B
512B	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
513B	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio or IPV, that is an injection on the arm to prevent polio?+B188	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 516B
514B	Did (NAME) receive the first oral polio or IPV vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS ..... 1 LATER ..... 2	
515B	How many times did (NAME) receive the oral polio or IPV vaccine?	NUMBER OF TIMES ..... <input type="text"/> DON'T KNOW ..... 8	
516B	Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the thigh sometimes at the same time as polio drops?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 518B
517B	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES ..... <input type="text"/> DON'T KNOW ..... 8	



SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																
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519B	How many times did (NAME) receive the measles vaccine?	NUMBER OF TIMES ..... <input type="text"/> DON'T KNOW ..... 8																	
520B	In the last 7 days was (NAME) given:	<table style="width:100%; border:none;"> <tr> <td></td> <td style="text-align:right;">YES</td> <td style="text-align:right;">NO</td> <td style="text-align:right;">DK</td> </tr> <tr> <td>a) [LOCAL NAME FOR MULTIPLE MICRONUTRIENT POWDER/BUSCUIT]?</td> <td style="text-align:right;">a) [POWDER] ..... 1</td> <td style="text-align:right;">2</td> <td style="text-align:right;">8</td> </tr> <tr> <td>b) [LOCAL NAME FOR READY TO USE THERAPEUTIC FOOD SUCH AS PLUMPY'NUT]?</td> <td style="text-align:right;">b) [PLUMPY'NUT] ..... 1</td> <td style="text-align:right;">2</td> <td style="text-align:right;">8</td> </tr> <tr> <td>c) [LOCAL NAME FOR READY TO USE SUPPLEMENTAL FOOD SUCH AS PLUMPY'DOZ]?</td> <td style="text-align:right;">c) [PLUMPY'DOZ] ..... 1</td> <td style="text-align:right;">2</td> <td style="text-align:right;">8</td> </tr> </table>		YES	NO	DK	a) [LOCAL NAME FOR MULTIPLE MICRONUTRIENT POWDER/BUSCUIT]?	a) [POWDER] ..... 1	2	8	b) [LOCAL NAME FOR READY TO USE THERAPEUTIC FOOD SUCH AS PLUMPY'NUT]?	b) [PLUMPY'NUT] ..... 1	2	8	c) [LOCAL NAME FOR READY TO USE SUPPLEMENTAL FOOD SUCH AS PLUMPY'DOZ]?	c) [PLUMPY'DOZ] ..... 1	2	8	
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521B	CHECK 215 IN BIRTH HISTORY: ANY MORE BIRTHS IN 2016-2019?																		
	MORE BIRTHS IN 2016-2019 <input type="checkbox"/> (GO TO 502B IN AN ADDITIONAL QUESTIONNAIRE) ←	NO MORE BIRTHS IN 2016-2019 <input type="checkbox"/> →	→ 601																



SECTION 6. CHILD HEALTH AND NUTRITION

601	<p>CHECK 224:</p> <p style="text-align: center;">             ONE OR MORE BIRTHS IN 2014-2019 <input type="checkbox"/> <span style="margin-left: 200px;">NO BIRTHS IN 2014-2019 <input type="checkbox"/></span> <span style="float: right;">→ 648</span> </p>									
602	<p>CHECK 215: RECORD THE BIRTH HISTORY NUMBER IN 603 AND THE NAME AND SURVIVAL STATUS IN 604 FOR EACH BIRTH IN 2014-2019. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S).</p> <p>Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately)</p>									
603	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 30%; text-align: center;">LAST BIRTH</th> <th style="width: 30%; text-align: center;">NEXT-TO-LAST BIRTH</th> </tr> </thead> <tbody> <tr> <td>BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.</td> <td style="text-align: center;">BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/></td> <td style="text-align: center;">BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/></td> </tr> </tbody> </table>		LAST BIRTH	NEXT-TO-LAST BIRTH	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/>	BIRTH HISTORY NUMBER ..... <input type="text"/> <input type="text"/>			
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604	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 30%; text-align: center;">LAST BIRTH</th> <th style="width: 30%; text-align: center;">NEXT-TO-LAST BIRTH</th> </tr> </thead> <tbody> <tr> <td>FROM 212 AND 216:</td> <td style="text-align: center;">NAME _____</td> <td style="text-align: center;">NAME _____</td> </tr> <tr> <td></td> <td style="text-align: center;">                     LIVING <input type="checkbox"/>      DEAD <input type="checkbox"/>                      (SKIP TO 646) ←                 </td> <td style="text-align: center;">                     LIVING <input type="checkbox"/>      DEAD <input type="checkbox"/>                      (SKIP TO 646) ←                 </td> </tr> </tbody> </table>		LAST BIRTH	NEXT-TO-LAST BIRTH	FROM 212 AND 216:	NAME _____	NAME _____		LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> (SKIP TO 646) ←	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> (SKIP TO 646) ←
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FROM 212 AND 216:	NAME _____	NAME _____								
	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> (SKIP TO 646) ←	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> (SKIP TO 646) ←								
605	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 40%;">In the last six months, was (NAME) given a vitamin A dose like [this/any of these]?</td> <td style="width: 30%;">                     YES ..... 1                      NO ..... 2                      DON'T KNOW ..... 8                 </td> <td style="width: 30%;">                     YES ..... 1                      NO ..... 2                      DON'T KNOW ..... 8                 </td> </tr> <tr> <td>SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.</td> <td></td> <td></td> </tr> </tbody> </table>	In the last six months, was (NAME) given a vitamin A dose like [this/any of these]?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.					
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606	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 40%;">In the last seven days, was (NAME) given iron pills, sprinkles with iron, or iron syrup like [this/any of these]?</td> <td style="width: 30%;">                     YES ..... 1                      NO ..... 2                      DON'T KNOW ..... 8                 </td> <td style="width: 30%;">                     YES ..... 1                      NO ..... 2                      DON'T KNOW ..... 8                 </td> </tr> <tr> <td>SHOW COMMON TYPES OF PILLS/SPRINKLES/SYRUPS.</td> <td></td> <td></td> </tr> </tbody> </table>	In the last seven days, was (NAME) given iron pills, sprinkles with iron, or iron syrup like [this/any of these]?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	SHOW COMMON TYPES OF PILLS/SPRINKLES/SYRUPS.					
In the last seven days, was (NAME) given iron pills, sprinkles with iron, or iron syrup like [this/any of these]?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8								
SHOW COMMON TYPES OF PILLS/SPRINKLES/SYRUPS.										
607	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 40%;">Was (NAME) given any drug for intestinal worms in the last six months?</td> <td style="width: 30%;">                     YES ..... 1                      NO ..... 2                      DON'T KNOW ..... 8                 </td> <td style="width: 30%;">                     YES ..... 1                      NO ..... 2                      DON'T KNOW ..... 8                 </td> </tr> </tbody> </table>	Was (NAME) given any drug for intestinal worms in the last six months?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8						
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608	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 40%;">Has (NAME) had diarrhea in the last 2 weeks?</td> <td style="width: 30%;">                     YES ..... 1                      NO ..... 2                      (SKIP TO 618) ←                      DON'T KNOW ..... 8                 </td> <td style="width: 30%;">                     YES ..... 1                      NO ..... 2                      (SKIP TO 618) ←                      DON'T KNOW ..... 8                 </td> </tr> </tbody> </table>	Has (NAME) had diarrhea in the last 2 weeks?	YES ..... 1 NO ..... 2 (SKIP TO 618) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 618) ← DON'T KNOW ..... 8						
Has (NAME) had diarrhea in the last 2 weeks?	YES ..... 1 NO ..... 2 (SKIP TO 618) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 618) ← DON'T KNOW ..... 8								



## SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH		NEXT-TO-LAST BIRTH	
		NAME _____		NAME _____	
609	<p>CHECK 467: CURRENTLY BREASTFEEDING?</p> <p>YES <input type="checkbox"/> NO/ NOT ASKED <input type="checkbox"/></p> <p>a) Now I would like to know how much (NAME) was given to drink during the diarrhea including breastmilk. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink?</p> <p>IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less?</p> <p>b) Now I would like to know how much (NAME) was given to drink during the diarrhea. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink?</p> <p>IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less?</p>	<p>MUCH LESS ..... 1</p> <p>SOMEWHAT LESS ..... 2</p> <p>ABOUT THE SAME ..... 3</p> <p>MORE ..... 4</p> <p>NOTHING TO DRINK ..... 5</p> <p>DON'T KNOW ..... 8</p> <p>IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less?</p>	<p>MUCH LESS ..... 1</p> <p>SOMEWHAT LESS ..... 2</p> <p>ABOUT THE SAME ..... 3</p> <p>MORE ..... 4</p> <p>NOTHING TO DRINK ..... 5</p> <p>DON'T KNOW ..... 8</p>		
610	<p>When (NAME) had diarrhea, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat?</p> <p>IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less?</p>	<p>MUCH LESS ..... 1</p> <p>SOMEWHAT LESS ..... 2</p> <p>ABOUT THE SAME ..... 3</p> <p>MORE ..... 4</p> <p>STOPPED FOOD ..... 5</p> <p>NEVER GAVE FOOD ..... 6</p> <p>DON'T KNOW ..... 8</p>	<p>MUCH LESS ..... 1</p> <p>SOMEWHAT LESS ..... 2</p> <p>ABOUT THE SAME ..... 3</p> <p>MORE ..... 4</p> <p>STOPPED FOOD ..... 5</p> <p>NEVER GAVE FOOD ..... 6</p> <p>DON'T KNOW ..... 8</p>		
611	<p>Did you seek advice or treatment for the diarrhea from any source?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 615) ←</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>(SKIP TO 615) ←</p>		



SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH
		NAME _____	NAME _____
612	<p>Where did you seek advice or treatment?</p> <p>Anywhere else?</p> <p>PROBE TO IDENTIFY THE TYPE OF</p> <p>IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S).</p> <p>_____</p> <p>(NAME OF PLACE(S))</p>	<p><b>PUBLIC SECTOR</b></p> <p>GOVERNMENT HOSPITAL . . . A</p> <p>REFERRAL HEALTH CENTRE B</p> <p>MCH/HC . . . . . C</p> <p>PRIMARY HEALTH UNIT (PHU D</p> <p>MOBILE CLINIC . . . . . E</p> <p>CHW . . . . . F</p> <p>OTHER PUBLIC SECTOR</p> <p>_____ G</p> <p>(SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/DOCTOR/ CLINIC . . . . . H</p> <p>PHARMACY . . . . . I</p> <p>OTHER PRIVATE MEDICAL SECTOR</p> <p>_____ J</p> <p>(SPECIFY)</p> <p><b>OTHER SOURCE</b></p> <p>SHOP . . . . . K</p> <p>TRADITIONAL PRACTITIONER . . . . . L</p> <p>MARKET . . . . . M</p> <p>ITINERANT DRUG SELLER . . . . . N</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	<p><b>PUBLIC SECTOR</b></p> <p>GOVERNMENT HOSPITAL . . . A</p> <p>REFERRAL HEALTH CENTRE B</p> <p>MCH/HC . . . . . C</p> <p>PRIMARY HEALTH UNIT (PHU D</p> <p>MOBILE CLINIC . . . . . E</p> <p>CHW . . . . . F</p> <p>OTHER PUBLIC SECTOR</p> <p>_____ G</p> <p>(SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/DOCTOR/ CLINIC . . . . . H</p> <p>PHARMACY . . . . . I</p> <p>OTHER PRIVATE MEDICAL SECTOR</p> <p>_____ J</p> <p>(SPECIFY)</p> <p><b>OTHER SOURCE</b></p> <p>SHOP . . . . . K</p> <p>TRADITIONAL PRACTITIONER . . . . . L</p> <p>MARKET . . . . . M</p> <p>ITINERANT DRUG SELLER . . . . . N</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>
613	CHECK 612:	<p>TWO OR MORE CODES CIRCLED <input type="checkbox"/></p> <p>ONLY ONE CODE CIRCLED <input type="checkbox"/></p> <p>(SKIP TO 615) ←</p>	<p>TWO OR MORE CODES CIRCLED <input type="checkbox"/></p> <p>ONLY ONE CODE CIRCLED <input type="checkbox"/></p> <p>(SKIP TO 615) ←</p>
614	<p>Where did you first seek advice or treatment?</p> <p>USE LETTER CODE FROM 612.</p>	FIRST PLACE . . . . . <input type="checkbox"/>	FIRST PLACE . . . . . <input type="checkbox"/>





SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH		NEXT-TO-LAST BIRTH	
		NAME _____		NAME _____	
622	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY ..... 1 NOSE ONLY ..... 2 BOTH ..... 3  OTHER _____ 6 (SPECIFY) DON'T KNOW ..... 8 (SKIP TO 624) ←		CHEST ONLY ..... 1 NOSE ONLY ..... 2 BOTH ..... 3  OTHER _____ 6 (SPECIFY) DON'T KNOW ..... 8 (SKIP TO 624) ←	
623	CHECK 618: HAD FEVER?	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/> (SKIP TO 646) ←		YES <input type="checkbox"/> NO OR DK <input type="checkbox"/> (SKIP TO 646) ←	
624	Did you seek advice or treatment for the illness from any source?	YES ..... 1 NO ..... 2 (SKIP TO 629) ←		YES ..... 1 NO ..... 2 (SKIP TO 629) ←	
625	Where did you seek advice or treatment?  Anywhere else?  PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S).  _____ (NAME OF PLACE(S))	<b>PUBLIC SECTOR</b> GOVERNMENT HOSPITAL... A REFERRAL HEALTH CENTRE B MCH/HC ..... C PRIMARY HEALTH UNIT (PHU D MOBILE CLINIC ..... E CHW ..... F OTHER PUBLIC SECTOR  _____ G (SPECIFY) <b>PRIVATE MEDICAL SECTOR</b> PRIVATE HOSPITAL/DOCTOR/ CLINIC ..... H PHARMACY ..... I OTHER PRIVATE MEDICAL SECTOR  _____ J (SPECIFY) <b>OTHER SOURCE</b> SHOP ..... K TRADITIONAL PRACTITIONER ..... L MARKET ..... M KORAN ..... N  OTHER _____ X (SPECIFY)		<b>PUBLIC SECTOR</b> GOVERNMENT HOSPITAL... A REFERRAL HEALTH CENTRE B MCH/HC ..... C PRIMARY HEALTH UNIT (PHU D MOBILE CLINIC ..... E CHW ..... F OTHER PUBLIC SECTOR  _____ G (SPECIFY) <b>PRIVATE MEDICAL SECTOR</b> PRIVATE HOSPITAL/DOCTOR/ CLINIC ..... H PHARMACY ..... I OTHER PRIVATE MEDICAL SECTOR  _____ J (SPECIFY) <b>OTHER SOURCE</b> SHOP ..... K TRADITIONAL PRACTITIONER ..... L MARKET ..... M KORAN ..... N  OTHER _____ X (SPECIFY)	
626	CHECK 625:	TWO OR MORE CODES CIRCLED <input type="checkbox"/> ONLY ONE CODE CIRCLED <input type="checkbox"/> (SKIP TO 628) ←		TWO OR MORE CODES CIRCLED <input type="checkbox"/> ONLY ONE CODE CIRCLED <input type="checkbox"/> (SKIP TO 628) ←	



## SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH		NEXT-TO-LAST BIRTH	
		NAME _____	NAME _____	NAME _____	NAME _____
627	Where did you first seek advice or treatment?  USE LETTER CODE FROM 625.	FIRST PLACE ..... <input type="checkbox"/>			
628	How many days after the illness began did you first seek advice or treatment for (NAME)? IF THE SAME DAY RECORD '00'.	DAYS ..... <input type="text"/> <input type="text"/>			
629	At any time during the illness, did (NAME) take any drugs for the illness?	YES ..... 1 NO ..... 2 (SKIP TO 646) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 646) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 646) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 646) ← DON'T KNOW ..... 8
630	What drugs did (NAME) take?  Any other drugs?  RECORD ALL MENTIONED.	<b>ANTIMALARIAL DRUGS</b> ARTEMISININ COMBINATION THERAPY (ACT)/ AI ..... A SP/FANSIDAR ..... B CHLOROQUINE ..... C AMODIAQUINE ..... D QUININE PILLS ..... E INJECTION/IV ..... F ARTESUNATE RECTAL ..... G INJECTION/IV ..... H  OTHER ANTIMALARIAL _____ I (SPECIFY)  <b>ANTIBIOTIC DRUGS</b> PILL/SYRUP ..... J INJECTION/IV ..... K  <b>OTHER DRUGS</b> ASPIRIN ..... L PANADOL/PARACETAMO... M IBUPROFEN ..... N  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	<b>ANTIMALARIAL DRUGS</b> ARTEMISININ COMBINATION THERAPY (ACT)/ AI ..... A SP/FANSIDAR ..... B CHLOROQUINE ..... C AMODIAQUINE ..... D QUININE PILLS ..... E INJECTION/IV ..... F ARTESUNATE RECTAL ..... G INJECTION/IV ..... H  OTHER ANTIMALARIAL _____ I (SPECIFY)  <b>ANTIBIOTIC DRUGS</b> PILL/SYRUP ..... J INJECTION/IV ..... K  <b>OTHER DRUGS</b> ASPIRIN ..... L PANADOL/PARACETAMO... M IBUPROFEN ..... N  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	<b>ANTIMALARIAL DRUGS</b> ARTEMISININ COMBINATION THERAPY (ACT)/ AI ..... A SP/FANSIDAR ..... B CHLOROQUINE ..... C AMODIAQUINE ..... D QUININE PILLS ..... E INJECTION/IV ..... F ARTESUNATE RECTAL ..... G INJECTION/IV ..... H  OTHER ANTIMALARIAL _____ I (SPECIFY)  <b>ANTIBIOTIC DRUGS</b> PILL/SYRUP ..... J INJECTION/IV ..... K  <b>OTHER DRUGS</b> ASPIRIN ..... L PANADOL/PARACETAMO... M IBUPROFEN ..... N  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	<b>ANTIMALARIAL DRUGS</b> ARTEMISININ COMBINATION THERAPY (ACT)/ AI ..... A SP/FANSIDAR ..... B CHLOROQUINE ..... C AMODIAQUINE ..... D QUININE PILLS ..... E INJECTION/IV ..... F ARTESUNATE RECTAL ..... G INJECTION/IV ..... H  OTHER ANTIMALARIAL _____ I (SPECIFY)  <b>ANTIBIOTIC DRUGS</b> PILL/SYRUP ..... J INJECTION/IV ..... K  <b>OTHER DRUGS</b> ASPIRIN ..... L PANADOL/PARACETAMO... M IBUPROFEN ..... N  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z
631	CHECK 630: ANY CODE A-I CIRCLED?	YES <input type="checkbox"/> NO <input type="checkbox"/> ↓ (SKIP TO 646) ←	YES <input type="checkbox"/> NO <input type="checkbox"/> ↓ (SKIP TO 646) ←	YES <input type="checkbox"/> NO <input type="checkbox"/> ↓ (SKIP TO 646) ←	YES <input type="checkbox"/> NO <input type="checkbox"/> ↓ (SKIP TO 646) ←



SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH		NEXT-TO-LAST BIRTH	
		NAME _____	NAME _____	NAME _____	NAME _____
632	CHECK 630: ARTEMISININ COMBINATION THERAPY ('A') GIVEN	CODE 'A' CIRCLED <input type="checkbox"/> ↓	CODE 'A' NOT CIRCLED <input type="checkbox"/> (SKIP TO 634) ←	CODE 'A' CIRCLED <input type="checkbox"/> ↓	CODE 'A' NOT CIRCLED <input type="checkbox"/> (SKIP TO 634) ←
633	How long after the fever started did (NAME) first take an artemisinin combination therapy?	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8
634	CHECK 630: SP/FANSIDAR ('B') GIVEN	CODE 'B' CIRCLED <input type="checkbox"/> ↓	CODE 'B' NOT CIRCLED <input type="checkbox"/> (SKIP TO 636) ←	CODE 'B' CIRCLED <input type="checkbox"/> ↓	CODE 'B' NOT CIRCLED <input type="checkbox"/> (SKIP TO 636) ←
635	How long after the fever started did (NAME) first take SP/Fansidar?	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8
636	CHECK 630: CHLOROQUINE ('C') GIVEN	CODE 'C' CIRCLED <input type="checkbox"/> ↓	CODE 'C' NOT CIRCLED <input type="checkbox"/> (SKIP TO 638) ←	CODE 'C' CIRCLED <input type="checkbox"/> ↓	CODE 'C' NOT CIRCLED <input type="checkbox"/> (SKIP TO 638) ←
637	How long after the fever started did (NAME) first take chloroquine?	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8
638	CHECK 630: AMODIAQUINE ('D') GIVEN	CODE 'D' CIRCLED <input type="checkbox"/> ↓	CODE 'D' NOT CIRCLED <input type="checkbox"/> (SKIP TO 640) ←	CODE 'D' CIRCLED <input type="checkbox"/> ↓	CODE 'D' NOT CIRCLED <input type="checkbox"/> (SKIP TO 640) ←
639	How long after the fever started did (NAME) first take amodiaquine?	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ... 3 DON'T KNOW ..... 8



## SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH		NEXT-TO-LAST BIRTH	
		NAME _____	NAME _____	NAME _____	NAME _____
640	CHECK 630: QUININE ('E' OR 'F') GIVEN	CODE 'E' OR 'F' CIRCLED <input type="checkbox"/> ↓	CODE 'E' OR 'F' NOT CIRCLED <input type="checkbox"/> ↓ (SKIP TO 642) ←	CODE 'E' OR 'F' CIRCLED <input type="checkbox"/> ↓	CODE 'E' OR 'F' NOT CIRCLED <input type="checkbox"/> ↓ (SKIP TO 642) ←
641	How long after the fever started did (NAME) first take quinine?	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ..... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ..... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ..... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ..... 3 DON'T KNOW ..... 8
642	CHECK 630: ARTESUNATE ('G' OR 'H') GIVEN	CODE 'G' OR 'H' CIRCLED <input type="checkbox"/> ↓	CODE 'G' OR 'H' NOT CIRCLED <input type="checkbox"/> ↓ (SKIP TO 644) ←	CODE 'G' OR 'H' CIRCLED <input type="checkbox"/> ↓	CODE 'G' OR 'H' NOT CIRCLED <input type="checkbox"/> ↓ (SKIP TO 644) ←
643	How long after the fever started did (NAME) first take artesunate?	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ..... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ..... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ..... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ..... 3 DON'T KNOW ..... 8
644	CHECK 630: OTHER ANTIMALARIAL ('I') GIVEN	CODE 'I' CIRCLED <input type="checkbox"/> ↓	CODE 'I' NOT CIRCLED <input type="checkbox"/> ↓ (SKIP TO 646) ←	CODE 'I' CIRCLED <input type="checkbox"/> ↓	CODE 'I' NOT CIRCLED <input type="checkbox"/> ↓ (SKIP TO 646) ←
645	How long after the fever started did (NAME) first take (OTHER ANTIMALARIAL)?	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ..... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ..... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ..... 3 DON'T KNOW ..... 8	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS AFTER FEVER ..... 2 THREE OR MORE DAYS AFTER FEVER ..... 3 DON'T KNOW ..... 8
646		GO BACK TO 604 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 647.	GO TO 604 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 647.		



## SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
647	CHECK 615(a) AND 615(b), ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET OR PRE-PACKAGED ORS LIQUID <input type="checkbox"/>	ANY CHILD RECEIVED FLUID FROM ORS PACKET OR PRE-PACKAGED ORS LIQUID <input type="checkbox"/>	649
648	Have you ever heard of a special product called [LOCAL NAME FOR ORS PACKET OR PRE-PACKAGED ORS LIQUID] you can get for the treatment of diarrhea?	YES ..... 1 NO ..... 2	
649	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2017-2019 LIVING WITH THE RESPONDENT ONE OR MORE <input type="checkbox"/> ↓ _____ (NAME OF YOUNGEST CHILD LIVING WITH HER) ↓	NONE <input type="checkbox"/>	701



## SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP
650	Now I would like to ask you about liquids or foods that (NAME FROM 649) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods. Did (NAME FROM 649) drink or eat:	YES	NO	DK	
	a) Plain water?	a) ..... 1	2	8	
	b) Juice or juice drinks?	b) ..... 1	2	8	
	c) Clear broth (soup)?	c) ..... 1	2	8	
	d) Canned/powdered livestock milk? IF YES: How many times did (NAME) drink canned/powdered milk? IF 7 OR MORE TIMES, RECORD '7'.	d) ..... 1 NUMBER OF TIMES DRANK CANNED/ POWDERED MILK <input type="text"/>	2	8	
	e) Fresh livestock milk? IF YES: How many times did (NAME) drink fresh milk? IF 7 OR MORE TIMES, RECORD '7'.	e) ..... 1 NUMBER OF TIMES DRANK <input type="text"/>	2	8	
	f) Infant formula? IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.	f) ..... 1 NUMBER OF TIMES DRANK <input type="text"/>	2	8	
	g) Any other liquids?	g) ..... 1	2	8	
	h) Yogurt? IF YES: How many times did (NAME) eat yogurt?  IF 7 OR MORE TIMES, RECORD '7'.	h) ..... 1 NUMBER OF TIMES ATE YOGURT <input type="text"/>	2	8	
	i) Any [BRAND NAME OF COMMERCIALY FORTIFIED BABY FOOD, E.G., Cerelac]?	i) ..... 1	2	8	
	j) Bread, dough, pancake, rice, noodles, porridge, or other foods made from grains?	j) ..... 1	2	8	
	k) Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside?	k) ..... 1	2	8	
	l) White potatoes, white yams, manioc/cassava, or	l) ..... 1	2	8	
	m) Any dark green, leafy vegetables?	m) ..... 1	2	8	
	n) Ripe mangoes, papayas, orange, bananas, water	n) ..... 1	2	8	
	o) Any other fruits or vegetables?	o) ..... 1	2	8	
	p) Liver, kidney, heart, or other organ meats?	p) ..... 1	2	8	
	q) Any meat, such as beef, lamb, goat, chicken?	q) ..... 1	2	8	
	r) Eggs?	r) ..... 1	2	8	
	s) Fresh or dried fish or shellfish?	s) ..... 1	2	8	
	t) Any foods made from beans, peas, lentils, or nuts?	t) ..... 1	2	8	
	u) Cheese or other food made from milk?	u) ..... 1	2	8	
	v) Any other solid, semi-solid, or soft food?	v) ..... 1	2	8	



SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
651	CHECK 650 (CATEGORIES 'g' THROUGH 'v'): ALL ARE "NO" <input type="checkbox"/> AT LEAST ONE "YES" <input type="checkbox"/>		→ 653
652	Did (NAME FROM 649) eat any solid, semi-solid, or soft foods yesterday during the day or at night?  IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?	YES ..... 1 (GO BACK TO 650 TO RECORD FOOD EATEN YESTERDAY) (THEN CONTINUE TO 653)  NO ..... 2	→ 654
653	How many times did (NAME FROM 649) eat solid, semi-solid, or soft foods yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES ..... <input type="text"/> DON'T KNOW ..... 8	
654	The last time (NAME FROM 649) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE ..... 01 PUT/RINSED INTO TOILET OR LATRINE ..... 02 PUT/RINSED INTO DRAIN OR DITCH ..... 03 THROWN INTO GARBAGE ..... 04 BURIED ..... 05 LEFT IN THE OPEN ..... 06  OTHER ..... 96 (SPECIFY)	



SECTION 7. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 226:  PREGNANT <input type="checkbox"/> ↓ NOT PREGNANT OR UNSURE <input type="checkbox"/>		→ 703
702	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD ..... 1 NO MORE ..... 2 UNDECIDED/DON'T KNOW ..... 8	→ 704 → 710
703	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD ..... 1 NO MORE/NONE ..... 2 SAYS SHE CAN'T GET PREGNANT ..... 3 UNDECIDED/DON'T KNOW ..... 8	→ 706 → 711 → 709
704	CHECK 226:  NOT PREGNANT OR UNSURE <input type="checkbox"/> ↓ a) How long would you like to wait from now before the birth of (a/another) child? PREGNANT <input type="checkbox"/> ↓ b) After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS ..... 1 YEARS ..... 2 SOON/NOW ..... 993 SAYS SHE CAN'T GET PREGNANT ..... 994 AFTER MARRIAGE ..... 995 OTHER ..... 996 (SPECIFY) DON'T KNOW ..... 998	→ 709 → 711 → 709
705	CHECK 226:  NOT PREGNANT OR UNSURE <input type="checkbox"/> ↓ PREGNANT <input type="checkbox"/>		→ 710
706	CHECK 303: USING A CONTRACEPTIVE METHOD?  NOT CURRENTLY USING <input type="checkbox"/> ↓ CURRENTLY USING <input type="checkbox"/>		→ 711
707	CHECK 704:  '24' OR MORE MONTHS OR '02' OR MORE YEARS <input type="checkbox"/> ↓ NOT ASKED <input type="checkbox"/> '00-23' MONTHS OR '00-01' YEAR <input type="checkbox"/>		→ 711



SECTION 7. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
708	<p>CHECK 703 &amp; 704:</p> <p>WANTS TO WAIT <input type="checkbox"/> WANTS NO MORE/ SOMETIME BEFORE NONE <input type="checkbox"/> A/ANOTHER CHILD</p> <p>a) You have said that you would like to wait for sometime before you get another child. Can you tell me why you are not using a method to prevent pregnancy?  Any other reason?</p> <p>b) You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy?  Any other reason?</p> <p>RECORD ALL REASONS MENTIONED.</p>	<p>NOT MARRIED ..... A</p> <p><b>FERTILITY-RELATED REASONS</b></p> <p>NOT HAVING SEX ..... B</p> <p>INFREQUENT SEX ..... C</p> <p>MENOPAUSAL/HYSTERECTOMY ..... D</p> <p>CAN'T GET PREGNANT ..... E</p> <p>NOT MENSTRUATED SINCE LAST BIRTH ..... F</p> <p>BREASTFEEDING ..... G</p> <p>UP TO GOD/FATALISTIC ..... H</p> <p><b>OPPOSITION TO USE</b></p> <p>RESPONDENT OPPOSED ..... I</p> <p>HUSBAND OPPOSED ..... J</p> <p>OTHERS OPPOSED ..... K</p> <p>RELIGIOUS PROHIBITION ..... L</p> <p><b>LACK OF KNOWLEDGE</b></p> <p>KNOWS NO METHOD ..... M</p> <p>KNOWS NO SOURCE ..... N</p> <p><b>METHOD-RELATED REASONS</b></p> <p><b>SIDE EFFECTS/HEALTH CONCERNS</b> ..... O</p> <p>LACK OF ACCESS/TOO FAR ..... P</p> <p>COSTS TOO MUCH ..... Q</p> <p><b>PREFERRED METHOD</b></p> <p>NOT AVAILABLE ..... R</p> <p>NO METHOD AVAILABLE ..... S</p> <p>INCONVENIENT TO USE ..... T</p> <p>INTERFERES WITH BODY'S NORMAL PROCESSES ..... U</p> <p>OTHER _____ X (SPECIFY)</p> <p>DON'T KNOW ..... Z</p>	
709	<p>CHECK 303: USING A CONTRACEPTIVE METHOD?</p> <p>NOT <input type="checkbox"/> NO, NOT <input type="checkbox"/> ASKED CURRENTLY USING</p> <p>YES, <input type="checkbox"/> _____ → 711 CURRENTLY USING</p>		
710	<p>Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
711	<p>CHECK 216:</p> <p>HAS LIVING <input type="checkbox"/> NO LIVING <input type="checkbox"/> CHILDREN CHILDREN</p> <p>a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?</p> <p>b) If you could choose exactly the number of children to have in your whole life, how many would that be?</p> <p>PROBE FOR A NUMERIC RESPONSE.</p>	<p>NONE ..... 00 → 713</p> <p>NUMBER ..... <input type="text"/> <input type="text"/></p> <p>OTHER _____ 96 → 713 (SPECIFY)</p>	
712	<p>How many of these children would you wish to be boys, how many would you wish to be girls and for how many would it not matter if it's a boy or a girl?</p>	<p>BOYS GIRLS EITHER</p> <p>NUMBER . . <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <p>OTHER _____ 96 (SPECIFY)</p>	



## SECTION 7. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																					
713	In the last three months have you: a) Heard about birth spacing on the radio? b) Seen anything about birth spacing on the television? c) Read about birth spacing in a newspaper or magazine? d) Received a voice or text message about birth spacing on a mobile phone? e) Have you read about birth spacing on internet or social media? f) Have you heard about birth spacing from a health care worker/in the health facility?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>a) RADIO .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>b) TELEVISION .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>c) NEWSPAPER OR MAGAZINE .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>d) MOBILE PHONE .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>e) SOCIAL MEDIA .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>f) HCWs/HF .....</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	a) RADIO .....	1	2	b) TELEVISION .....	1	2	c) NEWSPAPER OR MAGAZINE .....	1	2	d) MOBILE PHONE .....	1	2	e) SOCIAL MEDIA .....	1	2	f) HCWs/HF .....	1	2	
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d) MOBILE PHONE .....	1	2																						
e) SOCIAL MEDIA .....	1	2																						
f) HCWs/HF .....	1	2																						
714	CHECK 303: USING A CONTRACEPTIVE METHOD?  CURRENTLY USING <input type="checkbox"/> NOT CURRENTLY USING <input type="checkbox"/> NOT ASKED <input type="checkbox"/>	<p style="text-align: right;">→ 716</p> <p style="text-align: right;">→ 717</p>																						
715	Would you say that using contraception is mainly your decision, mainly your husband's decision, or did you both decide together?	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>MAINLY RESPONDENT .....</td> <td>1</td> </tr> <tr> <td>MAINLY HUSBAND .....</td> <td>2</td> </tr> <tr> <td>JOINT DECISION .....</td> <td>3</td> </tr> <tr> <td>OTHER _____ (SPECIFY)</td> <td>6</td> </tr> </tbody> </table>	MAINLY RESPONDENT .....	1	MAINLY HUSBAND .....	2	JOINT DECISION .....	3	OTHER _____ (SPECIFY)	6	} → 717													
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MAINLY HUSBAND .....	2																							
JOINT DECISION .....	3																							
OTHER _____ (SPECIFY)	6																							
716	Would you say that not using contraception is mainly your decision, mainly your husband's decision, or did you both decide together?	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>MAINLY RESPONDENT .....</td> <td>1</td> </tr> <tr> <td>MAINLY HUSBAND .....</td> <td>2</td> </tr> <tr> <td>JOINT DECISION .....</td> <td>3</td> </tr> <tr> <td>OTHER _____ (SPECIFY)</td> <td>6</td> </tr> </tbody> </table>	MAINLY RESPONDENT .....	1	MAINLY HUSBAND .....	2	JOINT DECISION .....	3	OTHER _____ (SPECIFY)	6														
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MAINLY HUSBAND .....	2																							
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OTHER _____ (SPECIFY)	6																							
717	Does your husband want the same number of children that you want, or does he want more or fewer than you want?	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>SAME NUMBER .....</td> <td>1</td> </tr> <tr> <td>MORE CHILDREN .....</td> <td>2</td> </tr> <tr> <td>FEWER CHILDREN .....</td> <td>3</td> </tr> <tr> <td>DONT KNOW .....</td> <td>8</td> </tr> </tbody> </table>	SAME NUMBER .....	1	MORE CHILDREN .....	2	FEWER CHILDREN .....	3	DONT KNOW .....	8														
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DONT KNOW .....	8																							



SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 119 & 120: CURRENTLY MARRIED <input type="checkbox"/>	NOT IN UNION <input type="checkbox"/>	→ 809
802	How old was your husband on his last birthday? IF 95 OR MORE, RECORD '95'	AGE IN COMPLETED YEARS ..... <input type="text"/> <input type="text"/> DON'T KNOW AGE ..... 98	
803	Did your husband ever attend school?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 806
804	What was the highest level of school he attended: primary, secondary, or higher?	PRIMARY ..... 1 SECONDARY ..... 2 HIGHER ..... 3 DON'T KNOW ..... 8	→ 806
805	What was the highest [GRADE/FORM/YEAR] he completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	[GRADE/FORM/YEAR] ..... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	
806	Has your husband done any work in the last 7 days?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 808
807	Has your husband done any work in the last 12 months?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 809
808	What is your husband's occupation? That is, what kind of work does he mainly do?  NB- REFER TO THE INTERVIEWER'S MANUAL FOR THE CODES ON OCCUPATION	_____ _____ _____ <input type="text"/> <input type="text"/>	
809	Aside from your own housework, have you done any work in the last seven days?	YES ..... 1 NO ..... 2	→ 813
810	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or look after animals or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES ..... 1 NO ..... 2	→ 813
811	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES ..... 1 NO ..... 2	→ 813
812	Have you done any work in the last 12 months?	YES ..... 1 NO ..... 2	→ 817
813	What is your main occupation? That is, what kind of work do you mainly do?  NB- REFER TO THE INTERVIEWER'S MANUAL FOR THE CODES ON OCCUPATION	_____ _____ _____ <input type="text"/> <input type="text"/>	



## SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
814	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER ..... 1 FOR SOMEONE ELSE ..... 2 SELF-EMPLOYED ..... 3	
815	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR ..... 1 SEASONALLY/PART OF THE YEAR ..... 2 ONCE IN A WHILE ..... 3	
816	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY ..... 1 CASH AND KIND ..... 2 IN KIND ONLY ..... 3 NOT PAID ..... 4	
817	CHECK 119&120:  CURRENTLY MARRIED <input type="checkbox"/> ↓ NOT IN UNION <input type="checkbox"/> → 825		
818	CHECK 816:  CODE '1' OR '2' CIRCLED <input type="checkbox"/> ↓ OTHER <input type="checkbox"/> → 821		
819	Who usually decides how the money you earn will be used: you, your husband, or you and your husband jointly?	RESPONDENT ..... 1 HUSBAND ..... 2 RESPONDENT AND HUSBAND JOINTLY ..... 3 OTHER ..... 6 (SPECIFY)	
820	Would you say that the money that you earn is more than what your husband earns, less than what he earns, or about the same?	MORE THAN HIM ..... 1 LESS THAN HIM ..... 2 ABOUT THE SAME ..... 3 HUSBAND HAS NO EARNINGS ..... 4 DON'T KNOW ..... 8	→ 822
821	Who usually decides how your husband's earnings will be used: you, your husband, or you and your husband jointly?	RESPONDENT ..... 1 HUSBAND ..... 2 RESPONDENT AND HUSBAND JOINTLY ..... 3 HUSBAND HAS NO EARNING ..... 4 OTHER ..... 6 (SPECIFY)	
822	Who usually makes decisions about health care for yourself: you, your husband, you and your husband jointly, or someone else?	RESPONDENT ..... 1 HUSBAND ..... 2 RESPONDENT AND HUSBAND JOINTLY ..... 3 IN-LAWS ..... 4 SOMEONE ELSE ..... 5 OTHER ..... 6	
823	Who usually makes decisions about making major household purchases?	RESPONDENT ..... 1 HUSBAND ..... 2 RESPONDENT AND HUSBAND JOINTLY ..... 3 SOMEONE ELSE ..... 4 OTHER ..... 6	



SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
824	When you are going out, who do you usually ask permission?	I GIVE MYSELF PERMISSION ..... 1 MY HUSBAND ..... 2 MYSELF AND MY HUSBAND JOINTL ..... 3 SOMEONE ELSE ..... 4 OTHER ..... 6	
825	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY ..... 1 JOINTLY ONLY ..... 2 BOTH ALONE AND JOINTLY ..... 3 DOES NOT OWN ..... 4	→ 828
826	Do you have a title deed for any house you own?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 828
827	Is your name on the title deed?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
828	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY ..... 1 JOINTLY ONLY ..... 2 BOTH ALONE AND JOINTLY ..... 3 DOES NOT OWN ..... 4	→ 901
829	Do you have a title deed for any land you own?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 901
830	Is your name on the title deed?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	



## SECTION 9. HIV/AIDS &amp; STIs

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																
901	Now I would like to talk about something else. Have you ever heard of HIV or AIDS?	YES ..... 1 NO ..... 2	→ 918																
902	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected wives who has no other wives?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
903	Can people get HIV from mosquito bites?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
904	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
905	Can people get HIV by sharing food with a person who has HIV?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
906	Can people get HIV because of witchcraft or other supernatural means?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
907	Is it possible for a healthy-looking person to have HIV?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
908	Can HIV be transmitted from a mother to her baby: a) During pregnancy? b) During delivery? c) By breastfeeding?	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>a) DURING PREGNANCY ..</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>b) DURING DELIVERY .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>c) BREASTFEEDING .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		YES	NO	DK	a) DURING PREGNANCY ..	1	2	8	b) DURING DELIVERY .....	1	2	8	c) BREASTFEEDING .....	1	2	8	
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c) BREASTFEEDING .....	1	2	8																
909	CHECK 908:  <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <input type="checkbox"/>            AT LEAST            ONE 'YES'         </div> <div style="text-align: center;"> <input type="checkbox"/>            OTHER         </div> </div>		→ 911																
910	Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
911	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8																	
912	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8																	
913	Do you think people hesitate to take an HIV test because they are afraid of how other people will react if the test result is positive for HIV?	YES ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8																	
914	Do people talk badly about people living with HIV, or who are thought to be living with HIV?	YES ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8																	
915	Do people living with HIV, or thought to be living with HIV, lose the respect of other people?	YES ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8																	
916	Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV.	AGREE ..... 1 DISAGREE ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8																	



SECTION 9. HIV/AIDS & STIs

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP	
917	Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV?	YES ..... 1 NO ..... 2 SAYS SHE HAS HIV ..... 3 DONT KNOW/NOT SURE/DEPENDS ..... 8		
918	CHECK 901:  HEARD ABOUT HIV OR AIDS <input type="checkbox"/> ↓ a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact?  NOT HEARD ABOUT HIV OR AIDS <input type="checkbox"/> ↓ b) Have you heard about infections that can be transmitted through sexual contact?	YES ..... 1 NO ..... 2		
919	CHECK 918: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS?  YES <input type="checkbox"/> ↓ NO <input type="checkbox"/> → 926			
920	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES ..... 1 NO ..... 2 DONT KNOW ..... 8		
921	Sometimes women experience a bad-smelling abnormal genital discharge. During the last 12 months, have you had a bad-smelling abnormal genital discharge?	YES ..... 1 NO ..... 2 DONT KNOW ..... 8		
922	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES ..... 1 NO ..... 2 DONT KNOW ..... 8		
923	CHECK 920, 921, AND 922:  HAS HAD AN INFECTION (ANY 'YES') <input type="checkbox"/> ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW <input type="checkbox"/> → 926			
924	The last time you had (PROBLEM FROM 920/921/922), did you seek any kind of advice or ...	YES ..... 1 NO ..... 2	→ 926	
925	Where did you go?  Any other place?  PROBE TO IDENTIFY THE TYPE OF SOURCE.  IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE)	<b>PUBLIC SECTOR</b> GOVERNMENT HOSPITAL ..... A REFERRAL HEALTH CENTRE ..... B MCH/HC ..... C PRIMARY HEALTH UNIT (PHU) ..... D MOBILE CLINIC ..... E OTHER PUBLIC SECTOR _____ (SPECIFY) ..... F <b>PRIVATE MEDICAL SECTOR</b> PRIVATE HOSPITAL/DOCTOR/ CLINIC ..... G PHARMACY ..... H OTHER PRIVATE MEDICAL SECTOR _____ (SPECIFY) ..... I <b>OTHER SOURCE</b> SHOP ..... J OTHER _____ X (SPECIFY)		
926	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES ..... 1 NO ..... 2 DONT KNOW ..... 8		



## SECTION 10. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP															
1001	<p>Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months?</p> <p>IF YES: How many injections have you had?</p> <p>IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.</p>	<p>NUMBER OF INJECTIONS ..... <input type="text"/> <input type="text"/></p> <p>NONE ..... 00</p>	→ 1004															
1002	<p>Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker?</p> <p>IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.</p>	<p>NUMBER OF INJECTIONS ..... <input type="text"/> <input type="text"/></p> <p>NONE ..... 00</p>	→ 1004															
1003	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>																
1004	Do you currently smoke cigarettes every day, some days, or not at all?	<p>EVERY DAY ..... 1</p> <p>SOME DAYS ..... 2</p> <p>NOT AT ALL ..... 3</p>	→ 1006															
1005	On average, how many cigarettes do you currently smoke each day?	NUMBER OF CIGARETTES ..... <input type="text"/> <input type="text"/>																
1006	Do you currently smoke or use any other type of tobacco every day, some days, or not at all?	<p>EVERY DAY ..... 1</p> <p>SOME DAYS ..... 2</p> <p>NOT AT ALL ..... 3</p>	→ 1008															
1007	<p>What other type of tobacco do you currently smoke or use?</p> <p>RECORD ALL MENTIONED.</p>	<p>KRETEKS ..... A</p> <p>PIPES FULL OF TOBACCO ..... B</p> <p>CIGARS, CHEROOTS, OR CIGARILLOS ..... C</p> <p>WATER PIPE ..... D</p> <p>SNUFF BY MOUTH ..... E</p> <p>SNUFF BY NOSE ..... F</p> <p>CHEWING TOBACCO ..... G</p> <p>BETEL QUID WITH TOBACCO ..... H</p> <p>OTHER _____ X (SPECIFY)</p>																
1008	<p>Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not a big problem:</p> <p>a) Getting permission to go to the doctor?</p> <p>b) Getting money needed for advice or treatment?</p> <p>c) The distance to the health facility?</p> <p>d) Not wanting to go alone?</p>	<table> <thead> <tr> <th></th> <th>BIG PROBLEM</th> <th>NOT A BIG PROBLEM</th> </tr> </thead> <tbody> <tr> <td>a) PERMISSION TO GO</td> <td>1</td> <td>2</td> </tr> <tr> <td>b) GETTING MONEY</td> <td>1</td> <td>2</td> </tr> <tr> <td>c) DISTANCE</td> <td>1</td> <td>2</td> </tr> <tr> <td>d) GO ALONE</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		BIG PROBLEM	NOT A BIG PROBLEM	a) PERMISSION TO GO	1	2	b) GETTING MONEY	1	2	c) DISTANCE	1	2	d) GO ALONE	1	2	
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SECTION 10. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1009	Are you covered by any health insurance?	YES ..... 1 NO ..... 2	→ 1011
1010	What type of health insurance are you covered by?  RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE ..... A HEALTH INSURANCE THROUGH EMPLOYER ..... B SOCIAL SECURITY ..... C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE ..... D  OTHER _____ X (SPECIFY)	
1011	<b>FISTULA</b> Sometimes a woman can have a problem of constant leakage of urine or stool from her vagina during the day and night. This problem usually occurs after a difficult childbirth, but may also occur after a sexual assault or after pelvic surgery.  Have you ever experienced a constant leakage of urine or stool from your vagina during the day and night?	YES ..... 1 NO ..... 2	→ 1013
1012	Have you ever heard of this problem?	YES ..... 1 NO ..... 2	→ 1101
1013	Did this problem start after you delivered a baby or had a stillbirth?	AFTER DELIVERED BABY ..... 1 AFTER HAD STILLBIRTH ..... 2 NEITHER ..... 3	→ 1016
1014	Did this problem start after a normal labor and delivery, or after a very difficult labor and delivery?	NORMAL LABOR/DELIVERY ..... 1 VERY DIFFICULT LABOR/DELIVERY ..... 2	
1015	How many days after delivery did the leakage start?  ENTER '90' IF 90 DAYS OR MORE.	NUMBER OF DAYS AFTER DELIVERY/OTHER EVENT ..... <input type="text"/> <input type="text"/>	
1016	Have you sought treatment for this condition?	YES ..... 1 NO ..... 2	→ 1018
1017	Why have you not sought treatment?  PROBE AND RECORD ALL MENTIONED.	DO NOT KNOW CAN BE FIXED ..... A DO NOT KNOW WHERE TO GO ..... B TOO EXPENSIVE ..... C TOO FAR ..... D POOR QUALITY OF CARE ..... E COULD NOT GET PERMISSION ..... F EMBARRASSMENT ..... G  OTHER _____ X (SPECIFY)	→ 1101
1018	From whom did you last seek treatment?	<b>HEALTH PROFESSIONAL</b> DOCTOR ..... 1 CLINICAL OFFICER ..... 2 NURSE/MIDWIFE ..... 3 <b>OTHER PERSON</b> COMMUNITY/VILLAGE HEALTH WORKER ..... 4 HERBALIST ..... 5  OTHER _____ 6 (SPECIFY)	
1019	Did you have an operation to fix the problem?	YES ..... 1 NO ..... 2	
1020	Did the treatment stop the leakage completely?  IF NO: Did the treatment reduce the leakage?	YES, STOPPED COMPLETELY ..... 1 NOT STOPPED BUT REDUCED ..... 2 NOT STOPPED AT ALL ..... 3 DID NOT RECEIVE TREATMENT ..... 4	



## SECTION 11. FEMALE CIRCUMCISION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1101	Now I would like to ask some questions about a practice known as female circumcision. Have you ever heard of female circumcision?	YES ..... 1 NO ..... 2	→ 1103
1102	In some countries, there is a practice in which a girl may have part of her genitals cut. Have you ever heard about this practice?	YES ..... 1 NO ..... 2	→ 1201
1103	Have you yourself ever been circumcised?	YES ..... 1 NO ..... 2	→ 1109
1104	What type of circumcision did you undergo?	SUNN ..... 1 INTERMEDIATE ..... 2 PHARAONIC ..... 3 DON'T KNOW ..... 8	
1105	Please describe what was exactly done  CIRCLE ONLY ONE OPTION  a) Excision of the clitoral hood (prepuce), with or without excision of part or all of the clitoris b) Excision of the clitoris with partial or total excision of the labia minora c) Excision of part or all of the external genitalia and stitching/ narrowing of the vaginal opening d) All other procedures that involve pricking, piercing, stretching or incising of the clitoris and/or labia; introduction of corrosive substances into the vagina to narrow it	TYPE I ..... 1 TYPE II ..... 2 TYPE III ..... 3 TYPE IV ..... 4 DON'T KNOW ..... 8	
1106	How old were you when you were circumcised?  IF THE RESPONDENT DOES NOT KNOW THE EXACT AGE, PROBE TO GET AN ESTIMATE.	AGE IN COMPLETED YEARS ..... <input type="text"/> <input type="text"/> AS A BABY/DURING INFANCY ..... 95 DON'T KNOW ..... 98	
1107	Who performed the circumcision?	<b>TRADITIONAL</b> TRAD. CIRCUMCISER ..... 11 TRAD. BIRTH ATTENDANT ..... 12 OTHER TRAD. _____ 16 (SPECIFY)  <b>HEALTH PROFESSIONAL</b> DOCTOR ..... 21 CLINICAL OFFICER ..... 22 NURSE/MIDWIFE ..... 23 OTHER HEALTH PROFESSIONAL _____ 26 (SPECIFY) DON'T KNOW ..... 98	
1108	CHECK 213, 215 AND 216:  HAS ONE OR MORE LIVING DAUGHTERS BORN IN 2007 OR LATER <input type="checkbox"/>	HAS NO LIVING DAUGHTERS BORN IN 2007 OR LATER <input type="checkbox"/>	→ 1116



SECTION 11. FEMALE CIRCUMCISION

1109	<p>CHECK 213, 215 AND 216: ENTER IN THE TABLE THE BIRTH HISTORY NUMBER AND NAME OF EACH LIVING DAUGHTER BORN IN 2007 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE DAUGHTERS. BEGIN WITH THE YOUNGEST DAUGHTER. (IF THERE ARE MORE THAN 3 DAUGHTERS, USE ADDITIONAL QUESTIONNAIRES).</p> <p>Now I would like to ask you some questions about your (daughter/daughters).</p>			
1111	<p>BIRTH HISTORY NUMBER AND NAME OF EACH LIVING DAUGHTER BORN IN 2007 OR LATER.</p>	<p>YOUNGEST LIVING DAUGHTER</p> <p>BIRTH HISTORY NUMBER .. <input type="text"/> <input type="text"/></p> <p>NAME _____</p>	<p>NEXT-TO-YOUNGEST LIVING DAUGHTER</p> <p>BIRTH HISTORY NUMBER .. <input type="text"/> <input type="text"/></p> <p>NAME _____</p>	<p>SECOND-TO-YOUNGEST LIVING DAUGHTER</p> <p>BIRTH HISTORY NUMBER .. <input type="text"/> <input type="text"/></p> <p>NAME _____</p>
1112	<p>Is (NAME OF DAUGHTER) circumcised?</p>	<p>YES ..... 1 NO ..... 2</p> <p>(GO TO 1112 IN NEXT COLUMN; OR IF NO MORE DAUGHTERS, GO TO 1116)</p>	<p>YES ..... 1 NO ..... 2</p> <p>(GO TO 1112 IN NEXT COLUMN; OR IF NO MORE DAUGHTERS, GO TO 1116)</p>	<p>YES ..... 1 NO ..... 2</p> <p>(GO TO 1112 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR IF NO MORE DAUGHTERS, GO TO 1116)</p>
1113	<p>How old was (NAME OF DAUGHTER) when she was circumcised?</p> <p>IF THE RESPONDENT DOES NOT KNOW THE AGE, PROBE TO GET AN</p> <p>RECORD '00' IF LESS THAN A YEAR</p>	<p>AGE IN COMPLETED YRS .. <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>	<p>AGE IN COMPLETED YRS .. <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>	<p>AGE IN COMPLETED YRS .. <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>
1114	<p>Was her genital area sewn closed?</p>	<p>YES ..... 1 NO ..... 2 DONT KNOW ..... 8</p>	<p>YES ..... 1 NO ..... 2 DONT KNOW ..... 8</p>	<p>YES ..... 1 NO ..... 2 DONT KNOW ..... 8</p>
1115	<p>Who performed the circumcision?</p>	<p><b>TRADITIONAL</b> TRADITIONAL CIRCUMCISER .. 11 TRAD. BIRTH ATTENDANT .. 12 OTHER TRAD. _____ 16 (SPECIFY)</p> <p><b>HEALTH PROFESSIONAL</b> DOCTOR ..... 21 CLINICAL OFFICER .. 22 NURSE/MIDWIFE .. 23 OTHER HEALTH PROFESSIONAL _____ 26 (SPECIFY)</p> <p>DONT KNOW ..... 98</p>	<p><b>TRADITIONAL</b> TRADITIONAL CIRCUMCISER .. 11 TRAD. BIRTH ATTENDANT .. 12 OTHER TRAD. _____ 16 (SPECIFY)</p> <p><b>HEALTH PROFESSIONAL</b> DOCTOR ..... 21 CLINICAL OFFICER .. 22 NURSE/MIDWIFE .. 23 OTHER HEALTH PROFESSIONAL _____ 26 (SPECIFY)</p> <p>DONT KNOW ..... 98</p>	<p><b>TRADITIONAL</b> TRADITIONAL CIRCUMCISER .. 11 TRAD. BIRTH ATTENDANT .. 12 OTHER TRAD. _____ 16 (SPECIFY)</p> <p><b>HEALTH PROFESSIONAL</b> DOCTOR ..... 21 CLINICAL OFFICER .. 22 NURSE/MIDWIFE .. 23 OTHER HEALTH PROFESSIONAL _____ 26 (SPECIFY)</p> <p>DONT KNOW ..... 98</p>
1115		<p>GO BACK TO 1111 IN NEXT COLUMN; OR, IF NO MORE DAUGHTERS, GO TO 1116)</p>	<p>GO BACK TO 1111 IN NEXT COLUMN; OR, IF NO MORE DAUGHTERS, GO TO 1116)</p>	<p>GO TO 1111 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR IF NO MORE DAUGHTERS, GO TO 1116)</p>
1116	<p>Do you believe that female circumcision is required by your religion?</p>	<p>YES ..... 1 NO ..... 2 DONT KNOW ..... 8</p>		
1117	<p>Do you think that female circumcision should be continued, or should it be stopped?</p>	<p>CONTINUED ..... 1 STOPPED ..... 2 DEPENDS ..... 3 DONT KNOW ..... 8</p>		



SECTION 12. MATERNAL DEATHS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES						SKIP
1201	Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your natural mother, including those who are living with you, those living elsewhere and those who have died. How many children did your mother give birth to, including you?	NUMBER OF BIRTHS TO NATURAL MOTHER . . . . . <input type="text"/> <input type="text"/>						
1202	CHECK 1201:  TWO OR MORE BIRTHS <input type="checkbox"/> ONLT ONE BIRTH (RESPONDENT ONLY) <input type="checkbox"/>							1301
1203	How many births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS . . . . . <input type="text"/> <input type="text"/>						
1204	What was the name given to your (oldest/ next oldest) brother or sister?	(1)	(2)	(3)	(4)	(5)	(6)	
1205	Is (NAME) male or female?	MALE 1 FEMALE 2						
1206	Is (NAME) still alive?	YES 1 NO 2 ↓ (SKIP TO 1208) DK 8 ↓ (GO TO 2)	YES 1 NO 2 ↓ (SKIP TO 1208) DK 8 ↓ (GO TO 3)	YES 1 NO 2 ↓ (SKIP TO 1208) DK 8 ↓ (GO TO 4)	YES 1 NO 2 ↓ (SKIP TO 1208) DK 8 ↓ (GO TO 5)	YES 1 NO 2 ↓ (SKIP TO 1208) DK 8 ↓ (GO TO 6)	YES 1 NO 2 ↓ (SKIP TO 1208) DK 8 ↓ (GO TO 7)	
1207	How old is (NAME)?  RECORD '00' IF LESS THAN ONE YEAR	<input type="text"/> <input type="text"/> (GO TO 2)	<input type="text"/> <input type="text"/> (GO TO 3)	<input type="text"/> <input type="text"/> (GO TO 4)	<input type="text"/> <input type="text"/> (GO TO 5)	<input type="text"/> <input type="text"/> (GO TO 6)	<input type="text"/> <input type="text"/> (GO TO 7)	
1208	How many years ago did (NAME) die?  RECORD '00' IF LESS THAN ONE YEAR	<input type="text"/> <input type="text"/>						
1209	How old was (NAME) when (he/she) died?	<input type="text"/> <input type="text"/> (IF MALE OR DIED BEFORE 12 YRS OR AFTER 49 YRS GO TO 2)	<input type="text"/> <input type="text"/> (IF MALE OR DIED BEFORE 12 YRS OR AFTER 49 YRS GO TO 3)	<input type="text"/> <input type="text"/> (IF MALE OR DIED BEFORE 12 YRS OR AFTER 49 YRS GO TO 4)	<input type="text"/> <input type="text"/> (IF MALE OR DIED BEFORE 12 YRS OR AFTER 49 YRS GO TO 5)	<input type="text"/> <input type="text"/> (IF MALE OR DIED BEFORE 12 YRS OR AFTER 49 YRS GO TO 6)	<input type="text"/> <input type="text"/> (IF MALE OR DIED BEFORE 12 YRS OR AFTER 49 YRS GO TO 7)	
1210	Was (NAME) pregnant when she died?	YES 1 ↓ (SKIP TO 1213) NO 2						



1211	Did (NAME) die during childbirth?	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	
1212	Did (NAME) die within six weeks after the end of a pregnancy or childbirth?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2	
1213	How many live born children did (NAME) give birth to during her lifetime?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
1214	IF NO MORE BROTHERS OR SISTERS, GO TO 1301.							
1204	What was the name given to your (oldest/ next oldest) brother or sister?	(7)	(8)	(9)	(10)	(11)	(12)	
1205	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	
1206	Is (NAME) still alive?	YES 1 NO 2 ↓ (SKIP TO 1208) DK 8 ↓ (GO TO 8)	YES 1 NO 2 ↓ (SKIP TO 1208) DK 8 ↓ (GO TO 9)	YES 1 NO 2 ↓ (SKIP TO 1208) DK 8 ↓ (GO TO 10)	YES 1 NO 2 ↓ (SKIP TO 1208) DK 8 ↓ (GO TO 11)	YES 1 NO 2 ↓ (SKIP TO 1208) DK 8 ↓ (GO TO 12)	YES 1 NO 2 ↓ (SKIP TO 1208) DK 8 ↓ (GO TO 13)	
1207	How old is (NAME)?  RECORD '00' IF LESS THAN ONE YEAR	<input type="text"/> (GO TO 8)	<input type="text"/> (GO TO 9)	<input type="text"/> (GO TO 10)	<input type="text"/> (GO TO 11)	<input type="text"/> (GO TO 12)	<input type="text"/> (GO TO 13)	
1208	How many years ago did (NAME) die?  RECORD '00' IF LESS THAN ONE YEAR	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	



1209	How old was (NAME) when (he/she) died?	<input type="text"/> (IF MALE OR DIED BEFORE 12 YRS GO TO 9)	<input type="text"/> (IF MALE OR DIED BEFORE 12 YRS GO TO 9)	<input type="text"/> (IF MALE OR DIED BEFORE 12 YRS GO TO 10)	<input type="text"/> (IF MALE OR DIED BEFORE 12 YRS GO TO 11)	<input type="text"/> (IF MALE OR DIED BEFORE 12 YRS GO TO 12)	<input type="text"/> (IF MALE OR DIED BEFORE 12 YRS GO TO 13)	
1210	Was (NAME) pregnant when she died?	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	
1211	Did (NAME) die during childbirth?	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	YES 1 ↓ (SKIP TO 1213) NO 2	
1212	Did (NAME) die within six weeks after the end of a pregnancy or childbirth?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2	
1213	How many live born children did (NAME) give birth to during her lifetime?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
1214	IF NO MORE BROTHERS OR SISTERS, GO TO 1301.							





1307	In your opinion, is a husband justified in hitting or beating his wife in the following situations:					
			YES	NO	DK	
	a) If she goes out without telling him?	a) GOES OUT	1	2	8	
	b) If she neglects the children?	b) NEGLECTS CHILDREN	1	2	8	
	c) If she neglects household duties including cooking?	c) NEG. HH DUTIES	1	2	8	
	d) If she argues with him?	d) ARGUES	1	2	8	
	e) If she wastes resources?	e) WASTES RESOURCES	1	2	8	
	g) If she refuses to have sex with him?	e) REFUSES SEX	1	2	8	
1308	Now, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your current (former) husband?		YES	NO	DK	
	a) He (is/was) jealous or angry if you (talk/talked) to other	JEALOUS	1	2	8	
	b) He frequently (accuses/accused) you of being unfaithful?	ACCUSES	1	2	8	
	c) He (does/did) not permit you to meet your female friends?	NOT MEET FRIENDS	1	2	8	
	d) He (tries/tried) to limit your contact with your family?	NO FAMILY	1	2	8	
	e) He (insists/insisted) on knowing where you (are/were) at all times?	WHERE YOU ARE	1	2	8	
1309	Now I need to ask some more questions about your relationship with your (last) husband.					
	A. Did your (last) husband ever:	B. How often did this happen during the last 12 months: often, only sometimes, or not at all?				
			EVER	OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
	a) Say or do something to humiliate you in front of others?		YES 1 NO 2	→ 1	2	3
	b) Threaten to hurt or harm you or someone you care about?		YES 1 NO 2	→ 1	2	3
	c) Insult you or make you feel bad about yourself?		YES 1 NO 2	→ 1	2	3
1310	A. Did your (last) husband ever do any of the following things to you:	B. How often did this happen during the last 12 months: often, only sometimes, or not at all?				
			EVER	OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
	a) Slap you, push you, shake you, or throw something at you?		YES 1 NO 2	→ 1	2	3
	b) Twist your arm or pull your hair?		YES 1 NO 2	→ 1	2	3
	c) Punch you with his fist or with something that could hurt you?		YES 1 NO 2	→ 1	2	3
	d) Kick you, drag you, or beat you up?		YES 1 NO 2	→ 1	2	3



	<p>e) Try to choke you or burn you on purpose?</p> <p>f) Threaten or attack you with a knife, gun, or other weapon?</p> <p>g) Physically force you to have sexual intercourse with him when you did not</p>	<p>YES 1 NO 2</p> <p>YES 1 NO 2</p> <p>YES 1 NO 2</p>	<p>1 2 3</p> <p>1 2 3</p> <p>1 2 3</p>	
1311	<p>CHECK 1310 (a-g):</p> <p>AT LEAST ONE <input type="checkbox"/> 'YES'</p> <p>NOT A SINGLE <input type="checkbox"/> 'YES' → 1314</p>			
1312	<p>How long after you first got married with your (last) husband did (this/any of these things) first happen?</p> <p>IF LESS THAN ONE YEAR, RECORD '00'.</p>		<p>NUMBER OF YEARS ..... <input type="text"/> <input type="text"/></p> <p>BEFORE MARRIAGE ..... 95</p>	
1313	<p>Did the following ever happen as a result of what your (last) husband did to you:</p> <p>a) You had cuts, bruises, or aches?</p> <p>b) You had eye injuries, sprains, dislocations, or burns?</p> <p>c) You had deep wounds, broken bones, broken teeth, or any other serious injury?</p>	<p>YES ..... 1 NO ..... 2</p> <p>YES ..... 1 NO ..... 2</p> <p>YES ..... 1 NO ..... 2</p>		
1314	<p>Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) husband at times when he was not already beating or physically hurting you?</p>	<p>YES ..... 1 NO ..... 2</p>		→ 1316
1315	<p>In the last 12 months, how often have you done this to your (last) husband: often, only sometimes, or not at all?</p>		<p>OFTEN ..... 1 SOMETIMES ..... 2 NEVER ..... 3</p>	
1316	<p>Are (Were) you afraid of your (last) husband: most of the time, sometimes, or never?</p>		<p>MOST OF THE TIME AFRAID ..... 1 SOMETIMES AFRAID ..... 2 NEVER AFRAID ..... 3</p>	
1317	<p>CHECK121:</p> <p>MARRIED MORE THAN ONCE <input type="checkbox"/> MARRIED ONCE <input type="checkbox"/></p> <p>A. So far we have been talking about the behavior of your (current/last) husband. Now I want to ask you about the behavior of any previous husband.</p> <p>B. How long ago did this last happen?</p>			→ 1318
	<p>a) Did any previous husband ever hit, slap, kick, or do anything else to hurt you physically?</p> <p>b) Did any previous husband physically force you to have intercourse or perform any other sexual acts against your will?</p>	<p>EVER</p> <p>YES 1 NO 2</p> <p>YES 1 NO 2</p>	<p>0 - 11 MONTHS AGO    12+ MONTHS AGO    DON'T REMEMBER</p> <p>1    2    3</p> <p>1    2    3</p>	



1318	<p>CHECK119 &amp; 120:</p> <p style="text-align: center;">CURRENTLY <input type="checkbox"/> MARRIED ↓</p> <p>a) From the time you were 12 years old has anyone other than your husband hit you, slapped you, kicked you, or done anything else to hurt you physically?</p>	<p style="text-align: center;">NOT IN UNION <input type="checkbox"/> ↓</p> <p>b) From the time you were 12 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>REFUSED TO ANSWER/ NO ANSWER ..... 3</p>	<p>→ 1321</p>
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1319	<p>Who has hurt you in this way?</p> <p>Anyone else?</p> <p>RECORD ALL MENTIONED.</p>	<p>MOTHER/STEP-MOTHER ..... A</p> <p>FATHER/STEP-FATHER ..... B</p> <p>SISTER/BROTHER ..... C</p> <p>DAUGHTER/SON ..... D</p> <p>OTHER RELATIVE ..... E</p> <p>MOTHER-IN-LAW ..... F</p> <p>FATHER-IN-LAW ..... G</p> <p>OTHER IN-LAW ..... H</p> <p>NEIGHBOUR ..... I</p> <p>TEACHER ..... J</p> <p>EMPLOYER/SOMEONE AT WORK ..... K</p> <p>POLICE/SOLDIER ..... L</p> <p>MILITIA/GANGS ..... M</p> <p>OTHER _____ X (SPECIFY)</p>	
1320	<p>In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all?</p>	<p>OFTEN ..... 1</p> <p>SOMETIMES ..... 2</p> <p>NOT AT ALL ..... 3</p>	
1321	<p>CHECK 201, 226, AND 230:</p> <p>EVER BEEN PREGNANT (YES' ON 201 OR 226 OR 230) <input type="checkbox"/></p>	<p>NEVER BEEN PREGNANT <input type="checkbox"/> → 1324</p>	1324
1322	<p>Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?</p>	<p>YES ..... 1</p> <p>NO ..... 2 → 1324</p>	1324
1323	<p>Who has done any of these things to physically hurt you while you were pregnant?</p> <p>Anyone else?</p> <p>RECORD ALL MENTIONED.</p>	<p>CURRENT HUSBAN ..... A</p> <p>MOTHER/STEP-MOTHER ..... B</p> <p>FATHER/STEP-FATHER ..... C</p> <p>SISTER/BROTHER ..... D</p> <p>DAUGHTER/SON ..... E</p> <p>OTHER RELATIVE ..... F</p> <p>FORMER HUSBAN ..... G</p> <p>MOTHER-IN-LAW ..... H</p> <p>FATHER-IN-LAW ..... I</p> <p>OTHER IN-LAW ..... J</p> <p>NEIGHBOUR ..... K</p> <p>TEACHER ..... L</p> <p>EMPLOYER/SOMEONE AT WORK ..... M</p> <p>POLICE/SOLDIER ..... N</p> <p>MILITIA/GANGS ..... O</p> <p>OTHER _____ X (SPECIFY)</p>	



1324	CHECK 119&120:  CURRENTLY MARRIED <input type="checkbox"/> NOT IN UNION <input type="checkbox"/>  a) In the last 12 months, has anyone raped you?      b) In the last 12 months has anyone physically forced you to have sexual intercourse?  YES ..... 1 NO ..... 2	→ 1326				
1325	CHECK 1310 (a-g) and 1317 (a,b), 1322:  AT LEAST ONE 'YES' <input type="checkbox"/> NOT A SINGLE 'YES' <input type="checkbox"/>	→ 1329				
1326	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?  YES ..... 1 NO ..... 2	→ 1329				
1327	From whom have you sought help? Anyone else?  RECORD ALL MENTIONED.	OWN FAMILY ..... A HUSBAND'S FAMILY ..... B CURRENT/FORMER HUSBAND ..... C FRIEND ..... E NEIGHBOR ..... F RELIGIOUS LEADER ..... G DOCTOR/MEDICAL PERSONNEL ..... H POLICE ..... I LAWYER ..... J SOCIAL SERVICE ORGANIZATION ..... K  OTHER _____ X (SPECIFY)	→ 1329			
1328	Have you ever told any one about this?  YES ..... 1 NO ..... 2					
THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE .....						
1329	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	YES, ONCE      YES, MORE THAN ONCE      NO HUSBAND ..... 1      2      3 OTHER MALE ADUL ..... 1      2      3 FEMALE ADULT ..... 1      2      3				
1330	INTERVIEWER'S COMMENTS/EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE. _____ _____ _____					
1331	RECORD THE TIME YOU END THE INTERVIEW.	HOURS ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> MINUTES ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>				



# Never-married Woman's Questionnaire





INTRODUCTION AND CONSENT

Hello. My name is \_\_\_\_\_ I am working with [NAME OF ORGANIZATION]. We are conducting a survey about health and related topics all over [NAME OF COUNTRY]. The information we collect will help the government to plan health and other services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 45 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. your participation in the survey is voluntary, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time. In case you need more information about the survey, you may contact the ministry of interior/planning and/or health.

Do you have any questions?  
May I begin the interview now?

SIGNATURE OF INTERVIEWER \_\_\_\_\_ DATE \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED .. 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED .. 2 → END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE START TIME.	HOURS ..... <input type="text"/> <input type="text"/> MINUTES ..... <input type="text"/> <input type="text"/>	
102	In what month and year were you born?	MONTH ..... <input type="text"/> <input type="text"/> DON'T KNOW MONTH ..... 98 YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR ..... .9998	
103	How old were you at your last birthday? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS ..... <input type="text"/> <input type="text"/>	
104	Have you ever attended school?	YES ..... 1 NO ..... 2	→ 108
105	What is the highest level of school you attended: primary, secondary, or higher?	KORANIC ..... 1 PRIMARY ..... 2 SECONDARY ..... 3 HIGHER ..... 4	
106	What is the highest [GRADE/FORM/YEAR] you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	[GRADE/FORM/YEAR] ..... <input type="text"/> <input type="text"/>	
107	CHECK 105:  KORANIC, PRIMARY OR SECONDARY <input type="checkbox"/> ↓	HIGHER <input type="checkbox"/> →	110
108	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE. PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL ..... 1 ABLE TO READ ONLY PART OF THE SENTENCE ..... 2 ABLE TO READ WHOLE SENTENCE ..... 3 NO CARD WITH REQUIRED LANGUAGE _____ (SPECIFY LANGUAGE) 4 BLIND/VISUALLY IMPAIRED ..... 5	



## SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
109	CHECK 108:  CODE '2', '3' OR '4' <input type="checkbox"/> CIRCLED ↓	CODE '1' OR '5' CIRCLED <input type="checkbox"/>	→ 111
110	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK ..... 1 LESS THAN ONCE A WEEK ..... 2 NOT AT ALL ..... 3	
111	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK ..... 1 LESS THAN ONCE A WEEK ..... 2 NOT AT ALL ..... 3	
112	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK ..... 1 LESS THAN ONCE A WEEK ..... 2 NOT AT ALL ..... 3	
113	Do you own a mobile telephone?	YES ..... 1 NO ..... 2	
114	Do you use a mobile phone for any financial transactions?	YES ..... 1 NO ..... 2	
115	Do you have an account in a bank or other financial institution that you yourself use?	YES ..... 1 NO ..... 2	
116	Have you ever used the internet?	YES ..... 1 NO ..... 2	→ 201
117	In the last 12 months, have you used the internet?  IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES ..... 1 NO ..... 2	→ 201
118	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	



SECTION 2. HIV/AIDS AND VACCINATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																
201	Now I would like to talk about something else. Have you ever heard of HIV or AIDS?	YES ..... 1 NO ..... 2	→ 218																
202	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected spouse who has no other relations?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
203	Can people get HIV from mosquito bites?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
204	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
205	Can people get HIV by sharing food with a person who has HIV?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
206	Can people get HIV because of witchcraft or other supernatural means?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
207	Is it possible for a healthy-looking person to have HIV?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
208	Can HIV be transmitted from a mother to her baby: a) During pregnancy? b) During delivery? c) By breastfeeding?	<table border="0"> <tr> <td></td> <td>YES</td> <td>NO</td> <td>DK</td> </tr> <tr> <td>a) DURING PREGNANCY . . .</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>b) DURING DELIVERY . . . .</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>c) BREASTFEEDING . . . . .</td> <td>1</td> <td>2</td> <td>8</td> </tr> </table>		YES	NO	DK	a) DURING PREGNANCY . . .	1	2	8	b) DURING DELIVERY . . . .	1	2	8	c) BREASTFEEDING . . . . .	1	2	8	
	YES	NO	DK																
a) DURING PREGNANCY . . .	1	2	8																
b) DURING DELIVERY . . . .	1	2	8																
c) BREASTFEEDING . . . . .	1	2	8																
209	CHECK 208:  <div style="text-align: center;">           AT LEAST <input type="checkbox"/> ONE 'YES'            ↓         </div> <div style="text-align: center; margin-top: 10px;">           OTHER <input type="checkbox"/> → 211         </div>																		
210	Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
211	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8																	
212	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8																	
213	Do you think people hesitate to take an HIV test because they are afraid of how other people will react if the test result is positive for HIV?	YES ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8																	
214	Do people talk badly about people living with HIV, or who are thought to be living with HIV?	YES ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8																	
215	Do people living with HIV, or thought to be living with HIV, lose the respect of other people?	YES ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8																	
216	Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV.	AGREE ..... 1 DISAGREE ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8																	
217	Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV?	YES ..... 1 NO ..... 2 SAYS SHE HAS HIV ..... 3 DON'T KNOW/NOT SURE/DEPENDS ..... 8																	



## SECTION 2. HIV/AIDS AND VACCINATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																												
218	CHECK 201: HEARD ABOUT HIV OR AIDS <input type="checkbox"/> NOT HEARD ABOUT HIV OR AIDS <input type="checkbox"/> a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact? b) Have you heard about infections that can be transmitted through sexual contact?	YES ..... 1 NO ..... 2																																													
219	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																																													
220	Have you received the following immunizations?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>a) Flu (Influenza)?</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>b) Tetanus, diphtheria, pertussis?</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>c) HPV (Human papillomavirus)?</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>d) Meningococcal?</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>e) Pneumococcal?</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>f) Hepatitis A</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>g) Hepatitis B</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>h) Polio?</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>i) Measles</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>j) Chickenpox (varicella)</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		YES	NO	DK	a) Flu (Influenza)?	1	2	8	b) Tetanus, diphtheria, pertussis?	1	2	8	c) HPV (Human papillomavirus)?	1	2	8	d) Meningococcal?	1	2	8	e) Pneumococcal?	1	2	8	f) Hepatitis A	1	2	8	g) Hepatitis B	1	2	8	h) Polio?	1	2	8	i) Measles	1	2	8	j) Chickenpox (varicella)	1	2	8	
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SECTION 3. FEMALE CIRCUMCISION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																				
301	Now I would like to ask some questions about a practice known as female circumcision. Have you ever heard of female circumcision?	YES ..... 1 NO ..... 2	→ 303																				
302	In some countries, there is a practice in which a girl may have part of her genitals cut. Have you ever heard about this practice?	YES ..... 1 NO ..... 2	→ 401																				
303	Have you yourself ever been circumcised?	YES ..... 1 NO ..... 2	→ 308																				
304	What type of circumcision did you undergo?	SUNN ..... 1 INTERMEDIATE ..... 2 PHARAONIC ..... 3 DON'T KNOW ..... 8																					
305	Please describe what was exactly done  a) Excision of the clitoral hood (prepuce), with or without excision of part or all of the clitoris b) Excision of the clitoris with partial or total excision of the labia minora c) Excision of part or all of the external genitalia and stitching/ narrowing of the vaginal opening d) All other procedures that involve pricking, piercing, stretching or incising of the clitoris and/or labia; introduction of corrosive substances into the vagina to narrow it.	<table border="0" style="width: 100%; text-align: right;"> <tr> <td></td> <td>YES</td> <td>NO</td> <td>DK</td> </tr> <tr> <td>TYPE I</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>TYPE II</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>TYPE III</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>TYPE IV</td> <td>1</td> <td>2</td> <td>8</td> </tr> </table>		YES	NO	DK	TYPE I	1	2	8	TYPE II	1	2	8	TYPE III	1	2	8	TYPE IV	1	2	8	
	YES	NO	DK																				
TYPE I	1	2	8																				
TYPE II	1	2	8																				
TYPE III	1	2	8																				
TYPE IV	1	2	8																				
306	How old were you when you were circumcised?  IF THE RESPONDENT DOES NOT KNOW THE EXACT AGE, PROBE TO GET AN ESTIMATE.	AGE IN COMPLETED YEARS ..... <input type="text"/> <input type="text"/> AS A BABY/DURING INFANCY ..... 95 DON'T KNOW ..... 98																					
307	Who performed the circumcision?	<b>TRADITIONAL</b> TRAD. CIRCUMCISER ..... 11 TRAD. BIRTH ATTENDANT ..... 12  OTHER TRAD. _____ 16 (SPECIFY)  <b>HEALTH PROFESSIONAL</b> DOCTOR ..... 21 NURSE/MIDWIFE ..... 22 OTHER HEALTH PROFESSIONAL _____ 26 (SPECIFY) DON'T KNOW ..... 98																					
308	Do you believe that female circumcision is required by your religion?	YES ..... 1 NO ..... 2 NO RELIGION ..... 3 DON'T KNOW ..... 8																					
309	Do you think that female circumcision should be continued, or should it be stopped?	CONTINUED ..... 1 STOPPED ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8																					
310	If you get married and give birth to girls in the future, would you want them to be circumcized?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8																					



## SECTION 4. VIOLENCE AGAINST WOMEN

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																
401	Now I am going to ask you about your understanding of domestic violence. What does domestic violence mean to you? Does it mean: a) Physical abuse? b) No participation in decision-making for household? c) No participation in decision-making for children? d) Better treatment of males than females? e) Failing to meet basic living costs? f) Denial of education? g) Forced marriage? h) Rape? i) Sexual harassment? j) Denial of inheritance? k) Other	<table> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>ABUSE .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>HH DECISIOI .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>CHILDREN DECISIC .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>BETTER TREATMENT ..</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>NO LIVING COSTS .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>EDU DENIAL .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>FORCED MARRIAG .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>RAPE .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>SEX HARASSMENT .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>INHERITANCE .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>OTHER _____</td> <td>1</td> <td>2</td> <td></td> </tr> </tbody> </table> <p>(SPECIFY)</p>		YES	NO	DK	ABUSE .....	1	2	8	HH DECISIOI .....	1	2	8	CHILDREN DECISIC .....	1	2	8	BETTER TREATMENT ..	1	2	8	NO LIVING COSTS .....	1	2	8	EDU DENIAL .....	1	2	8	FORCED MARRIAG .....	1	2	8	RAPE .....	1	2	8	SEX HARASSMENT .....	1	2	8	INHERITANCE .....	1	2	8	OTHER _____	1	2		
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OTHER _____	1	2																																																	
402	Who is the person who commits the most violent acts against women?	<table> <tbody> <tr> <td>HUSBAND .....</td> <td>A</td> </tr> <tr> <td>MOTHER/STEP-MOTHER .....</td> <td>B</td> </tr> <tr> <td>FATHER/STEP-FATHEI .....</td> <td>C</td> </tr> <tr> <td>SISTER/BROTHER .....</td> <td>D</td> </tr> <tr> <td>DAUGHTER/SON .....</td> <td>E</td> </tr> <tr> <td>OTHER RELATIVE .....</td> <td>F</td> </tr> <tr> <td>IN-LAWS .....</td> <td>G</td> </tr> <tr> <td>TEACHER .....</td> <td>H</td> </tr> <tr> <td>EMPLOYER/SOMEONE AT WOR .....</td> <td>I</td> </tr> <tr> <td>POLICE/SOLDIER .....</td> <td>J</td> </tr> <tr> <td>OTHER _____</td> <td>K</td> </tr> </tbody> </table> <p>(SPECIFY)</p>	HUSBAND .....	A	MOTHER/STEP-MOTHER .....	B	FATHER/STEP-FATHEI .....	C	SISTER/BROTHER .....	D	DAUGHTER/SON .....	E	OTHER RELATIVE .....	F	IN-LAWS .....	G	TEACHER .....	H	EMPLOYER/SOMEONE AT WOR .....	I	POLICE/SOLDIER .....	J	OTHER _____	K																											
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403	Where is the place with most violent acts?	<table> <tbody> <tr> <td>AT HOME .....</td> <td>1</td> </tr> <tr> <td>WORKPLACI .....</td> <td>2</td> </tr> <tr> <td>STREET .....</td> <td>3</td> </tr> <tr> <td>SCHOOL .....</td> <td>4</td> </tr> <tr> <td>WATER POINT .....</td> <td>5</td> </tr> <tr> <td>RURAL/GRAZING AREAS .....</td> <td>6</td> </tr> <tr> <td>OTHER _____</td> <td>96</td> </tr> </tbody> </table> <p>(SPECIFY)</p>	AT HOME .....	1	WORKPLACI .....	2	STREET .....	3	SCHOOL .....	4	WATER POINT .....	5	RURAL/GRAZING AREAS .....	6	OTHER _____	96																																			
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404	Does any form of violence cause damage?	<table> <tbody> <tr> <td>YES .....</td> <td>1</td> </tr> <tr> <td>NO .....</td> <td>2</td> </tr> </tbody> </table>	YES .....	1	NO .....	2	→ 406																																												
YES .....	1																																																		
NO .....	2																																																		
405	What is the most serious damage caused by violence?	<table> <tbody> <tr> <td>PHYSICAL .....</td> <td>1</td> </tr> <tr> <td>PSYCHOLOGICAL .....</td> <td>2</td> </tr> <tr> <td>OTHER _____</td> <td>96</td> </tr> </tbody> </table> <p>(SPECIFY)</p>	PHYSICAL .....	1	PSYCHOLOGICAL .....	2	OTHER _____	96																																											
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406	In your opinion, is a husband justified in hitting or beating his wife in the following situations: a) If she goes out without telling him? b) If she neglects the children? c) If she neglects household duties including cooking? d) If she argues with him? e) If she wastes resources? f) If she does not respect his family?	<table> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>GOES OUT .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>NEGL. CHILDREN .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>NEGL. OTHER HH DUTIES ..</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>ARGUES .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>WASTE RESOURCES ..</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>NOT RESP. FAMILY .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		YES	NO	DK	GOES OUT .....	1	2	8	NEGL. CHILDREN .....	1	2	8	NEGL. OTHER HH DUTIES ..	1	2	8	ARGUES .....	1	2	8	WASTE RESOURCES ..	1	2	8	NOT RESP. FAMILY .....	1	2	8																					
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407	A. Has anyone ever done any of the following things to you, while you were at the water point, grazing areas, at the school, at the house, at work, ETC :	B. How often did this happen during the last 12 months: often, only sometimes, or not at all?																																																	
		<table> <thead> <tr> <th></th> <th>EVER</th> <th>OFTEN</th> <th>SOME-TIMES</th> <th>NOT IN LAST 12 MONTHS</th> </tr> </thead> <tbody> <tr> <td>a) was slapped, pushed, shaken, or thrown something at?</td> <td>YES 1</td> <td>→ 1</td> <td>2</td> <td>3</td> </tr> <tr> <td></td> <td>NO 2</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		EVER	OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS	a) was slapped, pushed, shaken, or thrown something at?	YES 1	→ 1	2	3		NO 2																																					
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	<p>b) twisted your arm or pulled your hair?</p> <p>c) punched you with fist or with something that could hurt you?</p> <p>d) kicked, dragged, or beat you up?</p> <p>e) choked or burned you on purpose?</p> <p>f) threatened or attacked you with a knife, gun, or other weapon?</p>	<p>↓</p> <p>YES 1 →</p> <p>NO 2 ↓</p>	<p>1 2 3</p>	
408	<p>CHECK 407 a-f:</p> <p>AT LEAST ONE <input type="checkbox"/> 'YES' ↓</p> <p>Who has hurt you in this way?</p> <p>Anyone else?</p> <p>RECORD ALL MENTIONED.</p>	<p>ALL 'NO' <input type="checkbox"/></p>		<p>501</p> <p>MOTHER/STEP-MOTHER ..... A</p> <p>FATHER/STEP-FATHER ..... B</p> <p>SISTER/BROTHER ..... C</p> <p>NIECE/NEPHEW ..... D</p> <p>OTHER RELATIVE ..... E</p> <p>NEIGHBOUR ..... H</p> <p>TEACHER ..... I</p> <p>EMPLOYER/SOMEONE AT WOR ..... J</p> <p>POLICE/SOLDIER ..... K</p> <p>MILITIA/GANGS ..... L</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>
409	<p>In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all?</p>		<p>OFTEN ..... 1</p> <p>SOMETIMES ..... 2</p> <p>NOT AT ALL ..... 3</p>	



## SECTION 5. ILLEGAL MIGRATION (TAHRIB)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP				
501	Now, I would like to discuss illegal immigration among the youth in your community and its impact. Have you ever tried to migrate to another country using illegal means?	YES ..... 1 NO ..... 2	→ 507				
502	Did you reach your desired desination?	YES ..... 1 NO ..... 2	→ 504				
503	What means of transportation did you use to reach your destination during your last such attempt?	ON FOOT ..... 1 LAND TRANSPORT ..... 2 AIR TRANSPOR ..... 3 MARITIME TRANSPOR ..... 4					
504	Did you experience any violence on your way?	YES ..... 1 NO ..... 2	→ 506				
505	What kind of violence did you experience?	PHYSICAL VIOLENCE ..... 1 SEXUAL VIOLENCE ..... 2 CAPTIVITY ..... 3 RANSOM DEMAND ..... 4 ROBBERY ..... 5 VERBAL ABUSE ..... 6 WATER STORMS/WAVES ..... 7  OTHER ..... 96 (SPECIFY)					
506	What motivated you to take the decision to migrate?	UNEMPLOYMENT ..... 1 LOW PAY/INCOME SEARCH FOR BETTER OPPORTUNITIES ..... 2 POOR QUALITY OF EDUCATION ..... 3 INSECURITY ..... 4 POVERTY ..... 5 HOPELESSNESS ..... 6 LONELINESS ..... 7 INEQUALITY/SOCIAL EXCLUSIOI ..... 8 PEER INFLUENCE ..... 9 SOCIAL MEDIA INTERACTIONS/ POSTS ..... 10  OTHER ..... 96 (SPECIFY)					
507	Do you know any of your peers who lost their lives due to illegal migration?	YES ..... 1 NO ..... 2					
508	What can be done to address the problem of illegal migration/tahrib?	JOB CREATION ..... 1 BETTER PAYING JOBS ..... 2 BUSINESS OPPORTUNITIES ..... 3 GRANTS & CREDIT FACILITIE ..... 4 AWARENESS CREATION ..... 5 STATE RECONSTRUCTIO ..... 6 LAW ENFORCEMENT ..... 7  OTHER ..... 96 (SPECIFY)					
509	RECORD THE TIME YOU END THE INTERVIEW.	HOURS ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> MINUTES ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>					



INTERVIEWER'S OBSERVATIONS  
TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

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COMMENTS ON SPECIFIC QUESTIONS:

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ANY OTHER COMMENTS:

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SUPERVISOR'S OBSERVATIONS

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EDITOR'S OBSERVATIONS

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# Maternal Mortality Questionnaire



**SOMALI HEALTH &  
DEMOGRAPHIC SURVEY  
2018-2019**

SOMALI MINISTRIE'S OF PLANNING AND HEALTH

QUESTIONNAIRE  
SERIAL NUMBER

REG. CODE	DIST CODE	SETTLEMENT/TOWN	EA CODE	HH SERIAL	ENUMERATOR NO.															

**MATERNAL MORTALITY QUESTIONNAIRE**

IDENTIFICATION														
NAME	CODE													
REGION	<table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>													
PRE-WAR NAME OF THE DISTRICT	<table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>													
CURRENT NAME OF THE DISTRICT														
SETTLEMENT/TOWN	<table border="1"> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </table>													
EA TYPE (1=RURAL/IDP 2=URBAN/IDP 3=NOMADIC)														
EA CODE	<table border="1"> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </table>													
HOUSEHOLD SERIAL NUMBER IN THE EA	<table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>													
INTERVIEWER VISITS														
	1	2	3	FINAL VISIT										
DATE				DAY										
				MONTH										
INTERVIEWER'S NAME				YEAR										
RESULT*				INT. NO.										
NEXT VISIT: DATE				RESULT*										
TIME				TOTAL NUMBER OF VISITS										
<p>*RESULT CODES:</p> <table border="0"> <tr> <td>1 COMPLETED</td> <td>6 DWELLING VACANT OR ADDRESS NOT A DWELLING</td> </tr> <tr> <td>2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT</td> <td>7 DWELLING DESTROYED</td> </tr> <tr> <td>3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME</td> <td>8 DWELLING NOT FOUND</td> </tr> <tr> <td>4 POSTPONED</td> <td>9 PARTIALLY COMPLETED</td> </tr> <tr> <td>5 REFUSED</td> <td>96 OTHER (SPECIFY)</td> </tr> </table>					1 COMPLETED	6 DWELLING VACANT OR ADDRESS NOT A DWELLING	2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT	7 DWELLING DESTROYED	3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME	8 DWELLING NOT FOUND	4 POSTPONED	9 PARTIALLY COMPLETED	5 REFUSED	96 OTHER (SPECIFY)
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4 POSTPONED	9 PARTIALLY COMPLETED													
5 REFUSED	96 OTHER (SPECIFY)													
LANGUAGE OF QUESTIONNAIRE**	0 1	LANGUAGE OF INTERVIEW**		NATIVE LANGUAGE OF RESPONDENT**										
LANGUAGE OF QUESTIONNAIRE**	ENGLISH	**LANGUAGE CODES:												
		01 ENGLISH	03 OTHER	(SPECIFY)										
		02 SOMALI												
NAME	SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED IN BY										
DATE														
CODE														



INTRODUCTION AND CONSENT

Hello. My name is \_\_\_\_\_ . I am working with [NAME OF ORGANIZATION]. We are conducting a survey about health and related topics all over [NAME OF COUNTRY]. The information we collect will help the government to plan health and other services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 15 to 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. your participation in the survey is voluntary, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time. In case you need more information about the survey, you may contact the ministry of interior/planning and/or health.

Do you have any questions?  
May I begin the interview now?

SIGNATURE OF INTERVIEWER \_\_\_\_\_ DATE \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED .. 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED .. 2 → END

100	RECORD THE START TIME.	HOURS ..... <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>				
		MINUTES ..... <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>				



SECTION 1: HOUSEHOLD SCHEDULE

LINE NO.	USUAL RESIDENTS	DEMOGRAPHIC CHARACTERISTICS					RECENT LIVE BIRTHS (24 MONTHS)	
		RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	AGE	IF AGE 12 OR OLDER	IF EVER MARRIED	IF MARRIED & FEMALES AGED 12-49	
101	102	103	104	105	106	107	108	109
	Please give me the names of the persons who usually live in your household, starting with the head of the household.  AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2B TO BE SURE THAT THE LISTING IS COMPLETE.  THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-32 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household?  SEE CODES BELOW.	Is (NAME) male or female?	How old is (NAME) in completed years?  RECORD AGE IN COMPLETED YEARS  WRITE "00" IF LESS THAN ONE YEAR  IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status?  1 = MARRIED 2 = DIVORCED 3 = ABANDONED 4 = WIDOWED 5 = NEVER-MARRIED	How old was (NAME) when he/she got married for the first time?	Has (NAME) had a live birth in the last 24 months?	How many children did (NAME) give birth to who were born alive in the last 24 months including those who later died?  RECORD MALES & FEMALES  IF NONE, RECORD '00'.
01		<input type="text"/>	M F 1 2	IN YEARS <input type="text"/>	<input type="checkbox"/>	IN YEARS <input type="text"/>	YES NO 1 2 ↓ NEXT LINE	MALE FEMALE <input type="text"/>
02		<input type="text"/>	1 2	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
03		<input type="text"/>	1 2	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
04		<input type="text"/>	1 2	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
05		<input type="text"/>	1 2	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
06		<input type="text"/>	1 2	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
07		<input type="text"/>	1 2	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
08		<input type="text"/>	1 2	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
09		<input type="text"/>	1 2	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
10		<input type="text"/>	1 2	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>

**CODES FOR Q. 103: RELATIONSHIP TO HEAD OF HOUSEHOLD**

- |                                    |                               |
|------------------------------------|-------------------------------|
| 01 = HEAD OF HOUSEHOLD             | 08 = BROTHER OR SISTER        |
| 02 = SPOUSE                        | 09 = NEPHEW/NIECE             |
| 03 = SON OR DAUGHTER               | 10 = BROTHER/SISTER-IN-LAW    |
| 04 = SON-IN-LAW OR DAUGHTER-IN-LAW | 11 = OTHER RELATIVE           |
| 05 = GRANDCHILD                    | 12 = ADOPTED/FOSTER/STEPCHILD |
| 06 = PARENT                        | 13 = NOT RELATED              |
| 07 = PARENT-IN-LAW                 | 98 = DON'T KNOW               |



SECTION 1: HOUSEHOLD SCHEDULE

		DEMOGRAPHIC CHARACTERISTICS					RECENT LIVE BIRTHS (24 MONTHS)	
					IF AGE 12 OR OLDER	IF EVER MARRIED	IF MARRIED & FEMALES AGED 12-49	
LINE NO.	USUAL RESIDENTS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	AGE	MARITAL STATUS	AGE AT FIRST MARRIAGE	PARTICULARS OF LIVE BIRTHS WITHIN THE PAST 24 MONTHS	
101	102	103	104	105	106	107	108	109
	Please give me the names of the persons who usually live in your household, starting with the head of the household.  AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2B TO BE SURE THAT THE LISTING IS COMPLETE.  THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-32 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household?  SEE CODES BELOW.	Is (NAME) male or female?	How old is (NAME) in completed years?  RECORD AGE IN COMPLETED YEARS  WRITE "00" IF LESS THAN ONE YEAR  IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status?  1 = MARRIED 2 = DIVORCED 3 = ABANDONED 4 = WIDOWED 5 = NEVER-MARRIED	How old was (NAME) when he/she got married for the first time?	Has (NAME) had a live birth in the last 24 months?	How many children did (NAME) give birth to who were born alive in the last 24 months including those who later died?  RECORD MALES & FEMALES  IF NONE, RECORD '00'.
11		<input type="text"/>	M F 1 2	IN YEARS <input type="text"/>	<input type="text"/>	IN YEARS <input type="text"/>	YES NO 1 2 ↓ NEXT LINE	MALE FEMALE <input type="text"/>
12		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
13		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
14		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
15		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
16		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
17		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
18		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
19		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>
20		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	1 2 ↓ NEXT LINE	<input type="text"/>

TICK HERE IF CONTINUATION SHEET USED

**CODES FOR Q. 103: RELATIONSHIP TO HEAD OF HOUSEHOLD**

- |                                    |                               |
|------------------------------------|-------------------------------|
| 01 = HEAD OF HOUSEHOLD             | 08 = BROTHER OR SISTER        |
| 02 = SPOUSE                        | 09 = NEPHEW/NIECE             |
| 03 = SON OR DAUGHTER               | 10 = BROTHER/SISTER-IN-LAW    |
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| 06 = PARENT                        | 13 = NOT RELATED              |
| 07 = PARENT-IN-LAW                 | 98 = DONT KNOW                |

1A) Just to make sure that I have a complete listing: are there any other people such as small children or infants that we have not listed? YES NO <input type="checkbox"/>
1B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here? YES NO <input type="checkbox"/>



SECTION 2. DEATHS

NO.	QUESTIONS AND FILTERS			CODING CATEGORIES				SKIP
201	Have you lost any member of the household in the past two years (24 months)?			YES .....	NO .....	1	2	→ END
LINE NO.	NAME OF DECEASED MEMBER OF HOUSEHOLD	SEX OF DECEASED HOUSEHOLD MEMBER	AGE AT DEATH OF HOUSEHOLD MEMBER	<b>ENUMERATOR SKIPPING INSTRUCTIONS:</b> 1. IF THE DECEASED IS MALE → GO TO NEXT LINE 2. IF THE DECEASED IS A FEMALE NOT AGED 12- 49 → GO TO NEXT LINE 3. IF THE DECEASED IS A FEMALE AGED 12 - 49 → CONTINUE				
202	203	204	205	206	207	208	209	210
	What was the name of the deceased family member?	Was (NAME) Male or Female?	How old was (NAME) he/she when she died?	Was (NAME) pregnant when she died?	Did (NAME) die during delivery?	Did (NAME) die during the 6 weeks following delivery?	Did (NAME) die from accident or violence?	Did (NAME) suffer from any of the following health problems at any time during her last pregnancy, up to 6 weeks after child birth?
	RECORD ONLY ONE NAME	1 = MALE 2 = FEMALE	RECORD AGE IN COMPLETED YEARS  WRITE "00" IF < 1 YEAR  IF 95 OR MORE, RECORD '95'.			PROBE FOR APPROX 40 DAYS BIRTH CELEBRATION		CHECK ALL THAT APPLY
01				YES NO 1 → 2 GO TO 209	YES NO 1 → 2 GO TO 209	YES NO 1 2 ↓ NEXT LINE	YES NO 1 2 ↓ NEXT LINE	A SEVERE VOMITING B VAGINAL BLEEDING C LIMBS SWELLING D CONVULSION E SEVERE FEVER AFTER DELIVERY F CAESAREAN SECTION G OBSTRUCTED LABOUR Y OTHER (SPECIFY)
02				1 → 2 GO TO 209	1 → 2 GO TO 209	1 2 ↓ NEXT LINE	1 2 ↓ NEXT LINE	A SEVERE VOMITING B VAGINAL BLEEDING C LIMBS SWELLING D CONVULSION E SEVERE FEVER AFTER DELIVERY F CAESAREAN SECTION G OBSTRUCTED LABOUR Y OTHER (SPECIFY)
03				1 → 2 GO TO 209	1 → 2 GO TO 209	1 2 ↓ NEXT LINE	1 2 ↓ NEXT LINE	A SEVERE VOMITING B VAGINAL BLEEDING C LIMBS SWELLING D CONVULSION E SEVERE FEVER AFTER DELIVERY F CAESAREAN SECTION G OBSTRUCTED LABOUR Y OTHER (SPECIFY)
04				1 → 2 GO TO 209	1 → 2 GO TO 209	1 2 ↓ NEXT LINE	1 2 ↓ NEXT LINE	A SEVERE VOMITING B VAGINAL BLEEDING C LIMBS SWELLING D CONVULSION E SEVERE FEVER AFTER DELIVERY F CAESAREAN SECTION G OBSTRUCTED LABOUR Y OTHER (SPECIFY)
05				1 → 2 GO TO 209	1 → 2 GO TO 209	1 2 ↓ NEXT LINE	1 2 ↓ NEXT LINE	A SEVERE VOMITING B VAGINAL BLEEDING C LIMBS SWELLING D CONVULSION E SEVERE FEVER AFTER DELIVERY F CAESAREAN SECTION G OBSTRUCTED LABOUR Y OTHER (SPECIFY)
CHECK HERE IF CONTINUATION SHEET USED			RECORD THE END TIME. HOURS .....		MINUTES .....			

