

THE FEDERAL REPUBLIC OF SOMALIA


The information contained in this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission but with acknowledgement of this publication as a source.

## Suggested citation:

Somalia National Bureau of Statistics (Formerly Directorate of National Statistics, Federal Government of Somalia), Somali Health and Demographic survey - Galmudug Report 2021.

## Additional information about the survey can be

## obtained from:

Somalia National Bureau of Statistics.

## Email:

info@nbs.gov.so

## Website:

www.nbs.gov.so

## Telephone no.:

+252-61-3700080

## Social media:

Facebook: facebook.com/nbssomalia/
Twitter: @NBS_Somalia

This report was produced by the Somalia National Bureau of Statistics, with technical support from the United Nations Population Fund-Somalia, and funding from key donors.


## GALMUDUG STATE OF SOMALIA

## SOMALI HEALTH AND DEMOGRAPHIC SURVEY

## GALMUDUG Report

With technical support from


## With financial contribution from



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development and Cooperation SDC

## Foreword

The Galmudug Health and Demographic Survey (GMHDS) is a representative household survey that provides reliable data on health, nutrition and demographic characteristics. The survey was implemented by Somali National Bureau of Statistics (SNBS) and the Ministry of Health and Human Services (MoH) of the Federal Government of Somalia in partnership with the Ministry of Health and Human Services $(\mathrm{MoH})$ and Ministry of Planning, Economic Development and International Cooperation (MoPEDIC) of Galmudug State of Somalia. The survey marks the first time that such data has been produced in the history of the State which targeted women aged 15-49 and the children under the age of five years from randomly selected households across the State.

The main objective of GMHDS was to provide evidence on the health and demographic characteristics of the Galmudug population that will guide decision-makers in the formulation of effective policies for development of programmes. The data is critical for making informed policy decisions and for planning, monitoring, and evaluation of programmes related to health in general, and reproductive health in particular. The Galmudug State of Somalia is now able to monitor its respective sectors in the Development Plan as well as the health sector through the findings of this survey. The survey findings will also offer an indication of social behaviour in our communities and encourage our people to adopt positive behavioural changes to improve their lives.

The findings show just above half ( 57 percent) of Galmudug population is below 15 years of age. We are pleased to report that 78 percent of households get their drinking water from an improved water sources, 49 percent use improved facilities, and 29 percent of the population with access to electricity. The results indicate that total fertility rate (TFR) for Galmudug is quite high at 7.3. However, 30 percent of Galmudug women deliver safely in a health facility. The GMHDS results further highlight areas that need urgent intervention-to improve the lives of children, we know that only 3.5 percent of births have been registered, and only 9 percent of children aged 11-23 months have been fully vaccinated against common vaccine-preventable childhood diseases. According to the three anthropometric indices of nutritional status of children, 27 percent of children under-five are stunted, 11 percent are wasted and 12 percent are underweight.

These crucial findings are a result of the great efforts of Somali National Bureau of Statistics and Ministries of Health and Planning - Galmudug State of Somalia, in collaboration with UNFPA Somalia's Population and Development Unit —along with all the personnel who have worked on this survey. These professionals worked together diligently to complete every phase of work according to the planned timetable in a challenging environment. Some of these heroes also include more than 70 Galmudug female data collectors who knocked on doors of pre-sampled households in urban, rural and hard to reach nomadic settings to collect diverse information from 1,800 households across the State.

Thanks to our strong collaboration and partnership with SNBS and UNFPA Somalia, Galmudug now has a rich information, and skilled statistical staff who are able to lay a strong foundation of statistics for our future generations. We also remain grateful to the donors of this undertaking - The Foreign, Common wealth and Development Office (FCDO) formerly United Kingdom Department for International Development (DID) for their funding of fieldwork and data analysis, 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, which have created a product that will help turn the dreams of the Somalis to reality.

Somalia National Bureau of Statistics and Galmudug State- Ministries of Health and Planning invite all users of data such as government institutions, international organizations, the donor community, civil society organizations, universities, researchers, program managers and the public to play an important role in utilizing the valuable data showcased in the Galmudug report for making their policies, programmes as well as monitoring and evaluating their progress in order to contribute to the development of the State.



Sharmake Mohamed Farah

Director General
Somalia National Bureau of Statistics(SNBS)

## Acknowledgement

The Galmudug Health and Demographic Survey (GMHDS) report was realized with the commitment and dedication of various joint organizations who partnered and worked together, as well as individuals who spent their time to ensure the Galmudug state report was achieved. The Somali National Bureau of Statistics (SNBS), and the Ministry of Health of the Federal Government of Somalia together with the Ministry of Health and the Ministry of Planning, Economic Development and International Cooperation (MoPEDIC) of Galmudug State took the lead role in ensuring all stages of the survey were carried out accordingly and with this stated, we would like to acknowledge the experts and the leadership of both institutions. These individuals are: Sharmake Mohamed Farah (Director General, SNBS), Abdirahman Omar Dahir (Deputy Director General, SNBS), Nur Ahmed Weheliye (SHDS Coordinator), Dr Abdikadir Afrah Weheliye (Deputy SHDS Coordinator), Nuur Ali (SHDS Director), Naima Mohamed Catoosh (former Minister of Health Galmudug State), Abdihakim Ali Guure (former Minister MoPEDIC Galmudug State), Abdiweli Mohamed Ahmed (Director General, Ministry of Health, Galmudug State), Abdullahi Omer Adan (Director General, MoPEDIC, Galmudug State). We would also like to acknowledge Said Abdilaahi Abdi (Technical Lead, SHDS), Mohamed Abdinur Mohamed (Statistician SHDS), and Abdulrazak Abdullahi Karie (Demographer SHDS), Shukri Yusuf Salad (Admin and Finance officer SHDS), Hamida Sheel (Data Analyst/Research Officer SNBS), Kamal Ahmed (Advocacy and Donor Engagement Specialist SNBS), Shaafici Abdinuur (GMHDS MMR/Listing Coordinator, Galmudug) Abdihakin Mohamed Dirie (GMHDS State Coordinator, Galmudug), Abdullahi Warsame Abtidoon (Galgaduud Regional Coordinator, Galmudug), Yusuf Haji Aden (Mudug Regional Coordinator, Galmudug) and Abdirahman Omar Ali (Statistician GMHDS).

We would like to express our sincere appreciation to the United Nations Population Fund (UNFPA) for their technical guidance. They indeed ensured that our team was well prepared for the actual work on the ground. This survey will not have been realized without the support and leadership of Anders Thomsen (Representative, UNFPA Somalia), as well as Walter Mendonça Filho (Deputy Representative, UNFPA Somalia) who provided key support to the survey, the support provided in administration and finance by Kevin Kibubi, (Operations Unit, UNFPA Somalia), Nasra Adow, Samwel Andati, Halimo Ahmed (UNFPA P\&D team) went a long way to ensure the smooth implementation of the survey.

Furthermore, we would like to particularly point out Mariam Alwi, UNFPA's Population and Development (P\&D) Specialist and Head of Unit for her total commitment, enthusiasm and patience in guiding and steering the project. We would also like to acknowledge the Population and Development team of experts from UNFPA Somalia. These individuals include Felix Mulama (Technical Lead and Demographer), Richard Ng'etich (Statistician), Zena Lyaga (Demographer), and Josyline Gikunda (GIS Assistant).

We would also like to extend our appreciation to the Foreign, Commonwealth and Development Office (FCDO) formerly United Kingdom Department for International Development (DfID) for funding GMHDS fieldwork and data analysis stages, The Government of Sweden, The Government of Finland, The Government of Italy, the Italian Agency for Development Cooperation (AICS) and the Swiss Agency for Development and Cooperation for providing key financial support that went into creating this legacy for the Galmudug state and the country as a whole.

Finally, we would like to express our sincere gratitude to local respondents, local numerators, supervisors, quality assurance teams and other field personnel, who sometimes had to face insecurity, poor weather and limited infrastructure in their quest for data collection of this report. We express our sincere gratitude to all the above mentioned as well as anyone who participated in any capacity in the production of this report.

## Acronyms

| AIDS | Acquired Immunodeficiency Syndrome |
| :---: | :---: |
| ANC | Antenatal Care |
| ARI | Acute Respiratory Infections |
| ART | Antiretroviral Therapy |
| ASFRs | Age-Specific Fertility Rates |
| BCG | Bacillus Calmette-Guérin [tuberculosis vaccine] |
| BMI | Body Mass Index |
| CAPI | Computer-Assisted Personal Interviewing |
| CBR | Crude Birth Rate |
| CEB | Children Ever Born |
| CM | Centimeter |
| CRVS | Civil Registration and Vital Statistics |
| C-section | Cesarean Section |
| CSD | Central Statistics Department |
| CSPro | Census and Survey Processing System |
| CPR | Contraceptive Prevalence Rate |
| DANIDA | Danish International Development Agency |
| DfID | Department for International Development |
| DHS | Demographic and Health Survey |
| DPT | Diphtheria, Pertussis and Tetanus Vaccine |
| EAs | Enumeration Areas |
| EPHS | Essential Package of Health Services |
| FCDO | Foreign, Commonwealth and Development Office |
| FGM/C | Female Genital Mutilation/Cutting |
| GAR | Gross Attendance Ratios |
| GBV | Gender-Based Violence |
| GDP | Gross Domestic Product |
| GMHDS | Galmudug Health and Demographic Survey |
| GoSL | Government of Somaliland |
| GFR | General Fertility Rate |
| GIS | Geographic Information System |
| GPI | Gender Parity Index |
| HC | Health Centres |
| HIV | Human Immunodeficiency Virus |
| ICPD | Internal Conference on Population Development |
| IUD | Intra Uterine Device |
| IYCF | Infant and Young Child Feeding |
| KG | Kilogram |
| LAM | Lactational Amenorrhea |
| MCH | Maternal Child Health |
| MICS | Multiple Indicator Cluster Survey |


| MMR | Maternal Mortality Ratio |
| :---: | :---: |
| MM-Rate | Maternal Mortality Rate |
| MoHD | Ministry of Health Development |
| MoP\&ND | Ministry of Planning and National Development |
| MTCT | Mother-to-child transmission |
| NA | Not Applicable |
| NARs | Net Attendance Ratios |
| NDP | National Development Plan |
| NLWs | Nomadic link workers |
| ORS | Oral Rehydration Salts |
| ORT | Oral Rehydration Therapy |
| PAPFAM | Pan Arab Project for Family Health |
| P\&D | Population and Development |
| PESS | Population Estimation Survey of Somalia |
| PHU | Primary Health Unit |
| PNC | Postnatal Care |
| PPS | Probability Proportional to Size |
| PSU | Primary Sampling Units |
| RHF | Recommended Home Fluids |
| SD | Standard Deviation |
| SDF | Somaliland Development Fund |
| SDGs | Sustainable Development Goals |
| SLNTV | Somaliland National Television |
| SGBV | Sexual and Gender-Based Violence |
| SHS | Second-Hand Smoke |
| SPSS | Statistical Package for the Social Science |
| SSUs | Secondary Sampling Units |
| STIS | sexually Transmitted Infections |
| STD | Sexually Transmitted Diseases |
| TBA | Traditional Birth Attendant |
| TFR | Total Fertility Rate |
| TNS | Temporary Nomadic Settlements |
| ToT | Training of Trainers |
| TTI | Tetanus Toxoid injections |
| UNFPA | United Nations Population Fund |
| UNICEF | United Nations Children's Fund |
| USD | United States Dollar |
| US | United States |
| USUs | Ultimate Sampling Units |
| WHO | World Health Organization |

Foreword IV
Acknowledgement VII
Acronyms VIII

List of Tables XVI
List of Figures XX


| Introduction | $\mathbf{1}$ |  |
| :--- | :--- | :--- |
| 1.1 | History and Politics | 2 |
| 1.2 | Geography and the climate of the state | 2 |
| 1.3 | Demographics | 2 |
| 1.4 | Health Status | 2 |
| 1.5 | Survey Objectives and Organization | 3 |
| 1.6 | Sample design | 3 |
| 1.7 | Questionnaires | 4 |
| 1.8 | Training | 5 |
| 1.9 | Fieldwork | 6 |
| 1.10 | Data Processing | 6 |
| 1.11 | Response Rates | 7 |
| 1.12 | Quality Assurance | 8 |



Characteristics of the Respondents ..... 36
3.1 Background Characteristics of Respondents ..... 38
3.2 Educational Attainment ..... 38
3.3 Literacy rate ..... 39
3.4 Exposure to Mass Media ..... 40
3.5 Internet Use ..... 41
3.6 Employment Status ..... 42
3.7 Type of Employment ..... 42
3.8 Use of Tobacco ..... 43
Marriage, Fertility, Fertility Preference And Birth Spacing
4.1. Marital status ..... 56
4.2. $\quad$ Age at first marriage ..... 56
4.3 Early Marriage ..... 57
4.4 Fertility ..... 58
4.5 Menopause ..... 60
4.6 Age at First Birth ..... 60
4.7 T eenage Pregnancy and Motherhood ..... 60
4.8 Fertility Preferences ..... 61
4.9 Birth Spacing ..... 62
4.10 Contraceptive Use ..... 64

Maternal and Newborn Health ..... 84
5.1 Antenatal Care ..... 86
5.2 Antenatal Care Coverage ..... 86
5.3 Number and Timing of Antenatal Visits ..... 87
5.4 Components of Antenatal Care ..... 87
5.5 Intermittent preventive treatment (IPTp) by women
5.6 Tetanus Toxoid ..... 89
5.7 Place of Delivery ..... 90
5.8 Assistance During Delivery ..... 90
5.9 Postnatal Care and Practices ..... 91
5.10. Obstetric Fistula ..... 92
5.11. Problems in Accessing Health Care ..... 93 인

Child Health ..... 108
6.1 Birth Weight ..... 110
6.2 Vaccination of Children ..... 111
6.3 Symptoms of Acute Respiratory Infection ..... 112
6.4 Fever ..... 112
6.5 Diarrheal Diseases ..... 113
6.6 Treatment of Childhood Illnesses ..... 114
6.7 Disposal of Children's Stools ..... 115


Child nutrition and feeding practices and nutritional status of women
7.1. Nutrition of Children and Women ..... 124
7.2. Nutritional Status of Children ..... 125
7.3. $\quad$ Breastfeeding ..... 126
7.4. I nitiation of breastfeeding ..... 126
7.5. Breast feeding status by age ..... 127
7.6. Types of complementary Foods ..... 128
7.7. I nfant and Young Child Feeding (IYCF) Practices ..... 128
7.8. Micronutrients intake among Children ..... 129
7.9. Nutritional status of women ..... 130
7.10. Micronutrient intake among women ..... 131

HIV/AIDS-Related Knowledge, Beliefs and Attitudes ..... 144
8.1. Introduction ..... 146
8.2. HIV/AIDS-Related Knowledge, Beliefs and Attitudes and Prevention Methods ..... 146
8.3. Misconceptions about HIV/AIDS ..... 147
8.4. Knowledge about Mother-to-Child Transmission ..... 147
8.5. Attitudes towards People Living with HIV/AIDS ..... 148
8.6. Self-reporting of Sexually Transmitted Infections ..... 149


| Gender-Based Violence | $\mathbf{1 5 8}$ |  |
| :--- | :--- | ---: |
| 9.1. | Measurements of Violence | 160 |
| 9.2. | Ethical Considerations in GMHDS | 161 |
| 9.3. | Opinions about Domestic Violence | 161 |
| 9.4. | Women's Experience of Physical Violence | 162 |
| 9.5. | Perpetrators of physical violence | 162 |
| 9.6 | Violence during Pregnancy | 163 |
| 9.7 | Spousal Violence | 163 |
| 9.8 | Injuries to Women due to Spousal Violence | 164 |
| 9.9 | Help-seeking Behavior's | 164 |
| 9.10 | Places where Violence Against Women usually happens |  |


Female Circumcision 174
10.1. Opinions on Female Circumcision 176
10.2. Prevalence of Female Circumcision 177
10.3. Age at Female Circumcision 179
10.4. Female Circumcision on Daughters 179
10.5. Attitudes towards Female Circumcision 180


|  | Empowerment | 186 |
| :---: | :---: | :---: |
| 11.1 | Married Women's Employment | 188 |
| 11.2 | Control over Wives' Earnings | 189 |
| 11.3 | Control over Husbands' Earnings | 189 |
| 11.4 | Ownership of Assets | 190 |
| 11.5 | Ownership and Use of Bank Accounts and Phones | Mobile 190 |
| 11.6 | Women's Participation in Decision-Making | 192 |
| 11.7 | Attitudes towards Wife Beating | 192 |
| 11.8 | Summary Indices of Women's Empowerment | 193 |


Chronic Diseases, Disability, Out-of-Pocket Health Expenditure and Social Habits ..... 202
12.1. Prevalence of Chronic Diseases ..... 205
12.2 Diagnosis and Treatment of Chronic Diseases ..... 205
12.3 Prevalence of Disability ..... 207
12.4 Origin and Age at Onset of Disability ..... 208
12.5 Care and Support for Persons with Disabilities ..... 210
12.6 Household Out-of-Pocket Health Expenditure ..... 210
12.7 Tobacco Use and Khat Chewing ..... 212
References ..... 226
Glossary ..... 228
APPENDIX A ..... 234
Sampling Design ..... 235
Objectives of the Somali Health and Demographic Survey ..... 235
Sampling Frame ..... 235
Constructing Sampling Frame for Urban and Rural areas ..... 235
Constructing Sampling Frame for Nomads ..... 235
Adjustments to the Sampling Frame ..... 236
Sample Design ..... 236
Sample Allocation ..... 236
Sample selection in urban and rural areas ..... 236
Sample selection in nomadic areas ..... 237
First-stage Sample Allocation and Selection ..... 237
Second-stage Sample Allocation and Selection ..... 237
Third-stage Sample Allocation and Selection (2nd Stage in Nomadic Areas) ..... 237
Design Weights and Sampling Weights ..... 237
Adjustment for non-response and computation of sampling weights ..... 238
Post-Stratification ..... 239
Normalization ..... 239
References ..... 239
APPENDIX B ..... 242
Estimates of Sampling Errors ..... 241
APPENDIX C ..... 248
Data Quality Tables ..... 249
APPENDIX D ..... 252
List of Contributors ..... 253
APPENDIX E ..... 256
Household Questionnaire ..... 257
Ever-married Woman's Questionnaire ..... 281
Never-married Woman's Questionnaire ..... 351
Maternal Mortality Questionnaire ..... 362

## List of Tables

Table 1.1 Results of the household and individual interviews ..... 7
Table 2.1 Household population by age, sex, and residence ..... 21
Table 2.2 Household composition ..... 22
Table 2.3a Educational attainment of the male household population ..... 23
Table 2.3b Educational attainment of the female household population ..... 24
Table 2.4a School attendance ratio: PRIMARY ..... 25
Table 2.4b School attendance ratio: SECONDARY ..... 26
Table 2.5a Household drinking water ..... 27
Table 2.5b Treatment of household drinking water ..... 28
Table 2.6 Household sanitation facilities, GMHDS 2020 ..... 29
Table 2.7 Household characteristics ..... 30
Table 2.8 Household possessions ..... 31
Table 2.9 Wealth quintile ..... 32
Table 2.10 Birth registration of children aged under five ..... 32
Table 2.11 Handwashing, GMHDS 2020 ..... 33
Table 2.12 Children's living arrangements and orphanhood ..... 34
Table 3.1 Background characteristics of respondents ..... 45
Table 3.2 Educational attainment: Women ..... 46
Table 3.3 Literacy: Women ..... 47
Table 3.4 Exposure to mass media: Women ..... 48
Table 3.5 Internet usage: Women ..... 49
Table 3.6 Employment status: Women ..... 50
Table 3.7 Type of employment: Ever-married Women ..... 51
Table 3.8 Occupation: Ever Married Women ..... 51
Table 3.9 Use of tobacco: Ever Married Women ..... 52
Table 4.1 Current marital status ..... 67
Table 4.2 Age at first marriage - Women ..... 68
Table 4.3 Age at first marriage - Men ..... 68
Table 4.4 Current Fertility ..... 69
Table 4.5 Selected fertility indicators by background characteristics ..... 69
Table 4.6 Children ever born and living ..... 70
Table 4.7 Birth intervals ..... 71
Table 4.8 Menopause ..... 72
Table 4.9 Age at first birth ..... 72
Table 4.10 Teenage pregnancy and motherhood ..... 73
Table 4.11 Fertility preferences by number of living children ..... 74
Table 4.12 Desire to limit childbearing: Women ..... 75
Table 4.13 Ideal number of children according to number of living children ..... 76
Table 4.14 Fertility planning status ..... 77
Table 4.15 Knowledge of contraceptive methods ..... 78
Table 4.16 Knowledge of contraceptive methods according to background characteristics ..... 79
Table 4.17 Current use of contraception by background characteristics ..... 80
Table 4.18 Knowledge of fertile period by age ..... 80
Table 4.19 Need and demand for birth spacing among currently married women ..... 81
Table 4.20 Exposure to birth spacing messages ..... 82
Table 5.1 Antenatal care ..... 96
Table 5.2 Number of antenatal care visits and the timing of the visits ..... 97
Table 5.3 Components of antenatal care ..... 98
Table 5.4 Use of intermittent preventive treatment (IPTp) by women during pregnancy ..... 99
Table 5.5 Tetanus toxoid injections ..... 100
Table 5.6 Place of delivery ..... 101
Table 5.7 Assistance during delivery ..... 102
Table 5.8 Timing of first postnatal check-up for the mother ..... 103
Table 5.9 Timing of first postnatal check-up for the newborn ..... 104
Table 5.10 Obstetric fistula ..... 105
Table 5.11 Problems in accessing health care ..... 106
Table 6.1 Child's weight and size at birth ..... 116
Table 6.2 Vaccinations by background characteristics ..... 117
Table 6.3 Prevalence and treatment of symptoms of ARI ..... 118
Table 6.4 Prevalence and treatment of fever ..... 119
Table 6.5 Diarrhoea treatment ..... 120
Table 6.6 Disposal of children's stools ..... 121
Table 7.1 Nutritional status of children ..... 134
Table 7.1 Continued ..... 135
Table 7.2 Initial breastfeeding ..... 136
Table 7.3 Breastfeeding status by age ..... 137
Table 7.4 Foods and liquids consumed by children in the day or night preceding the interview ..... 138
Table 7.5 Infant and young child feeding (IYCF) practices ..... 139
Table 7.6 Micronutrient intake among children ..... 140
Table 7.6 Continued ..... 141
Table 7.7 Nutritional status of women ..... 142
Table 7.8 Micronutrient intake among mothers ..... 143
Table 8.1 Knowledge of HIV/AIDS ..... 151
Table 8.2 Comprehensive knowledge about HIV/AIDS ..... 152
Table 8.3 Knowledge of prevention of mother-to-child transmission of HIV/AIDS ..... 153
Table 8.4 Discriminatory attitudes towards people living with HIV/AIDS ..... 154
Table 8.5 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms ..... 155
Table 8.6 Women seeking treatment for STIs ..... 156
Table 9.1 Acts that mean domestic violence ..... 166
Table 9.2 Experience of physical violence ..... 167
Table 9.3 Opinions regarding the most common perpetrator of violent acts against women ..... 168
Table 9.4 Persons committing physical Violence ..... 169
Table 9.5 Experience of violence during pregnancy ..... 170
Table 9.6 Spousal violence by background characteristics ..... 171
Table 9.7 Injuries to women due to spousal violence ..... 172
Table 9.8 Help-seeking to stop violence ..... 172
Table 9.9 Opinions regarding the most common perpetratror of violent acts against women ..... 173
Table 10.1 Opinions on whether female circumcision is required by religion ..... 181
Table 10.2 Prevalence of female circumcision ..... 182
Table 10.3 Age at circumcision ..... 183
Table 10.4 Circumcision of girl's aged 0-14 by mother's background characteristics ..... 184
Table 10.5 Opinions about whether the practice of circumcision should continue ..... 185
Table 11.1 Employment and cash earnings of currently married women ..... 195
Table 11.2 Control over women's cash earnings and relative magnitude of women's cash earnings ..... 195
Table 11.3 Control over husbands' cash earnings ..... 196
Table 11.4 Ownership of assets ..... 197
Table 11.5 Ownership and use of bank accounts and mobile phones ..... 198
Table 11.6 Participation in decision making ..... 198
Table 11.7 Attitude toward wife beating: Women ..... 199
Table 11.8 Indicators of women's empowerment ..... 200
Table 12.1 Prevalence of chronic diseases by background characteristics ..... 215
Table 12.2 Prevalence of chronic diseases diagnosed by a physician ..... 216
Table 12.3 Prevalence of specific chronic diseases ..... 217
Table 12.4 Prevalence of disability and common types of disability ..... 218
Table 12.5 Origin of disabilities ..... 219
Table 12.6 Age at onset of disability ..... 220
Table 12.7 Care and Support received by background characteristics ..... 221
Table 12.8 Sources for advice or treatment GMHDS 2020 ..... 222
Table 12.9 Financial sources used to pay for health services ..... 223
Table 12.10 Amount in health expenses ..... 223
Table 12.11 Smoking or using tobacco ..... 224
Table 12.12 Use of Khat ..... 225

## List of Figures

Figure 2.1 Population distribution by age and sex ..... 13
Figure 2.2. Household Composition ..... 14
Figure 2.3 Educational attainment by sex ..... 15
Figure 2.4 Educational attainment by sex ..... 15
Figure 2.5 School attendance ratios ..... 16
Figure 2.6 Total net attendance ratios ..... 16
Figure 2.7 Household drinking water ..... 17
Figure 2.8 Household sanitation facilities ..... 18
Figure 2.9 Household possessions ..... 19
Figure 2.10 Wealth quintiles ..... 20
Figure 3:1 Educational attainment ..... 39
Figure 3.2 Literacy ..... 39
Figure 3.3 Literacy by region ..... 39
Figure 3.4 Exposure to mass media ..... 40
Figure 3.5 Internet Usage ..... 41
Figure 3.6 Internet use by Education attainment ..... 41
Figure 3.7 Employment Status ..... 42
Figure 3.8 Type of employment and earnings ..... 43
Figure 4.1 Current marital status of women aged 15-49 ..... 56
Figure 4.2 Age at first marriage ..... 57
Figure 4.3 Age-specific fertility rates by residence ..... 58
Figure 4.4 Total fertility rate ..... 59
Figure 4.5 Fertility rate by level of education ..... 60
Figure 4.6 Childbearing by wealth ..... 61
Figure 4.7 Fertility Planning Status ..... 62
Figure 4.8 Knowledge of contraceptive methods ..... 63
Figure 5.1 Skilled assistance received during ANC by the type of residence ..... 87
Figure 5.2 Source of antenatal care ..... 87
Figure 5.3 ANC visits made by pregnant women ..... 88
Figure 5.5 Components of antenatal care ..... 88
Figure 5.4 Components of antenatal care ..... 88
Figure 5.6 Tetanus toxoid injections ..... 89
Figure 5.7 Place of delivery ..... 90
Figure 5.8 Place of delivery by ANC visits ..... 90
Figure 5.9 Assistance during delivery by Wealth Quintile ..... 91
Figure 5.10 Assistance during delivery ..... 92
Figure 5.11 Obstetric fistula experience by place of residence and region ..... 93
Figure 5.12 Problems in accessing health care ..... 94
Figure 6.1 Child's weight and size at birth ..... 110
Figure 6.2 Vaccination Coverage for children age 12-23 months ..... 111
Figure 6.3 Prevalence and treatment of symptoms of ARI by age ..... 112
Figure 6.4 Percent of children with fever by age ..... 113
Table 6.5 Prevalence of fever by place of residence ..... 113
Figure 6.6 Percent of children with diarrhoa by age ..... 114
Figure 6.7 Prevalence and treatment of childhood illness ..... 114
Figure 7.1 Nutritional status of children by residence and region ..... 126
Figure 7.2 Initial Breastfeeding ..... 127
Figure 7.3 IYCF indicators on breastfeeding status ..... 128
Figure 7.4 children consuming foods rich in vitamin $A$ and iron by type of residence ..... 130
Figure 7.5 children given iron and Vitamin A supplements by type of residence ..... 131
Figure 7.6 Iron tables and deworming ..... 132
Figure 8.1 Percentage of women who have heard HIV/AIDs by type of residence and region ..... 146
Figure 8.2 Percent of women aged 15-49 who had ever heard about HIV/AIDS by wealth quintile andEducation level147
Figure 8.3 Percent of women aged 15-49 with comprehensive knowledge about HIV/AIDS by the level of education ..... 148
Figure 8.4 Percent of women aged 15-49 who know the means of how HIV/ AIDS can be transmitted from mother to child ..... 148
Figure 8.5 Percent of women aged 15-49 with discriminatory attitudes towards people living with HIV/AIDS
by Education. ..... 149
Figure 8.6 Percentage of women aged 15-49 with discriminatory attitudes towards people living with HIV ..... 149
Figure 8.7 Percentage of women aged15-49 reporting an STI or symptoms of an STI in the past 12 monthswho sought advice or treatment150
Figure 9.1 Acts that mean domestic violence ..... 162
Figure 9.2 Physical Violence ..... 163
Figure 9.3 Injuries to women due to spouse violence ..... 164
Figure 9.4 Place of violence act ..... 165
Figure 10.1 Opinions on FGM/C by Type of residence ..... 177
Figure 10.2 Opinions on FGM/C by Wealth Status ..... 177
Figure 10.3 Type of FGM/C by place of residence ..... 178
Figure 10.4 Types of FGM/C by Region ..... 178
Figure 10.5 Type of FGM/C by Wealth Status ..... 178
Figure 10.6 Age at female genital mutilation/ cutting by place of residence ..... 179
Figure 10.7 Opinions about whether the practice of circumcision should continue ..... 180
Figure 11.1 Employment and cash earnings of currently married women ..... 188
Figure 11.2 Control over women's earnings ..... 189
Figure 11.3 Control over Husbands' Earnings ..... 189
Figure 11.4 Ownership of assets ..... 190
Figure 11.5 Ownership of bank account and mobile phones ..... 191
Figure 11.6 Ownership of bank account and mobile ..... 192
Figure 11.7 Attitude towards wife beating ..... 193
Figure 12.1 Prevalence of chronic diseases by age ..... 205
Figure 12.2 Prevalence of chronic diseases by region ..... 206
Figure 12.3 Chronic diseases diagnosed and treated. ..... 206
Figure 12.4 Common chronic diseases ..... 207
Figure 12.5 Disability prevalence by age ..... 208
Figure 12.6 Common types of disabilities ..... 209
Figure 12.7 Age at onset of disability ..... 209
Figure 12.8 Support received by household members for people with disabilities ..... 210
Figure 12.9 Source of advice or treatment ..... 211
Figure 12.10 Source of payment of health services ..... 212
Figure 12.11 Smoking/tobacco use ..... 213
Figure 12.12 Smoking/tobacco use by Age ..... 213
Figure 12.13 Cigarette smoking, tobacco use and chewing of Khat ..... 213

## SUSTAINABLE DEVELOPMENT GOAL INDICATORS

| Goal | Indicator | Male | Female | Total |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | Zero hunger |  |  |  |  |



Good health and well-being

| 3.1.2 | Proportion of births attended by skilled health personnel | NA | 42 | 42 |
| :---: | :---: | :---: | :---: | :---: |
| 3.7 .1 | Proportion of women of reproductive age (aged 15-49 years) who have their need for birth spacing satisfied with modern methods | NA | 1.9 | 1.9 |
| 3.7.2 | Adolescent birth rates per 1,000 women a) Women aged 15-19 years | NA | 94 | NA |
| 3.a. 1 | Age-standardized prevalence of current tobacco use among persons aged 15 years and older | 5.9 | 0.8 | 3.0 |
| 3.b. 1 | Proportion of the target population covered by all vaccines included in their national programme | 9.6 | 7.5 | 8.5 |



## Inclusive and equitable quality education and lifelong learning opportunities for all

4.3.1 4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the last 12 months

| a) Net Attendance Ratio (primary) | 17.9 | 14.6 | 16.3 |
| :--- | :--- | :--- | :--- |
| b) Net Attendance Ratio (secondary) | 11.7 | 10.2 | 10.8 |

4.6.1

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 | NA | 39.3 | 39.3 |
| :--- | :--- | :--- | :--- | :--- |

## SUSTAINABLE DEVELOPMENT GOAL INDICATORS

| Goal | Indicator | Male | Female |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Gender equality |  |  |  |  |  |



## Ensure availability and sustainable management of water and sanitation for all

## SUSTAINABLE DEVELOPMENT GOAL INDICATORS



Indicator
Male Female
Total

## Decent work and economic growth

8.10.2 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) Proportion of adults ( 15 years and older)

NA 4 4 with an account at a bank or other financial institution

| b) Proportion of adults (15 years and older) <br> with with a mobile-money account | NA | 74.7 | 74.7 |
| :--- | :--- | :--- | :--- | :--- |



Peaceful and inclusive societies for sustainable development, access to justice for all and effective, accountable and inclusive institutions
16.1.3 Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months

| a) Percentage of women aged 15-49 who <br> have experienced physical violence in the <br> last 12 months " | NA | 7.1 | 7.1 |
| :--- | :--- | :--- | :--- |
| Proportion of children under 5 years of age <br> whose births have been registered with a <br> civil authority | 3.3 | 3.6 | 3.45 |



Partnerships for the goals

| 17.8.1 | Proportion of individuals who used Internet | NA | 16.1 | 16.1 |
| :--- | :--- | :--- | :--- | :--- | :--- | in the last 12 months




### 1.1 History and Politics

Galmudug state occupies two regions namely Mudug and Galgaduug. This is in accordance with article 49 of the Federal Government of Somalia's provisional Constitution, that stipulates - based on a voluntary decision, two or more regions may merge to form a Federal Member State (FMS). It was established in June 2015 in Adado after a consensus agreement reached by the clan leaders. Eight hundred representatives from 11 clans passed the Galmudug constitution. The 89-member regional parliament was selected by the elders.

In July 2015, the first presidential election for Galmudug was held in Adado, whereby his excellency Abdikariim Huseen Guuleed won the election and became the first president for Galmudug. He voluntarily resigned in 2017

In May 2017 Ahmed Duale Geele Haaf was elected as the second president of the Galmudug state. He began peace efforts soon after he was officially inaugurated into the office at a ceremony in the state capital Adado. His efforts bore fruit when he reached and signed a power-sharing agreement with Ahlu Sunna Wal Jama'a (ASWJ) leader Sheikh Shakir. The agreement allowed for the government to move to Dhuusamreeb, the capital city of Galmudug state which was under the control of the Ahlu Sunna Wal Jama'a (ASWJ) administration. However, this agreement did not last due to various reasons.

In February 2020, Ahmed Abdi Karie was elected as the Galmudug president. He faced political antagonism fromt Ahlu Sunna Wal Jama'a (ASWJ) and the candidates for Galmudug presidency. Following that, bitter fighting erupted in Dhuusamareeb that finally caused the disbandment of Ahlu Sunna Wal Jama'a (ASWJ).

Recognizing the importance of the unity and the political stability for Galmudug, President Ahmed reached out to his rivals to end the political standoff. Fortunately, the two sides agreed and compromised for Galmudug to form State of law. To move the agenda forward President Ahmed formed a strong cabinet whereby well known politicians, academicians appeared in the list.

Despite the significant progress made by Galmudug state towards peacebuilding, it is still a fragile state that is struggling with several challenges. Its people are facing several challenges including: political instability, insecurity (Alshabab), clan violence, food insecurity
as a result of frequent and prolonged droughts, recent locusts invasion which has affected pasture land.

### 1.2 Geography and the climate of the state

The Galmudug state derives its name from a conflation of the two constituent regions: Mudug and Galgaduud that are sub-divided into 12 districts. It is bordered to the east by the Indian Ocean, Puntland to the north, Ethiopia to the west, Hirshabelle to the south. The politicaladministrative capital is Dhusamareb City. Galmudug has a tropical hot climate, with a little seasonal fluctuation. The daily temperature ranges from $27^{\circ}$ to $37^{\circ}$.

Thirty-one percent of the Galmudug population are Nomads and they rely on livestock as their main source of livelihood. Like the rest of Somalia, the state has low annual rainfall and four seasons: the rainy seasons are Gu' and Deyr, while the dry seasons are Hagaa and Jiilaal. It is an arid state that is dry most of the year. Galmudug experiences drought of different severity every 4-5 years.

### 1.3 Demographics

According to the Population Estimation Survey for Somalia 2014, Galmudug State has a population of 1.3 million inhabitants, with 44 percent residing in the urban, 10 percent in the rural, and 31 percent in the Nomadic. The state hosts a large number of internally displacement persons (IDPs) from different regions of Somalia, constituting 15 percent of its population. The sex distribution for Galmudug indicates that 49 percent are male, while 50 percent are female.

### 1.4 Health Status

As in other parts of Somalia, Galmudug is facing challenges in delivering health services to its population including; poor health system, inadequate qualified health professionals and lack of financial resources. The health system of Galmudug is structured in three sections: Hospitals, Primary Health Care Units, and Primary Health Care Centers. However, some of the
health facilities are not functional. Some settlements in Glamudug are under the administration of Alshabab militants which has hampered access to health care thus increasing the risk for the maternal and child mortality.

The morbidity and mortality trends have remained the same over the years, with the general population affected by common diseases including; diarrhea, acute respiratory infections (ARI), malaria, malnutrition, and other vaccine-preventable diseases. In addition, noncommunicable diseases and psychiatric diseases also exist though the magnitude is understated due to lack of capacity of the health system infrastructure to diagnose.

The state might not achieve its health and nutrition goals without concerted and organized efforts to revive the health system. The Ministry of Health $(\mathrm{MOH})$ supports Galmudug to achieve 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 health sector initiatives concentrate on the following goals and priorities:

Service delivery: Scaling up of essential and basic health and nutrition services (EPHS)

Human resources for health: Overcoming the crisis of human resources for health

Leadership and governance: Improving governance and leadership of the health system

## Medicines, medical supplies and technologies:

 Enhancing access to essential medicines and technologiesHealth information system: Providing a functioning health information system

Health financing: Health financing for progress towards Universal Health Coverage (UHC)

Health infrastructure: Enhancing access to health personnel and medical support equipment

### 1.5 Survey Objectives and Organization

The main objective of the survey was to provide evidence on the health and demographic characteristics of the

Galmudug population and in general Somali population, that will guide the development of programs and formulation of effective policies. This information would also help monitor and evaluate national, subnational and sector development plans, including the Sustainable Development Goals (SDGs), both by the state level, national and development partners. The specific objectives of the survey were to:

O Examine basic indicators of maternal and child health
O Measure fertility and birth spacing
O Describe patterns of knowledge and awareness of the HIV and other sexually transmitted infections

O Understand the extent and patterns of genderbased violence and female circumcision

### 1.6 Sample design

The sample for the survey was designed to provide estimates of key indicators for the Galmudug as a whole, and for each of the two pre-war geographical regions, which are the Galmudug's first-level administrative divisions, as well as separately for urban, rural and nomadic areas. Each region was stratified into urban, rural and nomadic areas, yielding a total of 6 sample allocation strata.

Using 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 into urban and rural areas. Enumeration Areas (EAs) were formed onscreen 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. A total of 850 EAs were digitized ( 452 in urban areas and 398 in rural areas). However, because there were no security and accessibility constraints, not all digitized areas were included in the final sampling frame.

The nomadic frame comprised of an updated list of temporary nomadic settlements (TNS) obtained from the nomadic link workers who are tied to these settlements. A total of 467 TNS formed the survey nomadic sampling frame.

The survey followed a three-stage stratified cluster sample design in urban and rural strata with a probability proportional to size, 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 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 households at the second stage. To ensure that the survey precision is comparable across regions, PSUs were allocated equally. Within each stratum, a sample of 35 EAs was selected independently, with probability proportional to the number of digitized dwelling structures. In this first stage, a total of 160 EAs were allocated (urban 70 EAs, rural- 70 EAs, and nomadic - 20 EAs). In the urban and rural selected EAs, all households were listed. 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

## 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 neighboring 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 GMHDS report are made to locations where survey teams visited households within temporary nomadic settlements.

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 40 EAs were allocated to urban and rural strata (20 EAs each), while in the third stage, an average of 30 households were selected from the listed households in every EA to yield a total of 1,783 households from 60 EAs covered (20 EAs in urban, 20 EAs in rural and 20 EAs in nomadic).

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.

### 1.7 Questionnaires

Four types of questionnaires were used in the survey: The Maternal Mortality Questionnaire, the Household Questionnaire and two individual questionnaires-Evermarried 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) at national level using a direct method.

The Household Questionnaire, Ever-married Woman's Questionnaire, and Never-married Woman's Questionnaire were based on a 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 language. 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 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 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:

O Background characteristics, such as age, education, literacy and media exposure
O Birth history and child mortality
O Knowledge and use of family planning methods
O Antenatal care, delivery, and postnatal care
O Breastfeeding and infant feeding practices
O Vaccinations and children's illnesses
O Marriage and sexual activity
O Fertility preferences
O Women's work and partners' work background characteristics
O Knowledge of HIV/AIDS and methods of HIV transmission
O 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:

O Background characteristics, such as age, education, literacy and media exposure
O Violence against women
O FGM
O Knowledge and attitudes relating to HIV

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 ${ }^{1}$ 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). ${ }^{2}$ The CSPro software was developed jointly by the U.S. Census Bureau, the DHS Program and Serpro S.A.

### 1.8 Training

Training for the survey was a 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).

## Listing and MMR Training

Training of Trainers (ToT) sessions were conducted in two locations: Garowe and Hargeisa, facilitated by technical staff from UNFPA. Three trainers from Galmudug state 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

[^0]inconsistencies, identification of maternal deaths and CSPro mobile data collection application. Thereafter, these trainers transferred this knowledge and skills to 39 data collectors from across the state in Adado. 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 October 2017 in Kigali, Rwanda. These master trainers were all Somali professionals who participated in the development and review of data collection tools. Consequently, along with the master trainers, UNFPA trained 51 trainers of trainers in the country.

### 1.9 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 the MMR data collection began in 17th - 28th August, 2018 for urban and rural areas. Fieldwork was carried out by 4 teams, each consisting of one supervisor, four enumerators and a driver. An Android platform developed in CSPro was used for data collection. Each team was assigned mobile phones (one for each enumerator and one for the supervisor), EA Maps (in AO 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. Insecuritycompromised 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, the 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 un sampled households in the TNS.

### 1.10 Data Processing

Data processing for the survey 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 survey.

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) ${ }^{3}$ and Stata ${ }^{4}$ for data processing. Three people 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)

[^1]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 survey. Two team members were tasked with computing the sampling and survey weights.

### 1.11 Response Rates

Table 1.1 presents response rates for the GMHDS 2020. A total of 1800 households were selected for the sample, of which 1742 were occupied. Of the occupied households, 1741 were successfully interviewed, yielding a response rate of 99.9. The GMHDS 2020 interviewed 1966 women in Galmudug - 1330 ever-married women and 636 never-married women.

Table 1.1 Results of the household and individual interviews

| Number of households, number of interviews, and response rates, according to residence <br> (unweighted), GMHDS 2020 |  |
| :--- | :---: |
| Result | Total |
| Household interviews |  |
| Selected Households | 1,800 |
| Households occupied | 1,742 |
| Households interviewed | 1,741 |
| Household response rate ${ }^{1}$ | $\mathbf{9 9 . 9}$ |
| Interviews with ever-married women aged 15-49 |  |
| Number of eligible ever-married women | 1,419 |
| Number of eligible ever-married women interviewed | 1,330 |
| Eligible ever-married women response rate ${ }^{2}$ |  |

### 1.12 Quality Assurance

A variety of tools and mechanisms were used as part of the quality assurance arrangements throughout the implementation of the survey. 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 program 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 and above were retained for participation in the survey.

## Learning and Monitoring Program for Somalia (LAMPS)

-an Independent Third-Party Monitoring (TPM), engaged by the Department for International Development (DfID), provided periodical monitoring of survey 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 survey technical team with specific areas in which to improve the quality of survey training and collection of data from selected households. LAMPS consistently rated survey 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 Georeferencing 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 Georeferenced 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 childbearing age and children under five years of age, aided in monitoring data collection by the main survey team.

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


## Household and Housing Characteristics




## Key Findings

Age structure:
57 percent of household members are below 15 years of age

## Household headship:

42 percent of household heads are women.

## Education:

The age group of 15-19 has the lowest number of persons with no education at 32 percent for males compared to 24 percent for females.

## Drinking water:

78 percent of households use an improved source of drinking water.

## Sanitation:

49 percent of households have an improved sanitation facility.

## Mobile phone ownership:

72 percent of households own a mobile phone.

## Birth registration:

4 percent of children under the age of 5 had their birth registered.

### 2.0 Introduction

This chapter presents the socioeconomic characteristics of the household members that were covered by the Galmudug Health and Demographic Survey (GMHDS 2020). Information collected included 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 inform the understanding of the survey results in the following chapters, while serving as a foundation for social and economic development planning.

The survey 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.

## 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 after completing 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.

### 2.1 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 Galmudug.

The survey collected information on the age in completed years for each household member. Where the age was not known, interviewers asked 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 household members, by age, residence (urban, rural and nomadic) and sex.

The age structure of the household members is typical of a society with a young population. Having one of the highest fertility rates in the world, Galmudug has a broad-based age pyramid, with 57 percent of household members below 15 years of age. The sex and age distribution of the household members is presented in the population pyramid in Figure 2.1.

The population pyramid in Figure 2.1 is in line with a developing country's population where fertility and mortality rates are high, which demographically represents a young population. There are more boys than girls among children under 15 years of age, and more women than men at the older ages. 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.

The age pyramid in Figure 2.1 sharply tapers to become narrower above age 55. This indicates high mortality rates among the older age groups. Around two-thirds

of Galmudug people are below the age of 20 years and around three-quarters ( 79 percent) are below the age of 30 years. Youth between 15-29 years of age constitute 22 percent of the household members, while older people ( 65 years and above) comprise only 4 percent of household members. Forty percent of the household members are within the working age population (15-64 years), highlighting the need to create jobs and ensure that training or education offered addresses the needs of the labour market.

The survey shows about 34 percent of the female household members are within childbearing age (1549 years). This can have implications on Galmudug's future birth rates. The large number of potential mothers creates a population momentum and it is a strong indication of a potential spike in population growth that Galmudug is likely to experience in the coming years. These projections need to be taken into account by the relevant policymakers and stakeholders need to be encouraged to consider preparing for the provision of adequate social services.

### 2.2 Household Composition

Table 2.2 shows the distribution of households covered by the sex of the head of household and the number of household members, according to urban, rural and nomadic residences. Forty-two percent of households are headed by women, ( 43 percent in urban households, 49 percent of rural households, and 31 percent in nomadic households) (Figure 2.3).

The average household size is 6 persons, compared to 6.2 persons at the national level which is almost similar to the average of 5.9 reported in the PESS 2014. Urban households, which have 6.5 persons per household, are slightly larger than rural households, with 5.9 persons per household. Nomadic households have the lowest average household size with 5.6 persons.

Table 2.2 indicates that 37 percent of households have a foster child and/or orphaned children, 22 percent have foster children, 16 percent have single orphans and 4 percent have double orphans. There is a slight difference in the number of households with foster children among the three types of residence. In the rural households, 24 percent have foster children, while this proportion was 22 percent in the urban households and 19 percent nomadic households.

### 2.3 Education

Level of education is an important characteristic, as it affects behavior, including health-related behaviors 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 Galmudug responses that would guarantee orphans and children from different backgrounds equal access to better lives as they grow up.

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


### 2.3.1 Educational attainment

Information on educational attainment of the male and female household members aged six and above is presented in Table 2.3a and Table 2.3b. Overall, 54 percent of females and 56 percent of males aged 6 and above have never attended school. Five percent of female household members and 4 percent of male household members have completed primary education. Four percent of women have attained secondary education, compared to 5 percent of men (Figure 2.3). The survey results show 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 32 percent and 24 percent for females in the same age group.

The study reveals that 6 percent of males in Mudug have completed secondary education compared to 5 percent in Galgaduud region, while six percent of females in Mudug have completed secondary education compared to 2 percent in Galgaduud region.

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 urban centers. Nomadic household members are the most disadvantaged in terms of accessing education. Ninety percent of nomadic male household members have no education. Similarly, indicators for women are worse than those for men; 93 percent of nomadic female household members have no education (Figure 2.4).

### 2.4 School Attendance Ratios

Table 2.4 and Figure 2.5 present data on Net Attendance Ratios (NARs) and Gross Attendance Ratios (GARs) by school level, sex, and place of residence. The NAR for primary schooling is measured as the proportion of children aged 6-13 attending primary school, and for secondary schooling as the population aged 1417 attending secondary school. The GAR for primary schooling is measured as the total number of primary school students relative to the official primary-schoolage population; similarly, GAR for secondary schooling refers 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 range for that level. A NAR of 100 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 underage participation at a given level of schooling.

Sixteen percent of the total number of children attending primary school are of the right age for that level. At secondary level, only 11 percent of the total children attending are of the right age for that level. As shown in Figure 2.5 below, there is little difference between the NAR of boys and girls at the primary level (18 percent and 15 percent respectively). The NAR is slightly higher for males than females at the secondary level ( 12 percent and 10 percent respectively).

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


As presented in Figure 2.6, urban areas have the highest NAR at primary level at 25 percent while the nomadic areas have the lowest NAR at primary at 2 percent. Similarly, the NAR at secondary level is also highest in urban areas at 17 percent while in the nomadic areas, the NAR is almost zero.

Analysis by region show that Mudug has higher NAR at both primary and secondary levels at 23 and 13 percent respectively, compared to 10 percent and 8 percent respectively for Galgaduud.

Overall GAR at primary and secondary levels are at 38 percent and 19 percent respectively. The GAR for males ais slightly lower than females at primary level (34 percent and 36 percent, respectively) but the GAR is higher for males compared to females, at 22
and 17 percent respectively at secondary-school level, indicating higher school attendance among males than females. As the table shows, both the NAR and GAR at primary and secondary school levels increase with an increase in wealth.

### 2.5 Housing Characteristics

### 2.5.1 Water Supply

Access to clean drinking water is one of the SDGs and a target outlined in Somalia's National Development Plan (NDP) 9, and Galmudug State Development Plan (GSDP). The different types of water sources

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


Figure 2.6 Total net attendance ratios

Total net attendance ratios by type of residence

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, such as education, for people living in developing countries. The source of drinking water for a household is an indicator of how safe it is to consume. Sources that are likely to provide uncontaminated water that is suitable for drinking are known as improved water sources (Table 2.5a). 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, 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 diarrhea and dysentery in Galmudug can be reduced by introducing and using improved water sources that are readily available to households.

According to the survey, 78 percent of households get their drinking water from improved water sources. Ninety-five of urban households have access to improved water sources, while 93 percent of rural households and 32 percent of nomadic households have access to improved water sources (Table 2.5a and Figure 2.7). Sixty-one percent of household members have access to piped water coming into their dwelling, yard or plot. Fourteen percent of households travel for at least 30 minutes or longer to get water. Nomadic household members travel the longest distances to get water. Forty-nine percent of nomadic, 1 percent of both urban and rural households travel longer than 30 minutes, to access improved water sources.

Regionally, Galgaduud has higher proportions of households who get their drinking water from improved sources of water at 87 percent compared to 69 percent of Mudug households. Similarly, the percentage of households that travel 30 minutes or longer to obtain water is higher in Mudug than in Galgaduud at 23 percent and 4 percent, respectively.

As shown in Table 2.5b, only 8 percent of households treat water before drinking it, 10 percent of urban households and 11 percent for rural households. No nomadic households use appropriate treatment methods for drinking water. The most common method of water treatment is boiling at 5 percent, followed by bleaching/chlorination which is used by 3 percent of households -5 percent for urban households and 7 percent for rural households. None of the nomadic households interviewed use boiling to treat their water.

### 2.5.2 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 maintain their dignity and protection from a large number of 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 survey considers improved toilets as those that flush or pour flush into a piped sewer system or septic tank. A household is classified as having a basic toilet facility if the toilet is used by only 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 the UNICEF and WHO (UNICEF, WHO 2012).

Table 2.6 and Figure 2.8 show that 49 percent of households use sanitation facilities with basic sanitation services that would be considered as improved toilet facilities. Access to sanitation facilities within households

Percent distribution of household drinking water sources by type of residence

varies greatly by residence. Majority of households in rural and urban areas have access to improved toilet facilities at 68 and 64 percent respectively, compared to nomadic households at 2 percent. Regionally, Mudug has a higher proportion of households that use improved toilet facilities at 54 percent compared to 44 percent among households in Galgaduud.

### 2.5.3 Flooring Material, Lighting and Cooking Arrangements

Table 2.7 presents the distribution of households by dwelling characteristics and amenities. Twenty-nine percent of households in Galmudug use electricity 57 percent of urban households use electricity for lighting, compared to 24 percent of rural households, with no nomadic household reporting use of electricity for lighting.

The kind of flooring used in a house can be indicative of the lifestyle its inhabitants have. Across Galmudug, 74 percent of dwellings have floors made of earth or sand. In urban and rural residences, cement is the second most common type of flooring, used in 27 percent of urban dwellings and 26 percent of rural dwellings. Firewood is the most common source of fuel used for cooking in nomadic and rural areas, with 95 percent of nomadic households and 50 percent of rural households using firewood. In urban areas, 57 percent of households use charcoal, whereas in rural settings, 44 percent use this type of fuel for cooking.

### 2.6 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 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, 8 percent of households in Galmudug own a television, and 72 percent own a mobile phone. Keeping up with technological advances and connecting with friends and family is a top priority in majority of households: Seventy-six percent of people living in urban households, 75 percent living in rural households and 64 percent of nomadic households own simple mobile telephones with access to FM radio. In addition, around 22 percent of urban households, 19 percent of rural households and 6 percent of nomadic households' own radios (Table 2.8).

Six percent of urban, 4 percent of rural, and 1 percent of nomadic households own a car or truck. As is the case throughout the state, families in Galmudug value livestock and regard them as assets: Almost all nomadic households own livestock at 94 percent while 60 percent of rural households and 41 percent of urban households own livestock. Climate related shocks and stresses have become more frequent in the recent years and have adversely affected the livestock production sector. Sixty-six percent of nomadic households, 44 percent of rural households, and 26 percent urban households lost their livestock.



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 survey did not collect data on consumption or income, but the information collected on dwelling and household characteristics, consumer goods, and assets is used as a measure of socioeconomic status. The resulting wealth index is an indicator of the 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. 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 household members into five wealth quintiles (five equally divided levels) based on the wealth index by residence. These distributions indicate the degree to which wealth is evenly (or unevenly) distributed across Galmudug State. As expected, the survey findings show that urban areas are wealthier than rural and nomadic areas. For example, within urban households, 20 percent of households belong to the highest wealth quintile, followed by 8 percent in rural areas. No households in the nomadic areas belong to the highest wealth quintile indicating economic disparities based on type of residence (Figure 2.10).

### 2.8 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 interviews 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. Almost all children did not have a birth certificate. Four percent of children under two years were registered, of which less than 1 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. The levels of registration were generally low and no significant variations were recorded across the state, as shown in Table 2.11.

## 2.9: Hand Washing

Hand washing with water and soap is one of the most effective health interventions to reduce the incidence of illness especially among children. Monitoring correct hand washing behavior is challenging. The survey assessed the potential for correct hand washing behavior to take place by observing if a household had a specific place, where household members most often wash their hands
and observing if water and soap (or other local cleansing materials) were present at a specific place for hand washing.

Respondents were requested to show the place where household members wash their hands in order to observe if soap and water are available for hand washing. Table 2.11 indicates that 16 percent of urban, 10 percent of rural, and 1 percent of nomad dwellers have a basic hand washing facility.

Regionally, the percentage of households with hand washing facility available are higher in Galgaduud at 6 percent compared to Mudug at 4 percent.

Figure 2.10 Wealth quintiles

Percent distribution of de-jure household members by wealth quintiles and type of residance
■Urban ■Rural $\quad$ Nomadic

Table 2.1 Household population by age, sex, and residence ..... 21
Table 2.2 Household composition ..... 22
Table 2.3a Educational attainment of the male household population ..... 23
Table 2.3b Educational attainment of the female household population ..... 24
Table 2.4a School attendance ratio: PRIMARY ..... 25
Table 2.4b School attendance ratio: SECONDARY ..... 26
Table 2.5a Household drinking water ..... 27
Table 2.5b Treatment of household drinking water ..... 28
Table 2.6 Household sanitation facilities, GMHDS 2020 ..... 29
Table 2.7 Household characteristics ..... 30
Table 2.8 Household possessions ..... 31
Table 2.9 Wealth quintile ..... 32
Table 2.10 Birth registration of children aged under five ..... 32
Table 2.11 Handwashing, GMHDS 2020 ..... 33
Table 2.12 Children's living arrangements and orphanhood ..... 34

Table 2.1 Household population by age, sex, and residence
Percent distributions of the de facto household population by various age groupsand percentage of the de facto household population age 10-19, according to sex and residence, GMHDS, 2020

| Background characteristics | Urban |  |  | Rural |  |  | Nomadic |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| < 5 | 23.5 | 18.5 | 20.8 | 23.8 | 18.2 | 20.8 | 24.7 | 23.4 | 24.1 | 23.9 | 19.6 | 21.6 |
| 5-9 | 21.2 | 16.6 | 18.8 | 24.8 | 18.7 | 21.6 | 21.2 | 19.0 | 20.1 | 22.6 | 18.0 | 20.2 |
| 10-14 | 17.0 | 14.0 | 15.4 | 17.2 | 14.3 | 15.7 | 14.4 | 12.8 | 13.6 | 16.4 | 13.8 | 15.0 |
| 15-19 | 10.4 | 13.6 | 12.1 | 8.9 | 12.2 | 10.6 | 7.7 | 11.6 | 9.7 | 9.2 | 12.6 | 11.0 |
| 20-24 | 4.9 | 6.9 | 5.9 | 4.2 | 5.6 | 5.0 | 4.9 | 6.5 | 5.7 | 4.6 | 6.3 | 5.5 |
| 25-29 | 3.8 | 6.3 | 5.2 | 2.7 | 7.3 | 5.2 | 4.1 | 6.6 | 5.4 | 3.4 | 6.8 | 5.2 |
| 30-34 | 3.6 | 5.1 | 4.4 | 3.6 | 4.6 | 4.1 | 5.5 | 5.6 | 5.6 | 4.1 | 5.0 | 4.6 |
| 35-39 | 3.1 | 4.9 | 4.1 | 2.6 | 4.3 | 3.5 | 3.3 | 4.4 | 3.9 | 3.0 | 4.6 | 3.8 |
| 40-44 | 3.4 | 2.2 | 2.8 | 3.0 | 2.3 | 2.6 | 4.2 | 1.6 | 2.9 | 3.4 | 2.1 | 2.7 |
| 45-49 | 1.7 | 1.3 | 1.5 | 1.3 | 0.9 | 1.1 | 2.1 | 1.0 | 1.5 | 1.7 | 1.1 | 1.4 |
| 50-54 | 2.7 | 3.2 | 3.0 | 1.9 | 3.0 | 2.5 | 1.9 | 2.7 | 2.3 | 2.2 | 3.0 | 2.6 |
| 55-59 | 0.5 | 0.9 | 0.7 | 0.6 | 1.6 | 1.2 | 1.2 | 0.8 | 1.0 | 0.7 | 1.2 | 1.0 |
| 60-64 | 1.3 | 1.7 | 1.5 | 2.0 | 2.2 | 2.1 | 1.5 | 1.5 | 1.5 | 1.6 | 1.9 | 1.7 |
| 65-69 | 0.3 | 0.7 | 0.5 | 0.5 | 1.1 | 0.8 | 0.6 | 0.8 | 0.7 | 0.4 | 0.9 | 0.7 |
| 70-74 | 1.0 | 1.5 | 1.3 | 1.6 | 1.4 | 1.5 | 0.9 | 0.7 | 0.8 | 1.2 | 1.2 | 1.2 |
| 75-79 | 0.4 | 0.4 | 0.4 | 0.2 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 |
| 80+ | 1.2 | 1.9 | 1.6 | 1.1 | 1.7 | 1.4 | 1.4 | 0.7 | 1.1 | 1.2 | 1.6 | 1.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Dependency age groups |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-14 | 61.7 | 49.1 | 55.0 | 65.8 | 51.2 | 58.0 | 60.3 | 55.2 | 57.7 | 63.0 | 51.4 | 56.8 |
| 15-64 | 35.5 | 46.3 | 41.3 | 30.9 | 44.0 | 37.9 | 36.4 | 42.4 | 39.4 | 33.9 | 44.5 | 39.5 |
| 65+ | 2.8 | 4.6 | 3.8 | 3.3 | 4.8 | 4.1 | 3.4 | 2.4 | 2.9 | 3.1 | 4.1 | 3.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Child and adult populations |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-17 | 68.6 | 58.1 | 63.0 | 71.8 | 59.0 | 65.0 | 65.5 | 63.7 | 64.6 | 69.1 | 59.8 | 64.2 |
| 18+ | 31.4 | 41.9 | 37.0 | 28.2 | 41.0 | 35.0 | 34.5 | 36.3 | 35.4 | 30.9 | 40.2 | 35.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Adolescents 10-19 | 27.4 | 27.6 | 27.5 | 26.2 | 26.4 | 26.3 | 22.1 | 24.4 | 23.3 | 25.6 | 26.4 | 26.0 |
| Number of persons | 1733 | 1989 | 3723 | 1935 | 2187 | 4122 | 1248 | 1317 | 2565 | 4916 | 5494 | 10410 |

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, GMHDS, 2020

| Background characteristics | Type of Residence |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Nomadic | Total |
| Household headship |  |  |  |  |
| Male | 57.5 | 51.1 | 69.4 | 58.1 |
| Female | 42.5 | 48.9 | 30.6 | 41.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of usual members |  |  |  |  |
| 1 | 3.5 | 3.1 | 2.1 | 3.0 |
| 2 | 4.0 | 8.0 | 6.7 | 6.3 |
| 3 | 8.3 | 9.8 | 10.7 | 9.5 |
| 4 | 9.6 | 9.9 | 15.2 | 11.2 |
| 5 | 10.7 | 15.0 | 14.8 | 13.5 |
| 6 | 16.6 | 13.5 | 16.8 | 15.4 |
| 7 | 13.5 | 14.0 | 14.3 | 13.9 |
| 8 | 10.2 | 10.2 | 8.6 | 9.8 |
| 9+ | 23.6 | 16.5 | 10.7 | 17.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Mean size of households | 6.5 | 5.9 | 5.6 | 6.0 |
| Percentage of households with orphans and foster children under 18 |  |  |  |  |
| Foster children ${ }^{1}$ | 22.4 | 24.2 | 19.2 | 22.3 |
| Double orphans | 3.5 | 3.5 | 6.1 | 4.2 |
| Single orphans ${ }^{2}$ | 16.5 | 17.2 | 15.0 | 16.4 |
| Foster and/or orphan children | 35.9 | 38.1 | 35.3 | 36.6 |
| Number of households | 577 | 700 | 463 | 1740 |
| Note: Table is based on de jure household population, i.e. usual residents |  |  |  |  |
| ${ }^{1}$ Foster children are those under age 18 years of age living in households with neither their mother nor their father present <br> ${ }^{2}$ Includes children with one dead parent and an unknown survival status of the other parent |  |  |  |  |

${ }^{1}$ Foster children are those under age 18 years of age living in households with neither their mother nor their father present ${ }^{2}$ Includes children with one dead parent and an unknown survival status of the other parent

Table 2.3a Educational attainment of the male household population

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

| Background characteristics | Educational attainment of the household population |  |  |  |  |  |  | Total | Number of males |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No education | Some primary | Completed primary ${ }^{1}$ | Some secondary | Completed secondary ${ }^{2}$ | Higher education | Don't know |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 6-9 | 84.3 | 15.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 494 |
| 10-14 | 54.8 | 41.3 | 2.8 | 1.1 | 0.0 | 0.0 | 0.0 | 100.0 | 615 |
| 15-19 | 32.1 | 31.0 | 8.2 | 13.5 | 12.2 | 1.9 | 1.1 | 100.0 | 334 |
| 20-24 | 36.3 | 9.7 | 4.0 | 17.3 | 18.7 | 11.1 | 2.9 | 100.0 | 127 |
| 25-29 | 32.7 | 14.4 | 6.6 | 8.4 | 7.9 | 21.9 | 8.1 | 100.0 | 98 |
| 30-34 | 46.0 | 12.1 | 5.3 | 2.5 | 8.7 | 17.5 | 8.0 | 100.0 | 96 |
| 35-39 | 52.6 | 9.0 | 3.5 | 4.0 | 16.8 | 5.5 | 8.6 | 100.0 | 72 |
| 40-44 | 43.6 | 10.5 | 10.4 | 2.8 | 7.3 | 11.1 | 14.3 | 100.0 | 72 |
| 45-49 | '(68.5) | (8.1) | '(0) | '(5.6) | '(10.5) | '(0) | '(7.3) | 100.0 | 26 |
| 50-54 | '(50.7) | '(10.3) | '(6.9) | '(2.2) | '(9.3) | '(12.7) | '(7.9) | 100.0 | 40 |
| 55-59 | * | * | * | * | * | * | * | 100.0 | 15 |
| 60-64 | * | * | * | * | * | * | * | 100.0 | 23 |
| 65+ | 73.7 | 2.8 | 1.8 | 5.1 | 6.0 | 6.7 | 3.8 | 100.0 | 51 |

Type of residence

| Urban | 43.4 | 28.6 | 5.0 | 7.5 | 6.7 | 6.8 | 2.0 | 100.0 | 882 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Rural | 57.3 | 25.2 | 3.7 | 3.0 | 5.4 | 2.8 | 2.7 | 100.0 | 901 |  |
| Nomadic | 89.9 | 6.0 | 0.2 | 0.4 | 0.4 | 0.0 | 3.1 | 100.0 | 278 |  |
| Region |  |  |  |  |  |  |  |  |  |  |
| Mudug | 44.6 | 31.1 | 3.9 | 5.9 | 6.0 | 5.4 | 3.1 | 100.0 | 924 |  |
| Galgaduud | 64.8 | 18.4 | 3.7 | 3.5 | 4.7 | 3.0 | 1.9 | 100.0 | 1137 |  |
| Total | $\mathbf{5 5 . 8}$ | $\mathbf{2 4 . 1}$ | $\mathbf{3 . 8}$ | $\mathbf{4 . 6}$ | $\mathbf{5 . 3}$ | $\mathbf{4 . 1}$ | $\mathbf{2 . 5}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{2 0 6 1}$ |  |

[^2]Table 2.3b Educational attainment of the female household population
Percent distribution of the de facto male household populations age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, GMHDS, 2020

| Background characteristics | Educational attainment of the household population |  |  |  |  |  |  | Total | Number of females |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No education | Some primary | Completed primary ${ }^{1}$ | Some secondary | Completed secondary ${ }^{2}$ | Higher education | Don't know |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 6-9 | 85.7 | 14.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 370 |
| 10-14 | 52.7 | 44.1 | 1.6 | 1.6 | 0.0 | 0.0 | 0.0 | 100.0 | 538 |
| 15-19 | 24.4 | 34.2 | 12.5 | 14.2 | 10.9 | 3.3 | 0.6 | 100.0 | 388 |
| 20-24 | 33.8 | 33.2 | 5.9 | 8.3 | 9.0 | 9.7 | 0.0 | 100.0 | 169 |
| 25-29 | 58.8 | 22.2 | 5.5 | 2.8 | 7.1 | 3.6 | 0.0 | 100.0 | 157 |
| 30-34 | 61.0 | 23.9 | 2.9 | 2.9 | 5.1 | 2.9 | 1.3 | 100.0 | 94 |
| 35-39 | 55.1 | 34.3 | 5.9 | 0.0 | 3.3 | 1.3 | 0.0 | 100.0 | 69 |
| 40-44 | * | * | * | * | * | * | * | 100.0 | 24 |
| 45-49 | * | * | * | * | * | * | * | 100.0 | 15 |
| 50-54 | '(71.6) | '(7.3) | (8.0) | '(2.6) | (0.0) | '(10.5) | (0.0) | 100.0 | 35 |
| 55-59 | * | * | * | * | * | * | * | 100.0 | 22 |
| 60-64 | * | * | * | * | * | * | * | 100.0 | 17 |
| 65+ | '(93.2) | '(3.5) | (0.0) | '(3.2) | (0.0) | (0.0) | (0.0) | 100.0 | 28 |

Type of

| Urban | 42.3 | 35.1 | 6.0 | 6.3 | 6.1 | 4.0 | 0.2 | 100.0 | 879 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural | 57.8 | 29.4 | 4.3 | 4.0 | 2.8 | 1.3 | 0.3 | 100.0 | 861 |
| Nomadic | 92.5 | 6.6 | 0.0 | 0.0 | 0.2 | 0.0 | 0.6 | 100.0 | 185 |
| Region |  |  |  |  |  |  |  |  |  |
| Mudug | 43.2 | 36.0 | 5.4 | 6.0 | 6.3 | 2.6 | 0.3 | 100.0 | 894 |
| Galgaduud | 63.5 | 24.4 | 4.0 | 3.4 | 2.1 | 2.2 | 0.3 | 100.0 | 1030 |
| Total | $\mathbf{5 4 . 1}$ | $\mathbf{2 9 . 8}$ | $\mathbf{4 . 7}$ | $\mathbf{4 . 6}$ | $\mathbf{4 . 1}$ | $\mathbf{2 . 4}$ | $\mathbf{0 . 3}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 9 2 4}$ |

${ }^{1}$ Completed $8^{\text {th }}$ grade at the primary level
${ }^{2}$ Completed $12{ }^{\text {th }}$ grade at the secondary level
Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted

Table 2.4a School attendance ratio: PRIMARY

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the defacto household population by sex and level of schooling and Gender Parity Index (GPI), according to background characteristics, GMHDS, 2020

|  | Net Attendance Ratio ${ }^{1}$ |  |  |  | Gross Attendance Ratio ${ }^{2}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristics | Male | Female | Total | Gender Parity Index ${ }^{3}$ | Male | Female | Total | Gender Parity Index ${ }^{3}$ |
| Urban | 25.6 | 23.3 | 24.5 | 0.91 | 52.1 | 53.2 | 57.5 | 1.02 |
| Rural | 19.9 | 14.9 | 17.6 | 0.75 | 35.4 | 38.9 | 39.9 | 1.10 |
| Nomadic | 2.2 | 0.7 | 1.5 | 0.33 | 3.8 | 3.5 | 5.1 | 0.92 |
| Region of residence |  |  |  |  |  |  |  |  |
| Mudug | 25.1 | 19.7 | 22.6 | 0.79 | 39.8 | 40.7 | 42.6 | 1.02 |
| Galgaduud | 10.7 | 9.5 | 10.1 | 0.89 | 28.3 | 30.9 | 33.6 | 1.09 |
| Wealth quitile |  |  |  |  |  |  |  |  |
| Lowest | 5.6 | 3.8 | 4.7 | 0.69 | 9.2 | 8.8 | 10.2 | 0.96 |
| Second | 13.4 | 12.0 | 12.7 | 0.90 | 26.1 | 30.5 | 33.6 | 1.17 |
| Middle | 18.9 | 15.1 | 17.2 | 0.80 | 37.2 | 41.8 | 41.9 | 1.12 |
| Fourth | 23.5 | 23.0 | 23.3 | 0.98 | 50.9 | 50.3 | 54.7 | 0.99 |
| Highest | 52.1 | 36.8 | 44.5 | 0.71 | 85.0 | 84.4 | 89.5 | 0.99 |
| Total | 17.9 | 14.6 | 16.3 | 0.81 | 34.0 | 35.7 | 38.0 | 1.05 |

${ }^{1}$ 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 primary school is the percentage of the primary-school age (14-17 years) population that is attending secondary school. By definition the NAR cannot exceed 100 percent
${ }^{2}$ 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 primary school is the total number of primary school students, expressed as a percentage of the official secondary-school-age population.

If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent ${ }^{3}$ The Gender Parity Index for primary school is the ratio of the primary school NAR(GAR) for females to the NAR(GAR) for males.

Table 2.4b School attendance ratio: SECONDARY

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the defacto household population by sex and level of schooling and Gender Parity Index (GPI), according to background characteristics, GMHDS 2020

| Background characteristics | Net Attendance Ratio ${ }^{1}$ |  |  |  | Gross Attendance Ratio ${ }^{\text {² }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Total | Gender Parity Index ${ }^{3}$ | Male | Female | Total | Gender <br> Parity <br> Index ${ }^{3}$ |
| Urban | 18.5 | 15.7 | 16.9 | 0.85 | 35.4 | 28.8 | 31.7 | 0.81 |
| Rural | 11.3 | 11.0 | 11.1 | 0.97 | 20.6 | 15.7 | 17.8 | 0.76 |
| Nomadic | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |
| Region of residence |  |  |  |  |  |  |  |  |
| Mudug | 14.9 | 11.4 | 12.7 | 0.77 | 24.9 | 17.3 | 20.1 | 0.70 |
| Galgaduud | 8.8 | 8.3 | 8.5 | 0.95 | 19.3 | 16.3 | 17.8 | 0.85 |
| Wealth quitile |  |  |  |  |  |  |  |  |
| Lowest | 0.0 | 0.5 | 0.3 | 0.0 | 0.0 | 0.5 | 0.3 |  |
| Second | 5.9 | 7.8 | 7.0 | 1.32 | 13.4 | 11.4 | 12.2 | 0.85 |
| Middle | 10.0 | 9.3 | 9.6 | 0.93 | 23.2 | 16.5 | 19.3 | 0.71 |
| Fourth | 15.4 | 17.6 | 16.6 | 1.14 | 33.2 | 26.8 | 29.9 | 0.81 |
| Highest | 38.6 | 25.8 | 31.3 | 0.67 | 55.0 | 46.5 | 50.1 | 0.85 |
| TOTAL | 11.7 | 10.2 | 10.8 | 0.87 | 21.9 | 16.9 | 19.1 | 0.77 |

${ }^{1}$ 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 ( $14-17$ years) population that is attending secondary school. By definition the NAR cannot exceed 100 percent
${ }^{2}$ 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 underage students at a given level of schooling, the GAR can exceed 100 percent
${ }^{3}$ The Gender Parity Index for primary school is the ratio of the primary school NAR(GAR) for females to the NAR(GAR) for males. The Gender Parity Index for secondary school is the ratio of the secondary school NAR(GAR) for females to the NAR(GAR) for males.

Table 2.5a Household drinking water

| Percent distribution of Households by source of drinking water, time to obtain drinking water, according to residence, GMHDS, 2020 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristics | Types of residence |  |  | Region of residence |  | Total |
|  | Urban | Rural | Nomadic | Mudug | Galgaduud |  |
| Source of drinking water |  |  |  |  |  |  |
| Improved source | 95.1 | 93.1 | 32.3 | 69.2 | 86.6 | 77.6 |
| Piped water into dwelling/yard/plot | 88.1 | 78.8 | 0.3 | 46.5 | 76.6 | 61.0 |
| Piped to neighbor | 2.7 | 2.6 | 0.0 | 2.0 | 1.8 | 1.9 |
| Public tap/standpipe | 0.9 | 1.6 | 1.3 | 1.0 | 1.6 | 1.3 |
| Tube well/borehole | 1.6 | 2.4 | 0.8 | 2.0 | 1.4 | 1.7 |
| Protected dug well | 1.5 | 4.8 | 4.3 | 3.8 | 3.3 | 3.6 |
| Protected spring | 0.2 | 1.5 | 5.1 | 3.3 | 0.7 | 2.0 |
| Rainwater | 0.0 | 1.1 | 20.6 | 10.3 | 1.2 | 5.9 |
| Bottled water | 0.2 | 0.3 | 0.0 | 0.3 | 0.0 | 0.2 |
| Non-improved source | 4.9 | 6.9 | 67.7 | 30.8 | 13.4 | 22.4 |
| Unprotected dug well | 1.0 | 3.7 | 34.0 | 16.4 | 4.9 | 10.9 |
| Unprotected spring | 0.4 | 0.1 | 10.6 | 4.4 | 1.5 | 3.0 |
| Tanker truck/cart with drum | 3.0 | 1.4 | 11.5 | 3.7 | 5.7 | 4.6 |
| Water Kiosk | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Surface water | 0.2 | 1.2 | 11.6 | 6.2 | 0.9 | 3.6 |
| Other source | 0.4 | 0.3 | 0.0 | 0.1 | 0.4 | 0.3 |
| Missing | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Time to obtain drinking water (round trip)

|  | 94.2 | 89.6 | 7.4 | 57.2 | 82.3 | 69.3 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Water on premises ${ }^{1}$ | 4.6 | 8.6 | 41.6 | 18.0 | 13.9 | 16.0 |
| 30 minutes or less | 0.8 | 1.0 | 48.9 | 23.0 | 3.6 | 13.7 |
| More than 30 minutes | 0.4 | 0.8 | 2.0 | 1.7 | 0.3 | 1.0 |
| DK/Missing | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ |
| Total | 94.7 | 92.0 | 15.9 | 61.0 | 85.2 | 72.6 |
| Drinking water service <br> Percentage with basic drinking water <br> service <br> Percentage with limited drinking water <br> service <br> Number of households | 0.4 | 0.7 | 16.4 | 7.9 | 1.4 | 4.8 |

${ }^{1}$ Includes water piped to a neighbor and those reporting a round trip collection time of zero minutes
${ }^{2}$ Defined as drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or lessIncludes safely managed
${ }^{3}$ 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, GMHDS, 2020

Types of residence

|  | Types of residence |  |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| Water treatment method | Urban | Rural | Nomads | Mudug | Galgaduud | Total |
| Water treatment prior to <br> drinking |  |  |  |  |  |  |
| Boiled | 5.1 | 7.0 | 0.0 | 3.7 | 0.8 | 4.5 |
| Bleach/chlorine added | 4.5 | 4.2 | 0.0 | 1.2 | 2.0 | 3.2 |
| Strained through cloth | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ceramic, sand or other filter | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Solar disinfection | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Let it stand and settle | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other treatment | 0.2 | 0.6 | 0.0 | 0.2 | 0.1 | 0.3 |
| No treatment | 89.7 | 88.6 | 98.5 | 46.5 | 45.2 | 91.6 |
| Don't Know | 9.8 | 11.3 | 1.5 | 5.2 | 2.9 | 8.2 |
| Percentage using an | 9.5 | 10.8 | 0.0 | 4.7 | 2.8 | 7.5 |
| appropriate treatment method ${ }^{2}$ |  | 577 | 700 | 463 | 903 | 838 |
| Number of households |  |  |  |  |  | 1740 |

${ }^{1}$ Respondents may report multiple treatment methods so the sum of treatment may exceed 100 percent.
${ }^{2}$ Appropriate water treatment methods include boiling, bleaching, straining, filtering and solar disinfecting

Table 2.6 Household sanitation facilities, GMHDS 2020

| Type of toilet/latrine facility | Households |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Nomads | Mudug | Galgaduud | Total |
| Improved facility | 64.3 | 67.7 | 2.3 | 53.6 | 44.3 | 49.2 |
| Flush/pour to septic tank | 14.4 | 11.9 | 0.3 | 13.5 | 5.4 | 9.6 |
| Flush/pour to a pit latrine | 23.9 | 26.7 | 0.5 | 28.1 | 8.8 | 18.8 |
| Ventilated improved pit (VIP) latrine | 1.6 | 3.1 | 0.0 | 3.1 | 0.4 | 1.8 |
| Pit latrine with a slab | 23.8 | 24.4 | 1.3 | 8.6 | 28.2 | 18.0 |
| Composting toilet | 0.5 | 1.6 | 0.3 | 0.3 | 1.4 | 0.9 |
| Non-improved facility | 26.7 | 26.1 | 4.7 | 9.5 | 32.6 | 20.6 |
| Flush to some where else | 1.6 | 2.2 | 0.1 | 1.8 | 1.0 | 1.4 |
| Flush/pour flush, don't know where | 0.5 | 0.4 | 0.1 | 0.4 | 0.3 | 0.4 |
| Pit latrine without slab/Open latrine | 24.4 | 22.3 | 4.4 | 7.3 | 30.0 | 18.2 |
| Others | 0.2 | 1.2 | 0.1 | 0.0 | 1.2 | 0.6 |
| Open Defecation | 9.0 | 6.2 | 93.0 | 36.9 | 23.0 | 30.2 |
| Location of toilet facility |  |  |  |  |  |  |
| In own dwelling | 46.7 | 34.0 | 1.8 | 29.2 | 30.0 | 29.6 |
| In own Yard/Plot | 37.8 | 43.3 | 2.5 | 26.3 | 35.3 | 30.6 |
| Else Where | 5.4 | 14.4 | 3.0 | 6.7 | 10.3 | 8.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Percentage with basic sanitation service ${ }^{1}$ | 48.9 | 42.4 | 1.3 | 40.2 | 26.5 | 33.6 |
| Percentage with limited sanitation service ${ }^{2}$ | 14.9 | 23.7 | 0.8 | 13.1 | 16.4 | 14.7 |
| Number of households | 577 | 700 | 463 | 903 | 838 | 1740 |

[^3]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, GMHDS, 2020

| Housing characteristic | Type of residence |  |  | Region of residence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Nomadic | Mudug | Galgaduud | Total |
| Electricity |  |  |  |  |  |  |
| Yes | 57.2 | 24.4 | 0.0 | 30.6 | 26.9 | 28.8 |
| No | 42.8 | 75.6 | 100.0 | 69.4 | 73.1 | 71.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Flooring material |  |  |  |  |  |  |
| Earth/Sand | 61.4 | 70.1 | 96.9 | 70.4 | 78.6 | 74.4 |
| Dung | 0.3 | 0.0 | 0.5 | 0.5 | 0.0 | 0.2 |
| Grass | 0.5 | 0.5 | 0.3 | 0.5 | 0.3 | 0.4 |
| Wooden Planks | 1.2 | 1.6 | 0.0 | 0.9 | 1.1 | 1.0 |
| Palm/Bamboo | 1.3 | 0.3 | 1.8 | 1.7 | 0.3 | 1.0 |
| Parquet/Polished wood | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| Vinyl/Asphalt Strips | 8.4 | 1.4 | 0.0 | 4.5 | 2.0 | 3.3 |
| Ceramic Tiles | 26.5 | 25.6 | 0.3 | 20.5 | 17.7 | 19.2 |
| Cement | 0.3 | 0.6 | 0.0 | 0.6 | 0.0 | 0.3 |
| Carpet | 0.0 | 0.0 | 0.3 | 0.1 | 0.0 | 0.1 |
| Others | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total |  |  |  |  |  |  |
| Rooms used for sleeping | 35.8 | 40.3 | 94.4 | 57.4 | 48.6 | 53.2 |
| One | 34.0 | 41.8 | 5.6 | 22.7 | 37.0 | 29.6 |
| Two | 30.2 | 18.0 | 0.0 | 19.9 | 14.4 | 17.2 |
| Three or more | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total |  |  |  |  |  |  |
| Place for cooking | 33.1 | 28.3 | 3.6 | 25.9 | 20.6 | 23.3 |
| In the house | 38.5 | 36.3 | 11.3 | 28.9 | 31.9 | 30.4 |
| In a separate building | 27.6 | 33.9 | 83.0 | 43.8 | 46.0 | 44.9 |
| Outdoors | 0.8 | 1.5 | 2.1 | 1.4 | 1.5 | 1.5 |
| Others | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total |  |  |  |  |  |  |
| Cooking fuel | 2.6 | 0.0 | 0.0 | 1.4 | 0.3 | 0.8 |
| Electricity | 4.5 | 0.2 | 0.0 | 2.4 | 0.7 | 1.6 |
| LPG/natural gas/ biogas | 3.9 | 1.2 | 0.3 | 2.3 | 1.4 | 1.9 |
| Kerosene | 28.3 | 50.3 | 94.8 | 61.1 | 48.1 | 54.9 |
| Firewood | 57.4 | 44.3 | 2.3 | 29.0 | 46.6 | 37.5 |
| Charcoal | 1.0 | 2.3 | 1.8 | 2.1 | 1.3 | 1.7 |
| Straw/shrubs/grass | 1.6 | 0.1 | 0.1 | 1.1 | 0.0 | 0.6 |
| Agricultural crop | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 |
| No food cooked in the household | 0.8 | 0.8 | 0.6 | 0.4 | 1.1 | 0.8 |
| Other | 0.0 | 0.6 | 0.0 | 0.0 | 0.5 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Percentage using solid fuel for cooking ${ }^{1}$ | 88.2 | 97.2 | 99.0 | 93.5 | 96.0 | 94.7 |
| Percentage using clean fuel for cooking ${ }^{2}$ | 7.0 | 0.2 | 0.0 | 3.8 | 1.0 | 2.4 |
| Number of Households | 577 | 700 | 463 | 903 | 838 | 1740 |

LPG = Liquid petroleum gas
${ }^{1}$ Includes coal/lignite, charcoal, wood, straw/shrubs/grass, agricultural crops, and animal dung
${ }^{2}$ Includes electricity and LPG/natural gas/biogas

Percentage of households possessing various household effects, means of transportation,agricultural land and livestock/farm animals, according to residence, GMHDS, 2020

| Possession | Type of residence |  |  | Region of residence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Nomadic | Mudug | Galgaduud | Total |
| Household effect |  |  |  |  |  |  |
| Radio | 21.7 | 18.8 | 5.8 | 21.8 | 10.4 | 16.3 |
| Television | 17.4 | 4.4 | 0.6 | 11.0 | 4.1 | 7.7 |
| Refrigerator | 7.4 | 2.3 | 0.0 | 4.5 | 2.1 | 3.4 |
| Mobile phone | 76.0 | 74.5 | 64.2 | 68.6 | 76.2 | 72.2 |
| Non-mobile telephone | 5.2 | 2.5 | 3.3 | 5.2 | 1.9 | 3.6 |
| Computer | 7.8 | 2.2 | 0.3 | 5.0 | 2.0 | 3.6 |
| Internet | 6.3 | 5.3 | 0.9 | 4.2 | 4.7 | 4.4 |
| Air conditioner/Fan | 9.2 | 2.8 | 1.2 | 6.2 | 2.7 | 4.5 |
| Means of transport |  |  |  |  |  |  |
| Bicycle | 1.1 | 0.6 | 1.2 | 1.2 | 0.6 | 0.9 |
| Motorcycle/scooter | 1.1 | 0.4 | 0.1 | 0.7 | 0.4 | 0.5 |
| Donkey cart | 1.3 | 0.5 | 1.9 | 1.3 | 1.0 | 1.1 |
| Car/truck | 6.0 | 4.2 | 0.6 | 4.1 | 3.5 | 3.8 |
| Boat /Canoe | 0.3 | 0.1 | 0.4 | 0.4 | 0.1 | 0.3 |
| Tractor | 0.3 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 |
| Rickshaw | 1.2 | 0.2 | 0.0 | 0.8 | 0.2 | 0.5 |
| Animal plough | 0.7 | 0.3 | 6.4 | 3.7 | 0.3 | 2.0 |
| Ownership of agriculture land | 0.8 | 1.9 | 0.4 | 0.5 | 1.7 | 1.1 |
| Ownership of livestock ${ }^{1}$ | 41.0 | 59.8 | 93.9 | 57.9 | 67.8 | 62.7 |
| Livestock' lost | 26.2 | 43.5 | 65.9 | 41.3 | 46.2 | 43.7 |
| Number of households | 577 | 700 | 463 | 903 | 838 | 1740 |

[^4]| Wealth quintile |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of de-jure population by wealth quintiles and the Gini coefficient, according to residence and region, GMHDS, 2020 |  |  |  |  |  |  |  |  |
| Residence/region | Wealth quintile |  |  |  |  |  | Number of persons | Gini coefficient |
|  | Lowest | Second | Middle | Fourth | Highest | Total |  |  |
| Type of residence |  |  |  |  |  |  |  |  |
| Urban | 4.5 | 12.2 | 36.0 | 27.6 | 19.8 | 100.0 | 3783 | 0.2 |
| Rural | 5.5 | 35.0 | 37.3 | 14.4 | 7.7 | 100.0 | 4175 | 0.5 |
| Nomadic | 92.2 | 4.7 | 1.0 | 2.1 | 0.0 | 100.0 | 2630 | 0.4 |
| Region of residence |  |  |  |  |  |  |  |  |
| Mudug | 34.6 | 15.6 | 18.7 | 16.3 | 14.7 | 100.0 | 5632 | 0.3 |
| Galgaduud | 17.6 | 23.5 | 38.2 | 15.8 | 4.8 | 100.0 | 4956 | 0.3 |
| Total | 26.7 | 19.3 | 27.8 | 16.0 | 10.1 | 100.0 | 10589 | 0.3 |

Table 2.10 Birth registration of children aged under five

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

| Background characteristics | Children whose births are registered |  |  | Number of children |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage who had a birth certificate | Percentage who did not have a birth certificate | Percentage registered |  |
| Age |  |  |  |  |
| <2 | 0.0 | 3.7 | 3.7 | 745 |
| 2-4 | 0.1 | 3.2 | 3.4 | 1508 |
| Sex |  |  |  |  |
| Male | 0.2 | 3.1 | 3.3 | 1179 |
| Female | 0.0 | 3.6 | 3.6 | 1074 |
| Types of residence |  |  |  |  |
| Urban | 0.3 | 4.8 | 5.1 | 777 |
| Rural | 0.0 | 3.9 | 3.9 | 858 |
| Nomadic | 0.0 | 0.8 | 0.8 | 617 |
| Region of residence |  |  |  |  |
| Mudug | 0.0 | 3.0 | 3.0 | 1189 |
| Galgaduud | 0.2 | 3.8 | 4.0 | 1064 |
| Total | 0.1 | 3.4 | 3.5 | 2253 |

Percentage of households for whom the place most often used for washing hands was observed, by whether the location was fixed or mobile, and total percentage of households for whom the place for handwashing was observed; and among the households for whom the place for handwashing was observed, percentage with water available, percentage with soap available, and percentage with a cleansing agent other than soap available; percentage of households with a basic handwashing facility and percentage with a limited handwashing facility, according to background characteristics, GMHDS, 2020

|  | Percentage of households <br> for whom place for washing <br> hands was observed |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

${ }^{1}$ Soap includes soap or detergent in bar, liquid, powder or paste form
${ }^{2}$ Cleansing agents other than soap include locally available materials such as ash, mud or sand
${ }^{3}$ The availability of a handwashing facility on premises with soap and water
${ }^{4}$ The availability of a handwashing facility on premises without soap and/or water
Table 2.12 Children's living arrangements and orphanhood Percent distribution
Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, the percentage of children not living with a biological parent, and the percentage of children with one or both parents dead
according to background characteristics, GMHDS, 2020

| Background Characteristic |  | Living with mother but not with father |  | Living with father but not with mother |  | Not living with either parent |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Living with both parents | Father alive | Father dead | Mother alive | Mother dead | Both alive | Only father alive | Only mother alive | Both dead | Missing information on father/ mother | Total | Percentage not living with a biological parent | Percentage with one or both parents dead1 | Number of children |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-4 | 67.7 | 18.6 | 3.3 | 1.5 | 0.8 | 6.1 | 0.2 | 0.5 | 1.2 | 0.1 | 100.0 | 6.1 | 6.0 | 2267 |
| Age 0-17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <2 | 72.2 | 20.0 | 2.3 | 1.0 | 0.1 | 3.4 | 0.3 | 0.1 | 0.4 | 0.2 | 100.0 | 3.4 | 3.2 | 750 |
| 2-4 | 65.4 | 17.9 | 3.8 | 1.7 | 1.1 | 7.5 | 0.2 | 0.7 | 1.6 | 0.1 | 100.0 | 7.5 | 7.4 | 1516 |
| 5-9 | 59.8 | 17.5 | 5.6 | 2.7 | 0.7 | 9.8 | 0.9 | 1.0 | 1.9 | 0.1 | 100.0 | 9.8 | 10.1 | 2110 |
| 10-14 | 51.9 | 16.7 | 7.5 | 3.7 | 1.4 | 12.9 | 1.7 | 1.9 | 2.1 | 0.2 | 100.0 | 12.9 | 14.6 | 1579 |
| 15-17 | 46.3 | 14.8 | 8.8 | 2.5 | 1.5 | 17.5 | 1.7 | 3.4 | 3.4 | 0.0 | 100.0 | 17.5 | 18.8 | 775 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 59.7 | 18.3 | 5.2 | 2.6 | 1.1 | 9.5 | 0.8 | 1.1 | 1.6 | 0.1 | 100.0 | 9.5 | 9.8 | 3419 |
| Female | 58.4 | 16.4 | 6.1 | 2.4 | 0.9 | 10.9 | 1.1 | 1.5 | 2.2 | 0.2 | 100.0 | 10.9 | 11.8 | 3310 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 57.9 | 19.8 | 5.1 | 1.9 | 1.5 | 9.8 | 0.8 | 1.7 | 1.5 | 0.0 | 100.0 | 9.8 | 10.6 | 2365 |
| Rural | 55.6 | 20.8 | 7.1 | 2.0 | 0.4 | 10.8 | 0.9 | 0.9 | 1.3 | 0.2 | 100.0 | 10.8 | 10.6 | 2695 |
| Nomadic | 66.2 | 8.4 | 4.0 | 4.3 | 1.3 | 9.7 | 1.3 | 1.4 | 3.4 | 0.1 | 100.0 | 9.7 | 11.4 | 1670 |
| Region of residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mudug | 63.6 | 13.0 | 5.5 | 3.0 | 1.2 | 8.7 | 0.9 | 1.2 | 2.8 | 0.1 | 100.0 | 8.7 | 11.6 | 3533 |
| Galgaduud | 54.0 | 22.2 | 5.8 | 1.9 | 0.7 | 11.8 | 1.0 | 1.4 | 0.9 | 0.2 | 100.0 | 11.8 | 9.8 | 3197 |
| Wealth quitile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 65.2 | 9.9 | 4.5 | 4.0 | 1.0 | 9.3 | 1.3 | 1.5 | 3.3 | 0.1 | 100.0 | 9.3 | 11.5 | 1810 |
| Second | 55.9 | 22.8 | 5.7 | 2.1 | 0.3 | 9.9 | 0.7 | 1.0 | 1.4 | 0.2 | 100.0 | 9.9 | 9.1 | 1354 |
| Middle | 53.6 | 22.1 | 6.9 | 2.0 | 0.9 | 10.9 | 0.6 | 1.6 | 1.2 | 0.2 | 100.0 | 10.9 | 11.2 | 1880 |
| Fourth | 58.4 | 18.2 | 4.9 | 1.2 | 1.1 | 12.1 | 1.2 | 1.4 | 1.5 | 0.1 | 100.0 | 12.1 | 10.1 | 1038 |
| Highest | 65.3 | 11.8 | 6.2 | 2.7 | 2.5 | 8.0 | 1.2 | 0.6 | 1.6 |  | 100.0 | 8.0 | 12.1 | 647 |
| Total <18 | 59.0 | 17.4 | 5.6 | 2.5 | 1.0 | 10.2 | 1.0 | 1.3 | 1.9 | 0.1 | 100.0 | 10.2 | 10.8 | 6730 |
| Note: Table is based on de jure members, i.e., usual residents |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



# Characteristics of the Respondents 

Key Findings
Educational attainment:
72 percent of women have never attended school at all.

Literacy:
Only 39 percent of women in Galmudug are literate.

Access to media:
89 percent of women have no access to newspapers, radio, or television at least once a week.

Internet use:
18 percent of women had used the internet at least once.

Employment:
9 percent of ever-married women were currently employed.

# This chapter presents information on the demographic and socioeconomic characteristics of the survey respondents who were interviewed for the GMHDS 2020. 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 nevermarried 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 lives of women in the reproductive age group and provides a context for the interpretation of demographic and health indicators

### 3.1 Background Characteristics of Respondents

Information on the background characteristics of women aged 15-49 interviewed in the survey is presented in Table 3.1 by age, marital status, type of residence, education and wealth quintile. Thirty-three percent of the women interviewed were aged 15-19 (84 percent among never-married women and 8 percent among ever-married women). Fifty-six percent of women were currently married, while 33 percent have never been married, 8 percent were divorced and 3 percent were widowed.

More women live in urban and rural areas than nomadic area. Thirty-seven percent and 36 percent of the women reside in urban and rural areas respectively, while 27 percent of women live in nomadic areas.

Educational attainment among the respondents in Galmudug was low; 72 percent of all women have never attended school. Eighty-one percent of ever-married women had no education compared to 54 percent of never-married women. Sixteen percent of ever-married and 20 percent of never-married women were from the wealthiest households.

### 3.2 Educational Attainment

Table 3.2 presents the percent 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 Galmudug is very low. Overall, 72 percent of women aged 15-49 have not attended any formal schooling. Fifteen 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 2 percent completed secondary education. Two percent of women have higher levels of education (Figure 3.1).

Educational attainment decreases as the age of the women increases. The percentage of women who have some level of primary education is highest among women aged 15-19 at 22 percent and lowest among women aged $45-49$ at 2 percent. . The differences in educational attainment among women aged 15-49 in urban, rural and a nomadic area is pronounced. Ninetyseven percent of the women living in nomadic areas have never attended formal schooling compared to 70 percent of those from rural areas and 56 percent of women from urban areas.

There are significant differences between regions. The percentage of women who have attended at least some primary education is lower in Mudug at 12 percent as compared with Galgaduud at 18 percent. Educational attainment increases with increasing levels of wealth. The proportion of women with no education is highest in the lowest wealth quintile at 98 percent and lowest in the highest wealth quintile at 42 percent.

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


No Education

- Some Primary
- Completed Primary
- Some Secondary
- Completed Secondary
- Higher Education


### 3.3 Literacy rate

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

The GMHDS 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 either language was 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 women by background characteristics. The table shows that 39 percent of women in Galmudug aged 15-49 are literate.

As shown in Figure 3.2, literacy levels generally decrease with the age; literacy is highest among women aged 15-19 (53 percent) and the lowest among women aged 45-49 (22 percent). Literacy levels among women aged 15-49 vary by place of residence. Among women residing in urban areas, 56 percent are literate compared to 47 percent among those living in rural areas and 7 percent among the women living in nomadic areas (Table 3.3).

Literacy levels among women in Galgaduud are higher than those in Mudug; at 46 percent and 34 percent respectively (Figure 3.3). Further analysis by wealth levels shows that literacy levels increase with wealth status. Women from the wealthiest households are most literate at 71 percent compared to women from the poorest households at 8 percent.

## Figure 3.2 Literacy

Percent distribution of women aged 15-49 by level of literacy and age


## Figure 3.3 Literacy by region

Percent of women aged 15-49 by literacy and region


### 3.4 Exposure to Mass Media

The GMHDS 2020 collected information on the exposure of respondents to both broadcast and print media. 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, which can be used in the development of educational programmes, to convey messages to the public about government policies, disseminate health information, report opinions on health issues and other societal matters. It can also serve as a tool to observe public sentiments on important issues.

Table 3.4 shows that 89 percent of the respondents did not have access to any of the three forms of medianewspaper, radio and television-at least once a week. Radio was the most commonly accessed form of media. Eight percent of women listen to radio at least once a week, 5 percent watch television at least once a week, and 4 percent read newspapers at least once a week. Urban women have more access to newspapers, television and radio compared to their rural and nomadic counterparts -7 percent read a newspaper at least once a week, 10 percent watch television at least once a week and 11 percent listen to the radio at least once a week.

Exposure to media increases with both level of education and wealth status. While only about 1 percent of women with no education read a newspaper at least once a week, 15 percent of women with secondary education do so. Similarly, while 2 percent of women with no education watch television at least once a week, 16 percent of women with secondary 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. One percent of women in the lowest wealth quintile read the newspaper at least once a week, compared to 10 percent of women from the highest wealth quintile. Whereas one percent of women from the lowest wealth quintile watch television at least once a week, 19 percent of women among those in the highest wealth quintile do the same. Likewise, 2 percent of women in the lowest wealth quintile listen to radio at least once a week, compared to 14 percent among those in the highest quintile. Women's access to any of the three media at least once a week increases with the increase of the wealth quintile. Twenty-eight percent of women from the highest wealth quintile have access to any of the three media at least once a week compared to only 2 percent of the women from the lowest wealth quintile.

## Figure 3.4 Exposure to mass media

Percent of all women aged 15-49 who are exposed to specific media on a weekly basis
$\square$ Lowest $\square$ Second $\square$ Middle $\square$ Fourth $\square$ Highest


### 3.5 Internet Use

The internet is an important tool for accessing information. 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 (GSMA 2019). Studies have shown that women use the internet more often for health-related information searches than men. When their access is hindered, chances for women are slower to have access to important information for their families.

The survey 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 inquired how often women had used the internet in the month preceding the survey.

Table 3.5 shows that 18 percent of the women had ever used the internet, while 16 percent had used the internet in the past 12 months preceding the survey.

The use of the internet generally decreases with an increase in age; 27 percent of women aged 15-19 had
ever used the internet, compared to 2 percent of women aged 40-44. Around one-third ( 29 percent) of women living in urban areas had ever used the internet compared to 19 percent of women living in rural areas and 1 percent of women living in nomadic areas respectively. Use of internet in the 12 months preceding the survey is reported by 27 percent, 16 percent and 1 percent of women in urban, rural and nomadic areas respectively.

Twenty percent of women in Galgaduud had ever used the internet, whereas in Mudug, 16 percent reported they had ever used the internet (Figure 3.5). In the 12 months preceding the survey, 15 percent of women in Mudug and 18 percent of women in Galgaduud reported use of internet (Table 3.5).

Internet usage also increases with educational attainment and wealth status. Eighty-two 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 wealth quintile had ever used the internet, compared to 1 percent of women in the lowest wealth quintile (Table 3.5).

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


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


### 3.6 Employment Status

In the survey, 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 in Galmudug was low. Nine percent of ever-married women were employed at the time the survey was conducted, while less than 1 percent were not employed but had worked in the 12 months preceding the survey. Ninety-one percent of ever-married women had not been employed in the 12 months prior to the survey.

The proportion of women employed increases with an increase in the number of living children; 6 percent each for both women with no living children and 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.

Among ever-married women who are currently employed 2 percent are aged 15-19 representing the lowest proportion, while 20 percent are aged 40-44 representing the highest proportion. Among the regions, the percentage of employed women is slightly higher
in Galgaduud at 10 percent compared to Mudug at 7 percent (Figure 3.7).

Employment varies by place of residence and wealth status of the household. Among women from nomadic areas, 1 percent were currently employed, compared to 13 percent and 11 percent of women from rural and urban areas respectively. More women from wealthier households were employed than those in poorer households; 16 percent of women in the highest wealth quintile were currently employed compared to 2 percent of women in the lowest wealth quintile.

### 3.7 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, in either agricultural or non-agricultural.

Overall, 77 percent of ever-married women were paid in cash only, while 8 percent were not paid for their work. Seventy-three percent of the respondents working in agriculture were paid in cash only while 12 percent of their counterparts in the same sector were not paid at all. Women in non-agricultural work were mainly paid in cash only at 79 percent, whereas 11 percent were paid both in cash and in-kind, 4 percent were paid in-kind

Figure 3.7 Employment Status
Percent of ever-married women aged 15-49 currently employed by age and region

only and 6 percent were not paid. Non-agricultural work had the highest proportion of women paid in cash only while the agricultural sector had the highest proportion of women paid both in cash and in-kind (Figure 3.8).

Fifty-five percent of the currently employed women aged 15-49 were self-employed, 28 percent of those in agricultural work were employed by a family member, while 69 percent were self-employed and 2 percent were employed by a non-family member. Approximately half of women engaged in non-agricultural work were self-employed ( 49 percent), 36 percent were employed by a family member and 15 percent were employed by a non-family member.

Just over half of women were employed all year round (66 percent). Both women engaged in agricultural and non-agricultural work were mostly employed all year round ( 68 and 66 percent respectively) (Table 3.7).

Table 3.8 shows the percent distribution of ever-married women who were currently employed or who had worked in the 12 months preceding the survey by their occupation. Overall, 25 percent of the ever-married women were in professional/technical/ managerial occupations, while 8 percent were in domestic service, and 7 percent were in agricultural occupations. Majority of the women belong to the unskilled manual occupations 31 percent, followed by profession/technical/managerial and skilled manual occupations at 25 and 24 percent respectively.

### 3.8 Use of Tobacco

Exposure to Tobacco and second-hand smoking (SHS) during pregnancy has adverse health effects on women and infants. Women who smoke are more likely than non-smoker 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 during the survey. Table 3.9 shows the distribution of cigarette smokers and the percentage of women who use various types of tobacco by background characteristics.

Overall, 1 percent of ever-married women smoke cigarettes or use any type of tobacco. There is a slight variation among women of various age groups. Two percent of women in the groups 25-29 and 30-34 use any type of tobacco, compared to 1 percent of the women in groups 20-24, 35-39 and 40-44.

Furthermore, 2 percent of women in rural and 1 percent in urban areas use any type of tobacco. Less than 1 percent in nomadic areas use any type of tobacco.

## Figure 3.8 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


## List of Tables

Table 3.1 Background characteristics of respondents ..... 45
Table 3.2 Educational attainment: Women ..... 46
Table 3.3 Literacy: Women ..... 47
Table 3.4 Exposure to mass media: Women ..... 48
Table 3.5 Internet usage: Women ..... 49
Table 3.6 Employment status: Women ..... 50
Table 3.7 Type of employment: Ever-married Women ..... 51
Table 3.8 Occupation: Ever Married Women ..... 51
Table 3.9 Use of tobacco: Ever Married Women ..... 52

Table 3.1 Background characteristics of respondents

| Percentage of All women age 15-49 selected background characteristics, GMHDS, 2020 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristics | Ever-married Women |  |  | Never-married women |  |  | All women |  |  |
|  | Weighted percent | Weighted number | Unweighted number | Weighted percent | Weighted number | Unweighted number | Weighted percent | Weighted number | Unweighted number |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 7.9 | 104 | 103 | 84.3 | 542 | 532 | 32.8 | 646 | 635 |
| 20-24 | 18.7 | 248 | 252 | 12.3 | 79 | 82 | 16.6 | 327 | 334 |
| 25-29 | 25.5 | 338 | 336 | 2.3 | 15 | 16 | 18.0 | 353 | 352 |
| 30-34 | 18.4 | 244 | 245 | 0.7 | 5 | 4 | 12.7 | 249 | 249 |
| 35-39 | 17.3 | 230 | 230 | 0.1 | 1 | 1 | 11.7 | 230 | 231 |
| 40-44 | 8.1 | 107 | 109 | 0.1 | 1 | 1 | 5.5 | 108 | 110 |
| 45-49 | 4.0 | 54 | 55 | 0.0 | 0.0 | 0.0 | 2.7 | 54 | 55 |
| Marital status |  |  |  |  |  |  |  |  |  |
| Never-married | 0.0 | 0 | 0 | 100.0 | 642 | 636 | 32.7 | 642 | 636 |
| Married | 83.3 | 1,103 | 1,119 | 0.0 | 0.0 | 0.0 | 56.1 | 1,103 | 1,119 |
| Divorced/separated | 12.2 | 161 | 153 | 0.0 | 0.0 | 0.0 | 8.2 | 161 | 153 |
| Widowed | 4.5 | 60 | 58 | 0.0 | 0.0 | 0.0 | 3.1 | 60 | 58 |
| Type of residence |  |  |  |  |  |  |  |  |  |
| Urban | 35.0 | 464 | 474 | 41.0 | 263 | 281 | 37.0 | 727 | 755 |
| Rural | 36.8 | 488 | 417 | 35.4 | 227 | 202 | 36.4 | 715 | 619 |
| Nomadic | 28.1 | 373 | 439 | 23.6 | 152 | 153 | 26.7 | 524 | 592 |
| Region |  |  |  |  |  |  |  |  |  |
| Mudug | 51.3 | 679 | 691 | 62.3 | 400 | 419 | 54.9 | 1,079 | 1,110 |
| Galgaduud | 48.7 | 645 | 639 | 37.7 | 242 | 217 | 45.1 | 887 | 856 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 80.9 | 1,071 | 1,079 | 53.5 | 344 | 346 | 72.0 | 1,415 | 1,425 |
| Primary | 14.6 | 194 | 190 | 28.2 | 181 | 172 | 19.1 | 375 | 362 |
| Secondary | 3.2 | 43 | 44 | 15.1 | 97 | 98 | 7.1 | 140 | 142 |
| Higher | 1.2 | 16 | 17 | 3.2 | 20 | 20 | 1.8 | 36 | 37 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 18.5 | 244 | 283 | 18.1 | 116 | 113 | 18.3 | 360 | 396 |
| Second | 14.1 | 186 | 203 | 7.6 | 49 | 51 | 12.0 | 235 | 254 |
| Middle | 27.1 | 359 | 328 | 29.6 | 190 | 179 | 27.9 | 549 | 507 |
| Fourth | 23.9 | 317 | 297 | 24.3 | 156 | 151 | 24.1 | 473 | 448 |
| Highest | 16.4 | 217 | 219 | 20.4 | 131 | 142 | 17.7 | 348 | 361 |
| Total 15-49 | 100.0 | 1,324 | 1,330 | 100.0 | 642 | 636 | 100.0 | 1,966 | 1,966 |

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: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, GMHDS, 2020

| Background characteristics | Educational attainment of the household members |  |  |  |  |  |  | Median years completed | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No education | Some primary | Completed primary ${ }^{1}$ | Some secondary | Completed secondary ${ }^{2}$ | Higher education | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 59.0 | 20.8 | 6.0 | 9.3 | 2.4 | 2.5 | 100.0 | 0.0 | 972 |
| 15-19 | 54.8 | 22.2 | 7.4 | 11.9 | 1.9 | 1.8 | 100.0 | 0.0 | 646 |
| 20-24 | 67.4 | 18.1 | 3.3 | 4.1 | 3.4 | 3.8 | 100.0 | 0.0 | 327 |
| 25-29 | 80.6 | 11.1 | 2.8 | 2.2 | 1.6 | 1.7 | 100.0 | 0.0 | 353 |
| 30-34 | 85.3 | 9.7 | 1.7 | 0.7 | 1.5 | 1.0 | 100.0 | 0.0 | 249 |
| 35-39 | 88.1 | 8.3 | 2.5 | 0.0 | 0.4 | 0.7 | 100.0 | 0.0 | 230 |
| 40-44 | 92.3 | 6.1 | 0.8 | 0.8 | 0.0 | 0.0 | 100.0 | 0.0 | 108 |
| 45-49 | 84.6 | 1.6 | 3.7 | 1.6 | 3.2 | 5.3 | 100.0 | 0.0 | 54 |

Type of residence

| Urban | 56.0 | 20.3 | 6.9 | 9.3 | 3.7 | 3.8 | 100.0 | 0.0 | 727 |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural | 70.1 | 18.3 | 4.3 | 4.8 | 1.1 | 1.3 | 100.0 | 0.0 | 715 |
| Nomadic | 97.4 | 2.5 | 0.0 | 0.0 | 0.1 | 0.0 | 100.0 | 0.0 | 524 |
| Region |  |  |  |  |  |  |  |  |  |
| $\quad$ Mudug | 74.1 | 11.9 | 4.2 | 5.5 | 2.3 | 2.1 | 100.0 | 0.0 | 1,079 |
| Galgaduud | 69.8 | 18.4 | 4.1 | 4.8 | 1.2 | 1.7 | 100.0 | 0.0 | 887 |

Wealth
quintile

| Lowest | 97.5 | 2.2 | 0.0 | 0.0 | 0.0 | 0.2 | 100.0 | 0.0 | 360 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second | 88.1 | 10.5 | 1.2 | 0.0 | 0.2 | 0.0 | 100.0 | 0.0 | 235 |
| Middle | 73.7 | 15.4 | 3.7 | 5.2 | 1.1 | 0.7 | 100.0 | 0.0 | 549 |
| Fourth | 65.2 | 20.6 | 4.3 | 6.1 | 1.7 | 2.0 | 100.0 | 0.0 | 473 |
| Highest | 42.2 | 22.1 | 10.7 | 12.6 | 5.9 | 6.6 | 100.0 | 4.0 | 348 |
| Total | $\mathbf{7 2 . 2}$ | $\mathbf{1 4 . 9}$ | $\mathbf{4 . 1}$ | $\mathbf{5 . 2}$ | $\mathbf{1 . 8}$ | $\mathbf{1 . 9}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{0 . 0}$ | $\mathbf{1 , 9 6 6}$ |

${ }^{1}$ Completed 8th grade at the primary level
${ }^{2}$ Completed 12th grade at the secondary level

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

| Background characteristics | No schooling, primary or secondary school |  |  |  |  |  |  | Percentage literate ${ }^{1}$ | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Higher education | Can read a whole sentence | Can read part of a sentence | Cannot read at all | No card with required language | Blind/ visually impaired | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 2.4 | 28.2 | 19.5 | 49.4 | 0.5 | 0.0 | 100.0 | 50.1 | 972 |
| 15-19 | 1.6 | 32.3 | 18.9 | 46.8 | 0.5 | 0.0 | 100.0 | 52.8 | 646 |
| 20-24 | 3.8 | 20.3 | 20.7 | 54.5 | 0.7 | 0.0 | 100.0 | 44.8 | 327 |
| 25-29 | 1.7 | 10.7 | 20.7 | 65.8 | 1.1 | 0.0 | 100.0 | 33.1 | 353 |
| 30-34 | 1.0 | 8.4 | 19.0 | 70.4 | 1.1 | 0.0 | 100.0 | 28.5 | 249 |
| 35-39 | 0.7 | 6.0 | 19.6 | 71.1 | 2.0 | 0.5 | 100.0 | 26.4 | 230 |
| 40-44 | 0.0 | 6.5 | 17.3 | 73.2 | 3.0 | 0.0 | 100.0 | 23.8 | 108 |
| 45-49 | 5.3 | 4.8 | 11.8 | 75.7 | 2.4 | 0.0 | 100.0 | 21.9 | 54 |
| Type of residence |  |  |  |  |  |  |  |  |  |
| Urban | 3.8 | 28.0 | 24.0 | 43.4 | 0.6 | 0.2 | 100.0 | 55.8 | 727 |
| Rural | 1.2 | 20.8 | 24.5 | 53.0 | 0.4 | 0.0 | 100.0 | 46.5 | 715 |
| Nomadic | 0.0 | 0.8 | 5.8 | 90.9 | 2.5 | 0.0 | 100.0 | 6.6 | 524 |
| Region |  |  |  |  |  |  |  |  |  |
| Mudug | 2.0 | 15.8 | 15.9 | 65.1 | 1.3 | 0.0 | 100.0 | 33.6 | 1,079 |
| Galgaduud | 1.7 | 21.0 | 23.5 | 52.8 | 0.8 | 0.1 | 100.0 | 46.2 | 887 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 0.0 | 0.7 | 7.4 | 91.0 | 0.9 | 0.0 | 100.0 | 8.1 | 360 |
| Second | 0.0 | 4.1 | 10.0 | 83.9 | 2.0 | 0.0 | 100.0 | 14.1 | 235 |
| Middle | 0.7 | 19.3 | 22.3 | 57.3 | 0.4 | 0.0 | 100.0 | 42.3 | 549 |
| Fourth | 2.0 | 23.4 | 23.3 | 50.2 | 0.9 | 0.2 | 100.0 | 48.7 | 473 |
| Highest | 6.6 | 36.8 | 27.9 | 26.9 | 1.8 | 0.0 | 100.0 | 71.3 | 348 |
| Total | 1.8 | 18.1 | 19.3 | 59.6 | 1.1 | 0.1 | 100.0 | 39.3 | 1,966 |

${ }^{1}$ 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: Women

Percentage of All women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, GMHDS, 2020

| Background <br> characteristics | Reads a <br> newspaper at <br> least once a <br> week | Watches <br> television at <br> least once a <br> week | Listens to <br> radio at least <br> once a week | Accesses all <br> three media <br> at least once a a <br> week | Accesses any <br> one of the <br> three media <br> at least once <br> a week | Accesses <br> none of the <br> three media <br> at least once <br> a week | Number of <br> women |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |
| 15-19 | 6.1 | 5.5 | 7.8 | 1.1 | 14.2 | 85.8 | 646 |
| 20-24 | 2.5 | 5.1 | 9.4 | 1.1 | 12.2 | 87.8 | 327 |
| $25-29$ | 3.5 | 4.7 | 6.6 | 1.2 | 9.9 | 90.1 | 353 |
| 30-34 | 2.9 | 4.6 | 6.9 | 1.7 | 9.7 | 90.3 | 249 |
| 35-39 | 2.0 | 2.2 | 5.5 | 1.1 | 6.2 | 93.8 | 230 |
| $40-44$ | 0.0 | 2.4 | 8.9 | 0.0 | 10.5 | 89.5 | 108 |
| $45-49$ | 1.6 | 8.0 | 11.9 | 1.6 | 16.7 | 83.3 | 54 |

Type of
residence

| Urban | 6.9 | 10.2 | 11.2 | 2.7 | 19.1 | 80.9 | 727 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Rural | 3.1 | 2.5 | 8.5 | 0.5 | 11.1 | 88.9 | 715 |
| Nomadic | 0.1 | 0.0 | 1.5 | 0.0 | 1.5 | 98.5 | 524 |
| Region |  |  |  |  |  |  |  |
| Mudug | 4.5 | 6.4 | 5.5 | 1.9 | 10.0 | 90.0 | 1,079 |
| Galgaduud | 2.8 | 2.7 | 10.2 | 0.3 | 13.3 | 86.7 | 887 |
| Education |  |  |  |  |  |  |  |
| No education | 0.9 | 1.5 | 4.6 | 0.2 | 5.8 | 94.2 | 1,415 |
| Primary | 6.8 | 9.2 | 10.9 | 1.8 | 20.1 | 79.9 | 375 |
| Secondary | 15.0 | 16.1 | 18.3 | 4.3 | 30.9 | 69.1 | 140 |
| Higher | $(36.0)$ | $(39.3)$ | $(50.2)$ | $(20.4)$ | $(67.5)$ | $(32.5)$ | 36 |

Wealth quintile

| Lowest | 0.6 | 0.5 | 2.0 | 0.5 | 2.0 | 98.0 | 360 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second | 1.0 | 0.4 | 1.1 | 0.4 | 1.7 | 98.3 | 235 |
| Middle | 1.7 | 1.7 | 8.1 | 0.3 | 9.1 | 90.9 | 549 |
| Fourth | 5.0 | 3.3 | 9.9 | 1.1 | 13.7 | 86.3 | 473 |
| Highest | 10.1 | 18.7 | 14.1 | 3.8 | 28.4 | 71.6 | 348 |
| Total | $\mathbf{3 . 7}$ | $\mathbf{4 . 7}$ | $\mathbf{7 . 6}$ | $\mathbf{1 . 2}$ | $\mathbf{1 1 . 5}$ | $\mathbf{8 8 . 5}$ | $\mathbf{1 , 9 6 6}$ |

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

Table 3.5 Internet usage: Women
Percentage of All women age 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, GMHDS, 2020

Among women who have used the internet in the past 12 months, percentage who, in the past month, used the internet

| Background characteristics | Ever used the internet | Used the internet in the past 12 months | Number of women | Almost every day | At least once a week | Less than once a week | Not at all | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 27.3 | 24.6 | 646 | 60.7 | 24.7 | 5.8 | 8.7 | 100.0 | 159 |
| 20-24 | 24.2 | 22.2 | 327 | 53.0 | 30.2 | 8.8 | 7.9 | 100.0 | 72 |
| 25-29 | 15.0 | 13.0 | 353 | (56.1) | (35.6) | (3.2) | (5.1) | 100.0 | 46 |
| 30-34 | 8.8 | 8.8 | 249 | * | * | * | * | 100.0 | 22 |
| 35-39 | 5.5 | 5.2 | 230 | * | * | * | * | 100.0 | 12 |
| 40-44 | 2.4 | 1.6 | 108 | * | * | * | * | 100.0 | 2 |
| 45-49 | 9.6 | 4.8 | 54 | * | * | * | * | 100.0 | 3 |
| Type of residence |  |  |  |  |  |  |  |  |  |
| Urban | 28.9 | 27.1 | 727 | 65.1 | 23.1 | 4.6 | 7.2 | 100.0 | 197 |
| Rural | 18.9 | 16.0 | 715 | 51.4 | 32.6 | 8.7 | 7.2 | 100.0 | 114 |
| Nomadic | 1.1 | 0.8 | 524 | * | * | * | * | 100.0 | 4 |

Region

| Mudug | 16.2 | 14.6 | 1,079 | 64.7 | 19.6 | 6.8 | 8.9 | 100.0 | 158 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Galgaduud | 19.8 | 17.8 | 887 | 54.1 | 33.7 | 6.1 | 6.1 | 100.0 | 158 |

Education

| No education | 6.4 | 5.6 | 1,415 | 46.1 | 33.9 | 9.7 | 10.3 | 100.0 | 79 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Primary | 34.5 | 29.4 | 375 | 58.0 | 24.8 | 9.9 | 7.3 | 100.0 | 110 |
| Secondary | 71.9 | 69.9 | 140 | 65.9 | 26.5 | 1.8 | 5.9 | 100.0 | 98 |
| Higher | (81.9) | (79.6) | 36 | (79.2) | (15.0) | (0.0) | (5.9) | 100.0 | 29 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 0.8 | 0.8 | 360 | * | * | * | * | 100.0 | 3 |
| Second | 2.9 | 2.1 | 235 | * | * | * | * | 100.0 | 5 |
| Middle | 12.4 | 10.9 | 549 | 52.8 | 28.8 | 6.9 | 11.6 | 100.0 | 60 |
| Fourth | 24.0 | 21.0 | 473 | 60.2 | 29.1 | 4.8 | 5.8 | 100.0 | 100 |
| Highest | 45.7 | 42.7 | 348 | 64.3 | 23.3 | 6.8 | 5.6 | 100.0 | 149 |
| Total | 17.8 | 16.1 | 1,966 | 59.4 | 26.7 | 6.4 | 7.5 | 100.0 | 316 |

[^5]Table 3.6 Employment status: Women

Percent distribution of ever married women age 15-49 by employment status, according to background characteristics, GMHDS, 2020

| Background characteristics | Employed in the $\mathbf{1 2}$ months preceding the survey |  | Not employed in the 12 months preceding the survey | Total | Number of evermarried women |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Currently employed ${ }^{1}$ | Not currently employed |  |  |  |


| Age |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15-19 | 2.3 | 0.0 | 97.7 | 100.0 | 104 |
| 20-24 | 3.5 | 0.5 | 96.1 | 100.0 | 248 |
| 25-29 | 7.0 | 0.0 | 93.0 | 100.0 | 338 |
| 30-34 | 5.6 | 1.0 | 93.5 | 100.0 | 244 |
| 35-39 | 15.7 | 0.0 | 84.3 | 100.0 | 230 |
| 40-44 | 20.3 | 1.4 | 78.3 | 100.0 | 107 |
| 45-49 | 16.0 | 1.6 | 82.4 | 100.0 | 54 |
| Number of living children |  |  |  |  |  |
| 0 | 6.2 | 0.0 | 93.8 | 100.0 | 148 |
| 1-2 | 5.8 | 0.4 | 93.8 | 100.0 | 289 |
| 3-4 | 8.3 | 0.6 | 91.0 | 100.0 | 372 |
| $5+$ | 11.2 | 0.5 | 88.3 | 100.0 | 516 |
| Type of residence |  |  |  |  |  |
| Urban | 10.6 | 0.4 | 89.0 | 100.0 | 464 |
| Rural | 12.8 | 0.8 | 86.4 | 100.0 | 488 |
| Nomadic | 0.9 | 0.0 | 99.1 | 100.0 | 373 |
| Region |  |  |  |  |  |
| Mudug | 7.1 | 0.3 | 92.6 | 100.0 | 679 |
| Galgaduud | 10.3 | 0.6 | 89.1 | 100.0 | 645 |
| Education |  |  |  |  |  |
| No education | 7.8 | 0.5 | 91.7 | 100.0 | 1,071 |
| Primary | 10.1 | 0.0 | 89.9 | 100.0 | 194 |
| Secondary | (13.8) | (0.0) | (86.2) | 100.0 | 43 |
| Higher | * | * | * | 100.0 | 16 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 1.7 | 0.0 | 98.3 | 100.0 | 244 |
| Second | 3.3 | 0.5 | 96.2 | 100.0 | 186 |
| Middle | 7.5 | 1.1 | 91.4 | 100.0 | 359 |
| Fourth | 13.3 | 0.0 | 86.7 | 100.0 | 317 |
| Highest | 16.3 | 0.4 | 83.3 | 100.0 | 217 |
| Total | 8.7 | 0.4 | 90.9 | 100.0 | 1,324 |

${ }^{1}$ 'Currently employed' is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave illness, vacation or any other such a reason
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 3.7 Type of employment: Ever-married Women

Percent distribution of ever married women age 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 nonagricultural), GMHDS 2020

| Background characteristics | Agricultural work | Non-agricultural work | Total |
| :---: | :---: | :---: | :---: |
| Type of earning |  |  |  |
| Cash only | 73.0 | 78.5 | 76.9 |
| Cash and in-kind | 14.6 | 11.0 | 12.0 |
| In-kind only | 0.0 | 4.4 | 3.1 |
| Not paid | 12.4 | 6.2 | 8.0 |
| Total | 100.0 | 100.0 | 100.0 |
| Type of employer |  |  |  |
| Employed by family member | 28.3 | 36.4 | 34.1 |
| Employed by non-family member | 2.3 | 14.9 | 11.3 |
| Self-employed | 69.4 | 48.7 | 54.7 |
| Total | 100.0 | 100.0 | 100.0 |
| Continuity of employment |  |  |  |
| All year | 67.5 | 66.0 | 66.4 |
| Seasonal | 16.8 | 14.3 | 15.0 |
| Occasional | 15.7 | 19.8 | 18.6 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women employed during the past 12 months | 38 | 93 | 131 |

## Table 3.8 Occupation: Ever Married Women

Percent distribution of ever married women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, GMHDS 2020

| Background characteristics | Standardized occupation groups |  |  |  |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Professional/ technical/ managerial | Clerical | Sales and services | Skilled manual | Unskilled manual | Domestic service | Agriculture |  |  |
| Type of residence |  |  |  |  |  |  |  |  |  |
| Urban | 21.2 | 4.9 | 2.1 | 25.9 | 31.8 | 7.6 | 6.5 | 100.0 | 52 |
| Rural | 26.7 |  | 5.0 | 21.0 | 31.7 | 7.6 | 8.0 | 100.0 | 77 |
| Nomadic | * | * | * | * | * | * | * | 100.0 | 2 |
| Region |  |  |  |  |  |  |  |  |  |
| Mudug | 33.1 | 5.2 | 1.8 | 18.2 | 19.2 | 12.2 | 10.4 | 100.0 | 50 |
| Galgaduud | 19.2 |  | 5.0 | 27.0 | 38.8 | 4.6 | 5.4 | 100.0 | 81 |
| Total | 24.5 | 2.0 | 3.8 | 23.6 | 31.3 | 7.5 | 7.3 | 100.0 | 131 |

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

Table 3.9 Use of tobacco: Ever Married Women

Percentage of ever married women age 15-49 who smoke various tobacco products,according to background characteristics, GMHDS 2020

| Background characteristics | Percentage who smoke |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: |
|  | Cigarettes | Other types of tobacco | Any type of tobacco |  |
| Age |  |  |  |  |
| 15-19 | 0.0 | 0.0 | 0.0 | 104 |
| 20-24 | 0.7 | 0.0 | 0.7 | 248 |
| 25-29 | 1.8 | 0.0 | 1.8 | 338 |
| 30-34 | 1.6 | 0.0 | 1.6 | 244 |
| 35-39 | 0.6 | 0.0 | 0.6 | 230 |
| 40-44 | 0.8 | 0.0 | 0.8 | 107 |
| 45-49 | 0.0 | 0.0 | 0.0 | 54 |
| Type of residence |  |  |  |  |
| Urban | 1.2 | 0.0 | 1.2 | 464 |
| Rural | 1.5 | 0.0 | 1.5 | 488 |
| Nomadic | 0.3 | 0.0 | 0.3 | 373 |
| Region |  |  |  |  |
| Mudug | 1.3 | 0.0 | 1.3 | 679 |
| Galgaduud | 0.8 | 0.0 | 0.8 | 645 |
| Education |  |  |  |  |
| No education | 1.1 | 0.0 | 1.1 | 1,071 |
| Primary | 0.4 | 0.0 | 0.4 | 194 |
| Secondary | (4.0) | (0.0) | (4.0) | 43 |
| Higher | * | * | * | 16 |
| Wealth quintile |  |  |  |  |
| Lowest | 0.5 | 0.0 | 0.5 | 244 |
| Second | 0.8 | 0.0 | 0.8 | 186 |
| Middle | 1.5 | 0.0 | 1.5 | 359 |
| Fourth | 1.6 | 0.0 | 1.6 | 317 |
| Highest | 0.4 | 0.0 | 0.4 | 217 |
| Total | 1.1 | 0.0 | 1.1 | 1,324 |



Marriage, Fertility, Fertility Preference And Birth Spacing

## Key Findings

## Marital status:

33 percent of women aged 15-49 have never been married.

Age at first marriage:
The median age at first marriage for women aged $25-39$ is 18 .

## Early marriage:

22 percent of ever-married women aged 20-49 are married by age 15, and $\mathbf{4 8}$ percent are married by 18 years.

## Total Fertility Rate (TFR):

7.3 children per woman.

## Birth Spacing:

A median of 20 months between two births.

## Age at first birth:

The median age at first birth in Galmudug is 20 for women aged 15-49.

Teenage pregnancy and motherhood:
10 percent of women aged 15-19 have either given birth or are pregnant with their first child.

Desire for more children:
69 percent of women want to have another child soon.

Ideal number of children:
11.1 is the average of ideal number of children for currently married women.

## Fertility planning:

68 percent of births were reported by the mother to have been wanted at the time of conception, and 24 percent were mistimed (wanted later); only 9 percent of births were unintended at the time of conception.

## Contraceptive knowledge:

61 percent of all ever-married women and 62 of currently married women have knowledge of modern contraception.
4. MARRIAGE, FERTILITY, FERTILITY PREFERENCE AND BIRTH SPACING

Marriage is a primary indication of the exposure of women to the risk of pregnancy and is important in understanding the fertility of a specific country or society. Populations, where women marry at a younger age, tend to start childbearing early and experience a longer exposure to the risk of pregnancy and thus have higher fertility. Information on marriage guides the understanding of fertility patterns, particularly as marriage among Somali women is almost universal and childbearing takes place within the context of marriage.

### 4.1. Marital status

Table 4.1 and Figure 4.1 show the distribution of women aged 15-49 by their current marital status and according to age. Overall, 33 percent of women aged 15-49 have never married, 56 percent are currently married, 8 percent are divorced and 3 percent are widowed at the time of the survey.

The percentage of women who have never been married declines sharply with increasing age, from 84 percent among those aged 15-19 to 24 percent for women aged 20-24. Almost all Somali women are married by the age of 35 .

Widowhood significantly increases and peaks among women of age group 45-49 at 15 percent. The percentage
of divorced women varies at different age groups; among women aged 15-19, 3 percent are divorced, 13 percent among those aged 20-24, 10 percent among those in the 40-44 age bracket and 18 percent among those aged 45-49. This indicates that age does not influence the decision to stay in a marriage or not. Marriage among Galmudug women is almost universal.

### 4.2. Age at first marriage

In most societies, marriage marks the point in a woman's life when childbearing becomes socially acceptable. Women who marry early will, on average, have longer exposure to pregnancy and more lifetime births.

Figure 4.1 Current marital status of women aged 15-49


Information on age at first marriage was obtained by asking all ever-married women the month and year they got married to their first husband, while similar information for men was obtained from the household roster.

Table 4.2 shows the percentage of women aged 15-49 who were first married by specific exact ages and the median age at first marriage, according to the current age. Twenty-two percent of women in the age group 20-49 and 21 percent of women in the age group 25-49 entered their first marriage by the age of 15 . Forty-eight percent of women aged 20-49 and 46 percent of women aged 25-49 were married for the first time by the age of 18 , while 59 percent of women aged 20-49 and 60 percent of the women aged group 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 18 years.

Analysis by region shows that the median age at first marriage for women aged 25-49 in Mudug is higher as compared to the same group of women in Galgaduud at age 20 and 15 respectively.

Table 4.3 shows the percentage of men aged 15-64 who were first married, by specific exact age 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 while 7 percent entered into their first marriage by the age of 18 . Eight percent of the men aged 25-64 had never married. The median age at first marriage for men aged 25-64 in Galmudug is 24 years.

### 4.3 Early Marriage

Early marriage is still widely practised 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 harmful 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 as well as Figure 4.2, 22 percent and 21 percent of women aged 20-49 and 25-49 respectively, had already married by the time they turned 15 years. Forty-eight percent of women aged 20-49 and 46 percent of women aged 25-49 were married for the first time by the age of 18 .

## Figure 4.2 Age at first marriage

Percent of women age 15-49 who were first married by specific exact ages
■ 20-49 - 25-49


### 4.4 Fertility

The number of children that a woman bears depends on many factors, including the age she begins childbearing, how long she waits between births and her fecundity. Postponing first births and extending the interval between births have played a role in reducing fertility levels in many countries. The knowledge of the 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 programs in Galmudug. Using the information collected during the GMHDS 2020, it is possible to estimate the current level of fertility and highlight variations in fertility according to certain characteristics.

### 4.4.1 Current Fertility

The most used measures of current fertility are the total fertility rate (TFR) and one of its components agespecific 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 childbearing years if she were to experience current observed ASFRs. The TFR estimates compiled during the GMHDS 2020 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 women-years in that age group during the
specified period. As presented in Table 4.4, the ASFR increases rapidly between 15-19 and 20-24 age group, the ASFRs decline steadily between 25-39 years and a sharp decline is noted after the age of 39 . Figure 4.3 presents the ASFRs by type of residence. In the age group 15-19 years, women residing in nomadic households have higher ASFRs than their urban and rural counterparts. However, in the age, 20-24 women residing in urban households have higher ASFRs as compared to rural and nomadic women. With the exception of the rural women whose ASFRs peak at 25-29 years the ASFRs for the other women peaks at 20-24 years.

Other important measures of current fertility are the general fertility rate (GFR) and crude birth rates (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 total fertility measures (TFR, GFR, and CBR) by type of residence. The total fertility rate for Galmudug is 7.3 children per woman compared to 6.9 Nationally. This means that on average a women in Galmudug will give birth to 7.3 children during her child bearing years. The general fertility rate, 234 per 1,000 live births and the crude birth rate 45 per 1,000 populations.

The TFR is highest among women residing in nomadic areas at 7.4, and lowest among those residing in urban areas in 7.2 (Figure 4.4). Childbearing peaks in the age group 20-24 and drops sharply after 39 years.

Figure 4.3 Age-specific fertility rates by residence

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


Total fertility rates by residence


The general fertility rate in nomadic area is 243 births per 1,000 women while rural and urban area is 236 and 227 births per 1,000 women respectively. It has been observed a slight variation of the CBR by place of residence. The CBR is highest in urban area 46 per 1,000 populations, followed by nomadic areas at 45 per 1,000 population, and lowest in rural areas at 44 per 1,000 populations.

Table 4.5 shows the total fertility rate for the 3 years preceding the survey, the percentage of women aged 1549 currently pregnant, and the mean number of children ever born to women aged 40-49 years, according to background characteristics. The GMHDS 2020 indicates that in Galmudug there is a very slight difference between the TFR (7.3) and mean CEB for women aged 40-49 years (8). This could mean fertility is declining slightly, or a lower recall bias. Notably, this pattern holds across places of residence and women's education levels.

The largest fertility differentials are associated with education, there is a negative correlation between fertility and level of education. As the level of education increases, fertility reduces. The TFR for women with no education is 7.5 compared to 4.9 for those with higher education (Figure 4.5). A woman with no education is likely to have about 3 children more than one with post secondary education, and one child more than a woman with primary education. The total fertility rate is higher in Galgaduud at 8.3 compared to Mudug at 6.3. Women from the wealthiest households are likely to have one child less than women from the poorest households.

The percentage of women who reported being pregnant at the time of the survey is also presented in Table 4.5. Nineteen percent of women were pregnant at the time of the survey. Urban women were more likely to be pregnant at 20 percent than rural and nomadic women at 18 and 19 percent, respectively. Similar to the TFR, the proportion of women who are currently pregnant is higher in Galgaduud at 21 percent than in Mudug at 17 percent.

Table 4.6 shows the distribution of ever-married women and currently married women aged 15-49 by the number of children ever born, the mean number of children ever born and the mean number of living children. For an ever married woman aged 45-49 the average number of children she has ever born is 6.7 children, and 5.9 were surviving at the time of the survey. Among the currently married women, the mean number of children ever born to a 45-49 year old is 7.5 and 6.5 were alive at the time of the survey. The mean number of CEB increases with age, reflecting the natural family-building process. For example, among ever-married women, the average number of children ever born for the age group $25-29$ is 3.8, while women of 35-39 years reported an average of 6.2 children ever born.

### 4.4.2 Inter-Birth Intervals

Longer birth intervals improve the health status of both mother and child (Rutstein, 2005). Infants born less than two years after the birth of a previous child experience

a higher risk of health problems. Research has shown that children born too soon after a previous birth are at an increased risk of poor health, particularly when the interval is less than 24 months. Table 4.7 shows the distribution of non-first births in the 5 years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics. The median birth interval in Galmudug is 20 months. The median number of months since a preceding birth increases significantly with age, from 15 months among mothers aged 15-19 to 23 months among mothers aged 40-49. The median birth interval in urban and rural areas (21 months, each) slightly higher than in nomadic areas (18 months). Women in Galgaduud have a slightly higher median birth interval ( 20 months) than women in Mudug (19 months).

### 4.5 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 have had a hysterectomy; or if they have never menstruated. Table 4.8 shows the percentage of women aged 30-49 who are menopausal, according to age. Overall, 19 percent of women aged 30-49 in Galmudug are menopausal.

### 4.6 Age at First Birth

The age at which childbearing begins has an impact on the health and welfare of a mother, and her children and fertility levels. Early-onset of childbearing leads to a longer reproductive span and a higher levels of fertility. On the other hand, the postponement of first births contributes to an overall fertility decline. Table 4.9 shows the percentage of women aged 15-49 who have given birth by specific exact ages, the percentage who have never given birth, and the median age at first birth, according to the current age. The median age at first birth for women aged 25-49 in Galmudug is 20 years.

Two percent and 3 percent of women aged 20-49 and 25-49, respectively had given birth by the time they turned 15. Twenty-two percent and 21 percent of women aged 20-49 and 25-49, respectively had first given birth by the age of 18 (Table 4.9).

### 4.7 Teenage Pregnancy and Motherhood

Teenage pregnancy is a major health concern because of its association with higher morbidity and mortality for both the mother and the child. Childbearing during adolescence is known to have adverse social consequences, particularly regarding educational attainment, as women who become mothers in their teens are more likely to drop out of school. Table 4.10 shows the percentage of women aged 15-19 who have had a live birth or who are pregnant with their first child,
and the percentage who have begun childbearing. The data indicates that 10 percent of the Galmudug girls aged 15-19 have begun childbearing, 8 percent have already given birth and 3 percent are pregnant with their first child. There are significant differences by background characteristics. Thirteen percent and 11 percent of girls aged 15-19 in rural and nomadic areas were already mothers or pregnant with their first child, respectively as compared with 7 percent among their urban counterparts. The percentage of women aged 15-19 who had begun childbearing in Galgaduud (15 percent) were more than twice as those in Mudug (7 percent). Twelve percent of girls aged 15-19 with no education had begun childbearing, compared to 5 percent of girls with secondary education. Thirteen percent of the girls aged 15-19 in the poorest households had started childbearing, compared to 7 percent of girls of the same age in the wealthiest households (Figure 4.6).

### 4.8 Fertility Preferences

Information on fertility preferences can help family planning program planners assess the desire for children, the extent of mistimed and unintended pregnancies, and the demand for contraception to space or limit births. This information may suggest the direction that fertility patterns will take in the future. This section presents GMHDS 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.

### 4.8.1 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. Sixty-nine percent of the currently married women want to have their next birth within two years, less than 2 percent of currently married women aged 15-49 want to delay the next birth to 2 or more years, 19 percent are undecided on whether to have another child, and 8 percent do not want any more children. Seventy-six percent of currently married women with no living children want to have their next birth within 2 years, while 69 percent of women with 5 children want to have their next birth within 2 years. Fourteen percent of currently married women with 6 or more children do not want to have other children.

### 4.8.2 Desire to Limit Childbearing

Table 4.12 shows the percentage of currently married women aged 15-49 who want no more children, by the number of living children, according to background characteristics. Eight percent of currently married women are willing to stop childbearing. The desire to limit childbearing generally increases as the number

of living children increases, from 3 percent among married women with one living child to 14 percent among women with six or more living children. Analysis by residence show that there are slight variations in the desire of women to limit childbearing; 7 percent in urban, 8 percent in nomadic and 9 percent in rural areas. Regionally, Mudug has higher proportions of women who want to limit childbearing at 11 percent compared to Galgaduud at 6 percent.

### 4.8.3 Ideal Number of Children

The ideal number of children is the number of children that women would like to have if they could go back to the time when they did not have any children and could choose exactly the number of children to have in their whole life. All ever-married women with at least one child were asked the ideal number of children they would choose to have if they could start afresh. Table 4.13 shows the percentage distribution of ever-married women aged 15-49 by ideal number of children, and the mean ideal number of children for all respondents and for currently married respondents, according to the number of living children they have. The results shows that the Somali women in Galmudug state desire large families. Overall, 94 percent of women consider six or more children to be the ideal family size, 4 percent stated their ideal number of children is 5 and less than 1 percent reported that their ideal number is 4 children. Among the ever-married women and currently married women, the mean ideal number of children is the same at 11 percent. Women in Galmudug are in support of having many children.

### 4.8.4 Fertility Planning

Table 4.14 shows the percent distribution of births to ever-married women aged $15-49$ in the 5 years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth.

Overall, about two-thirds of births ( 68 percent) were wanted at the time they occurred, while 24 percent were intended later and around 9 percent were born to mothers who intended to have no more children (Figure 4.7).

First- and second-order births were more likely to have been intended at 72 and 67 percent, respectively compared to third or higher-order births at 61 and 62 percent respectively. The proportion of unintended (wanted no more) births is greater for third order births and above at 11 percent than for first births at 8 percent.

### 4.9 Birth Spacing

Birth spacing or child spacing is defined as educational, comprehensive medical or social activities which enable the couples to decide freely the number of children they want or might not want, spacing of their children and to select how this may be achieved. Furthermore, birth spacing involves the deliberate use of different contraceptive methods to limit or space the number of children a couple has.

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


### 4.9.1 Knowledge of Contraceptive Methods

Information about contraceptive methods was collected by asking all ever-married women and currently married women if they had heard of various methods that a couple can use to delay or avoid a pregnancy. Specifically, the interviewer named methods, described and then asked whether the respondent had heard of them.

Table 4.15 and Figure 4.8 show the percentage of evermarried women, and currently married women aged 15-49 who have heard of any contraceptive method, according to specific methods. Sixty-one percent and 62 percent of ever-married women and currently married women have heard at least one of the methods of contraception respectively.

Lactational Amenorrhea (LAM), pills, injectables, implants, IUD and condoms are the contraceptive methods most widely known among women in Galmudug

State. 52 percent of currently married women have heard of lactational amenorrhea, 29 percent have heard of the pill, 28 percent have heard of injectables, 27 percent have heard of implants, 19 percent have heard of IUD and 17 percent have heard of the male condom.

Table 4.16 presents data on the knowledge of contraceptive methods by background characteristics. Generally, knowledge of contraception is highest among women aged 20 years and above compared to women under 20 years of age. Sixty-six percent of women aged 2024 years have heard of at least one modern method of contraception compared to women under 20 years at 52 percent. Currently, married women in urban areas are more likely to know of any modern contraceptive at 69 percent compared to those in rural and nomadic areas at 63 and 51 percent respectively. Regionally, currently, married women in Mudug are more informed about modern contraception at 63 percent compared to women in Galgaduud at 59 percent.

Figure 4.8 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


### 4.10 Contraceptive Use

One of the most frequently used indicators for assessing the success of birth spacing programs is examining the current level of contraceptive use by determining the current level of Contraceptive Prevalence Rate (CPR). CPR is the percentage of currently married 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 percent distribution of ever-married women and currently married women aged 15-49 by contraceptive method currently used, according to age. Six percent of women are using any method and less than 1 percent of currently married women are using any modern method.

Women in urban areas and rural areas are more likely to use any contraceptive methods than women in nomadic areas. The CPR is 7 percent and 6 percent in urban areas and rural areas respectively, compared to 4 percent in nomadic areas. Regionally, the use of any method is higher in Mudug at 7 percent than in Galgaduud at 5 percent. There is no clear pattern between the educational level of women and the use of contraception.

### 4.10.1 Knowledge of Fertile Period

Basic knowledge of the physiology of reproduction is especially useful for the successful practice of coitusrelated methods such as periodic abstinence. The 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 4.18 shows the percentage of ever-married women aged 15-49 with correct knowledge of the fertile period during the ovulatory cycle, according to age. Overall, 11 percent of women aged 15-49 in Galmudug state have the correct knowledge of the fertile period. Women aged 45-49 years have the highest correct knowledge of the fertile period at 17 percent as compared to women in the age brackets (30-34 years) and (15 - 19 years) at 8 and 9 percent, respectively.

### 4.10.2 Need and Demand for Birth Spacing

One of the major concerns of birth spacing programs is to assess the size of the potential demand for contraception and to identify women who are in need of contraceptive services. Table 4.19 presents estimates of unmet need, the needs met, 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 the needs.

Thirty-six percent of currently married women have an unmet for birth spacing services ( 30 percent have a need for spacing and 5 percent want to stop childbearing services). One percent of married women are currently using a contraceptive method or have a met need for either birth spacing or limiting childbearing. The total demand birth spacing among currently married women is 36 percent ( 31 percent for birth spacing and 5 percent for limiting childbearing).

Analysis by age shows that the unmet need for birth spacing is highest among women aged 30-34 at 42 percent, and lowest among women aged 40-44 at 27 percent. There is variation in unmet need for birth spacing by type of residence. Unmet need for birth spacing is highest in nomadic areas at 38 percent and lowest in urban areas at 34 percent. Regionally, unmet need is higher in Mudug at 36 percent than in Galgaduud at 35 percent. Unmet needs decrease with increasing education, it is highest among women with no education at 37 percent and lowest among those with secondary education at 21 percent. There is a slight 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 33 percent, and highest among women in the poorest wealth quintile, at 38 percent.

### 4.10.3 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 program 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 4.20 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, 15 percent of currently married women in Galmudug were exposed to birth spacing messages through one of the three media; 13 percent heard on the radio, 6 percent saw on television, and 5 percent read in the newspaper. Women in urban areas and rural areas are more likely to have been exposed to birth spacing messages in the media compared to women in nomadic areas (22 percent, 18 percent and 4 percent respectively).

## List of Tables

Table 4.1 Current marital status ..... 67
Table 4.2 Age at first marriage - Women ..... 68
Table 4.3 Age at first marriage - Men ..... 68
Table 4.4 Current Fertility ..... 69
Table 4.5 Selected fertility indicators by background characteristics ..... 69
Table 4.6 Children ever born and living ..... 70
Table 4.7 Birth intervals ..... 71
Table 4.8 Menopause ..... 72
Table 4.9 Age at first birth ..... 72
Table 4.10 Teenage pregnancy and motherhood ..... 73
Table 4.11 Fertility preferences by number of living children ..... 74
Table 4.12 Desire to limit childbearing: Women ..... 75
Table 4.13 Ideal number of children according to number of living children ..... 76
Table 4.14 Fertility planning status ..... 77
Table 4.15 Knowledge of contraceptive methods ..... 78
Table 4.16 Knowledge of contraceptive methods according to background characteristics ..... 79
Table 4.17 Current use of contraception by background characteristics ..... 80
Table 4.18 Knowledge of fertile period by age ..... 80
Table 4.19 Need and demand for birth spacing among currently married women ..... 81
Table 4.20 Exposure to birth spacing messages ..... 82

## Table 4.1 Current marital status

| Percent distribution of women 15-49 by current marital status, according to age, GMHDS 2020 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Never-married | Currently Married | Divorced | Widowed | Total | Number of women |
| 15-19 | 83.9 | 12.4 | 3.2 | 0.5 | 100.0 | 646 |
| 20-24 | 24.2 | 61.7 | 13.3 | 0.9 | 100.0 | 327 |
| 25-29 | 4.3 | 83.2 | 9.8 | 2.7 | 100.0 | 353 |
| 30-34 | 1.9 | 83.2 | 10.2 | 4.6 | 100.0 | 249 |
| 35-39 | 0.4 | 85.8 | 7.2 | 6.6 | 100.0 | 230 |
| 40-44 | 0.8 | 80.5 | 9.6 | 9.2 | 100.0 | 108 |
| 45-49 | 0.0 | 66.7 | 18.4 | 14.9 | 100.0 | 54 |
| Total | 32.7 | 56.1 | 8.2 | 3.1 | 100.0 | 1,966 |

Table 4.2 Age at first marriage - Women

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

Percentage first married by exact age:

| Background |  |  |  |  |  | Percentage of nevermarried | Number of respondents | Median age at first marriage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | 18 | 20 | 22 | 25 |  |  |  |
| Women |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 7.7 | n/a | n/a | n/a | $\mathrm{n} / \mathrm{a}$ | 83.9 | 646 | a |
| 20-24 | 25.0 | 51.4 | 57.6 | n/a | n/a | 24.2 | 327 | a |
| 25-29 | 20.9 | 48.2 | 60.4 | 70.7 | 82.6 | 4.3 | 353 | 17.0 |
| 30-34 | 27.4 | 47.5 | 57.9 | 68.4 | 87.0 | 1.9 | 249 | 18.0 |
| 35-39 | 19.0 | 46.7 | 61.9 | 71.9 | 87.4 | 0.4 | 230 | 18.0 |
| 40-44 | 16.2 | 40.1 | 61.5 | 70.7 | 85.0 | 0.8 | 108 | 18.0 |
| 45-49 | 16.0 | 39.5 | 50.6 | 68.6 | 87.6 | 0.0 | 54 | 19.2 |
| 20-49 | 22.2 | 47.6 | 59.2 | n/a | n/a | 7.6 | 1,320 | a |
| 25-49 | 21.3 | 46.3 | 59.7 | 70.3 | 85.4 | 2.2 | 994 | 18.0 |

Note: The age at first marriage is defined as the age at which the respondent got married to her first spouse na $=$ 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 - Men
Percentage of men age 15-49 who were first married by specific exact ages, and median age at first marriage, according to current age, GMHDS 2020

| Current Age | Percentage first married by exact age: |  |  |  |  | Percentage of nevermarried | Number of respondents | Median age at first marriage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | 18 | 20 | 22 | 25 |  |  |  |
| 15-19 | 0.3 | n/a | n/a | n/a | n/a | 97.9 | 460 | a |
| 20-24 | 0.0 | 7.5 | 15.9 | n/a | n/a | 64.8 | 232 | a |
| 25-29 | 0.0 | 7.1 | 19.1 | 36.4 | 56.7 | 26.3 | 176 | 22.0 |
| 30-34 | 0.4 | 6.5 | 15.4 | 32.1 | 55.6 | 8.6 | 206 | 23.0 |
| 35-39 | 0.0 | 4.1 | 13.0 | 31.9 | 50.7 | 3.4 | 151 | 24.0 |
| 40-44 | 0.0 | 7.5 | 10.7 | 32.4 | 41.4 | 2.7 | 179 | 25.0 |
| 45-49 | 1.0 | 6.3 | 12.5 | 33.8 | 42.7 | 3.2 | 87 | 25.0 |
| 50-54 | 0.0 | 7.8 | 14.0 | 29.7 | 38.8 | 1.5 | 122 | 25.0 |
| 55-59 | 0.0 | 2.6 | 17.3 | 41.6 | 51.5 | 0.0 | 38 | 23.0 |
| 60-64 | 0.5 | 7.5 | 18.3 | 42.6 | 52.3 | 1.4 | 85 | 23.0 |
| 20-49 | 0.2 | 6.6 | 14.7 | n/a | n/a | 22.0 | 1,030 | a |
| 25-49 | 0.2 | 6.4 | 14.4 | 33.3 | 50.3 | 9.6 | 799 | 24.0 |
| 20-64 | 0.2 | 6.7 | 15.0 | n/a | n/a | 18.0 | 1,276 | a |
| 25-64 | 0.2 | 6.5 | 14.8 | 33.9 | 49.2 | 7.6 | 1,044 | a |

[^6]Age-specific and total fertility rate, general fertility rate, and crude birth rate for the 3 years preceding the survey, according to residence GMHDS 2020

|  | Residence |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Age | Urban | Rural | Nomadic | Total |
| $15-19$ | 76 | 86 | 131 | 94 |
| $20-24$ | 365 | 342 | 339 | 349 |
| $25-29$ | 320 | 357 | 329 | 337 |
| $30-34$ | 328 | 316 | 312 | 319 |
| $35-39$ | 210 | 196 | 196 | 201 |
| $40-44$ | 105 | 159 | 165 | 137 |
| $45-49$ | 43 | 0 | 0 | 16 |
| TFR (15-49) | 7.2 | 7.3 | 7.4 | 7.3 |
| GFR | 227 | 236 | 243 | 234 |
| CBR | 45.8 | 43.7 | 45.2 | 44.8 |

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 age 15-49
CBR: Crude birth rate expressed per 1,000 population

Table 4.5 Selected fertility indicators by background characteristics

Total fertility rate for the 3 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, according to background characteristics, GMHDS 2020

| Background <br> characteristics | Total Fertility Rate | Percentage women age 15-49 <br> currently pregnant | Mean number of children ever <br> born to women age 40-49 |
| :--- | :---: | :---: | :---: |
| Type of residence | 7.2 |  |  |
| Urban | 7.3 | 19.9 | 7.2 |
| Rural | 7.4 | 18.3 | 8.2 |
| Nomadic |  | 18.8 | 9.7 |
| Region | 6.3 | 16.7 | 7.6 |
| $\quad$ Mudug | 8.3 | 21.3 | 8.4 |
| Galgaduud |  |  |  |
| Education | 7.5 | 17.2 | 9.2 |
| No Education | 6.6 | 26.2 | 9.1 |
| Primary | 5.2 | 37.4 | 9.8 |
| Secondary | 4.9 | 5.7 | 6.0 |
| Higher |  |  |  |
| Wealth quintile | 7.3 | 19.2 | 7.5 |
| Lowest | 8.0 | 18.0 | 10.4 |
| Second | 7.3 | 19.0 | 8.2 |
| Middle | 7.5 | 17.9 | 7.7 |
| Fourth | 6.1 | 21.4 | 7.5 |
| Highest | 7.3 | 19.0 | 8.0 |
| Total |  |  |  |

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,GMHDS 2020

Number of children ever born

| Age | Number of children ever born |  |  |  |  |  |  |  |  |  |  |  |  | Mean <br> number <br> of Mean |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10+ | Total | Number of women | ever born | of living children |

Ever-
married
women

| 15-19 | 51.4 | 29.6 | 15.6 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 104 | 0.7 | 0.7 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 20-24 | 15.6 | 19.8 | 27.3 | 22.5 | 10.4 | 4.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 248 | 2.1 | 2.0 |
| 25-29 | 7.1 | 4.1 | 12.2 | 19.2 | 20.5 | 17.1 | 11.6 | 5.6 | 1.9 | 0.8 | 0.0 | 100.0 | 338 | 3.8 | 3.7 |
| 30-34 | 5.7 | 3.3 | 9.6 | 8.6 | 15.8 | 15.0 | 12.4 | 13.2 | 9.2 | 4.4 | 2.8 | 100.0 | 244 | 4.9 | 4.8 |
| 35-39 | 3.0 | 1.1 | 5.4 | 12.1 | 7.6 | 10.8 | 13.0 | 15.4 | 8.3 | 10.2 | 13.3 | 100.0 | 230 | 6.2 | 5.7 |
| 40-44 | 5.9 | 1.9 | 7.6 | 6.0 | 5.4 | 18.7 | 13.3 | 8.0 | 10.0 | 5.1 | 18.2 | 100.0 | 107 | 6.2 | 5.5 |
| 45-49 | 5.8 | 0.0 | 4.6 | 4.8 | 5.7 | 14.3 | 16.9 | 5.5 | 11.0 | 14.3 | 17.0 | 100.0 | 54 | 6.7 | 5.9 |
| Total | $\mathbf{1 1 . 0}$ | $\mathbf{8 . 0}$ | $\mathbf{1 3 . 0}$ | $\mathbf{1 3 . 7}$ | $\mathbf{1 2 . 1}$ | $\mathbf{1 1 . 9}$ | $\mathbf{9 . 2}$ | $\mathbf{7 . 4}$ | $\mathbf{4 . 9}$ | $\mathbf{3 . 8}$ | $\mathbf{5 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 , 3 2 4}$ | $\mathbf{4 . 2}$ | $\mathbf{3 . 9}$ |

Currently
married
women

| $15-19$ | 49.7 | 29.1 | 17.3 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 80 | 0.8 | 0.7 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 20-24 | 14.7 | 17.1 | 30.0 | 22.5 | 11.4 | 4.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 202 | 2.1 | 2.1 |
| 25-29 | 5.0 | 3.1 | 11.4 | 20.3 | 20.7 | 18.0 | 12.6 | 6.2 | 1.8 | 0.9 | 0.0 | 100.0 | 294 | 4.0 | 3.8 |
| $30-34$ | 4.1 | 2.4 | 7.9 | 9.5 | 16.4 | 14.4 | 13.9 | 13.2 | 9.7 | 5.1 | 3.3 | 100.0 | 207 | 5.2 | 5.0 |
| $35-39$ | 2.4 | 0.0 | 5.5 | 12.7 | 6.0 | 9.7 | 12.7 | 15.9 | 8.5 | 11.9 | 14.9 | 100.0 | 198 | 6.4 | 5.9 |
| $40-44$ | 5.3 | 2.3 | 7.4 | 7.4 | 2.8 | 14.3 | 14.7 | 9.8 | 11.9 | 5.3 | 18.9 | 100.0 | 87 | 6.4 | 5.7 |
| $45-49$ | $(0.0)$ | $(0.0)$ | $(3.4)$ | $(7.2)$ | $(3.7)$ | $(13.2)$ | $(14.8)$ | $(4.8)$ | $(14.1)$ | $(18.0)$ | $(20.7)$ | 100.0 | 36 | 7.5 | 6.5 |
| Total | $\mathbf{9 . 3}$ | $\mathbf{6 . 7}$ | $\mathbf{1 2 . 9}$ | $\mathbf{1 4 . 7}$ | $\mathbf{1 2 . 1}$ | $\mathbf{1 1 . 6}$ | $\mathbf{9 . 9}$ | $\mathbf{7 . 9}$ | $\mathbf{5 . 2}$ | $\mathbf{4 . 3}$ | $\mathbf{5 . 4}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 , 1 0 3}$ | $\mathbf{4 . 4}$ | $\mathbf{4 . 1}$ |

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

Percent distribution of non-first births in the 5 years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, GMHDS 2020

| Background characteristics | Birth order |  |  |  |  |  |  | Number of non-first births | Median number of months since preceding birth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 7-17 | 18-23 | 24-35 | 36-47 | 48-59 | 60+ | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | * | 100.0 | 22 | 14.6 |
| 20-29 | 34.4 | 12.0 | 20.1 | 6.7 | 3.2 | 23.7 | 100.0 | 541 | 19.0 |
| 30-39 | 33.3 | 21.2 | 28.6 | 6.2 | 2.9 | 7.8 | 100.0 | 385 | 20.0 |
| 40-49 | 18.4 | 21.7 | 19.1 | 14.4 | 3.5 | 22.9 | 100.0 | 58 | 23.0 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 31.8 | 15.5 | 22.1 | 8.9 | 3.3 | 18.4 | 100.0 | 554 | 20.0 |
| Female | 33.3 | 16.6 | 23.8 | 4.1 | 2.7 | 19.5 | 100.0 | 451 | 20.0 |

Survival of preceding birth

| 19.5 |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Living | 33.0 | 15.9 | 22.3 | 6.7 | 3.1 | 18.9 | 100.0 | 955 | 23.7 |
| Dead | 22.3 | 17.9 | 33.1 | 7.5 | 1.7 | 17.5 | 100.0 | 51 |  |
| Birth order |  |  |  |  |  |  |  |  |  |
| 2-3 | 33.0 | 16.1 | 23.1 | 6.5 | 2.9 | 18.4 | 100.0 | 925 | 19.2 |
| $4-6$ | 28.5 | 16.3 | 22.1 | 7.7 | 4.9 | 20.5 | 100.0 | 71 | 22.0 |
| $7+$ | $\star$ | $\star$ | $\star$ | $\star$ | $\star$ | $*$ | 100.0 | 10 | 31.7 |

Type of
residence

|  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Urban | 34.3 | 14.3 | 22.9 | 6.0 | 2.8 | 19.8 | 100.0 | 362 | 21.0 |
| Rural | 34.1 | 18.7 | 21.6 | 7.7 | 3.0 | 14.8 | 100.0 | 376 | 21.0 |
| Nomadic | 27.8 | 14.5 | 24.6 | 6.5 | 3.3 | 23.3 | 100.0 | 267 | 18.4 |
| Region |  |  |  |  |  |  |  |  |  |
| Mudug | 33.0 | 14.8 | 23.0 | 6.0 | 2.9 | 20.3 | 100.0 | 458 | 19.0 |
| Galgaduud | 32.1 | 17.0 | 22.7 | 7.4 | 3.1 | 17.7 | 100.0 | 548 | 20.0 |
| Education |  |  |  |  |  |  |  |  |  |
| No Education | 31.3 | 16.3 | 24.5 | 7.4 | 3.1 | 17.5 | 100.0 | 810 | 20.0 |
| Primary | 37.5 | 13.5 | 15.9 | 4.9 | 3.1 | 25.3 | 100.0 | 154 | 18.0 |
| Secondary | $(45.3)$ | $(19.8)$ | $(7.7)$ | $(2.8)$ | $(2.8)$ | $(21.6)$ | 100.0 | 30 | 18.9 |
| Higher | $*$ | $*$ | $*$ | $*$ | $*$ | $*$ | 100.0 | 11 | 33.3 |

Wealth
quintile

| Lowest | 31.1 | 16.2 | 20.2 | 5.3 | 3.5 | 23.7 | 100.0 | 168 | 16.8 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second | 21.8 | 13.6 | 31.6 | 9.8 | 2.1 | 21.1 | 100.0 | 139 | 20.8 |
| Middle | 32.6 | 17.6 | 23.3 | 5.9 | 2.7 | 18.0 | 100.0 | 299 | 21.0 |
| Fourth | 35.4 | 12.7 | 20.5 | 7.3 | 4.1 | 19.9 | 100.0 | 256 | 21.0 |
| Highest | 39.0 | 20.6 | 20.8 | 6.6 | 2.1 | 11.0 | 100.0 | 143 | 19.1 |
| Total | $\mathbf{3 2 . 5}$ | $\mathbf{1 6 . 0}$ | $\mathbf{2 2 . 9}$ | $\mathbf{6 . 8}$ | $\mathbf{3 . 0}$ | $\mathbf{1 8 . 9}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 , 0 0 6}$ | $\mathbf{2 0 . 0}$ |

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

| Percentage of women age 30-49 who are menopausal, according to age, GMHDS 2020 |  |  |
| :--- | :---: | :---: |
| Age | Percentage menopausal ${ }^{1}$ | Number of women |
| $30-34$ | 16.7 | 249 |
| $35-39$ | 20.5 | 230 |
| $40-41$ | 15.8 | 78 |
| $42-43$ | $(7.7)$ | 28 |
| $44-45$ | $(26.7)$ | 30 |
| $46-47$ | $\star$ | 15 |
| $48-49$ | $\star$ | 10 |
| Total | $\mathbf{1 8 . 5}$ | $\mathbf{6 4 1}$ |

${ }^{1}$ Percentage of women who (1) are not pregnant, and (2) have had a birth in the past 5 years and are not postpartum amenorrheic, and (3) for whom one of the following additional conditions applies: (a) whose last menstrual period occurred 6 or more months preceding the survey, or (b) declared that they are in menopause or have had a hysterectomy, or (c) have never menstruated

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

Table 4.9 Age at first birth

Percentage of women age 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, GMHDS 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 | 0.5 | n/a | n/a | n/a | n/a | 86.9 | 646 | a |
| 20-24 | 1.8 | 27.0 | 52.6 | n/a | n/a | 29.2 | 327 | 18.0 |
| 25-29 | 1.8 | 25.5 | 49.4 | 74.2 | 86.8 | 7.0 | 353 | 19.0 |
| 30-34 | 3.8 | 25.5 | 48.5 | 64.1 | 80.2 | 3.3 | 249 | 19.0 |
| 35-39 | 2.9 | 16.2 | 36.2 | 59.2 | 78.5 | 0.4 | 230 | 20.0 |
| 40-44 | 2.4 | 8.2 | 25.6 | 48.2 | 73.9 | 1.8 | 108 | 21.0 |
| 45-49 | 1.6 | 12.8 | 24.0 | 30.8 | 49.2 | 2.1 | 54 | 24.0 |
| 20-49 | 2.4 | 22.3 | 44.8 | n/a | n/a | 10.0 | 1,320 | a |
| 25-49 | 2.6 | 20.8 | 42.2 | 63.0 | 79.8 | 3.7 | 994 | 20.0 |
| $\mathrm{n} / \mathrm{a}=$ Not applicable due to censoring |  |  |  |  |  |  |  |  |
| "na = Not applicable due to censoring <br> $a=$ Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group" |  |  |  |  |  |  |  |  |


| Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, GMHDS 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 |  |
| Age group |  |  |  |  |
| 15-19 | 7.8 | 2.6 | 10.3 | 646 |
| 15 | 0.0 | 1.4 | 1.4 | 178 |
| 16 | 0.0 | 0.0 | 0.0 | 137 |
| 17 | 3.8 | 2.9 | 6.8 | 116 |
| 18 | 15.2 | 3.4 | 18.5 | 128 |
| 19 | 30.5 | 7.4 | 37.9 | 86 |
| Type of residence |  |  |  |  |
| Urban | 6.1 | 1.2 | 7.3 | 241 |
| Rural | 9.9 | 3.0 | 12.9 | 237 |
| Nomadic | 7.2 | 4.0 | 11.2 | 168 |
| Region |  |  |  |  |
| Mudug | 4.8 | 2.4 | 7.3 | 379 |
| Galgaduud | 12.0 | 2.8 | 14.7 | 266 |
| Education |  |  |  |  |
| No education | 8.7 | 3.7 | 12.4 | 354 |
| Primary | 8.3 | 1.2 | 9.5 | 192 |
| Secondary | 3.9 | 1.3 | 5.1 | 89 |
| Higher | * | * | * | 11 |
| Wealth quintile |  |  |  |  |
| Lowest | 9.0 | 4.0 | 12.9 | 128 |
| Second | 9.7 | 4.5 | 14.2 | 56 |
| Middle | 10.1 | 1.0 | 11.1 | 195 |
| Fourth | 6.8 | 1.6 | 8.4 | 149 |
| Highest | 2.9 | 4.0 | 6.9 | 117 |
| Total | 7.8 | 2.6 | 10.3 | 646 |
| Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been |  |  |  |  |

Table 4.11 Fertility preferences by number of living children

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

| Desire for children | Number of living children ${ }^{1}$ |  |  |  |  |  |  | Total 15-49 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6+ |  |
| Have another soon ${ }^{2}$ | 76.4 | 79.2 | 79.0 | 63.9 | 67.7 | 68.8 | 63.1 | 68.8 |
| Have another later ${ }^{3}$ | 0.0 | 2.1 | 1.5 | 1.5 | 1.1 | 2.4 | 1.3 | 1.4 |
| Undecided | 19.5 | 14.7 | 17.6 | 24.1 | 22.0 | 17.7 | 17.8 | 19.1 |
| Want no more | 0.0 | 3.1 | 1.9 | 7.5 | 8.0 | 9.9 | 13.8 | 8.3 |
| Declared infecund | 4.1 | 0.9 | 0.0 | 3.0 | 1.2 | 1.2 | 3.9 | 2.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of respondents | 77 | 96 | 132 | 158 | 150 | 141 | 349 | 1,103 |

${ }^{1}$ The number of living children includes current pregnancy
${ }^{2}$ Wants next birth within 2 years
${ }^{3}$ 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, GMHDS 2020

| Background <br> characteristics | Number of living children ${ }^{1}$ |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 0 | 1 | 2 | 3 | 4 | 5 | $6+$ |

Type of

| Urban | 0.0 | 5.7 | 0.0 | 5.9 | 6.7 | 10.2 | 11.6 | 7.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural | 0.0 | 0.0 | 0.0 | 9.5 | 6.0 | 14.0 | 15.3 | 9.3 |
| Nomadic | 0.0 | 4.7 | 5.1 | 7.4 | 11.9 | 3.2 | 14.8 | 8.2 |
| Region |  |  |  |  |  |  |  |  |
| Mudug | 0.0 | 6.1 | 3.4 | 9.3 | 14.2 | 14.7 | 17.2 | 10.9 |
| Galgaduud | 0.0 | 0.0 | 0.0 | 4.4 | 2.5 | 5.5 | 11.0 | 5.5 |
| Education |  |  |  |  |  |  |  |  |
| No education | 0.0 | 3.1 | 2.3 | 9.1 | 9.6 | 11.0 | 13.8 | 9.1 |
| Primary | 0.0 | 4.2 | 0.0 | 0.0 | 3.5 | 4.6 | 15.6 | 5.4 |
| Secondary | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5 | 2.8 |
| Higher | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |


| Wealth quintile |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Lowest | 0.0 | 7.0 | 6.9 | 10.9 | 12.2 | 5.5 | 13.8 | 9.3 |
| Second | 0.0 | 0.0 | 0.0 | 0.0 | 8.5 | 4.4 | 17.4 | 7.5 |
| Middle | 0.0 | 0.0 | 0.0 | 13.3 | 4.1 | 10.4 | 13.4 | 8.2 |
| Fourth | 0.0 | 5.2 | 0.0 | 5.7 | 10.1 | 18.4 | 12.6 | 8.9 |
| Highest | 0.0 | 4.1 | 0.0 | 4.4 | 6.8 | 4.6 | 13.1 | 7.1 |
| Total | 0.0 | 3.1 | 1.9 | 7.5 | 8.0 | 9.9 | 13.8 | 8.3 |

Note: ${ }^{1}$ The number of living children includes the current pregnancy

Table 4.13 Ideal number of children according to number of living children

Percent distribution of ever married women age 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, GMHDS 2020

|  | Number of living children ${ }^{1}$ |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | $6+$ |  |
| Ideal number of children |  |  |  |  |  |  |  |  |
| 1 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 |
| 2 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 0.0 | 0.4 |
| 3 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 |
| 4 | 1.4 | 2.4 | 0.9 | 0.0 | 0.0 | 0.7 | 0.5 | 0.7 |
| 5 | 7.4 | 7.2 | 6.0 | 6.8 | 2.1 | 3.8 | 1.2 | 4.2 |
| 6+ | 87.4 | 88.9 | 93.2 | 93.2 | 97.9 | 93.4 | 97.7 | 94.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 78 | 107 | 130 | 136 | 145 | 123 | 274 | 992 |
| Mean ideal number of children for: ${ }^{2}$ |  |  |  |  |  |  |  |  |
| Ever <br> Married <br> women | 10.1 | 10.2 | 10.8 | 10.6 | 11.1 | 10.8 | 12.3 | 11.1 |
| Number of ever married women | 78 | 107 | 130 | 136 | 145 | 123 | 274 | 992 |
| Mean ideal number of children for currently married women |  |  |  |  |  |  |  |  |
| Currently married women | 10.2 | 10.1 | 11.0 | 10.4 | 10.9 | 10.8 | 12.2 | 11.1 |
| Number of currently married women | 54 | 80 | 107 | 115 | 118 | 107 | 244 | 825 |

Table 4.14 Fertility planning status

Percent distribution of births to ever married women age 15-49 in the 5 years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, GMHDS 2020

| Birth order and mother's age at birth | Planning status of birth |  |  | Total | Number of births |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wanted then | Wanted later | Wanted no more |  |  |
| Birth Order |  |  |  |  |  |
| 1 | 71.5 | 20.6 | 8.0 | 100.0 | 959 |
| 2 | 67.2 | 24.0 | 8.8 | 100.0 | 749 |
| 3 | 60.6 | 28.6 | 10.7 | 100.0 | 415 |
| 4+ | 62.2 | 29.3 | 8.5 | 100.0 | 142 |
| Mother's age at birth |  |  |  |  |  |
| <20 | 63.6 | 30.3 | 6.1 | 100.0 | 285 |
| 20-24 | 70.6 | 24.9 | 4.4 | 100.0 | 718 |
| 25-29 | 67.9 | 22.3 | 9.8 | 100.0 | 611 |
| 30-34 | 68.4 | 20.4 | 11.2 | 100.0 | 410 |
| 35-39 | 59.1 | 24.4 | 16.6 | 100.0 | 197 |
| 40-44 | (64.4) | (17.1) | (23.9) | 100.0 | 41 |
| 45-49 | * | * | * | 100.0 | 4 |
| Total | 67.5 | 23.7 | 8.8 | 100.0 | 2,266 |

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

| Percentage of ever married women, and currently married women age 15-49 who have heard of any contraceptive method, <br> according to specific method, GMHDS 2020 |  |  |
| :--- | :---: | :---: |
| Method | Ever married | Currently married |
| Any method | 61.2 | 62.2 |
| Any modern method | 60.5 | 61.3 |
| IUDs | 18.6 | 18.7 |
| Injectables | 27.7 | 28.1 |
| Implants | 26.3 | 26.5 |
| Pills | 29.5 | 29.2 |
| Male condoms | 16.8 | 16.7 |
| Female condoms | 11.6 | 11.8 |
| Emergency contraception | 15.1 | 15.5 |
| Standard days method | 15.0 | 15.5 |
| Lactational Amenorrhea (LAM) | 51.4 | 52.2 |
| Other modern methods | 0.7 | 0.6 |
| Any traditional method | 21.7 | 22.2 |
| Rhythm | 14.8 | 15.2 |
| Withdrawal | 17.0 | 17.1 |
| Traditional methods | 1.7 | 1.8 |
| Mean number of methods known by | 2.5 | 2.5 |
| women 15-49 | 1,324 | 1,103 |
| Number of respondents |  |  |


| Percentage of currently married women age 15-49 who have heard of at least one contraceptive method and who have heard of at least one modern method, by background characteristics, GMHDS 2020 |  |  |  |
| :---: | :---: | :---: | :---: |
| Background characteristics | Heard of any method | Heard of any modern method ${ }^{1}$ | Number of women |
| Age |  |  |  |
| 15-19 | 51.9 | 51.9 | 80 |
| 20-24 | 66.5 | 65.6 | 202 |
| 25-29 | 67.1 | 66.1 | 294 |
| 30-34 | 54.2 | 53.2 | 207 |
| 35-39 | 64.9 | 64.4 | 198 |
| 40-44 | 58.8 | 56.4 | 87 |
| 45-49 | (59.1) | (59.1) | 36 |
| Type of residence |  |  |  |
| Urban | 69.2 | 68.5 | 374 |
| Rural | 63.6 | 63.2 | 394 |
| Nomadic | 52.5 | 50.9 | 334 |
| Region |  |  |  |
| Mudug | 64.9 | 63.2 | 567 |
| Galgaduud | 59.3 | 59.2 | 536 |
| Education |  |  |  |
| No education | 59.2 | 58.3 | 896 |
| Primary | 73.1 | 72.5 | 160 |
| Secondary | (84.8) | (82.1) | 31 |
| Higher | * | * | 15 |
| Wealth quintile |  |  |  |
| Lowest | 51.7 | 50.1 | 226 |
| Second | 57.6 | 56.5 | 154 |
| Middle | 62.2 | 61.6 | 293 |
| Fourth | 68.8 | 68.5 | 254 |
| Highest | 69.9 | 69.0 | 176 |
| Total 15-49 | 62.2 | 61.3 | 1,103 |
| ${ }^{1}$ Pill, IUD, inejctables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhea (LAM), and other modern methods <br> 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 4.17 Current use of contraception by background characteristics

| Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to background characteristics, GMHDS, 2020 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristics | Any method | Any modern method | Modern method |  |  |  |  |  |  |  |
|  |  |  | Injectables | Pills | Lactational Amenorrhea (LAM) | Any traditional method | Rhythm | Not currently using | Total | of women currently married |
| Number of living children |  |  |  |  |  |  |  |  |  |  |
| 0 | * | * | * | * | * | * | * | * | 100.0 | 1 |
| 1-2 | * | * | * | * | * | * | * | * | 100.0 | 16 |
| 3-4 | 5.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.7 | 94.3 | 100.0 | 53 |
| $5+$ | 5.8 | 0.6 | 0.4 | 0.2 | 0.0 | 0.0 | 5.1 | 94.2 | 100.0 | 1032 |
| Types of residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 7.4 | 1.7 | 1.1 | 0.7 | 0.0 | 0.0 | 5.6 | 92.6 | 100.0 | 374 |
| Rural | 6.2 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | 6.0 | 93.8 | 100.0 | 394 |
| Nomadic | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 | 96.2 | 100.0 | 334 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Mudug | 7.2 | 0.9 | 0.3 | 0.5 | 0.2 | 0.0 | 6.2 | 92.8 | 100.0 | 567 |
| Galgaduud | 4.5 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 4.1 | 95.5 | 100.0 | 536 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 5.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 5.1 | 94.8 | 100.0 | 897 |
| Primary | 8.6 | 2.8 | 1.8 | 1.1 |  | 0.0 | 5.7 | 91.4 | 100.0 | 160 |
| Secondary | (5.5) | (5.5) | (0.0) | (0.0) | (2.7) | (2.8) | (0.0) | (93.9) | 100.0 | 31 |
| Higher | * | * | * | * | * | 0.0 | * | * | 100.0 | 14 |
| Total | 5.9 | 0.7 | 0.4 | 0.2 | 0.1 | 0.0 | 5.2 | 94.1 | 100.0 | 1103 |

Note: If more than one method is used, only the most effective method is considered in this tabulation.
LAM = Lactational amenorrhea method
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 4.18 Knowledge of fertile period by age

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

| Age | Percentage with correct <br> knowledge of the fertile period | Number of ever-married women |
| :--- | :---: | :---: |
| 15-19 | 9.2 | 104 |
| 20-24 | 14.8 | 248 |
| $25-29$ | 10.2 | 338 |
| $30-34$ | 8.4 | 244 |
| $35-39$ | 9.6 | 230 |
| $40-44$ | 12.8 | 107 |
| $45-49$ | 17.1 | 54 |
| Total | $\mathbf{1 1 . 0}$ | $\mathbf{1 , 3 2 4}$ |

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

## Table 4.19 Need and demand for birth spacing among currently married women

Percentage of currently married women age 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, according to background characteristics, GMHDS 2020

| Background characteristics | Unmet need for birth spacing |  | Total | Met need for birth spacing (currently using) |  | Total | Total demand for birth spacing ${ }^{1}$ |  | Total | Percentage of demand satisfied ${ }^{2}$ | Percentage of demand satisfied by modern method ${ }^{3}$ | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | For spacing | For limiting |  | For spacing | For limiting |  | For spacing | For limiting |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 26.7 | 2.1 | 28.9 | 0.0 | 0.0 | 0.0 | 26.7 | 2.1 | 28.9 | 0.0 | 0.0 | 80 |
| 20-24 | 31.0 | 1.5 | 32.5 | 1.5 | 0.0 | 1.5 | 32.5 | 1.5 | 34.0 | 4.6 | 4.6 | 202 |
| 25-29 | 32.7 | 3.8 | 36.5 | 0.6 | 0.3 | 0.9 | 33.3 | 4.1 | 37.4 | 2.3 | 2.3 | 294 |
| 30-34 | 34.8 | 6.9 | 41.6 | 0.8 | 0.0 | 0.8 | 35.6 | 6.9 | 42.5 | 1.9 | 1.9 | 207 |
| 35-39 | 27.1 | 5.7 | 32.8 | 0.0 | 0.0 | 0.0 | 27.1 | 5.7 | 32.8 | 0.0 | 0.0 | 198 |
| 40-44 | 27.4 | 12.7 | 40.1 | 0.0 | 0.0 | 0.0 | 27.4 | 12.7 | 40.1 | 0.0 | 0.0 | 87 |
| 45-49 | (16.8) | (12.1) | (28.9) | (0.0) | (0.0) | (0.0) | (16.8) | (12.1) | (28.9) | (0.0) | (0.0) | 36 |

Type of
Residence

| Urban | 27.1 | 6.5 | 33.7 | 1.5 | 0.2 | 1.7 | 28.6 | 6.8 | 35.4 | 4.9 | 4.9 | 374 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural | 29.5 | 5.7 | 35.3 | 0.2 | 0.0 | 0.2 | 29.8 | 5.7 | 35.5 | 0.6 | 0.6 | 394 |
| Nomadic | 35.1 | 2.9 | 38.0 | 0.0 | 0.0 | 0.0 | 35.1 | 2.9 | 38.0 | 0.0 | 0.0 | 334 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |
| Mudug | 29.4 | 6.8 | 36.2 | 0.8 | 0.2 | 0.9 | 30.1 | 6.9 | 37.1 | 2.5 | 2.5 | 567 |
| Galgaduud | 31.5 | 3.4 | 34.9 | 0.4 | 0.0 | 0.4 | 31.9 | 3.4 | 35.3 | 1.2 | 1.2 | 536 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| No Education | 31.4 | 6.0 | 37.4 | 0.1 | 0.0 | 0.1 | 31.5 | 6.0 | 37.5 | 0.3 | 0.3 | 897 |
| Primary | 26.5 | 1.6 | 28.1 | 2.3 | 0.5 | 2.8 | 28.8 | 2.1 | 30.9 | 9.2 | 9.2 | 160 |
| Secondary | (21.9) | (0.0) | (21.9) | (5.5) | (0.0) | (5.5) | (27.4) | (0.0) | 27.4 | 20.1 | 20.1 | 31 |
| Higher | * | * | * | * | * | * | * | * | * | * | * | 14 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 34.1 | 3.4 | 37.5 | 0.0 | 0.0 | 0.0 | 34.1 | 3.4 | 37.5 | 0.0 | 0.0 | 226 |
| Second | 30.2 | 4.6 | 34.8 | 0.0 | 0.0 | 0.0 | 30.2 | 4.6 | 34.8 | 0.0 | 0.0 | 154 |
| Middle | 31.5 | 4.6 | 36.2 | 0.4 | 0.3 | 0.7 | 31.9 | 4.9 | 36.8 | 1.8 | 1.8 | 293 |
| Fourth | 28.2 | 6.8 | 35.0 | 0.4 | 0.0 | 0.4 | 28.6 | 6.8 | 35.5 | 1.2 | 1.2 | 254 |
| Highest | 27.1 | 6.2 | 33.4 | 2.4 | 0.0 | 2.4 | 29.6 | 6.2 | 35.8 | 6.8 | 6.8 | 176 |
| Total | 30.4 | 5.1 | 35.5 | 0.6 | 0.1 | 0.7 | 31.0 | 5.2 | 36.2 | 1.9 | 1.9 | 1103 |

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, female 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

Percentage of ever married women age 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, GMHDS 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of residence |  |  |  |  |  |  |  |
| Urban | 17.8 | 11.5 | 7.3 | 22.0 | 4.6 | 78.0 | 464 |
| Rural | 16.9 | 4.7 | 4.8 | 18.2 | 2.6 | 81.8 | 488 |
| Nomadic | 2.5 | 0.5 | 0.7 | 3.5 |  | 96.5 | 373 |
| Region |  |  |  |  |  |  |  |
| Mudug | 12.2 | 8.2 | 5.4 | 15.4 | 3.6 | 84.6 | 679 |
| Galgaduud | 14.2 | 3.5 | 3.5 | 15.3 | 1.5 | 84.7 | 645 |
| Education |  |  |  |  |  |  |  |
| No education | 10.1 | 3.3 | 2.6 | 12.0 | 1.0 | 88.0 | 1,071 |
| Primary | 23.8 | 14.3 | 8.9 | 26.6 | 5.8 | 73.4 | 194 |
| Secondary | (3.5) | (0.2) | (0.0) | (3.5) | (0.0) | (96.5) | 43 |
| Higher | * | * | * | * | * | * | 16 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 4.3 | 1.6 | 1.7 | 5.8 | 0.7 | 94.2 | 244 |
| Second | 3.5 | 0.2 | 0.0 | 3.5 |  | 96.5 | 186 |
| Middle | 12.0 | 3.3 | 4.0 | 13.2 | 1.8 | 86.8 | 359 |
| Fourth | 17.0 | 7.4 | 4.7 | 20.9 | 2.3 | 79.1 | 317 |
| Highest | 27.9 | 17.7 | 12.0 | 31.9 | 8.6 | 68.1 | 217 |
| Total 15-49 | 13.2 | 5.9 | 4.5 | 15.4 | 2.6 | 84.6 | 1,324 |

[^7]

## Maternal and Newborn Health

4x:


## Key Findings

## Antenatal care coverage:

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

## ANC visits:

$\mathbf{8}$ percent of women had at least four ANC visits.

## Components of antenatal care:

93 percent of women who received antenatal care had their blood pressure measured, 77 percent had a urine sample taken, and 84 percent had a blood sample taken while 31 percent were given iron supplements.

## Tetanus toxoid injections:

31 percent of births were protected against neonatal tetanus.

## Delivery services:

42 percent of births were delivered with the assistance of a skilled birth attendant, 30 percent were delivered at the health facility, of which 23 percent went to public and 7 percent went to private facilities.

## Postnatal checks:

13 percent of mothers and 10 percent of new-borns had a postnatal check within the first 2 days after delivery.
Barriers to access to health care:
76 percent of women aged 15-49 had at least one problem accessing health care.

This chapter presents information on maternal and newborn health. It highlights Antenatal Care (ANC), the number and timing of ANC visits, and various components of maternal health care in and after ANC and births, places of delivery, helping during delivery, and postnatal care (PNC). These services support key strategic and health policy objectives in Galmudug, as well as, the reduction of maternal morbidity and mortality.

The results from the survey provide an opportunity to classify critical issues affecting the health status of women and children in Galmudug. This information will assist policymakers, planners and other collaborators in the health sector to formulate suitable strategies and interferences to improve maternal, new-born and child health services in Galmudug State.

### 5.1 Antenatal Care

ANC helps women to prepare for delivery and understand warning signs during pregnancy and childbirth. Through preventive health care, women can access micronutrient supplementation, treatment of hypertension to prevent eclampsia, as well as immunization against tetanus. ANC can also provide HIV testing and medications which helps prevent mother-to-child transmission of HIV.

In areas where malaria is endemic, health personnel can provide pregnant women with medications and insecticide-treated mosquito nets to help prevent this deadly disease (UNICEF global databases, 2020).

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

During the 2020 GMHDS, 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.

### 5.2 Antenatal Care Coverage

Table 5.1 and Figure 5.1 show the percentage distribution of women who had given birth in the five years prior to the survey by the ANC provider during pregnancy. Overall, 66 percent of women in Galmudug did not attend ANC during their most recent pregnancy. Among those who attended ANC, 34 percent received ANC from a skilled provider (doctors/clinical officers, nurses, midwives and auxiliary midwives) at least once for their last birth. Twenty-two percent of women received ANC from a doctor/clinical officer, while 11 percent received care from a midwife, nurse or auxiliary midwife. Older mothers are less likely to receive ANC than younger mothers. Twenty-six percent of women aged 35-49 received ANC from a skilled provider, compared to 37 percent of women below 20 years.

Figure 5.2 shows that the use of skilled providers for ANC services varies by residence. Rural women and urban women are more likely than nomadic women to receive any ANC from a skilled provider (46 percent, 40 percent and 11 percent, respectively).

Regionally, the proportion of women in Galgaduud who received ANC from skilled personnel is almost twice as compared to Mudug region (44 percent and 23 percent, respectively). As expected, wealth status is associated with use of ANC from a skilled health care provider. Use of skilled providers for ANC increase with an increase in wealth status. Fifty-one percent of women from the highest wealth quintile received ANC from a skilled provider compared to 9 percent of women in the lowest wealth quintile (Table 5.1).

Figure 5.1 Skilled assistance received during ANC by the type of residence

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


### 5.3 Number and Timing of Antenatal Visits

ANC is more beneficial in preventing adverse outcomes of pregnancy when it is sought early and is continued throughout pregnancy. Health professionals recommend that the first ANC visit should occur within the first three months of the pregnancy. Visits should continue monthly through week 28 of pregnancy, and then every two weeks up to week 36 (or until birth). If the first ANC 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 ANC visits will be made.

Table 5.2 and Figure 5.3 present data on the percent distribution of women aged 15-49 who had a live birth in the five years preceding the survey by the number of ANC visits for the most recent live birth by background characteristics. Overall, 8 percent had made four or more ANC visits, while 19 percent made between two to three ANC Visits during their most recent pregnancy. Fifteen percent of women in urban areas had made four or more ANC visits compared to 8 percent among women in the rural and one percent among women in the nomadic areas. Sixty-six percent of women did not attend any ANC.

Eleven percent of women made their first ANC visit before the fourth month of pregnancy. Urban women had a slightly higher percentage of women who delayed ANC to the last trimester - six percent made their first ANC visit in or after the eighth month, as compared to 4 and 1 percent among women in rural and nomadic areas respectively. The median length of pregnancy at

Percentage receiving antenatal care from skilled provider the type of residence

the first ANC visit for urban and rural is 5 months as compared with 4 months for nomadic women.

### 5.4 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 ANC services, respondents were asked whether they had been advised on complications or received certain screening tests during the ANC visits.

Table 5.3 presents information on the content of ANC 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, 31 percent of women took iron supplements during the pregnancy of their last birth while only 5 percent of women took drugs to treat intestinal worms. Among other ANC services, 93 percent of women who received ANC had their blood pressure measured, 84 percent had a blood sample taken and 77 percent had a urine sample taken.

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


Percent of women who received different components of antenatal care by place of residence


Figure 5.5 Components of antenatal care
Percent of women who received different components of ANC by region


Analysis by residence shows that women in rural and urban areas were more likely to receive ANC component or services compared to those in the nomadic areas. Forty-one percent of rural women and 39 percent of urban women took iron supplements compared to only 9 percent of nomadic women (Figure 5.4). Regionally, women in Galgaduud are more likely to take iron tablets than those in Mudug region at 44 percent and 19 percent, respectively (Figure 5.5) The proportion of women who took iron supplements generally increases with an increase in wealth status. Women in the highest quintile were more likely to take iron tablets than women in the lowest wealth quintile (43 percent and 8 percent, respectively).

### 5.5 Intermittent preventive treatment (IPTp) by women during pregnancy

Intermittent preventive treatment of malaria in pregnancy (IPTp) is a full therapeutic course of antimalarial medicine
given to pregnant women at routine ANC visits to prevent malaria. IPTp helps prevent maternal malaria episodes, maternal and foetal anaemia, placental parasitaemia, low birth weight, and neonatal mortality.

Table 5.4 shows the percentage of women aged $15-49$ with a live birth in the 2 years preceding the survey who received one or more doses of SP/Fansider to prevent malaria during their most recent pregnancy (IPTp3+) by background characteristics. Overall, 2 percent of women with a live birth in the 2 years preceding the survey reported having taken one or more doses of SP/Fansidar, 1 percent reported taking two or more doses, and less than one percent reported taking three or more doses.

Three percent of women in Galgaduud received one or more doses of SP/Fansidar during their most recent pregnancy compared to less than one percent of women in Mudug. The proportion of women receiving one or more doses of SP/Fansidar generally increases with an increase in wealth status. Four percent of women from the highest wealth quintile have received one or more doses of SP/Fansidar compared to 1 percent of women from the lowest wealth quintile.

## 5．6 Tetanus Toxoid

Tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus which is a leading cause of early infant death in many developing countries．It is often attributed to poor hygiene during delivery．For full protection of her new－born 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 dose for the next pregnancy．Five doses are considered to provide protection for a lifetime．

Tetanus is caused by a highly potent neurotoxin， tetanospasmin which is produced during the growth of the anaerobic bacterium．Tetanus usually occurs through infection of a skin injury with tetanus spores．

Tetanus spores introduced into an area of injury germinate to tetanus bacilli in the presence of necrotic tissue with reduced oxygen potential．Neonatal tetanus occurs through infection of the umbilicus when the cord is cut with an unclean instrument or when substances contaminated with tetanus spores are applied to the umbilical stump．（WHO，2018）

Table 5.5 indicates 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．

The findings show that the exposure of tetanus vaccination for pregnant women is very low in Galmudug State despite the need for vaccination．Overall， 20 percent of women received two or more tetanus toxoid injections during the pregnancy of their last live birth and 31 percent of births were protected against neonatal tetanus．

Analysis by residence shows that women in rural and urban areas are more likely to receive tetanus injections and had their last live birth protected against neonatal tetanus，compared to those in the nomadic areas． Twenty－seven percent of rural women and 25 percent of urban women got tetanus injections compared to only 4 percent of nomadic women．Similarly， 42 percent of rural women and 39 percent of urban women had their last live birth protected against neonatal tetanus compared to 7 percent of women in nomadic areas．

Uptake of tetanus during pregnancy generally increases with an increase in wealth status however，women from the highest wealth quintile are less likely to have both them and their neonates protected from tetanus compared to those from the fourth wealth quintile （Table 5．5）．

Regionally，women in Galgaduud are more likely to receive tetanus injections than women in Mudug at 28 percent and 12 percent，respectively．Similarly，births to women in Galgaduud are more likely to be protected against neonatal tetanus than births to women in Mudug at 42 percent and 20 percent，respectively．（Figure 5．6）．

Figure 5．6 Tetanus toxoid injections

Percentage receiving two or more injections and protected against neonatal tetanus by regions．


[^8]
### 5.7 Place of Delivery

Increasing delivery within a health facility is key in reducing health risks to both the mother and child. Appropriate medical attention and hygiene during delivery reduces the danger of complications and infection that can cause mortality in either the mother or baby.

Table 5.6 and Figure 5.7 present information on the percentage 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 Galmudug. Overall, 30 percent of births occurred in health facilities ( 23 percent in public and 7 percent in private health facilities). Younger mothers are more likely to deliver in a health facility than older mothers. Thirty-five percent of births to mothers less than age 20 were delivered at a health facility, as compared with 30 percent of births to mothers aged 20-34 and 25 percent to mothers aged 35-49.

Place of delivery differs greatly by residence, 46 percent of births in rural areas and 33 percent in urban areas were delivered in a health facility compared to only 6 percent in nomadic areas. Regionally, 37 percent of births in Galgaduud were delivered in a health facility, as compared to 22 percent of births in Mudug.

As presented in Figure 5.8, the number of ANC visits influences the likelihood of a woman delivering in a health facility. Sixty-seven percent of most recent births to mothers with four or more ANC visits were delivered

Figure 5.7 Place of delivery

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

at a health facility, compared to 19 percent of births to mothers with no ANC visits.

Wealth status has an effect on the place of delivery. Births to women in the highest wealth quintile are nine times more likely to take place in a health facility than births to women in the lowest wealth quintile (54 percent and 6 percent, respectively).

### 5.8 Assistance During Delivery

The higher proportion of births assisted by a skilled birth attendant in rural areas might be explained by the fact that Guricel town is considered as a rural settlement according to 1991 pre-war districts. However, it now has full characteristics of urban and is one of the largest populated towns in Galgaduud region. Moreover, it has a significant number of health facilities.

To decrease maternal and neonatal morbidity and mortality, there is a need for every child to be delivered with the assistance of a trained skilled birth attendant.

Table 5.7 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.

## Figure 5.8 Place of delivery by ANC visits

Percentage delivered in a health facility


Table 5.7 shows that 42 percent of births in Galmudug were delivered with the assistance of a skilled health professional i.e. doctor/clinical officer, nurse, midwife or auxiliary midwife. On the other hand, around half (52 percent) of births in Galmudug were delivered with the assistance of a traditional birth attendant (TBA) and 2 percent were delivered through C-section.

Analysis by age depicts that mothers under 20 years are more likely to be assisted by a skilled birth attendant at 45 percent than those aged 20-34 and those aged $35-49$ at 42 and 38 percent respectively.

As expected, the number of ANC visits influences the likelihood of a woman seeking skilled attendance during delivery. Among women who attended at least four ANC visits, 74 percent were delivered by a skilled attendant compared to 32 percent of those who did not attend any ANC visits.

Moreover, first-birth order and 2-3 birth order are more likely to be delivered by a skilled health personnel compared to higher birth orders. Similarly, women who delivered in a health facility were more likely to be assisted by skilled birth attendant than those delivered outside a health facility at 96 and 19 percent, respectively.

According to the place of residence, the rural has the highest percentage of women assisted by skilled health providers followed by those who are in the urban areas
and the lowest percentage are those in the nomadic areas ( 59 percent, 49 percent and 10 percent, respectively).

Regionally, the percentage of women assisted by skilled personnel is higher in Galgaduud at 47 percent and lower in Mudug at 37 percent.

As presented in Figure 5.9, the wealth quintile is strongly associated with the type of assistance at delivery. Births to women in the highest wealth quintile were more likely to get assistance at delivery from a skilled provider at 69 percent compared with births to women in the lowest wealth quintile at 11 percent.

Among births in the five years preceding the survey, 8 percent of the deliveries were assisted by a doctor, 34 percent by a nurse or midwife or auxiliary, and 5 percent by relatives or friends. Fifty-two percent of births were assisted by a traditional birth attendant (Figure 5.10)

### 5.9 Postnatal Care and Practices

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 all women to receive a health check-up within two days of delivery. To assess the extent of the

Figure 5.9 Assistance during delivery by Wealth Quintile

Percentage of births assisted by a skilled provider


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

use of postnatal care in Galmudug, 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 5.8 shows that only 13 percent of mothers had a postnatal check within the first two days after birth, within 10 percent reporting that they were checked within 4 hours after giving birth.

Women are more likely to seek postnatal care for their first births compared to the subsequent births. Additionally, among the women who gave birth in a health facility, 37 percent had a postnatal check-up within the first two days after birth. However, those who delivered at home or elsewhere did not receive any postnatal health check.

Analysis by place of residence shows that 18 percent of mothers in rural areas and 16 percent of mothers in urban areas received a postnatal check during the first 2 days after delivery compared to only 2 percent of mothers in nomadic areas.

Women in Galgaduud are more likely than those in Mudug to receive a postnatal check during the first 2 days after delivery ( 15 percent and 10 percent, respectively).

In addition, women from wealthier households were more likely to receive postnatal care within two days of delivery at 28 percent compared to women from poorer households at 2 percent.

Table 5.9 gives information about the percentage 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, only 10 percent of infants born in the 2 years before the survey received a postnatal check during the first 2 days after birth. Among the new-borns delivered in a health facility, 30 percent had their first postnatal checkup within two days of birth. The new-borns in urban and rural areas received postnatal care in the first two days after delivery at 15 percent and 13 percent, respectively compared to the new-borns and nomadic settlements 1 percent. Analysis by region shows that the percentage of new-borns who had their first postnatal check-up within two days after birth are higher in Galgaduud at 13 percent than in Mudug at 8 percent. Newborns whose mothers are in the highest wealth quintile have a greater chance of receiving a postnatal checkup within two days of birth as compared to those newborns whose mothers are in the lowest wealth quintile at 23 percent and 1 percent, respectively.

### 5.10. Obstetric Fistula

An 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 a fistula experiences an uncontrollable leakage of urine and/or faeces 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 Somalia. Vaginal fistula usually results from prolonged obstructed labor (Peterman, 2008).

In Galmudug, 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 difficult childbirth but may occur after sexual assault or after pelvic surgery.

Table 5.10 indicates the percentage of ever-married women aged 15-49 who have heard of obstetric fistula and the percentage who have experienced obstetric fistula. Fifty-nine percent of ever-married women had heard of the problem but 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 survey, and the actual prevalence may be much higher than 3 percent, constituting a severe threat to maternal health. Thus, the survey findings should be interpreted with caution.

Figure 5.11 shows that urban women were more likely to experience symptoms of fistula at 3 percent, compared to women in rural and nomadic areas at 2 percent each. Analysis by region shows women who experienced obstetric fistula are higher in Mudug than in Galgaduud at 3 percent and 2 percent, respectively.

### 5.11. Problems in Accessing Health Care

The survey included a series of questions designed to obtain information on the problems 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 1549 were asked whether each of the following factors would be a big problem or not for them in obtaining health services: getting permission to go to health facilities, getting money for treatment, the distance to the health facility, and not wanting to go alone. Table 5.11 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, 76 percent of women face at least one problem accessing health care. The majority at 69 percent perceived lack of money as a barrier to their access to health services, 66 percent cited the distance to a health facility as a challenge, while 51 percent mentioned not wanting to go alone as a deterrent. Forty-three percent of indicated obtaining permission as a barrier to access health services.

Figure 5.12 indicates that married women are more likely to have at least one problem accessing health care than divorced/widowed at 77 percent and 72 percent respectively. The nomadic women are more likely to have at least one problem accessing health care at 91 percent compared to the urban and rural women at 71 percent, 69 percent respectively. Analysis by region shows that the percentage of women who experienced at least one problem accessing health care is higher in

Figure 5.11 Obstetric fistula experience by place of residence and region

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


Mudug at 77 percent than in Galgaduud at 75 percent. The proportion of women having at least one problem accessing health care decreases with increasing wealth status; 98 percent of women the poorest are likely to encounter at least one problem accessing health care compared to 63 percent of those with the richest level of wealth quintile.

## Figure 5.12 Problems in accessing health care

Percent of women aged 15-49 who reported that they have problems accessing health care

List of Tables
Table 5.1 Antenatal care ..... 96
Table 5.2 Number of antenatal care visits and the timing of the visits ..... 97
Table 5.3 Components of antenatal care ..... 98
Table 5.4 Use of intermittent preventive treatment (IPTp) by women during pregnancy ..... 99
Table 5.5 Tetanus toxoid injections ..... 100
Table 5.6 Place of delivery ..... 101
Table 5.7 Assistance during delivery ..... 102
Table 5.8 Timing of first postnatal check-up for the mother ..... 103
Table 5.9 Timing of first postnatal check-up for the newborn ..... 104
Table 5.10 Obstetric fistula ..... 105
Table 5.11 Problems in accessing health care ..... 106

Percent distribution of ever married women age 15-49 who had a live birth in the 5 years preceding the survey by antenatal care (ANC) provider during the pregnance for the most resent birth and percentage receiving antenatal care from a skilled provider for the most resent birth, according to background charactristics, GMHDS 2020

| Background characteristics | Person providing assistance during ANC |  |  |  | Total | Skilled assistance during ANC $^{2}$ | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Doctor/ Clinical Officer | Nurse/ <br> Auxiliary <br> Midwife/ <br> Midwife | TBA ${ }^{1}$ /Other/ Relative | No ANC |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |
| <20 | 25.2 | 11.5 | 0.6 | 62.7 | 100.0 | 36.7 | 205 |
| 20-34 | 21.6 | 12.0 | 1.4 | 65.0 | 100.0 | 33.6 | 701 |
| 35-49 | 19.5 | 6.4 | 0.0 | 74.0 | 100.0 | 26.0 | 101 |
| Birth order |  |  |  |  |  |  |  |
| 1 | 22.2 | 11.3 | 1.1 | 65.5 | 100.0 | 33.4 | 1,005 |
| 2-3 | * | * | * | * | 100.0 | 100.0 | 1 |
| 4-5 | * | * | * | * | 100.0 | * | 0 |
| 6+ | * | * | * | * | 100.0 | * | 1 |
| Type of residence |  |  |  |  |  |  |  |
| Urban | 28.7 | 16.8 | 1.4 | 53.1 | 100.0 | 45.5 | 346 |
| Rural | 27.0 | 12.8 | 0.6 | 59.6 | 100.0 | 39.8 | 374 |
| Nomadic | 7.8 | 2.8 | 1.3 | 88.1 | 100.0 | 10.6 | 286 |
| Region |  |  |  |  |  |  |  |
| Mudug | 11.9 | 10.6 | 1.4 | 76.1 | 100.0 | 22.5 | 493 |
| Galgaduud | 31.9 | 12.0 | 0.7 | 55.3 | 100.0 | 44.0 | 513 |
| Education |  |  |  |  |  |  |  |
| No education | 19.5 | 9.1 | 1.0 | 70.5 | 100.0 | 28.5 | 815 |
| Primary | 33.1 | 22.6 | 1.0 | 43.3 | 100.0 | 55.7 | 147 |
| Secondary | (35.6) | (7.8) | (3.4) | (53.2) | 100.0 | (43.4) | 33 |
| Higher | * | * | * | * | 100.0 | * | 11 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 5.9 | 2.7 | 0.7 | 90.7 | 100.0 | 8.6 | 183 |
| Second | 12.7 | 7.1 | 1.6 | 78.6 | 100.0 | 19.8 | 151 |
| Middle | 24.7 | 13.4 | 1.6 | 60.3 | 100.0 | 38.1 | 287 |
| Fourth | 30.8 | 13.8 | 0.7 | 54.7 | 100.0 | 44.6 | 236 |
| Highest | 32.9 | 18.3 | 0.6 | 48.3 | 100.0 | 51.2 | 149 |
| Total | 22.1 | 11.3 | 1.1 | 65.5 | 100.0 | 33.5 | 1,006 |

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.
Figures in parentheses are based on 25-49 unweighted cases.
An asterisk indicates that a figure is based on fewer than 25 un-weighted cases and has been suppressed.
Note:Figures in parentheses are based on 25-49 unweighted cases.

Table 5.2
Number of antenatal care visits and the timing of the visits

| 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 GMHDS 2020 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Number and timing of | Type of residence |  |  | Total |
| ANC visits | Urban | Rural | Nomadic |  |
| Number of ANC visits |  |  |  |  |
| None | 53.1 | 59.6 | 88.1 | 65.5 |
| 1 | 8.7 | 7.0 | 4.6 | 6.9 |
| 2-3 | 23.4 | 24.9 | 5.6 | 18.9 |
| 4+ | 14.6 | 8.2 | 0.7 | 8.3 |
| Don't know/missing | 0.3 | 0.2 | 0.9 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of months pregnant at time of first ANC visit |  |  |  |  |
| No antenatal care | 53.1 | 59.6 | 88.1 | 65.5 |
| <4 | 13.4 | 13.4 | 5.1 | 11.1 |
| 4-5 | 15.6 | 11.1 | 2.4 | 10.2 |
| 6-7 | 11.5 | 12.0 | 2.3 | 9.1 |
| $8+$ | 6.4 | 3.7 | 1.1 | 3.9 |
| Don't know/missing | 0.0 | 0.2 | 0.9 | 0.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 346 | 374 | 286 | 1,006 |
| Median months pregnant at first visit (for those with ANC) | 5.0 | 5.0 | 4.0 | 5.0 |
| Number of women with ANC | 162 | 151 | 34 | 348 |

Table 5.3 Components of antenatal care

Among ever married women age 15-49 with a live birth in the 5 years preceding the survey, percentages who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent live birth; and among women receiving antenatal care (ANC) for the most recent live birth in the 5 years preceding the survey, percentage receiving specific antenatal services, according to background characteristics, GMHDS 2020

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

Among women who received ANC for
their most recent birth in the past 5 years, the percentage with the selected

|  |  | Number of women with a live birth in the | 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 |  |

Mother's age
at birth

| $<20$ | 32.3 | 3.9 | 205 | 93.8 | 74.9 | 84.4 | 76 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $20-34$ | 32.2 | 4.8 | 701 | 91.2 | 76.2 | 84.2 | 245 |
| $35-49$ | 24.5 | 4.9 | 101 | $(100.0)$ | $(92.4)$ | $(85.8)$ | 26 |


| Birth order |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1 | 29.3 | 3.2 | 312 | 92.3 | 81.1 | 85.0 | 103 |
| $2-3$ | 34.3 | 4.4 | 285 | 93.3 | 79.1 | 82.8 | 108 |
| $4-5$ | 30.5 | 4.4 | 205 | 93.5 | 72.5 | 83.9 | 76 |
| $6+$ | 31.6 | 7.5 | 205 | 89.9 | 72.9 | 86.9 | 60 |

Type of
residence

| Urban | 39.1 | 5.4 | 346 | 95.8 | 77.4 | 84.7 | 162 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Rural | 41.4 | 6.6 | 374 | 91.3 | 76.2 | 84.9 | 151 |
| Nomadic | 9.3 | 1.2 | 286 | 86.3 | 74.5 | 74.5 | 34 |
| Region |  |  |  |  |  |  |  |
| Mudug | 18.9 | 1.8 | 493 | 85.6 | 77.0 | 84.3 | 118 |
| Galgaduud | 43.5 | 7.4 | 513 | 96.0 | 77.2 | 84.5 | 229 |


| Education |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No education | 28.1 | 4.8 | 815 | 90.9 | 75.8 | 82.5 | 241 |
| Primary | 44.3 | 3.1 | 147 | 94.8 | 81.0 | 89.0 | 84 |
| Secondary | (44.1) | (6.0) | 33 | * | * | * | 15 |
| Higher | * | * | 11 | * | * | * | 8 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 8.3 | 0.9 | 183 | 75.7 | * | * | 17 |
| Second | 18.8 | 1.9 | 151 | (94.8) | (81.3) | (76.1) | 32 |
| Middle | 36.5 | 4.3 | 287 | 91.0 | 73.1 | 80.5 | 114 |
| Fourth | 44.2 | 9.6 | 236 | 96.8 | 76.4 | 86.1 | 107 |
| Highest | 42.6 | 4.9 | 149 | 91.4 | 83.2 | 91.4 | 77 |
| Total 15-49 | 31.4 | 4.7 | 1,006 | 92.5 | 77.2 | 84.4 | 348 |

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 Use of intermittent preventive treatment (IPTp) by women during pregnancy

Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy that resulted in the last live birth, received one or more doses of SP/Fansidar, received two or more doses of SP/Fansidar, and received three or more doses of SP/Fansidar according to background characteristics, GMHDS 2020

| Background characteristic | Percentage who received one or more doses of SP/ Fansidar | Percentage who received two or more doses of SP/ Fansidar | Percentage who received three or more doses of SP/ Fansidar | Number of women with a live birth in the $\mathbf{2}$ years preceding the survey |
| :---: | :---: | :---: | :---: | :---: |
| Type of residence |  |  |  |  |
| Urban | 2.2 | 0.5 | 0.5 | 226 |
| Rural | 2.8 | 1.1 | 0.0 | 244 |
| Nomadic | 0.5 | 0.2 | 0.2 | 191 |
| Region |  |  |  |  |
| Mudug | 0.3 | 0.0 | 0.0 | 302 |
| Galgaduud | 3.3 | 1.2 | 0.4 | 359 |
| Education |  |  |  |  |
| No education | 1.4 | 0.7 | 0.2 | 531 |
| Primary | 3.8 | 0.4 | 0.4 | 104 |
| Secondary | * | * | * | 19 |
| Higher | * | * | * | 6 |
| Wealth quintile |  |  |  |  |
| Lowest | 0.7 | 0.4 | 0.4 | 116 |
| Second | 1.3 | 1.3 | 0.0 | 103 |
| Middle | 1.3 | 0.8 | 0.0 | 179 |
| Fourth | 2.6 | 0.6 | 0.6 | 166 |
| Highest | 3.9 | 0.0 | 0.0 | 96 |
| Total 15-49 | 1.9 | 0.6 | 0.2 | 661 |
| Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. |  |  |  |  |

## Table 5.5 Tetanus toxoid injections

Among mothers age 15-49 with a live birth in the 5 years preceding the survey, percentage receiving two or more tetanus toxoid injections during the pregnancy for the most recent live birth and percentage whose most recent live birth was protected against neonatal tetanus, according to background characteristics, GMHDS 2020

| Background characteristics | Percentage receiving two or more injections during last pregnancy | Percentage whose last live birth was protected against neonatal tetanus ${ }^{1}$ | Number of mothers |
| :---: | :---: | :---: | :---: |
| Mother's age at birth |  |  |  |
| <20 | 22.9 | 33.1 | 205 |
| 20-34 | 19.1 | 30.0 | 701 |
| 35-49 | 19.2 | 33.9 | 101 |
| Birth order |  |  |  |
| 1 | 21.3 | 34.1 | 251 |
| 2-3 | 19.8 | 30.2 | 632 |
| 4-5 | 17.0 | 28.3 | 120 |
| 6+ | * | * | 3 |
| Type of residence |  |  |  |
| Urban | 24.9 | 39.0 | 346 |
| Rural | 27.1 | 42.1 | 374 |
| Nomadic | 4.4 | 7.0 | 286 |
| Region |  |  |  |
| Mudug | 12.0 | 19.6 | 493 |
| Galgaduud | 27.5 | 42.0 | 513 |
| Education |  |  |  |
| No education | 17.4 | 27.2 | 815 |
| Primary | 31.9 | 48.1 | 147 |
| Secondary | (28.7) | (42.5) | 33 |
| Higher | * | * | 11 |
| Wealth quintile |  |  |  |
| Lowest | 4.2 | 5.6 | 183 |
| Second | 11.8 | 21.0 | 151 |
| Middle | 22.8 | 35.1 | 287 |
| Fourth | 29.5 | 44.9 | 236 |
| Highest | 26.6 | 42.7 | 149 |
| Total | 19.9 | 31.0 | 1,006 |

${ }^{1}$ 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 un-weighted cases and has been suppressed.

Table 5.6 Place of delivery

Percent distribution of live births in the 5 years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, GMHDS 2020

| Background characteristics | Health facility |  | Home | Other | Total | Percentage delivered in a health facility | Number of births |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Public sector | Private sector |  |  |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |
| <20 | 27.0 | 7.6 | 65.1 | 0.4 | 100.0 | 34.6 | 285 |
| 20-34 | 22.7 | 7.3 | 69.7 | 0.3 | 100.0 | 30.0 | 1,738 |
| 35-49 | 19.5 | 5.5 | 75.0 | 0.0 | 100.0 | 25.0 | 250 |
| Birth order |  |  |  |  |  |  |  |
| 1 | 23.2 | 7.6 | 68.9 | 0.4 | 100.0 | 30.8 | 966 |
| 2-3 | 22.6 | 6.9 | 70.3 | 0.2 | 100.0 | 29.5 | 1,164 |
| 4-5 | 22.5 | 6.4 | 71.0 | 0.0 | 100.0 | 29.0 | 138 |
| 6+ | * | * | * | * | 100.0 | * | 6 |

Antenatal care
visits ${ }^{1}$

| None | 14.4 | 4.7 | 80.7 | 0.2 | 100.0 | 19.1 | 659 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $1-3$ | 44.3 | 12.4 | 43.0 | 0.3 | 100.0 | 56.6 | 261 |
| $4+$ | 45.0 | 22.2 | 32.8 | 0.0 | 100.0 | 67.2 | 85 |
| $\left.\begin{array}{llll}\text { Don't know/ } & * & * & * \\ \text { missing } & & & \end{array}\right)$ | 6 |  |  |  |  |  |  |

Type of
residence

| Urban | 27.1 | 5.5 | 67.2 | 0.3 | 100.0 | 32.5 | 793 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural | 33.3 | 12.7 | 53.6 | 0.5 | 100.0 | 45.9 | 845 |
| Nomadic | 3.9 | 1.8 | 94.3 | 0.0 | 100.0 | 5.7 | 636 |
| Region |  |  |  |  |  |  |  |
| Mudug | 18.8 | 3.1 | 77.9 | 0.2 | 100.0 | 21.8 | 1,075 |
| Galgaduud | 26.6 | 10.8 | 62.3 | 0.3 | 100.0 | 37.3 | 1,198 |
| Education |  |  |  |  |  |  |  |
| No education | 18.8 | 6.1 | 74.9 | 0.2 | 100.0 | 24.9 | 1,851 |
| Primary | 40.9 | 10.2 | 48.1 | 0.8 | 100.0 | 51.1 | 332 |
| Secondary | 41.1 | 16.4 | 42.6 | 0 | 100.0 | 57.4 | 67 |
| Higher | * | * | * | * | 100.0 | * | 24 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 3.7 | 1.7 | 94.5 | 0.0 | 100.0 | 5.5 | 410 |
| Second | 7.7 | 2.3 | 90.1 | 0.0 | 100.0 | 9.9 | 333 |
| Middle | 23.6 | 10.4 | 65.3 | 0.6 | 100.0 | 34.1 | 650 |
| Fourth | 32.9 | 8.1 | 59.0 | 0.0 | 100.0 | 41.0 | 546 |
| Highest | 43.7 | 10.5 | 45.0 | 0.8 | 100.0 | 54.2 | 334 |
| Total | 22.9 | 7.1 | 69.7 | 0.3 | 100.0 | 30.0 | 2,273 |

[^9]
## Table 5.7 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, GMHDS 2020

| Background characteristics | Person providing assistance during delivery |  |  |  |  |  | Percentage delivered by skilled provider ${ }^{1}$ | Percentage delivered by C-section | Number of births |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Doctor/ Clinical Officer | Nurse/ <br> Auxiliary Midwife/ Midwife | Traditional birth attendant | Relative/other | No one | Total |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |
| $<20$ | 9.0 | 36.4 | 48.5 | 5.8 | 0.3 | 100.0 | 45.4 | 1.8 | 285 |
| 20-34 | 7.8 | 34.2 | 52.0 | 5.0 | 1.0 | 100.0 | 42.0 | 1.8 | 1738 |
| 35-49 | 4.9 | 33.0 | 55.9 | 5.2 | 1.1 | 100.0 | 37.9 | 1.2 | 250 |
| Birth order |  |  |  |  |  |  |  |  |  |
| 1 | 8.5 | 33.8 | 51.2 | 5.7 | 0.8 | 100.0 | 42.3 | 2.5 | 966 |
| 2-3 | 7.2 | 35.0 | 51.9 | 4.8 | 1.1 | 100.0 | 42.2 | 1.2 | 1164 |
| 4-5 | 5.0 | 32.5 | 58.3 | 3.3 | 0.9 | 100.0 | 37.5 | 0.6 | 138 |
| $6+$ | * | * | * | * | * | 100.0 | * | * | 6 |
| Antenatal care visits ${ }^{2}$ |  |  |  |  |  |  |  |  |  |
| None | 5.6 | 26.8 | 60.0 | 6.1 | 1.6 | 100.0 | 32.4 | 1.8 | 659 |
| 1-3 | 13.8 | 53.0 | 29.4 | 3.3 | 0.5 | 100.0 | 66.8 | 4.6 | 261 |
| 4+ | 15.5 | 58.5 | 26.1 | 0.0 | 0.0 | 100.0 | 73.9 | 3.7 | 85 |
| Don't know/ missing | * | * | * | * | * | 100.0 | * | * | 6 |
| Place of delivery |  |  |  |  |  |  |  |  |  |
| Health facility | 23.5 | 72.4 | 3.5 | 0.1 | 0.4 | 100.0 | 95.9 | 5.8 | 682 |
| Elsewhere | 0.8 | 18.0 | 72.8 | 7.2 | 1.2 | 100.0 | 18.8 | 0 | 1591 |
| Type of residence |  |  |  |  |  |  |  |  |  |
| Urban | 9.8 | 39.3 | 48.9 | 1.9 | 0.1 | 100.0 | 49.1 | 1.7 | 793 |
| Rural | 10.9 | 48.4 | 38.4 | 1.7 | 0.7 | 100.0 | 59.3 | 2.9 | 845 |
| Nomadic | 0.4 | 9.7 | 74.0 | 13.6 | 2.4 | 100.0 | 10.0 | 0.3 | 636 |
| Region |  |  |  |  |  |  |  |  |  |
| Mudug | 6.6 | 29.9 | 55.2 | 6.7 | 1.6 | 100.0 | 36.5 | 1.8 | 1075 |
| Galgaduud | 8.5 | 38.4 | 49.1 | 3.6 | 0.4 | 100.0 | 46.9 | 1.7 | 1198 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 6.3 | 30.1 | 56.5 | 5.9 | 1.1 | 100.0 | 36.4 | 1.4 | 1851 |
| Primary | 12.9 | 51.2 | 33.9 | 1.8 | 0.3 | 100.0 | 64.1 | 2.9 | 332 |
| Secondary | 12.5 | 62.0 | 25.5 | 0.0 | 0.0 | 100.0 | 74.5 | 3.9 | 67 |
| Higher | * | * | * | * | * | 100.0 | * | * | 24 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 0.3 | 10.6 | 74.6 | 13.6 | 0.8 | 100.0 | 11.0 | 0.1 | 410 |
| Second | 1.3 | 13.4 | 70.5 | 11.1 | 3.7 | 100.0 | 14.7 | 0.7 | 333 |
| Middle | 9.3 | 37.6 | 50.4 | 2.3 | 0.4 | 100.0 | 46.8 | 1.3 | 650 |
| Fourth | 10.1 | 49.5 | 38.8 | 1.3 | 0.3 | 100.0 | 59.6 | 2.6 | 546 |
| Highest | 15.5 | 53.4 | 30.5 | 0.3 | 0.4 | 100.0 | 68.8 | 4.2 | 334 |
| Total | 7.6 | 34.4 | 52.0 | 5.1 | 1.0 | 100.0 | 42.0 | 1.7 | 2273 |

[^10]Table 5.8 Timing of first postnatal check-up for the mother
Among women age 15-49 giving birth in the 2 years preceding the survey, the percent distribution of the mother's first postnatal checkup 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 2 days after giving birth, according to background characteristics, GMHDS 2020

| Background characteristics | Time after delivery of mother's first postnatal check-up |  |  |  |  | Total | Percentage of women with a postnatal checkup in the first two days after birth |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than 4 hours | $4-23$ hours | 1-2 days | Don't know | No postnatal check-up ${ }^{1}$ |  |  | Number of women |

Mother's age at
birth

| $<20$ | 11.9 | 3.0 | 1.6 | 0.0 | 83.5 | 100.0 | 16.5 | 164 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $20-34$ | 9.6 | 1.4 | 0.3 | 0.7 | 88.0 | 100.0 | 11.3 | 453 |
| $35-49$ | $(11.1)$ | $(2.7)$ | $(1.1)$ | $(0.0)$ | $(85.2)$ | 100.0 | $(14.8)$ | 42 |

Birth order

| 1 | 19.2 | 1.5 | 1.3 | 0.9 | 77.2 | 100.0 | 21.9 | 98 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-3 | 9.0 | 2.0 | 0.8 | 0.5 | 87.7 | 100.0 | 11.8 | 450 |
| 4+ | 7.7 | 1.3 | 0.0 | 0.0 | 91.0 | 100.0 | 9.0 | 112 |
| Place of delivery |  |  |  |  |  |  |  |  |
| Health facility | 29.8 | 5.3 | 2.0 | 1.4 | 61.5 | 100.0 | 37.1 | 228 |
| Elsewhere | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 100.0 | 0.0 | 432 |
| Type of residence |  |  |  |  |  |  |  |  |
| Urban | 14.2 | 2.1 | 0.0 | 0.8 | 82.9 | 100.0 | 16.3 | 226 |
| Rural | 13.7 | 3.0 | 1.2 | 0.6 | 81.5 | 100.0 | 17.9 | 243 |
| Nomadic | 1.4 | 0.0 | 0.9 | 0.0 | 97.8 | 100.0 | 2.2 | 191 |
| Region |  |  |  |  |  |  |  |  |
| Mudug | 8.7 | 0.9 | 0.4 | 0.6 | 89.5 | 100.0 | 10.0 | 301 |
| Galgaduud | 11.6 | 2.7 | 0.9 | 0.4 | 84.4 | 100.0 | 15.2 | 359 |
| Education |  |  |  |  |  |  |  |  |
| No education | 7.6 | 1.1 | 0.6 | 0.6 | 90.1 | 100.0 | 9.3 | 530 |
| Primary | 20.0 | 5.9 | 1.4 | 0.0 | 72.7 | 100.0 | 27.3 | 104 |
| Secondary | * | * | * | * | * | 100.0 | * | 19 |
| Higher | * | * | * | * | * | 100.0 | * | 6 |

Education

| Wealth quintile |  |  |  |  |  | 100 | 116 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Lowest | 1.2 | 0.0 | 0.4 | 0.0 | 98.4 | 100.0 | 3.8 | 103 |
| Second | 2.6 | 0.0 | 1.2 | 0.0 | 96.2 | 100.0 | 11.3 | 179 |
| Middle | 10.8 | 0.5 | 0.0 | 0.0 | 88.7 | 100.0 | 19.3 | 166 |
| Fourth | 13.4 | 4.2 | 1.8 | 1.4 | 79.3 | 100.0 | 27.6 | 96 |
| Highest | 23.1 | 4.5 | 0.0 | 0.9 | 71.5 | 100.0 | 12.8 | 660 |
| Total | 10.3 | 1.8 | 0.7 | 0.5 | 86.7 | 100.0 |  |  |

${ }^{1}$ Includes women who received a check-up after 41 days
Note:Figures in parentheses are based on 25-49 unweighted cases.
An asterisk indicates that a figure is based on fewer than 25 un-weighted cases and has been suppressed.

Table 5.9 Timing of first postnatal check-up 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, GMHDS 2020 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristics | Time after birth of newborn's first postnatal check-up |  |  |  |  |  | Percentage of births with a postnatal check-up in the first two days after birth | Number of births |
|  | 1-3 hours | 4-23 hours | 1-2 days | Don't know | No postnatal check-up ${ }^{1}$ | Total |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |  |
| <20 | 9.4 | 1.4 | 0.0 | 0.0 | 89.2 | 100.0 | 10.8 | 164 |
| 20-34 | 8.2 | 1.2 | 0.2 | 0.4 | 90.0 | 100.0 | 9.6 | 453 |
| 35-49 | (12.8) | (0.0) | (4.7) | (0.0) | (82.5) | 100.0 | (17.5) | 42 |
| Birth order |  |  |  |  |  |  |  |  |
| 1 | 14.7 | 1.5 | 1.8 | 0.0 | 82.0 | 100.0 | 18.0 | 98 |
| 2-3 | 7.9 | 0.9 | 0.2 | 0.4 | 90.5 | 100.0 | 9.0 | 450 |
| 4+ | 7.2 | 2.1 | 0.0 | 0.0 | 90.7 | 100.0 | 9.3 | 112 |
| Place of delivery |  |  |  |  |  |  |  |  |
| Health facility | 25.4 | 3.4 | 1.3 | 0.8 | 69.0 | 100.0 | 30.1 | 228 |
| Elsewhere | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 100.0 | 0.0 | 432 |
| Type of residence |  |  |  |  |  |  |  |  |
| Urban | 12.9 | 1.1 | 0.9 | 0.0 | 85.1 | 100.0 | 14.9 | 226 |
| Rural | 10.8 | 2.2 | 0.4 | 0.6 | 86.1 | 100.0 | 13.3 | 243 |
| Nomadic | 1.4 | 0.0 | 0.0 | 0.2 | 98.4 | 100.0 | 1.4 | 191 |
| Region |  |  |  |  |  |  |  |  |
| Mudug | 6.1 | 1.1 | 0.6 | 0.0 | 92.2 | 100.0 | 7.8 | 301 |
| Galgaduud | 11.0 | 1.2 | 0.3 | 0.5 | 86.9 | 100.0 | 12.6 | 359 |
| Education |  |  |  |  |  |  |  |  |
| No education | 7.2 | 1.0 | 0.4 | 0.4 | 91.0 | 100.0 | 8.6 | 530 |
| Primary | 13.4 | 2.2 | 0.0 | 0.0 | 84.3 | 100.0 | 15.7 | 104 |
| Secondary | * | * | * | * | * | 100.0 | * | 19 |
| Higher | * | * | * | * | * | 100.0 | * | 6 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 1.2 | 0.0 | 0.0 | 0.4 | 98.4 | 100.0 | 1.2 | 116 |
| Second | 1.2 | 0.0 | 1.1 | 0.0 | 97.7 | 100.0 | 2.3 | 103 |
| Middle | 10.5 | 0.5 | 0.5 | 0.0 | 88.5 | 100.0 | 11.5 | 179 |
| Fourth | 11.9 | 1.4 | 0.0 | 0.9 | 85.8 | 100.0 | 13.4 | 166 |
| Highest | 17.4 | 4.8 | 0.9 | 0.0 | 76.9 | 100.0 | 23.1 | 96 |
| Total | 8.8 | 1.2 | 0.4 | 0.3 | 89.3 | 100.0 | 10.4 | 660 |

${ }^{1}$ Includes newborns who received a checkup after the first week
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 5.10 Obstetric fistula

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

| Background characteristic | Heard obstetric fistula | Experienced obstetric fistula | Number of ever-married women |
| :---: | :---: | :---: | :---: |
| Age |  |  |  |
| 15-19 | 47.7 | 0.0 | 104 |
| 20-24 | 55.7 | 1.3 | 248 |
| 25-29 | 57.6 | 3.0 | 338 |
| 30-34 | 61.6 | 1.7 | 244 |
| 35-39 | 60.3 | 4.4 | 230 |
| 40-44 | 62.8 | 3.5 | 107 |
| 45-49 | 70.3 | 4.8 | 54 |
| Type of residence |  |  |  |
| Urban | 63.2 | 3.1 | 464 |
| Rural | 57.7 | 2.2 | 488 |
| Nomadic | 54.0 | 2.4 | 373 |
| Region |  |  |  |
| Mudug | 56.1 | 2.7 | 679 |
| Galgaduud | 61.1 | 2.4 | 645 |
| Education |  |  |  |
| No education | 57.7 | 2.4 | 1071 |
| Primary | 66.5 | 3.1 | 194 |
| Secondary | (49.1) | (4.0) | 43 |
| Higher | * | * | 16 |
| Wealth quintile |  |  |  |
| Lowest | 59.2 | 2.9 | 244 |
| Second | 50.6 | 2.0 | 186 |
| Middle | 57.6 | 3.2 | 359 |
| Fourth | 61.1 | 1.5 | 317 |
| Highest | 62.7 | 3.2 | 217 |
| Total | 58.6 | 2.6 | 1324 |

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 5.11 Problems in accessing health care

Percentage of women age 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, GMHDS 2020

| Background characteristics | Problems in accessing health care |  |  |  |  | Number of evermarried 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 |  |
| Age |  |  |  |  |  |  |
| 15-19 | 36.8 | 59.2 | 58.0 | 42.6 | 70.5 | 104 |
| 20-34 | 42.3 | 69.0 | 65.8 | 50.5 | 76.2 | 830 |
| 35-49 | 45.4 | 70.1 | 67.0 | 53.8 | 76.5 | 390 |

Number of living
children

| 0 | * | * | * | * | * | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-2 | * | * | * | * | * | 22 |
| 3-4 | 47.7 | 70.2 | 64.3 | 61.6 | 70.5 | 72 |
| 5+ | 42.5 | 68.3 | 65.6 | 50.1 | 76.2 | 1,229 |
| Marital status |  |  |  |  |  |  |
| Married | 0.0 | 69.5 | 66.9 | 50.4 | 76.6 | 1,103 |
| Divorced/ widowed | 39.3 | 64.0 | 58.7 | 53.1 | 72.3 | 221 |
| Employed past 12 months |  |  |  |  |  |  |
| Not employed | 42.6 | 69.1 | 66.2 | 51.2 | 76.4 | 1,193 |
| Employed for cash | 43.2 | 63.2 | 58.9 | 46.4 | 70.8 | 116 |
| Employed not for cash | * | * | * | * | * | 15 |

Type of
residence

| Urban | 41.4 | 62.8 | 56.5 | 41.7 | 71.1 | 464 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural | 40.8 | 61.6 | 59.0 | 45.4 | 68.6 | 488 |
| Nomadic | 47.1 | 85.0 | 85.5 | 69.2 | 91.2 | 373 |
| Region |  |  |  |  |  |  |
| Mudug | 38.0 | 69.5 | 65.5 | 49.1 | 76.5 | 679 |
| Galgaduud | 47.8 | 67.6 | 65.6 | 52.6 | 75.2 | 645 |
| Education |  |  |  |  |  |  |
| No education | 44.1 | 71.7 | 69.2 | 53.4 | 78.5 | 1,071 |
| Primary | 38.9 | 57.1 | 53.6 | 41.2 | 67.7 | 194 |
| Secondary | (36.8) | (57.4) | (42.8) | (38.8) | (59.4) | 43 |
| Higher | * | * | * | * | * | 16 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 54.8 | 91.6 | 92.1 | 73.6 | 97.5 | 244 |
| Second | 37.6 | 77.8 | 76.0 | 57.0 | 83.1 | 186 |
| Middle | 48.4 | 68.3 | 65.8 | 50.5 | 72.4 | 359 |
| Fourth | 38.0 | 56.3 | 52.4 | 42.7 | 67.8 | 317 |
| Highest | 31.4 | 53.1 | 45.6 | 32.3 | 62.5 | 217 |
| Total | 42.8 | 68.6 | 65.6 | 50.8 | 75.9 | 1,324 |

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.


Child Health


## Key Findings

## Birth weight:

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

## Vaccinations:

9 percent of children aged 12-23 months had received all basic vaccinations (Bacillus CalmetteGuérin (BCG), three doses of pentavalent and polio vaccines, and one dose of the measles vaccine) at any time before the survey. $\mathbf{3 0}$ percent of children had received BCG at any time before the survey, 31 percent had received the first dose of pentavalent vaccine, $\mathbf{3 1}$ percent received the first dose of polio vaccine and $\mathbf{1 2}$ percent had received the third does of polio. Twelve percent had received the measles vaccine.

Symptoms of acute respiratory infection (ARI):
3 percent of children under the age of five had symptoms of ARI in the two weeks before the survey, $\mathbf{2 5}$ percent of these children had treatment or advice sought on the same or next day.

Fever:
7 percent of children under-five had fever during the two weeks preceding the survey; 32 percent of these children, advice or treatment was sought on the same or next day.

Diarrhea:
5 percent of children under age five had diarrhea in the 2 weeks before the survey; 49 percent of these children advice or treatment was sought from a health facility.

Stool disposal:
47 percent of children under-five living with their mothers had their last stool safely disposed of.

This chapter presents information on child health and survival. This includes characteristics of the neonate (birth weight and size), the vaccination status of young children, and treatment practices (particularly contact with health services) among children suffering from three childhood illnesses: acute respiratory infection (ARI), fever, and diarrhea. Because appropriate sanitary practices can help prevent and reduce the severity of diarrheal disease. Information is also provided on how children's fecal matter is disposed. Results obtained from this survey are expected to assist policymakers and program managers as they are implementing and monitoring the current health sector strategic plan of Galmudug State. It will also help in formulating appropriate interventions to prevent deaths from childhood illnesses, and improve the health status of children in Galmudug State.

### 6.1 Birth Weight

Low birth weight (LBW) is defined by the World Health Organization (WHO) as weight at birth less than 2500 $\mathrm{g}(5.5 \mathrm{lb}$.$) . Low birth weight (LBW) continues to be$ a significant public health problem globally and is associated with a range of both short and long-term consequences. Overall, it is estimated that 15 to 20 percent of all births worldwide are LBW, representing more than 20 million births a year. The goal is to achieve a 30 percent reduction in the number of infants born with a weight lower than 2500 g by the year 2025. This would translate into a 3.9 percent relative reduction per year between 2012 and 2025 and a reduction from approximately 20 million to about 14 million infants with low weight at birth (WHO, 2012).

[^11]For births in the five years preceding the survey, birth weight was recorded in the Ever-Married Woman's Questionnaire is available from either a written record or the mother's recall. Because birth weight may not be 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 proxy for the weight of the child.

Table 6.1 presents information on child weight at birth by background characteristics. Nine percent of births occurring in the five years preceding the survey had a reported birth weight. Among the children with known birth weights, 13 percent weighed less than 2.5 kg at birth.

As presented in Figure 6.1, analysis by region shows that the proportion of children with LBW is higher in Mudug region at 17 percent compared to 10 percent in Galgaduud region. According to the results, more underweight births were reported among younger mothers, at 16 percent for mothers younger than 20 years compared to 13 percent reported by mothers of aged 20-34 (Table 6.1).

### 6.2 Vaccination of Children

According to WHO, a child is considered fully vaccinated if he or she has received BCG vaccination against tuberculosis; three doses of diphtheria, pertussis and tetanus (DPT); at least three doses of polio; and one dose of the measles. The GMHDS 2020 collected information on vaccination coverage in two ways: from vaccination cards shown to the interviewer and from mothers' verbal reports. If the cards were available, the interviewer copied the vaccination dates directly into the questionnaire. When there was no vaccination card for the child or if a vaccine had not been recorded on the vaccination card as being given, the respondent was asked to recall the vaccines given to her child.

Table 6.2 presents the vaccination coverage for children aged 12-23 months, the age by which they should have received all vaccinations. Mothers presented health
cards for 4 percent of children aged 12-23 months. Nine percent of children aged 12-23 months are fully vaccinated, meaning that they received all the basic vaccinations (one BCG vaccine, three doses of pentavalent and polio vaccines, and one dose of measles vaccine) (Figure 6.2).

With respect to coverage of specific vaccines among children aged 12-23 months (based on the vaccination card or the mother's report), 30 percent received the BCG vaccine and 31 percent received the first dose of DPTHepB- Hib prior to the survey. Only 10 percent of children received the third dose of DPT-HepB-Hib. Twelve percent received the measles vaccine, 30 percent received the recommended polio zero dose at birth, 31 percent received the first dose of polio, and 13 percent received the second dose of polio. Twelve percent of children had received the third dose of the polio vaccine (Table 6.2)

The percentage of children fully vaccinated varies substantially by place of residence. Fourteen percent of children in urban areas had received all basic vaccinations, compared to 2 percent of children in nomadic areas. Analysis by region also depicts that Galgaduud region has a higher proportion of children who received all the basic vaccinations at 11 percent as compared to 6 percent in Mudug region (Table 6.2).

Figure 6.2 Vaccination Coverage for children age 12-23 months

Percent of children aged 12-23 months who received specific vaccines at any time before the survey


### 6.3 Symptoms of Acute Respiratory Infection

Acute Respiratory Infection (ARI) is one of the leading causes of childhood morbidity and mortality throughout the world. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by ARI. In the GMHDS 2020, the prevalence of ARI was estimated by asking mothers whether their children under age 5 had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the survey. These symptoms are compatible with ARI. It should be noted that the morbidity data collected are subjective-that is, they are based on the mother's perception of illness with no validation from medical personnel-and that the prevalence of ARI is subject to seasonality.

Table 6.3 shows the percentage of children under age 5 with symptoms of ARI during the two weeks preceding the survey and the actions that mothers took in response to their children's illness according to selected background characteristics. Overall, 3 percent of children under age 5 showed ARI symptoms at some point in the two weeks preceding the survey.

Differences in the proportions of children with ARI are observed by background characteristics. The prevalence of ARI increases from 2 percent of the children less than 6 months to 4 percent among those aged 12-23 months. After age 23 months, ARI prevalence decreases with increasing age (Figure 6.3). There is no gender difference in the children reporting with symptoms of

ARI (3 percent for both). The proportion of children with ARI is higher in Galgaduud region as compared to Mudug region (4 percent and 1 percent, respectively).

As presented in Table 6.3, analysis by place of residence shows that there are variations in the prevalence of ARI. Rural areas reported the highest percentage of children with symptoms of ARI at 4 percent compared to nomadic areas with the lowest proportions at 1 percent.

Mothers who reported that their children had ARI symptoms were asked about the actions they had taken to treat the illness. Among children with ARI symptoms, advice or treatment was sought from a health facility or a health provider for 25 percent of children while 20 percent of children with ARI symptoms received antibiotics (Table 6.3)

### 6.4 Fever

Fever is a major manifestation of malaria and other acute infections in children. Malaria contributes to high levels of anemia and mortality in young children. While fever can occur year-round, malaria is more prevalent after the end of the rainy season.

Table 6.4 shows the percentage of children under age 5 presenting with fever during the 2 weeks preceding the survey and the percentage receiving various treatments, by selected background characteristics. Overall, 7 percent of children under age five had fever during the

Figure 6.3 Prevalence and treatment of symptoms of ARI by age

Percentage with symptoms of ARI symptoms in the 2 weeks preceding the survey


Percent of children with fever in the two weeks preceeding the survey

two weeks preceding the survey. Advice or treatment was sought for 27 percent of these children, while 17 percent took antibiotic drugs.

Differences in the proportions of children with fever are observed by background characteristics. There was striking variation in fever prevalence by sex of the child. Males are more likely to have a fever than females ( 9 percent and 5 percent, respectively). The prevalence of fever varies with children's ages. Children aged 12-23 months are more likely to be sick with fever at 12 percent than children in other age groups (Figure 6.4). The proportion of children under-five reported as having had fever in the two weeks before the survey is higher in Galgaduud region at 10 percent compared to Mudug region at 4 percent.

Figure 6.5 shows that the proportion of children with fever was higher in rural and urban areas at 8 percent (each) compared to 5 percent in nomadic areas.

### 6.5 Diarrheal Diseases

Dehydration caused by severe diarrhea is a major cause of morbidity and mortality among young children, even though the condition can be easily treated with oral rehydration therapy (ORT).

Exposure to diarrhea-causing agents frequently relates to the use of contaminated water and unhygienic practices in food preparation and disposal of excreta. The survey collected information on the prevalence of diarrhea among children in Galmudug State by asking mothers whether their children under the age of five 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 Prevalence of fever by place of residence

Percentage of children with fever by place of residence


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


Table 6.5 shows the percentage of children under－five who had diarrhea during the two weeks preceding the survey by selected background characteristics．Five percent of children under－five had a diarrhea episode in the two weeks preceding the survey and among those who had diarrhea， 49 percent sought advice or treatment．

Figure 6.6 shows that the prevalence of diarrhea increases from 6 percent among children less than 6 months to 9 percent among children aged 6－11 and 12－23 months． This observation is expected because children aged 6 months and older are typically introduced to liquids in addition to breast milk and complementary foods．After the age of 23 months，it generally declines due to the child＇s adaption of complementary foods．

There is slight variation by place of residence in the prevalence of diarrhea．The prevalence of diarrhea among children in urban areas，rural and nomadic is 6 percent， 5 percent and 4 percent respectively．Similarly，

Galgaduud region reported a slightly higher proportion of children with diarrhea than children in Mudug region （ 6 percent and 4 percent respectively）．

## 6．6 Treatment of Childhood Illnesses

During the 2 weeks before the survey， 3 percent of children under－five had symptoms of ARI，while 7 percent had a fever and 5 percent had diarrhea．Advice or treatment was sought for 25 percent of children with ARI， 32 percent of children with a fever，and 49 percent of children with diarrhea（Figure 6．7）．

Figure 6．7 Prevalence and treatment of childhood illness

Percent of children under age 5 with symproms
in the 2 weeks before the survey

Percent of children under age 5 treated for childhood
illnesses in the 2 weeks preceding the survey
49.0


### 6.7 Disposal of Children's Stools

The proper disposal of children's faeces is important in preventing the spread of disease. If faeces are left uncontained, the disease may spread by direct contact or through animal contact. Children's stools are considered to be safely disposed of if the child uses a toilet or latrine, the child's stool is put or rinsed into a toilet or latrine, or the stool is buried.

Table 6.6 presents the percent distribution of children under-five living with their mother by the manner of disposal of the child's last faecal matter. Forty-seven percent of children's stools are disposed of safely. Children in rural areas and urban areas are more likely to have their stool safely disposed of at 63 percent and 59 percent respectively than those in nomadic areas at 11 percent.

There is a slight variation by region, the percentage of children whose stools are disposed of safely is slightly higher in Galgaduud at 48 percent than in Mudug region at 46 percent.

## List of Tables

Table 6.1 Child's weight and size at birth ..... 116
Table 6.2 Vaccinations by background characteristics ..... 117
Table 6.3 Prevalence and treatment of symptoms of ARI ..... 118
Table 6.4 Prevalence and treatment of fever ..... 119
Table 6.5 Diarrhoea treatment ..... 120
Table 6.6 Disposal of children's stools ..... 121

Table 6.1 Child's weight and size at birth

Percentage of live births in the five years preceding the survey that has a reported birth weight; among live births in the five years preceding the survey with 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, GMHDS 2020

| Background characteristics | Percent distribution of all live births by size of child at birth |  |  | Don't know | Total | Percentage of all births that have a reported birth weight ${ }^{1}$ | Number of births | Births with a reported birth weight ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Very small | Smaller than average | Average or larger |  |  |  |  | $\begin{gathered} \text { Less than } \\ 2.5 \mathrm{~kg} \end{gathered}$ | Number of births |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |
| $<20$ | 4.0 | 9.3 | 67.4 | 19.3 | 100.0 | 12.1 | 285 | (15.7) | 35 |
| 20-34 | 3.9 | 4.7 | 74.2 | 17.1 | 100.0 | 8.9 | 1,738 | 13.0 | 154 |
| 35-49 | 3.2 | 8.0 | 69.8 | 19.0 | 100.0 | 7.6 | 250 | * | 19 |
| Birth order |  |  |  |  |  |  |  |  |  |
| 1 | 5.0 | 6.9 | 70.1 | 18.1 | 100.0 | 11.6 | 1,009 | 14.7 | 117 |
| 2-3 | 3.1 | 4.7 | 74.8 | 17.4 | 100.0 | 7.4 | 1,140 | 9.9 | 85 |
| 4-5 | 1.6 | 4.9 | 77.5 | 16.0 | 100.0 | 5.0 | 122 | * | 6 |
| 6+ | * | * | * | * | 100.0 | * | 3 | * | 0 |

Mother's smoking
status

## Smokes

| cigarettes/ <br> tobacco | $*$ | $*$ | $*$ | $*$ | 100.0 | $*$ | 23 | $*$ | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Does not smoke | 3.8 | 5.7 | 72.9 | 17.6 | 100.0 | 9.2 | 2250 | 13.0 | 207 |

Type of residence

| Urban | 6.0 | 6.2 | 74.0 | 13.9 | 100.0 | 13.3 | 793 | 15.9 | 105 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural | 2.8 | 6.7 | 77.7 | 12.8 | 100.0 | 11.8 | 845 | 11.2 | 99 |
| Nomadic | 2.6 | 3.7 | 65.0 | 28.7 | 100.0 | 0.5 | 636 | * | 3 |
| Region |  |  |  |  |  |  |  |  |  |
| Mudug | 3.7 | 3.9 | 79.4 | 13.0 | 100.0 | 8.7 | 1,075 | 17.4 | 94 |
| Galgaduud | 4.0 | 7.3 | 67.0 | 21.8 | 100.0 | 9.5 | 1,198 | 10.1 | 114 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 3.8 | 5.0 | 71.5 | 19.7 | 100.0 | 5.9 | 1,851 | 14.1 | 108 |
| Primary | 4.2 | 9.2 | 78.0 | 8.5 | 100.0 | 19.6 | 332 | 16.4 | 65 |
| Secondary | 4.2 | 6.8 | 76.8 | 12.1 | 100.0 | 37.9 | 67 | (8.3) | 25 |
| Higher | * | * | * | * | 100.0 | * | 24 | * | 9 |

Wealth quintile

| Lowest | 3.1 | 3.6 | 64.8 | 28.4 | 100.0 | 0.1 | 410 | * | 0 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Second | 1.6 | 5.3 | 71.5 | 21.7 | 100.0 | 2.4 | 333 | * | 8 |
| Middle | 4.4 | 5.4 | 73.7 | 16.5 | 100.0 | 6.3 | 650 | $(14.8)$ | 41 |
| Fourth | 5.1 | 7.4 | 73.8 | 13.7 | 100.0 | 16.8 | 546 | 11.5 | 92 |
| Highest | 3.8 | 6.2 | 81.2 | 8.8 | 100.0 | 19.9 | 334 | 13.8 | 67 |
| Total | $\mathbf{3 . 9}$ | $\mathbf{5 . 7}$ | $\mathbf{7 2 . 9}$ | $\mathbf{1 7 . 6}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{9 . 1}$ | $\mathbf{2 , 2 7 3}$ | $\mathbf{1 3 . 4}$ | $\mathbf{2 0 8}$ |

'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

| Percentage of children age 12-23 [18-29] months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, GMHDS 2020 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristics | BCG | DPT-HepB-Hib |  |  | Polio ${ }^{1}$ |  |  |  | Measles | All basic vaccinations ${ }^{2}$ | No vaccinations | Percentage with a vaccination card seen | Number of children |
|  |  | 1 | 2 | 3 | 0 | 1 | 2 | 3 |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Female | 30.6 | 31.8 | 11.6 | 10.8 | 30.6 | 31.3 | 12.5 | 11.6 | 11.6 | 9.6 | 68.2 | 2.4 | 169 |
| Male | 30.2 | 30.8 | 9.5 | 8.1 | 30.2 | 31.5 | 13.2 | 12.6 | 11.8 | 7.5 | 68.5 | 5.5 | 146 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | (58.5) | (62) | (41.9) | (31.3) | (58.5) | (63) | (42.9) | (36.9) | (32.4) | (27.8) | (33.4) | (21.4) | 25 |
| 2-3 | 40.9 | 42.0 | 12.0 | 12.0 | 40.9 | 42.0 | 17.3 | 16.4 | 16.4 | 10.9 | 58.0 | 4.2 | 104 |
| 4-5 | 26.7 | 26.7 | 6.5 | 5.5 | 26.7 | 26.7 | 7.8 | 7.8 | 7.8 | 5.5 | 73.3 | 1.0 | 88 |
| $6+$ | 15.4 | 16.2 | 5.0 | 5.0 | 15.4 | 16.2 | 5.0 | 5.0 | 5.0 | 4.1 | 83.8 | 1.5 | 98 |


| Type of residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Urban | 39.7 | 41.5 | 17.2 | 16.2 | 39.7 | 42.4 | 20.7 | 20.7 | 19.7 | 14.4 | 57.6 | 3.7 | 113 |
| Rural | 40.2 | 40.9 | 10.8 | 8.8 | 40.2 | 40.2 | 13.3 | 11.3 | 11.3 | 8.0 | 59.1 | 6.3 | 117 |
| Nomadic | 4.3 | 4.3 | 1.6 | 1.6 | 4.3 | 4.3 | 1.6 | 1.6 | 1.6 | 1.6 | 95.7 | 0.5 | 84 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | 148 |
| Galgaduud | 39.3 | 40.0 | 13.3 | 11.8 | 39.3 | 40.6 | 16.4 | 15.6 | 14.9 | 11.1 | 59.4 | 6.7 | 167 |


| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No education | 24.1 | 24.8 | 8.7 | 7.7 | 24.1 | 24.9 | 10.9 | 9.9 | 9.4 | 7.0 | 74.8 | 3.5 | 245 |
| Primary | 50.0 | 52.0 | 15.1 | 13.6 | 50.0 | 52.0 | 18.1 | 18.1 | 18.1 | 11.6 | 48.0 | 4.1 | 57 |
| Secondary | * | * | * | * | * | * | * | * | * | * | * | * | 12 |
| Higher | * | * | * | * | * | * | * | * | * | * | * | * | 1 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 3.2 | 3.2 | 0.8 | 0.8 | 3.2 | 3.2 | 0.8 | 0.8 | 0.8 | 0.8 | 96.8 | 0.0 | 56 |
| Second | (16.7) | (16.7) | (9.3) | (9.3) | (16.7) | (16.7) | (9.3) | (9.3) | (9.3) | (9.3) | (83.3) | (3.7) | 49 |
| Middle | 39.9 | 39.9 | 17.3 | 13.3 | 39.9 | 39.9 | 21.1 | 18.3 | 18.3 | 13.3 | 60.1 | 3.0 | 86 |
| Fourth | 34.8 | 37.4 | 7.8 | 7.8 | 34.8 | 38.9 | 12.6 | 12.6 | 11.2 | 5.2 | 61.1 | 6.0 | 77 |
| Highest | (56.4) | (58.3) | (17.4) | (17.4) | (56.4) | (56.4) | (17.3) | (17.3) | (17.3) | (15.5) | (41.6) | (6.4) | 46 |
| Total | 30.4 | 31.3 | 10.6 | 9.5 | 30.4 | 31.4 | 12.8 | 12.1 | 11.7 | 8.6 | 68.3 | 3.8 | 314 |

${ }^{1}$ Polio 0 is the polio vaccination given at birth
${ }^{2}$ BCG, measles, and three doses each of DPT 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 2 weeks preceding the survey according to background characteristics, GMHDS 2020

Among children under the age of five:

| Background characteristics | Percentage with symptoms of ARI 1 | Number of children |
| :---: | :---: | :---: |
| Age in months |  |  |
| 0-5 | 0.8 | 199 |
| 6-11 | 2.0 | 169 |
| 12-23 | 3.5 | 312 |
| 24-35 | 3.2 | 400 |
| 36-47 | 3.0 | 428 |
| 48-59 | 2.9 | 412 |
| Sex |  |  |
| Male | 2.9 | 1,016 |
| Female | 2.7 | 905 |

Cooking fuel

| Electricity or gas | $(3.0)$ | 36 |
| :--- | ---: | ---: |
| Kerosene | $*$ | 23 |
| Firewood | 4.0 | 794 |
| Charcoal | 0.6 | 451 |

Straw/Shrubs/Grass (0.0) 43
Agricultural crops * 7
Animal dung * 1
Other fuel * 2
No food cooked in household * 14

| Missing | 3.2 | 550 |
| :--- | :--- | ---: |
| Types of residence |  |  |
| Urban | 3.2 | 677 |
| Rural | 3.8 | 713 |
| Nomadic | 1.0 | 530 |


| Region |  | 903 |
| :--- | ---: | ---: |
| Mudug | 1.3 | 1,017 |


| Mother's Education |  |  |
| :--- | ---: | ---: |
| No Education | 2.4 | 1,550 |
| Primary | 4.8 | 288 |
| Secondary | 3.7 | 61 |
| Higher | $\star$ | 21 |


| Wealth quintile |  |  |
| :--- | :--- | :--- |
| Lowest | 0.9 | 337 |


| Second | 1.7 | 282 |
| :--- | ---: | ---: |
| Middle | 3.6 | 551 |
| Fourth | 3.4 | 470 |
| Highest | 3.6 | 280 |
| Total | $\mathbf{2 . 8}$ | $\mathbf{1 , 9 2 0}$ |

${ }^{1}$ 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 antibiotics as treatment, by background characteristics, GMHDS 2020

|  |  |  | Among children under the age of five with fever: |
| :--- | :---: | :---: | :---: | :---: | :---: |

Type of
residence

| Urban | 8.2 | 677 | 36.9 | 7.1 | 24.7 | 56 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural | 8.4 | 713 | 26.5 | 4.9 | 17.7 | 60 |
| Nomadic | 4.7 | 530 | (4.9) | (0.0) | (0.0)' | 25 |
| Region |  |  |  |  |  |  |
| Mudug | 4.4 | 903 | (25) | (4.4) | (11.0)' | 39 |
| Galgaduud | 10.0 | 1,017 | 27.5 | 5.1 | 19.8 | 101 |
| Education |  |  |  |  |  |  |
| No education | 7.0 | 1,550 | 20.5 | 3.2 | 14.0 | 108 |
| Primary | 8.6 | 288 | (42.1) | (9.4) | (24.5)' | 25 |
| Secondary | 11.1 | 61 | * | * | * | 7 |
| Higher | * | 21 | * | * | * | 1 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 5.6 | 337 | (6.5) | (0.0) | * | 19 |
| Second | 5.4 | 282 | * | * | * | 15 |
| Middle | 7.8 | 551 | (29.4) | (2.6) | (20.5)' | 43 |
| Fourth | 9.5 | 470 | (31.4) | (7.7) | (24.4)' | 45 |
| Highest | 6.8 | 280 | * | * | * | 19 |
| Total | 7.3 | 1,920 | 26.8 | 4.9 | 17.3 | 141 |

[^12]Table 6.5 Diarrhoea 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, GMHDS 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 |
| :---: | :---: | :---: | :---: | :---: |
| Age in months |  |  |  |  |
| 0-5 | 6.1 | 199 | * | 12 |
| 6-11 | 9.2 | 169 | * | 16 |
| 12-23 | 9.2 | 312 | (50.7)' | 29 |
| 24-35 | 5.1 | 400 | * | 20 |
| 36-47 | 1.7 | 428 | * | 7 |
| 48-59 | 2.8 | 412 | * | 12 |
| Sex |  |  |  |  |
| Male | 5.2 | 1,016 | 8.0 | 53 |
| Female | 4.8 | 905 | (38.9)' | 43 |
| Type of residence |  |  |  |  |
| Urban | 6.0 | 677 | (56.0)' | 40 |
| Rural | 4.5 | 713 | (53.2)' | 32 |
| Nomadic | 4.4 | 530 | * | 23 |
| Region |  |  |  |  |
| Mudug | 3.6 | 903 | (46.9)' | 32 |
| Galgaduud | 6.3 | 1,017 | 50.2 | 64 |
| Mother's education |  |  |  |  |
| No education | 4.8 | 1,550 | 47.5 | 75 |
| Primary | 5.0 | 288 | * | 14 |
| Secondary | 10.6 | 61 | * | 6 |
| Higher | * | 21 | * | 0 |
| Wealth quintile |  |  |  |  |
| Lowest | 5.0 | 337 | * | 17 |
| Second | 3.9 | 282 | * | 11 |
| Middle | 5.3 | 551 | (55.5)' | 29 |
| Fourth | 6.2 | 470 | (64.4)' | 29 |
| Highest | 3.5 | 280 | * | 10 |
| Total | 5.0 | 1,920 | 49.1 | 96 |

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

Percent distribution of youngest children under age five living with the mother by the manner of disposal of the child's last faecal matter, and percentage of children whose stools are disposed of safely, according to background characteristics, GMHDS 2020

| Background characteristics | Manner of disposal of children's stools |  |  |  |  |  |  |  | Percentage of children whose stools were disposed of safely ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Child <br> used <br> toilet <br> latrine | Put/ rinsed into toilet or latrine | Buried | Put/ rinsed into drain or ditch | Thrown into garbage | Left in the open | Other | Total |  | Number of children |

Age of child
in months

| $0-1$ | 21.9 | 25.0 | 1.9 | 16.2 | 11.6 | 22.1 | 1.4 | 100.0 | 48.7 | 65 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2-3 | 29.6 | 16.8 | 1.9 | 8.9 | 15.5 | 27.4 | 0.0 | 100.0 | 48.3 | 69 |
| $4-5$ | 16.7 | 20.8 | 1.3 | 19.4 | 16.4 | 23.3 | 2.1 | 100.0 | 38.8 | 72 |
| $6-8$ | 32.3 | 9.8 | 0.4 | 16.3 | 18.1 | 23.1 | 0.0 | 100.0 | 42.5 | 104 |
| $9-11$ | 14.4 | 14.8 | 3.9 | 12.7 | 16.0 | 38.2 | 0.0 | 100.0 | 33.1 | 74 |
| $12-17$ | 22.8 | 23.8 | 4.4 | 14.1 | 9.0 | 25.6 | 0.4 | 100.0 | 51.0 | 241 |
| $18-23$ | 25.2 | 18.1 | 1.5 | 26.2 | 16.0 | 13.0 | 0.0 | 100.0 | 44.7 | 81 |
| $6-23$ | 23.5 | 19.0 | 2.8 | 16.2 | 13.2 | 25.0 | 0.2 | 100.0 | 45.4 | 481 |

Type of
residence

| Urban | 37.9 | 20.4 | 1.0 | 19.0 | 14.7 | 6.4 | 0.5 | 100.0 | 59.3 | 854 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Rural | 36.3 | 25.7 | 0.5 | 21.5 | 10.5 | 4.7 | 0.7 | 100.0 | 62.6 | 920 |
| $\quad$ Nomadic | 2.8 | 2.0 | 5.9 | 3.1 | 14.6 | 71.5 | 0.1 | 100.0 | 10.7 | 692 |
| Region |  |  |  |  |  |  |  |  |  |  |
| $\quad$ Mudug | 23.0 | 19.7 | 3.5 | 7.0 | 16.4 | 30.3 | 0.1 | 100.0 | 46.2 | 1,159 |
| Galgaduud | 31.4 | 15.0 | 1.0 | 23.0 | 10.2 | 18.5 | 0.8 | 100.0 | 47.5 | 1,308 |

Mother's
education

| No | 25.8 | 16.9 | 2.5 | 12.5 | 13.3 | 28.6 | 0.5 | 100.0 | 45.1 | 2,023 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| education |  |  |  |  |  |  |  |  |  |  |
| Primary | 35.4 | 19.2 | 1.2 | 29.5 | 10.3 | 4.0 | 0.3 | 100.0 | 55.9 | 351 |
| Secondary | 31.5 | 18.1 |  | 27.1 | 22.0 |  | 1.3 | 100.0 | 49.6 | 69 |
| Higher | $(43.3)$ | $(14.5)$ | $(0.0)$ | $(25.0)$ | $(17.0)$ | $(0.0)$ | $(0.0)$ | 100.0 | $(57.9)$ | 24 |

## Wealth

quintile

| Lowest | 5.0 | 2.6 | 5.1 | 4.4 | 12.4 | 70.5 | 0.0 | 100.0 | 12.7 | 435 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second | 8.9 | 7.7 | 6.2 | 8.1 | 17.2 | 51.4 | 0.5 | 100.0 | 22.8 | 374 |
| Middle | 40.1 | 22.4 | 0.5 | 17.5 | 10.7 | 8.0 | 0.8 | 100.0 | 63.0 | 713 |
| Fourth | 37.5 | 22.8 | 0.3 | 22.3 | 13.7 | 2.9 | 0.5 | 100.0 | 60.6 | 584 |
| Highest | 32.8 | 25.4 | 0.9 | 21.5 | 13.6 | 5.5 | 0.2 | 100.0 | 59.2 | 361 |
| Total | $\mathbf{2 7 . 5}$ | $\mathbf{1 7 . 2}$ | $\mathbf{2 . 2}$ | $\mathbf{1 5 . 5}$ | $\mathbf{1 3 . 1}$ | $\mathbf{2 4 . 0}$ | $\mathbf{0 . 5}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{4 6 . 9}$ | $\mathbf{2 , 4 6 7}$ |

${ }^{1}$ Children's stools are considered to be disposed of safely if the child used a toilet or latrine, if the faecal matter was put/rinsed into a toilet or latrine or if it was buried
Note: Figures in parentheses are based on 25-49 unweighted cases.

# Child nutrition and feeding practices and nutritional status of women 



Key Findings
Nutritional status of children:
27 percent of children under-five are stunted (short for their age), 11 percent are wasted (thin for their height) and $\mathbf{2 4}$ percent are underweight (thin for their age)

Breastfeeding:
90 percent of children have ever breastfed.

Early initiation of breastfeeding:
61 percent of children started breastfeeding within first hour of their birth.

Exclusive breastfeeding:
32 percent of children under 6 months are exclusively breastfed

Timely initiation of complementary feeding:
39 percent of children were introduced to complementary foods at 6-8 months

Vitamin A:
34 percent of children of 6-23 months consumed foods rich in vitamin A in the day preceding the survey.

Iron supplementation:
6 percent of children of 6-59 months have received iron supplements in the 7 days preceding survey

Nutritional status of women:
16 percent of women age 15-49 are thin (a body mass index [BMI] below 18.5), while 20 percent are overweight

This chapter describes the nutritional status of children under the age of five: infant and young child feeding practices, including breastfeeding and feeding with solid/semisolid foods; diversity of foods fed and frequency of feeding; and micronutrient status and supplementation. The discussion also covers the nutritional status of women aged 15-49.

Nutrition provides energy, promotes growth, and nourishes the body. The nutritional status of a person is determined by multifaceted interactions including food availability, affordability, accessibility and consumption and infections. It influences an individual's growth and development, productivity, reproductive success and susceptibility to diseases.

Good nutritional status is critical for the growth and development of children, particularly those who are under two years of age. Additionally, women's nutrition has a direct effect on their health and the health of their children. Nutritional deficiencies among women can lead to anaemia, infections and pregnancy complications that could result in premature birth or death. Nutritional deficiencies among children, especially those under five years of age, often lead to childhood illnesses such as diarrhoea, respiratory diseases and nutritional problems such as wasting and stunting.

### 7.1. Nutrition of Children and Women

The nutritional status of women and children can be measured using different methods, such as anthropometric, biochemical, clinical and dietary methods. These techniques of assessment differ in how and when they are conducted. In the GMHDS 2020, the anthropometric and dietary methods were used for assessing the nutritional status of women aged 15 to 49 years and children aged zero to five years. The dietary method inquired about feeding practices of infants and children, while the anthropometric assessment measured the height and weight of women aged 1549 and the children under the age of five in sampled households. The equipment used for height and weight measurements was the seca scale (for weight), height board (height for children aged under five) and seca (height for adults).

The GMHDS 2020 followed the standard method of measuring the height and weight of women and children. Women's weight was measured by placing the weighing scale on a flat place to ensure it was balanced and having the woman stand on it facing forward, with a vertical posture. Children under two years of age were measured lying down (supine position), whereas children above two years of age were measured while standing upright. The enumerating teams were trained before being deployed to the field. Their training involved class sessions and field pilot-tests on how to measure the weight and length/height of children and women respectively. The enumerators were medical professionals - midwives, nurses, public health officers and doctors. In the GMHDS 2020, standardized nutritional indicators were generated using the WHO anthropometric tool for nutritional survey data analyses. The measurements below were used to generate nutritional indicators:

1. Weight for age (underweight)
2. Height for age (stunting)
3. Weight for height (wasting)

The standard assessment guideline that was used to calculate the indicators was Z-score or standard deviation scores ( -2 or +2 ). The weight for age index (underweight) indicator describes the children who are underweight if they are minus (2 SD) from the mean reference population. This is a crucial indicator for assessing nutritional conditions of children.

Height for age (stunting) indicator calculates the children who suffer growth retardation as a result of poor diets or recurrent infections. Stunting is a result of chronic nutritional deprivations and often results in delayed mental and motoric development, poor school performance and reduced intellectual capacity and productivity later in life. This in turn affects the economic development at national level.

Weight for height (wasting) indicator measures the children who suffer acute malnutrition, usually as consequences of insufficient food intake or a high incidence of infectious diseases especially diarrhea. Wasting in turn impairs the functioning of the immune system and increases children's morbidity and mortality.

Weight-for-age (underweight) is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic malnutrition.

### 7.2. Nutritional Status of Children

The nutritional status of children is affected by different factors, such as a mother's nutritional status, socioeconomic status, educational background or children's poor health conditions. The nutritional status of Somali children is relatively poor due to many reasons, such as low economic conditions, and severe drought that has affected the country in recent years. Undernourished children are usually associated with high mortality and morbidity rates. Additionally, nutritional deficit also hinders children's long-term physical and mental development.

The survey measured the height and weight of children below 5 years and inquired about their dietary intake. The weight and height measured for children that were recorded were used as anthropometric measurements using the Z-score.

As per WHO standards, indicators such as height-forage, weight-for-height and weight-for-age can be used to calculate the nutritional status of children under five years of age.

Table 7.1 presents the nutritional status of children under five years of age according to three anthropometric indices-height-for-age, weight-for-height and weight-for-age. Twenty-seven percent of children under the age of five are stunted and 17 percent severely stunted, while 11 percent are wasted; it also further shows that 7 percent of the children are severely wasted. Twentyfour percent of children under the age of five are underweight, with 14 percent are severely underweight. These indicators are more or less similar to the national, 28 percent are stunted, 17 percent severely 12 percent are wasted, 23 percent underweight while 12 percent severely underweight (GMHDS, 2020).

As presented in Table 7.1, analysis by sex indicates that the prevalence of stunted children are similar for both males and females at 27 percent. The disparity in stunting prevalence by place of residence is substantial; 31 percent of rural children and 30 percent of urban children are stunted, as compared with 19 percent of nomadic children. Similarly, variation in the nutritional status of children by region is quite evident, with stunting being higher in Galgaduud region at 33 percent than in Mudug region at 21 percent (Figure 7.1).

In addition, children whose mothers are thin (a body mass index [BMI] below 18.5) are more likely to be stunted than children whose mothers have a normal BMI and children whose mothers are overweight or obese. Children whose mothers are thin have the highest prevalence of stunting at 40 percent while those children whose mothers have a normal BMI have the lowest prevalence at 24 percent.

The results show a slightly lower proportion of female than male children who are wasted ( 11 percent and 12 percent). The proportion of children who are wasted is higher in the rural and nomadic area at 13 percent and 12 percent, respectively than in urban areas at 9 percent. Similarly, wasting is higher in Galgaduud at 14 percent as compared to 9 percent in Mudug region (Figure 7.1). There are wide variations by place of residence in the prevalence of underweight.

The highest proportion of children who are underweight are from the rural areas while nomadic areas have the lowest prevalence of underweight ( 29 percent and 17 percent respectively). Regionally, Mudug has

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

slightly higher percent of children who are underweight than in Galgaduud region ( 27 percent and 22 percent respectively) (Figure 7.1).

### 7.3. Breastfeeding

The GMHDS 2020 data in Galmudug State can be used to evaluate infant feeding practices, including breastfeeding duration, introduction of complementary weaning foods, and use of feeding bottles. The pattern of infant feeding has important influences on both the child and the mother. Feeding practices are the principal determinants of a child's nutritional status. Poor nutritional status in young children exposes them to a greater risk of morbidity. Biologically, breastfeeding suppresses the mother's return to fertile status and affects the length of the birth interval as well as the level of fertility. These effects are influenced by both the duration and frequency of breastfeeding and the age at which the child receives foods and liquids to complement breast milk.

### 7.4. Initiation of breastfeeding

The World Health Organization (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 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 the percentage of all children born in the two years before the survey by breastfeeding status and the timing of initial breastfeeding, according to background characteristics. Ninety percent of last-born children who were born in the two years preceding the survey were breastfed at some time. Sixty-one percent of children are breastfed within one hour of birth, and 86 percent are breastfed within one day of birth. Approximately half of children (51 percent) have received a prelacteal feed. This findings are similar to the National where 90 percent of children have ever breastfed while 60 percent were breastfed within the first hour of birth.

The proportion of children breastfed within one hour of birth is higher among children whose mothers delivered in a heath facility and whose birth was assisted by a health professional than among children delivered at home or by a traditional birth attendant. The survey data shows that 65 percent of children born in health facilities were breastfed within the first hour of birth, while 58 percent of children who were born at home started breastfeeding within the first hour of birth (Table 7.2).

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


The proportion of children breastfed within one hour of birth increases with increasing wealth, from 48 percent among children in the lowest quintile to 69 percent among those in the highest quintile.

Figure 7.2 shows that children from nomadic areas are less likely to be breastfed within the first hour of birth at 50 percent, compared to 65 percent (each) for children from urban and rural areas.

### 7.5. Breast feeding status by age

Breast milk contains all of the nutrients needed by children in the first six months of life and is an uncontaminated nutritional source. Therefore, complementing breast milk before age 6 months is discouraged as the likelihood of contamination and resulting risk of diarrheal disease are high.

Early initiation of complementary feeding also reduces breast milk output because the production and release of breast milk is modulated by the frequency and intensity of suckling.

Table 7.3 presents the percent distribution of youngest children under two years who are living with their mother by breastfeeding status, including those currently breastfeeding and the percentage of all children under two years of age using feeding bottles with nipples according to their age in months.

Thirty-two percent of children under six months are exclusively breastfed compared to 34 percent nationally
(GMHDS, 2020). Contrary to the recommendation that children under the age of six months be exclusively breastfed, many infants under six months are fed other liquids in addition to breast milk, such as water, at 20 percent, other milk, at 22 percent, and non-milk liquids, at 3 percent. Moreover, 12 percent of infants began complementary foods before six months of age. Ten percent of children below six months were not breastfeeding at the time the survey was conducted.

### 7.5.1. Infant and Young Child Feeding (IYCF) Indicators on Breastfeeding Status

Appropriate IYCF practices include breastfeeding through age of two years, introduction of solid and semisolid foods at 6 months, and gradual increases in the amount of food given and frequency of feeding as the child gets older. According to recommendations, breastfed children age 6-23 months should receive animal source foods and vitamin A-rich fruits and vegetables daily (PAHO/WHO, 2003).

Figure 7.3 shows that 32 percent of children aged under six months were exclusively breastfed, while 50 percent of children under six months were predominantly breastfed. Forty-one percent of children were still breastfeeding at the age of one, and 29 percent were breastfeeding at age two. Overall, 39 percent of children were introduced to complementary foods at six to eight months and 27 percent of children under age two were breastfed appropriately for their age.

Indicators on breastfeeding by age in months


### 7.6. Types of complementary Foods

Complementary foods are recommended for children when breastfeeding is no longer sufficient for their nutritional needs. The period for complementary feeding usually starts after 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 breast milk from six months onwards. However, foods should be appropriate for their age and nutritional needs. Mothers or caregivers should take precaution when preparing food, ensuring its safety to minimize the risk of food contamination.

Table 7.4 shows the foods consumed by children under two years of age who were living with their mother during the day or night preceding the survey according to their breastfeeding status. The data shows that 16 percent of breastfed children aged under two years and 15 percent of non-breastfed children aged under 2 years were fed infant formula.

Twenty-nine percent of the breastfed children were getting other milk in addition to breast milk, compared to 43 percent who were not breastfed.

However, infants as young as zero months, whether breastfeeding or not, have already been introduced to other foods and liquids. This contradicts the exclusive
breastfeeding guidance provided by WHO for children less than six months old.

The data shows that 35 percent of breastfed children aged under two years received solid or semi-solid complementary foods in addition to breast milk. Sixteen percent of children aged 0-23 months currently breast feeding had fruits and vegetables rich in vitamin A whereas, 4 percent of children of this age ate other fruits and vegetables.

Children aged 0-23 months who were given animal sources of food (meat, fish and poultry), milk products (cheese, yogurt and other) at 12 percent (each) and 6 percent of this age group were given eggs.. Fifty-three percent of children aged 0-23 months who were not breastfeeding received solid or semi-solid foods from any sources.

### 7.7. Infant and Young Child Feeding (IYCF) Practices

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. Optimal Infant and Young Child Feeding (IYCF) Practices are essential for child growth and development.

The IYCF Global Strategy was first issued in 2002 jointly by WHO and UNICEF to reverse disturbing trends of infant and child feeding practices. The main objective of the strategy is to improve and promote healthy feeding practices and, as a result, to decrease the child morbidity and mortality.

Breastfed children age 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least three times a day. Non-breastfed children aged 6-23 months should receive milk or milk products two or more times a day to ensure that their calcium needs are met. In addition, they need animal-source foods and vitamin A rich fruits and vegetables.

Four food groups are considered the minimum number appropriate for non-breastfed young children. Nonbreastfed children aged 12-23 months should be fed meals four to five times each day, with one or two snacks (WHO, 2005; WHO, 2008; WHO, 2010).

Table 7.5 shows that 64 percent of Galmudug children aged 6-23 months received breast milk or breast milk substitutes during the day or night preceding the interview.

Twelve percent of children (breastfeeding or not) had an adequately diverse diet-that is, they had been given foods from at least four food groups-and 16 percent had been fed the minimum number of times appropriate for their age. Only 3 percent of Galmudug children aged 6-23 months are fed in accordance with all three IYCF practice.

According to the results presented in Table 7.5, 14 percent of breastfed children aged 6-23 months old were fed four or more different groups of food the day or night preceding the survey and 24 percent were fed the minimum meal frequency the night or day before the survey. Only 6 percent among the breastfed children aged 6-23 months old were fed four or more different groups of foods at a minimum number of times that is required.

Among the non-breastfeeding children, 18 percent were fed milk or milk products, whereas 18 percent were fed four or more different groups of food the night or day preceding the survey and 19 percent of them were fed the minimum meal frequency. Only 3 percent of the non-breastfeeding children were fed with 3 IYCF practices (Table 7.5).

Among all children (breast feeding or not), those aged 18-23 months are more likely than children aged 9-11 months to be fed according to all three recommended IYCF guidelines ( 7 percent and 1 respectively). Children (breast feeding or not) in Mudug are twice as likely as those in Galgaduud to be fed according to the guidelines at 4 and 2 percent respectively.

As expected, children in the highest wealth quintile (7 percent) are more likely to be fed according to the recommended three IYCF practices than children in the lower two wealth quintiles that had no child fed according to recommended practice.

### 7.8. Micronutrients intake among Children

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Micronutrients are available in foods and can also be provided through direct supplementation. Breastfeeding children benefit from supplements given to their mother.

The information collected on food consumption among children aged 6-23 months is useful in assessing the extent to which children are consuming food groups rich in two key micronutrients in their daily diet: iron and vitamin A. Iron plays an important role in numerous biological systems and iron deficiency is one of the primary causes of anaemia, which has serious health consequences for children. Vitamin A supports the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage and is the leading cause of childhood blindness. VAD also increases the severity of infections such as measles and diarrhoeal disease and slows recovery from illness.

Table 7.6 presents information on consumption of foods rich in vitamin A and iron in the 24 hours preceding the survey among children aged 6-23 months who are living with their mother. It also provides information on micronutrient supplementation and deworming among children aged 6-59 months. Overall, 34 percent of children aged 6-23 months consumed food rich in vitamin A in the 24 hours preceding the survey, and 24 percent consumed foods rich in iron. Only 6 percent of children aged 6-59 months were given iron supplements in the past 7 days, 9 percent were given vitamin $A$ supplements in the past 6 months, and 8 percent were given deworming medication in the past 6 months.

Analysis by place of residence shows that a large proportion of children aged between 6-23 months in rural areas had received foods rich in vitamin A at 42 percent, followed by those who live in urban areas at 40 percent compared to 19 percent among the nomadic children (Figure 7.4).

Regionally, children in Galgaduud consume fewer foods rich in vitamin A and iron than those in Mudug region. Thirty percent of children in Galgaduud received foods rich in vitamin A, as compared with 38 percent of children in Mudug (Figure 7.4).

The proportion of children consuming foods rich in vitamin A and iron increase with increasing household wealth status except for the second wealth quintile. Forty-nine percent of children in the highest wealth quintiles received foods rich in vitamin A, compared to 22 percent of children in the lowest wealth quintiles.

As presented in Figure 7.5, analysis by place of residence shows 13 percent of urban children and 11 percent of rural children received vitamin A supplements, as compared with 2 percent of nomadic children. Similar pattern was also observed for iron supplements. More children in Galgaduud reported having received vitamin A supplements compared to those in Mudug, however, more children in Mudug received iron supplements compared to those in Galgaduud.

### 7.9. Nutritional status of women

Chronic energy deficiency is caused by eating too little or having an unbalanced diet that lacks adequate nutrients. Women of reproductive age are especially vulnerable to chronic energy deficiency and malnutrition due to low dietary intake, inequitable distribution of food within the household, improper food storage and preparation, dietary taboos, infectious diseases, and inadequate care practices. It is well known that chronic energy deficiency leads to low productivity among adults and is related to heightened morbidity and mortality. In addition, chronic under-nutrition among women is a major risk factor for adverse birth outcomes.

The GMHDS 2020 in Galmudug collected anthropometric data on height and weight for women aged 15-49. These data were used to calculate several measures of nutritional status such as maternal height and Body Mass Index (BMI).

The BMI is a screening tool that can indicate whether a person is underweight, has normal weight or is overweight. The 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), 25.029.9 (overweight) and $>=30$ (obese). If the person's BMI is outside of normal range, their health risks might increase significantly. Having too much weight can lead

Figure 7.4 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


Percentage of children given iron and Vitamin A supplements

to various health conditions, such as diabetes type II, cardiovascular problems and high blood pressure. If the weight of a person is below the normal range, the risk of adverse pregnancy outcomes and overall poor health status increases.

Table 7.7 shows that 3 percent of women aged 15-49 are of short stature (below 145 cm ). Generally, women with short stature are at a higher risk of obstructed labour, due to cephalo-pelvic disproportion. Fifty-five percent of women have a normal body mass index (between 18.5 and 24.9), while 16 percent of women aged 15-49 are thin, with a BMI of less than 18.5. Twenty percent of women are overweight, with a body mass index of more than 25.0-29.9; 8 percent of women are obese.

The proportion of women who are of normal weight declines with age, from 63 percent among those aged $15-19$ to 35 percent among those aged 40-49. Analysis by place of residence shows that nomadic areas have the highest percentage of thin women at 18 percent, followed by rural areas at 17 percent and 15 percent in urban areas. Regionally, Galgaduud has a higher proportion of thin women at 22 percent, compared to Mudug at 13 percent

In general, the prevalence of overweight or obesity rises with increasing wealth. Forty-three percent of women in the highest wealth quintile are overweight or obese, compared with only 17 percent of women in the lowest quintile (Table 7.7).

### 7.10. Micronutrient intake among women

During pregnancy, women are at a higher risk of anaemia due to an increase in demand for iron by the body. Severe anaemia can place both the mother and the baby in danger through increased risk of blood loss during labour and can raise the risk of preterm delivery, low birth weight, and perinatal mortality. To prevent anaemia, pregnant women are advised to take iron folate supplements, eat iron-rich foods, and prevent intestinal worms. The GMHDS 2020 asked women aged 15-49 who gave birth in the 5 years before the survey whether they took iron supplements and/or deworming medication during their most recent pregnancy.

Table 7.8 shows that 70 percent of women with a child born in the last 5 years did not take any iron tablets during their most recent pregnancy. Overall, only 3 percent of women took iron tablets for 90 days or more during their most recent pregnancy, and only 5 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 5 percent compared to women from rural and nomadic areas at 2 percent and 1 percent respectively. Regionally, the percentage of women who took iron supplements during their most recent pregnancy for at least 90 days was slightly higher in Galgaduud than Mudug (3 percent and 2 percent, respectively) (Figure 7.6).

Percentage of women who took iron supplements for at least 90 days and deworming by type of residence and reigon


## List of Tables

Table 7.1 Nutritional status of children ..... 134
Table 7.1 Continued ..... 135
Table 7.2 Initial breastfeeding ..... 136
Table 7.3 Breastfeeding status by age ..... 137
Table 7.4 Foods and liquids consumed by children in the day or night preceding the interview ..... 138
Table 7.5 Infant and young child feeding (IYCF) practices ..... 139
Table 7.6 Micronutrient intake among children ..... 140
Table 7.6 Continued ..... 141
Table 7.7 Nutritional status of women ..... 142
Table 7.8 Micronutrient intake among mothers ..... 143

## Galmudug Health and Demographic Survey

## Table 7.1 Nutritional status of children

 background characteristics, GMHDS 2020| Background characteristics | Height-for-age ${ }^{1}$ |  |  |  | Weight-for-Height |  |  |  |  | Weight-for-age |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage below -3 SD | Percentage below-2 SD ${ }^{2}$ | Mean Z-score (SD) | Number of children | Percentage below-3 SD | Percentage below-2 SD ${ }^{2}$ | Percentage below +2 SD | Mean Z-score (SD) | Number of children | Percentage below-3 SD | Percentage below -2 SD2 | Percentage below +2 SD | Mean Z-score (SD) | Number of children |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-5 | (12.2) | (18.0) | (3.7) | 29 | 8.8 | 16.7 | 17.9 | 1.6 | 57 | 12.1 | 21.2 | 37.3 | 1.4 | 96 |
| 6-8 | * | * | * | 24 | (9.3) | (13.1) | (15.0) | (2.0) | 27 | 17.6 | 33.3 | 31.3 | 2.3 | 62 |
| 9-11 | * | * | * | 21 | * | * | * | * | 20 | (14.9) | (25.1) | (34.4) | (2.2) | 42 |
| 12-17 | 20.1 | 30.9 | 2.4 | 69 | (5.4) | (9.9) | (12.0) | (1.9) | 49 | 14.2 | 24.6 | 11.0 | 0.6 | 79 |
| 18-23 | * | * | * | 19 | * | * | * | * | 12 | * | * | * | * | 18 |
| 24-35 | 17.6 | 31.0 | 1.4 | 123 | 5.7 | 8.8 | 9.9 | 1.8 | 74 | 13.6 | 23.0 | 9.4 | 0.6 | 129 |
| 36-47 | 17.3 | 27.0 | 2.7 | 122 | 7.3 | 11.6 | 14.0 | 1.5 | 116 | 14.6 | 26.5 | 18.7 | 1.0 | 205 |
| 48-59 | 16.0 | 25.3 | 2.8 | 112 | 6.4 | 12.8 | 11.3 | 1.2 | 107 | 14.4 | 23.8 | 21.1 | 1.2 | 199 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 16.6 | 27.4 | 2.5 | 250 | 7.4 | 12.2 | 13.1 | 1.6 | 231 | 12.8 | 21.7 | 21.0 | 1.1 | 390 |
| Female | 17.4 | 26.6 | 2.6 | 269 | 6.1 | 10.7 | 12.1 | 1.5 | 231 | 15.1 | 26.7 | 16.7 | 1.0 | 440 |
| Size at birth ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Very small | * | * | * | 15 | * | * | * | * | 19 | (18.9) | (31.3) | (10.0) | (0.6) | 27 |
| Small | (15.9) | (26.7) | (2.6) | 28 | (10.6) | (15.9) | (14.6) | (1.6) | 32 | 17.7 | 31.4 | 16.0 | 1.1 | 50 |
| Average or larger | 17.1 | 27.8 | 2.5 | 363 | 6.5 | 10.8 | 13.0 | 1.7 | 312 | 14.3 | 23.6 | 17.4 | 1.0 | 536 |
| Mother's nutritional status ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Thin (BMI < } \\ & \text { 18.5) } \end{aligned}$ | 23.4 | 40.4 | 1.7 | 56 | * | * | * | * | 24 | 17.2 | 29.2 | 15.5 | 0.8 | 62 |
| Normal (BMI 18.5-24.9) | 13.7 | 24.4 | 2.8 | 107 | 7.3 | 12.4 | 14.4 | 1.7 | 117 | 14.5 | 25.3 | 17.6 | 0.9 | 188 |
| Overweight/ obese (BMI $>=25$ ) | 18.2 | 28.2 | 2.5 | 77 | 4.8 | 7.1 | 12.6 | 1.7 | 54 | 13.5 | 21.9 | 21.2 | 1.3 | 117 |
| Type of residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 17.1 | 30.0 | 2.5 | 202 | 5.0 | 9.3 | 14.5 | 1.7 | 161 | 14.4 | 25.8 | 17.0 | 1.0 | 289 |
| Rural | 20.0 | 30.5 | 2.7 | 214 | 8.5 | 12.1 | 14.0 | 2.0 | 183 | 17.1 | 29.0 | 11.5 | 0.7 | 283 |


| Background characteristics | Height-for-age ${ }^{1}$ |  |  |  | Weight-for-Height |  |  |  |  | Weight-for-age |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage below -3 SD | $\begin{aligned} & \text { Percentage } \\ & \text { below }-2 \\ & S D^{2} \end{aligned}$ | Mean Z-score (SD) | Number of children | Percentage below -3 SD | ```Percentage below -2 SD}\mp@subsup{}{}{2``` | ```Percentage below +2 SD``` | Mean Z-score (SD) | Number of children | Percentage below-3 SD | $\begin{aligned} & \text { Percentage } \\ & \text { below }-2 \\ & \text { SD2 } \end{aligned}$ | ```Percentage below +2 SD``` | Mean Z-score (SD) | Number of children |
| Nomadic | 13.1 | 18.6 | 2.4 | 103 | 6.6 | 13.1 | 8.3 | 0.9 | 118 | 9.5 | 16.6 | 30.2 | 1.5 | 258 |
| Region of residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mudug | 14.3 | 21.4 | 3.4 | 209 | 5.1 | 9.3 | 17.1 | 2.0 | 257 | 16.6 | 27.0 | 22.9 | 1.5 | 487 |
| Galgaduud | 19.8 | 32.6 | 1.7 | 310 | 8.5 | 13.6 | 7.9 | 1.0 | 204 | 11.3 | 21.6 | 14.5 | 0.6 | 343 |
| Mother's education ${ }^{5}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 15.9 | 25.2 | 2.3 | 128 | 3.9 | 8.1 | 15.3 | 1.9 | 119 | 13.8 | 25.1 | 18.5 | 1.0 | 221 |
| Primary | 17.2 | 27.9 | 2.5 | 119 | 8.3 | 12.8 | 11.3 | 1.4 | 103 | 14.3 | 22.4 | 20.7 | 1.2 | 184 |
| Secondary | * | * | * | 23 | (9.7) | (15.9) | (11.3) | (0.9) | 25 | (9.4) | (20.4) | (19.2) | (1.1) | 37 |
| Higher education | * | * | * | 5 | * | * | * | * | 6 | * | * | * | * | 10 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 14.2 | 22.1 | 2.3 | 130 | 7.1 | 12.8 | 7.3 | 0.9 | 118 | 10.7 | 18.0 | 27.6 | 1.4 | 268 |
| Second | 15.9 | 28.4 | 2.6 | 105 | 6.3 | 10.4 | 17.6 | 2.4 | 104 | 18.7 | 29.2 | 13.7 | 0.7 | 159 |
| Middle | 20.6 | 31.7 | 2.6 | 162 | 7.9 | 9.9 | 12.1 | 1.3 | 112 | 16.2 | 29.2 | 12.6 | 0.6 | 213 |
| Fourth | 18.2 | 26.4 | 3.0 | 74 | 4.6 | 11.4 | 20.4 | 2.7 | 89 | 13.8 | 23.6 | 19.7 | 1.3 | 121 |
| Highest | 16.5 | 27.1 | 2.4 | 49 | (6.4) | (13.6) | (8.5) | (1.0) | 40 | 9.1 | 22.3 | 16.3 | 1.1 | 69 |
| Total | 17.0 | 26.9 | 2.6 | 519 | 6.7 | 11.4 | 12.6 | 1.6 | 462 | 14.0 | 24.3 | 18.8 | 1.0 | 830 |

Note: Table is based on children who stayed in the household on the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards adopted in 2006.
The indices in this table are NOT comparable to those based on the previously used 1977 NCHS/CDC/WHO Reference.
Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight.
${ }^{1}$ Recumbent length is measured for children under age 2, or in the few cases when the age of the child is unknown and the child is less than 85 cm ; standing height is measured for all other children.
${ }^{2}$ Includes children who are below -3 standard deviations (SD) from the WHO Growth Standards population median
${ }^{3}$ Excludes children whose mothers were not interviewed
${ }^{4}$ Excludes children whose mothers were not weighed and measured. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 11.10.
${ }^{5}$ For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.
Figures in parentheses are based on 25-49 unweighted cases.
An asterisk indicates that a figure is based on fewer than 25 un-weighted 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, GMHDS 2020

| Background characteristics | Among lastborn children born in the past two years: |  |  |  | Among lastborn 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 | Number of lastborn children | Percentage who received a pre-lacteal feed ${ }^{2}$ | Number of lastborn children ever breastfed |
| Sex |  |  |  |  |  |  |
| Male | 90.1 | 59.2 | 86.6 | 353 | 51.4 | 318 |
| Female | 90.2 | 62.0 | 85.7 | 306 | 50.0 | 276 |
| Assistance at delivery |  |  |  |  |  |  |
| Health personnel ${ }^{3}$ | 91.5 | 63.5 | 88.7 | 312 | 55.8 | 285 |
| Traditional birth attendant | 90.5 | 59.1 | 86.0 | 316 | 45.4 | 286 |
| Relative/friend | (82.8) | (50.1) | (71.2) | 26 | (50.3) | 22 |
| Other | * | * | * | 0 | * | 0 |
| No one | * | * | * | 6 | * | 2 |
| Place of delivery |  |  |  |  |  |  |
| Health facility | 92.9 | 65.2 | 90.9 | 228 | 54.4 | 212 |
| At home | 88.7 | 58.2 | 83.9 | 431 | 48.6 | 382 |
| Other | * | * | * | 1 | * | 1 |
| Types of residence |  |  |  |  |  |  |
| Urban | 92.1 | 64.7 | 87.4 | 226 | 47.9 | 208 |
| Rural | 94.2 | 64.5 | 90.7 | 243 | 55.8 | 229 |
| Nomadic | 82.7 | 50.4 | 79.1 | 191 | 47.1 | 158 |
| Type of residence |  |  |  |  |  |  |
| Mudug | 86.7 | 60.4 | 84.4 | 301 | 46.3 | 261 |
| Galgaduud | 93.1 | 60.6 | 87.7 | 359 | 54.2 | 334 |
| Mother's education |  |  |  |  |  |  |
| No education | 89.0 | 58.5 | 84.6 | 530 | 49.8 | 472 |
| Primary | 94.5 | 64.7 | 91.8 | 104 | 48.0 | 98 |
| Secondary | * | * | * | 19 | * | 19 |
| Higher | * | * | * | 6 | * | 5 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 85.5 | 47.6 | 80.2 | 116 | 42.9 | 99 |
| Second | 84.6 | 53.3 | 83.1 | 103 | 53.3 | 87 |
| Middle | 92.2 | 64.1 | 87.7 | 179 | 52.3 | 165 |
| Fourth | 91.9 | 65.1 | 87.5 | 166 | 48.5 | 153 |
| Highest | 95.0 | 69.2 | 91.7 | 96 | 58.0 | 91 |
| Total | 90.2 | 60.5 | 86.2 | 660 | 50.8 | 595 |

Note: Table is based on lastborn children born in the two years preceding the survey regardless of whether the children are living or dead at the time of interview.
${ }^{1}$ Includes children who started breastfeeding within one hour of birth
${ }^{2}$ Children given something other than breast milk during the first three days of life
${ }^{3}$ Doctor/clinical officer or nurse/midwife/auxiliary midwife
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 according to age in months, GMHDS 2020 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Breastfeeding status: |  |  |  |  |  |  | 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 |
| Age in months | Not breastfeeding | Exclusively breastfeeding | Breastfeeding and consuming plain water only | Breastfeeding and consuming nonmilk liquids ${ }^{1}$ | Breastfeeding and consuming other milk | Breastfeeding and consuming complementary foods | Total | Currently breastfeeding |  |  |  |
| 0-1 | 10.6 | 35.7 | 19.4 | 2.7 | 17.4 | 14.3 | 100.0 | 89.4 | 58 | 32.9 | 62 |
| 2-3 | 5.9 | 28.1 | 17.0 | 2.5 | 32.6 | 13.8 | 100.0 | 94.1 | 59 | 42.5 | 62 |
| 4-5 | 13.3 | 32.7 | 23.0 | 4.4 | 17.1 | 9.5 | 100.0 | 86.7 | 64 | 57.8 | 71 |
| 6-8 | 22.5 | 18.4 | 8.4 | 6.3 | 14.3 | 30.1 | 100.0 | 77.5 | 90 | 54.6 | 99 |
| 9-11 | 37.2 | 17.0 | 2.3 | 4.0 | 5.4 | 34.2 | 100.0 | 62.8 | 65 | 56.7 | 68 |
| 12-17 | 60.5 | 9.5 | 3.9 | 2.2 | 2.9 | 20.9 | 100.0 | 39.5 | 196 | 52.9 | 210 |
| 18-23 | 76.5 | 3.3 | 0.0 | 0.0 | 3.7 | 16.6 | 100.0 | 23.5 | 55 | 51.3 | 64 |
| 0-3 | 8.3 | 31.9 | 18.2 | 2.6 | 25.0 | 14.1 | 100.0 | 91.7 | 117 | 37.7 | 125 |
| 0-5 | 10.1 | 32.2 | 20.0 | 3.3 | 22.1 | 12.4 | 100.0 | 89.9 | 181 | 45.0 | 196 |
| 6-9 | 26.4 | 16.9 | 6.7 | 5.8 | 11.9 | 32.2 | 100.0 | 73.6 | 119 | 57.1 | 129 |
| 12-15 | 59.3 | 9.8 | 1.9 | 2.7 | 3.6 | 22.7 | 100.0 | 40.7 | 162 | 55.2 | 172 |
| 12-23 | 64.2 | 8.1 | 3.0 | 1.7 | 3.1 | 19.9 | 100.0 | 35.8 | 252 | 52.6 | 273 |
| 20-23 | (76.9) | (0.0) | (0.0) | (0.0) | (5.1) | (18.0) | 100.0 | (28.7) | 30 | (43.8) | 38 |
| 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 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 percentag |  |  |  |  |  |  |  |  |  |  |  |
| Thus children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods re classified in the non-milk liquid category even though they may who get complementary food are classified in that category as long as they are breastfeeding as well. |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{1}$ Non-milk liquids include juice, juice drinks, clear broth or other liquids |  |  |  |  |  |  |  |  |  |  |  |


| 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, GMHDS 2020 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Liquids |  |  | Solid or semi solid foods |  |  |  |  |  |  |  |  |  | Number of children |
| Age in months | Infant formula | Other milk ${ }^{\text {' }}$ | Other liquids ${ }^{2}$ | Fortified baby food | Food made from grains ${ }^{3}$ | Fruits and vegetables rich in vitamin $A^{4}$ | 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 |  |
| BREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-1 | 12.3 | 16.7 | 7.0 | 1.8 | 7.5 | 5.3 | 0.0 | 0.0 | 4.1 | 4.1 | 1.8 | 1.8 | 14.6 | 49 |
| 2-3 | 24.7 | 24.0 | 12.8 | 9.1 | 7.9 | 4.9 | 1.6 | 1.6 | 3.2 | 3.2 | 3.2 | 7.9 | 14.7 | 53 |
| 4-5 | 9.4 | 18.8 | 15.7 | 3.0 | 2.7 | 1.7 |  | 1.8 | 0.9 | 0.9 |  | 3.6 | 11.1 | 49 |
| 6-8 | 19.5 | 34.2 | 21.3 | 4.9 | 20.2 | 19.4 | 5.6 | 9.6 | 7.4 | 10.5 | 4.9 | 21.5 | 44.8 | 70 |
| 9-11 | (10.5) | (35.8) | (30.7) | (10.8) | (20.4) | (21.2) | (2.0) | (9.0) | (9.9) | (10.3) | (5.9) | (19.0) | (53.7) | 43 |
| 12-17 | 14.7 | 33.1 | 38.1 | 10.1 | 37.8 | 29.5 | 11.9 | 16.0 | 8.3 | 25.9 | 11.6 | 14.5 | 52.2 | 77 |
| 18-23 | * | * | * | * | * | * | * | * | * | * | * | * | * | 13 |
| 6-23 | 15.7 | 36.3 | 32.9 | 8.3 | 29.2 | 24.4 | 7.3 | 12.9 | 9.4 | 18.0 | 9.4 | 17.4 | 50.7 | 204 |
| Total | 15.7 | 29.3 | 23.9 | 6.7 | 19.4 | 15.7 | 4.4 | 7.9 | 6.6 | 11.5 | 6.1 | 11.9 | 34.8 | 355 |
| NONBREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-1 | * | * | * | * | * | * | * | * | * | * | * | * | * | 9 |
| 2-3 | * | * | * | * | * | * | * | * | * | * | * | * | * | 10 |
| 4-5 | * | * | * | * | * | * | * | * | * | * | * | * | * | 14 |
| 6-8 | * | * | * | * | * | * | * | * | * | * | * | * | * | 20 |
| 9-11 |  | 42.1 | 22.2 | 8.1 | 12.4 | 11.4 | 4.7 | 4.7 | 9.4 | 9.4 | 4.7 | 11.2 | 50.1 | 26 |
| 12-17 | 15.2 | 44.3 | 44.3 | 9.7 | 37.1 | 33.5 | 9.1 | 23.1 | 14.3 | 30.7 | 10.7 | 14.7 | 61.4 | 137 |
| 18-23 | 23.9 | 51.1 | 50.2 | 21.6 | 39.1 | 31.9 | 13.1 | 20.0 | 11.2 | 25.5 | 9.4 | 17.3 | 55.3 | 59 |
| 6-23 | 16.0 | 43.9 | 43.1 | 12.4 | 33.3 | 28.4 | 8.9 | 18.4 | 11.8 | 24.9 | 9.2 | 13.9 | 56.3 | 242 |
| Total | 15.2 | 42.6 | 39.3 | 11.4 | 30.8 | 26.8 | 7.8 | 16.6 | 10.4 | 22.9 | 8.4 | 12.9 | 52.8 | 275 |

Note: Breastfeeding status and food consumed refer to a " 24 -hour" period (yesterday and last night).
'Other milk includes fresh, tinned and powdered animal milk
${ }^{2}$ Does not include plain water. Includes juice, juice drinks, clear broth, or other non-milk liquids.
${ }^{3}$ Includes fortified baby food
Figures in parentheses are based on $25-49$ unweighted cases.
An asterisk indicates that a figure is based on fewer than 25 un

|  survey, by background characteristics, GMHDS 2020 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristics | 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: |  |  |  | $\begin{aligned} & \text { Number of } \\ & \text { children 6-23 } \\ & \text { months } \end{aligned}$ |
|  | $\begin{aligned} & 4+\text { food } \\ & \text { groups }{ }^{1} \end{aligned}$ | $\begin{aligned} & \text { Minimum } \\ & \text { meal } \\ & \text { frequency }{ }^{2} \end{aligned}$ | Both 4+ food groups and minimum meal frequency |  | Milk <br> or milk <br> products  <br> 4 $\quad$4+food <br> groups ${ }^{1}$ |  | Minimum meal frequency ${ }^{4}$ | $\begin{gathered} \text { With } \\ \text { 3IYCF } \\ \text { practices }^{5} \end{gathered}$ |  | Breast milk, milk or milk products ${ }^{6}$ | $\begin{aligned} & 4+\text { food } \\ & \text { groups }{ }^{1} \end{aligned}$ | $\begin{aligned} & \text { Minimum } \\ & \text { meal } \\ & \text { frequency }{ }^{7} \end{aligned}$ | With 3 IYCF practices |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6-8 | 7.4 | 24.6 | 4.9 | 70 | * | * | * | * | 20 | 82.2 | 5.7 | 26.0 | 3.8 | 90 |
| 9-11 | (9.3) | (23.8) | (2.0) | 43 | (1.7) | (4.7) | (6.5) | (0.0) | 26 | 63.2 | 7.6 | 17.3 | 1.2 | 70 |
| 12-17 | 20.8 | 21.3 | 6.3 | 77 | 19.2 | 23.1 | 18.1 | 3.8 | 137 | 48.4 | 22.3 | 19.2 | 4.7 | 214 |
| 18-23 | * | * | * | 13 | 22.9 | 18.1 | 20.5 | 4.3 | 59 | 36.4 | 20.6 | 24.6 | 6.8 | 72 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 15.8 | 29.2 | 7.5 | 100 | 18.3 | 16.8 | 17.9 | 3.4 | 134 | 61.8 | 11.7 | 16.1 | 3.6 | 234 |
| Female | 13.0 | 19.7 | 3.9 | 104 | 18.4 | 19.5 | 19.2 | 2.9 | 109 | 66.2 | 13.3 | 14.7 | 2.5 | 212 |
| Type of residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 24.8 | 30.4 | 8.7 | 65 | 21.6 | 21.3 | 22.5 | 6.1 | 89 | 61.4 | 17.9 | 19.2 | 5.1 | 155 |
| Rural | 19.0 | 30.0 | 8.4 | 69 | 19.9 | 22.0 | 21.0 | 2.8 | 84 | 67.0 | 14.5 | 16.7 | 3.6 | 153 |
| Nomadic | 0.0 | 13.0 | 0.0 | 69 | 12.1 | 8.9 | 10.4 | 0.0 | 69 | 62.9 | 3.4 | 9.5 | 0.0 | 138 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mudug | 19.6 | 28.8 | 7.1 | 110 | 24.9 | 24.2 | 22.3 | 4.6 | 111 | 67.3 | 17.8 | 20.0 | 4.4 | 221 |
| Galgaduud | 8.3 | 19.1 | 4.0 | 94 | 12.7 | 12.7 | 15.3 | 2.0 | 131 | 60.8 | 7.7 | 11.4 | 1.9 | 225 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 8.4 | 22.0 | 2.9 | 167 | 15.9 | 14.8 | 16.3 | 1.4 | 188 | 64.0 | 8.9 | 13.6 | 1.5 | 355 |
| Primary | 42.6 | 30.1 | 14.6 | 28 | 18.9 | 30.8 | 20.0 | 9.4 | 46 | 58.5 | 29.2 | 19.2 | 8.8 | 73 |
| Secondary | * | * | * | 7 | * | * | * | * | 9 | * | * | * | * | 16 |
| Higher | * | * | * | 2 | * | * | * | * | 0 | * | * | * | * | 2 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | (0.0) | (7.4) | (0.0) | 41 | 10.0 | 13.5 | 15.9 | 0.0 | 43 | 60.4 | 5.2 | 8.9 | 0.0 | 84 |
| Second | 3.0 | 23.7 | (0.0) | 29 | (19.2) | (10.1) | (6.9) | (0.0) | 43 | 59.6 | 5.3 | 11.3 | 0.0 | 72 |
| Middle | 10.5 | 28.5 | 4.7 | 61 | 15.1 | 13.3 | 20.6 | 2.9 | 59 | 65.6 | 8.9 | 17.2 | 2.7 | 119 |
| Fourth | (23.4) | (30.0) | (8.4) | 44 | 22.1 | 28.6 | 21.7 | 7.2 | 63 | 64.5 | 19.5 | 18.0 | 5.3 | 107 |
| Highest | (40.9) | (32.0) | (17.1) | 29 | (26.2) | (21.9) | (26.9) | (4.3) | 34 | 68.4 | 23.1 | 20.4 | 6.7 | 63 |
| Total | 14.4 | 24.4 | 5.7 | 204 | 18.3 | 18.0 | 18.5 | 3.2 | 242 | 63.9 | 12.4 | 15.5 | 3.1 | 446 |
| Food groups: a, infant f. meat, poultry, fish, and For breastfed children ${ }^{3}$ Includes two or more <br> ${ }^{4}$ For non-breastfed chil ${ }^{5}$ Non-breastfed childre product group ${ }^{6}$ Breastfeeding, or not ${ }^{7}$ Children are fed the m Note: Figures in parent An asterisk indicates th |  | ast milk, cheese or <br> s); g. legumes and is receiving solid or t formula, fresh, ti mum meal frequen idered to be fed wit <br> two or more feedings ber of times per da nweighted cases. than 25 unweight | ogurt or other milk ts. <br> emi-solid food at le ed and powdered is receiving solid or a minimum standa <br> of commercial infa according to their cases and has been | ducts; b. foods made <br> twice a day for infants mal milk, and yogurt emi-solid food or milk of three Infant and you <br> formula, fresh, tinned and breastfeeding sta uppressed. | grains, roots, and <br> 8 months and at le <br> eds at least four tim child feeding pract <br> d powdered anima as described in foo | bers, including po <br> three times a day <br> a day <br> if they receive o <br> ilk, and yogurt <br> otes 2 and 4 | dge and fortified $b$ ba or children $9-23$ ma <br> er milk or milk prod | food from grain <br> hs <br> ts at least twice | vitamin A-rich fruits a <br> $y$, receive the minimum | egetables (and red <br> al frequency, and re | oil); d. other frut <br> solid or semi- | and vegetables; <br> foods from at leas | our food groups not | uding the milk/milk |

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, GMHDS 2020

Among youngest children aged 6-23 months
living with the mother:
Background

## characteristics

| Percentage who consumed foods rich in vitamin A in past 24 hours ${ }^{1}$ | Percentage who consumed foods rich in iron in past 24 hours ${ }^{2}$ | Number of children age | Percentage given iron supplements in past 7 days |
| :---: | :---: | :---: | :---: |

Among all children aged 6-59 months:

Percentage
given deworming medication in past 6 given vitamin A months $^{3}$ in past 6 months children

Age in months

| $6-8$ | 21.2 | 11.2 | 99 | 3.8 | 4.1 | 3.9 | 99 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $9-11$ | 22.5 | 12.8 | 71 | 5.7 | 7.5 | 6.5 | 71 |
| $12-17$ | 41.2 | 31.2 | 231 | 5.4 | 7.5 | 10.6 | 231 |
| $18-23$ | 38.6 | 27.6 | 81 | 5.0 | 11.1 | 11.0 | 81 |
| $24-35$ | $*$ | $*$ | 0 | 6.1 | 8.9 | 8.8 | 400 |
| $36-47$ | $*$ | $*$ | 0 | 5.9 | 6.7 | 10.1 | 428 |
| $48-59$ |  | $*$ | 0 | 6.6 | 9.3 | 9.1 | 412 |
| Sex | 35.7 | 26.1 | 250 | 6.2 | 9.1 | 9.5 | 905 |
| Male | 32.0 | 21.3 | 231 | 5.5 | 6.9 | 8.8 | 816 |

Breastfeeding
status
Breastfeeding
Not
$30.6 \quad 19.8 \quad 217$
6.7 5.7
7.5
9.2

263 breastfeeding
Mother's age

| $15-19$ | $(30.6)$ | $(12.9)$ | 25 | $(1.0)$ | $(4.1)$ | $(8.0)$ | 46 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $20-29$ | 34.5 | 25.3 | 274 | 6.0 | 9.0 | 8.1 | 914 |
| $30-39$ | 33.3 | 23.2 | 160 | 4.8 | 6.7 | 9.7 | 664 |
| $40-49$ | $*$ | $*$ | 21 | 14.5 | 10.4 | 16.0 | 97 |

Type of
residence

| Urban | 39.6 | 27.7 | 166 |
| :--- | :--- | :--- | :--- |
| Rural | 41.8 | 28.8 | 169 |
| Nomadic | 18.5 | 13.6 | 147 |
| Region |  |  |  |
| Mudug | 38.3 | 28.4 | 233 |
| Galgaduud | 29.8 | 19.4 | 248 |

$$
\begin{array}{r}
10.0 \\
6.2 \\
0.3
\end{array}
$$

| 11.1 | 13.4 |
| ---: | ---: |
| 9.9 | 10.9 |
| 1.7 | 1.5 |482Mudug233

248

| 7.4 | 7.5 | 7.4 | 821 |
| ---: | ---: | ---: | ---: |
| 4.4 | 8.6 | 10.8 | 900 |

Education

| No education | 30.5 | 20.5 | 383 | 5.3 | 7.3 | 8.4 | 1,385 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Primary | 47.2 | 37.8 | 79 | 7.3 | 11.4 | 11.5 | 263 |
| Secondary | $*$ | $*$ | 17 | 9.5 | 8.4 | 14.9 | 57 |

Table 7.6 Continued

| Background characteristics | Among youngest children aged 6-23 months living with the mother: |  |  | Among all children aged 6-59 months: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who consumed foods rich in vitamin A in past 24 hours $^{1}$ | Percentage who consumed foods rich in iron in past 24 hours ${ }^{2}$ | Number of children age | Percentage given iron supplements in past 7 days | Percentage given deworming medication in past 6 months ${ }^{3}$ | Percentage given vitamin A supplementation in past 6 months | Number of children |
| Higher | * | * | 2 | * | * | * | 17 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 22.2 | 17.9 | 90 | 0.3 | 2.6 | 1.7 | 309 |
| Second | 20.0 | 12.1 | 79 | 0.9 | 1.5 | 2.2 | 254 |
| Middle | 33.2 | 18.8 | 130 | 5.4 | 7.7 | 9.6 | 495 |
| Fourth | 44.9 | 34.4 | 117 | 10.7 | 15.0 | 16.5 | 420 |
| Highest | 49.0 | 36.9 | 65 | 10.7 | 10.5 | 12.5 | 244 |
| Total | 33.9 | 23.8 | 481 | 5.9 | 8.1 | 9.2 | 1,722 |

Note: Information on vitamin A is based on both mother's recall and the immunization card (where available). Information on iron supplements and deworming medication is based on the mother's recall.
$\mathrm{n} / \mathrm{a}=$ Not applicable
An asterisk indicates that a figure is based on fewer than 25 un-weighted cases and has been suppressed.
${ }^{1}$ 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
${ }^{2}$ Includes meat (including organ meat), fish, poultry, and eggs
${ }^{3}$ Deworming for intestinal parasites is commonly done for helminths and for schistosomiasis.
Galmudug Health and Demographic Survey
Table 7.7 Nutritional status of women

| Among women age 15-49, the percentage with height under 145 cm , mean Body Mass Index (BMI), and the percentage with specific BMI levels, by background characteristic 2020 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristics | Height |  | Body Mass Index ${ }^{1}$ |  |  |  |  |  |  |  |  |
|  |  |  | Mean body max index (BMI) | Normal |  | Thin |  | Overweight/Obese |  |  | Number of women |
|  | Percentage below 145 cm | Number of women |  | 18.5-24.9 <br> (Total normal) | $\begin{gathered} <18.5 \text { (Total } \\ \text { thin) } \end{gathered}$ | $\begin{gathered} \text { 17.0-18.4 } \\ \text { (Mildly thin) } \end{gathered}$ | $<17$ <br> (Moderately and severely thin) | $>=25.0$ <br> (Total overweight or obese) | $\begin{gathered} \text { 25.0-29.9 } \\ \text { (Overweight) } \end{gathered}$ | $\begin{gathered} 30.0+ \\ \text { (obese) } \end{gathered}$ |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 5.4 | 587 | 21.3 | 63.3 | 26.3 | 17.2 | 9.1 | 10.3 | 6.9 | 3.4 | 575 |
| 20-29 | 1.6 | 603 | 23.3 | 57.4 | 12.8 | 9.5 | 3.3 | 29.8 | 23.1 | 6.7 | 487 |
| 30-39 | 1.5 | 452 | 25.2 | 47.5 | 8.9 | 6.5 | 2.5 | 43.6 | 30.0 | 13.6 | 382 |
| 40-49 | 1.5 | 155 | 26.0 | 34.7 | 7.4 | 5.4 | 2.0 | 57.8 | 39.1 | 18.7 | 146 |
| Type of residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 3.3 | 671 | 24.1 | 49.0 | 14.7 | 9.9 | 4.7 | 36.4 | 24.0 | 12.3 | 593 |
| Rural | 3.1 | 675 | 23.3 | 54.2 | 16.9 | 10.7 | 6.2 | 28.9 | 19.9 | 9.0 | 596 |
| Nomadic | 1.5 | 451 | 21.9 | 65.4 | 17.7 | 13.8 | 3.9 | 17.0 | 15.7 | 1.2 | 402 |
| Region of residence |  |  |  |  |  |  |  |  |  |  |  |
| Mudug | 2.9 | 1,021 | 23.4 | 59.5 | 12.5 | 9.6 | 2.9 | 28.0 | 20.8 | 7.2 | 934 |
| Galgaduud | 2.7 | 775 | 23.1 | 48.8 | 21.6 | 13.5 | 8.1 | 29.7 | 19.9 | 9.8 | 656 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 2.1 | 1,336 | 23.5 | 55.9 | 14.1 | 10.0 | 4.1 | 30.0 | 21.8 | 8.2 | 1,180 |
| Primary | 6.0 | 295 | 22.4 | 50.0 | 26.0 | 15.6 | 10.4 | 24.0 | 16.1 | 7.9 | 258 |
| Secondary | 3.0 | 133 | 22.8 | 61.5 | 17.7 | 13.1 | 4.6 | 20.8 | 13.0 | 7.8 | 121 |
| Higher education | (0.0) | 32 | (25.1) | (42.6) | (10.6) | (10.6) | (0.0) | (46.7) | (30.6) | (16.1) | 31 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 1.0 | 477 | 22.0 | 66.4 | 17.0 | 12.5 | 4.5 | 16.5 | 14.8 | 1.7 | 423 |
| Second | 2.6 | 343 | 22.6 | 58.2 | 17.9 | 10.5 | 7.4 | 23.9 | 19.4 | 4.5 | 307 |
| Middle | 3.3 | 474 | 23.8 | 49.4 | 17.5 | 12.1 | 5.5 | 33.1 | 21.3 | 11.8 | 414 |
| Fourth | 3.6 | 278 | 24.0 | 47.5 | 16.0 | 10.2 | 5.8 | 36.5 | 22.5 | 14.0 | 243 |
| Highest | 4.9 | 225 | 25.0 | 47.3 | 9.8 | 8.8 | 1.0 | 42.9 | 29.2 | 13.7 | 203 |
| Total | 2.8 | 1,797 | 23.3 | 55.1 | 16.3 | 11.2 | 5.1 | 28.7 | 20.4 | 8.3 | 1,590 |

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters ( $\mathrm{kg} / \mathrm{m}^{2}$ ).
${ }^{1}$ Excludes pregnant women and women with a birth in the preceding 2 months

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, GMHDS 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 |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | (60.4) | (35.9) | (0.0) | (3.7) | 100.0 | (3.7) | 31 |
| 20-29 | 71.0 | 24.5 | 0.4 | 4.0 | 100.0 | 2.4 | 107 |
| 30-39 | 69.2 | 24.9 | 5.4 | 0.6 | 100.0 | 11.4 | 78 |
| 40-49 | (79.0) | (14.9) | (3.5) | (2.6) | 100.0 | (0.0) | 33 |

Type of residence

| Urban | 61.7 | 31.8 | 1.2 | 5.3 | 100.0 | 2.5 | 92 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Rural | 63.5 | 31.8 | 3.2 | 1.6 | 100.0 | 9.8 | 93 |
| Nomadic | 92.5 | 4.1 | 2.7 | 0.7 | 100.0 | 2.0 | 63 |
| Region |  |  |  |  |  |  |  |
| Mudug | 76.1 | 20.9 | 1.0 | 2.0 | 100.0 | 2.4 | 126 |
| Galgaduud | 64.1 | 28.8 | 3.7 | 3.4 | 100.0 | 7.9 | 122 |
| Education |  |  |  |  |  |  |  |
| No education | 79.3 | 17.2 | 2.8 | 0.7 | 100.0 | 5.6 | 190 |
| Primary | $(39.2)$ | $(51.4)$ | $(1.1)$ | $(8.3)$ | 100.0 | $(2.7)$ | 41 |
| Secondary | $*$ | $*$ | $*$ | $*$ | 100.0 | $*$ | 12 |
| Higher | $*$ | $*$ | $*$ | $*$ | 100.0 | $*$ | 4 |

Wealth
quintile

| Lowest | 91.5 | 4.7 | 3.9 | 0.0 | 100.0 | 2.8 | 44 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second | $(83.0)$ | $(15.6)$ | $(0.0)$ | $(1.4)$ | 100.0 | $(0.0)$ | 33 |
| Middle | 73.8 | 24.3 | 1.9 | 0.0 | 100.0 | 6.4 | 77 |
| Fourth | 55.2 | 31.7 | 5.2 | 7.9 | 100.0 | 8.1 | 50 |
| Highest | $(50.0)$ | $(44.7)$ | $(0.0)$ | $(5.3)$ | 100.0 | $(5.4)$ | 44 |
| Total | $\mathbf{7 0 . 2}$ | $\mathbf{2 4 . 8}$ | $\mathbf{2 . 3}$ | $\mathbf{2 . 7}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{5 . 1}$ | $\mathbf{2 4 8}$ |

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.


HIV/AIDS-Related Knowledge, Beliefs and Attitudes


### 8.1. Introduction

The survey collected information on the knowledge of and attitudes around Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome (HIV/AIDS) and 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 on and trends in HIV/AIDS knowledge, attitudes, and behaviours, including knowledge of HIV/AIDS prevention methods, stigma and prevention of mother-to-child transmission.

HIV/AIDS is not considered to be a major epidemic in Somalia and most people associate HIV/AIDS with people who commit sexual sins. The HIV/AIDS prevalence among the adult population is estimated to be very low at about 0.55 percent, with an estimated figure of 2,370 annual deaths (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 Somalia depends on several variables: levels of knowledge about HIV/AIDS among the general population, social stigmatization, modification of risk behavior, 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.

### 8.2. HIV/AIDS-Related Knowledge, Beliefs and Attitudes and Prevention Methods

The survey collected data from women aged 15-49 on their knowledge, perceptions, and behaviors related to HIV/AIDS, as well awareness of modes of HIV/AIDS transmission. The survey also collected information on knowledge about which behaviors could prevent the spread of HIV/ AIDS. Respondents were asked whether they had heard of HIV/AIDS. Those who reported they had heard of HIV/AIDS were then asked several questions on how the infection could be avoided.

Table 8.1 provides information on women's awareness of HIV/AIDS. It shows that about 66 percent of women aged 15-49 have heard of HIV/AIDS. The proportion of women who have heard of HIV/AIDS was lower in nomadic areas compared to rural and urban areas at 45 percent, 71 percent and 76 percent respectively. Regionally, the percentage of women who have heard of HIV/AIDs is slightly higher in Galguduud at 67 percent compared to those Mudug region with 65 percent as shown in Figure 8.1.

Sixty percent of women who have not attended school had heard about HIV/ AIDS compared to 91 percent of those with higher education. Awareness of HIV/AIDS is higher among the wealthier households at 86 percent compared to poorer households at 41 percent (Figure

Figure 8.1 Percentage of women who have heard HIV/AIDs by type of residence and region


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/AID..

### 8.3. Misconceptions about HIV/ AIDS

Table 8.2 presents data on the misconceptions about HIV/AIDS transmission (e.g. that HIV/AIDS can be transmitted by mosquito bites or that it can be transmitted by sharing food with someone who has HIV/AIDS). About 41 percent of women aged 15-49 stated that a healthy-looking person can have the AIDS virus, 38 percent believe AIDs cannot be transmitted through supernatural means while 34 percent believe that sharing of food does not transmit the virus and 27 percent were aware that the transmission cannot take place through mosquito bites.

Table 8.2 also includes a composite measure of knowledge of HIV/AIDS. It shows that 12 percent of all women aged 15-49 rejected two most common misconceptions about HIV/AIDS (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.

6 percent of the interviewed women have comprehensive knowledge of HIV/AIDS. Comprehensive knowledge of HIV/AIDS increases with increase in the levels of education, however the levels are low for example, 8 percent of women with higher education have comprehensive knowledge of HIV/AIDS.. Women in

Mudug are more likely to have comprehensive knowledge on HIV/AIDS at 7 percent than women form Galgaduud at 5 percent.

### 8.4. 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 survey were asked whether HIV/AIDS could be transmitted from a mother to her child during pregnancy or delivery and through breastfeeding. They were also asked whether the risk of mother-to-child transmission (MTCT) of HIV/AIDS could be reduced by the mother taking special drugs during pregnancy.

Table 8.3 presents data on the knowledge about mother-to-child transmission among women aged 15-49 by background characteristics. It shows that 40 percent of women are aware that HIV/AIDS can be transmitted during pregnancy, 43 percent know that it can be transmitted during delivery and through breastfeeding, whereas 31 percent of the respondents believe HIV/AIDS can be transmitted by all three means. Twenty-eight percent of women are aware that the risk of mother-to-child transmission can be reduced if the infected mother takes special drugs during pregnancy. Knowledge of prevention of mother-to-child transmission of HIV/ AIDS increases with women's educational attainment. Knowledge on mother to child transmission of HIV/ AIDS is almost similar among women in Galagadud and Mudug at 29 percent and 28 respectively.


### 8.5. Attitudes towards People Living with HIV/AIDS

Many people in Galmudug believe that HIV/AIDS is a disease for the people who are sexualy immoral. Extensive stigma and discrimination against people living with HIV/AIDS adversely affect both people's willingness to be tested and their adherence to ART. For instance, people may hesitate to take an HIV test because they are afraid of how other people will react if the test result is positive.

HIV/AIDS-related stigma and discrimination undermine HIV/AIDS prevention as they stop people from seeking information on how to reduce their risk of exposure to HIV/AIDS and adopt safer behaviours, as they believe such inquiries may raise suspicion about their status. Tackling the stigma and discrimination is thus an important factor for the success of programs targeting HIV/AIDS prevention and control.

In the survey, 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 infected with HIV, to buy vegetables from an infected shopkeeper or vendor, and to let others know the HIV/AIDS status of family members.

Table 8.4 presents data for women aged 15-49 who had heard of HIV/AIDS and their attitudes towards people living with HIV/AIDS. It shows that 54 percent of women think that children living with HIV/AIDS should not attend school with children who are not infected. Fifty-eight percent of the women said they would not buy fresh vegetables from a shopkeeper or vendor who is HIV positive. Further, the table shows that 44 percent of the respondents have discriminatory attitudes towards people living with HIV/AIDS.


Stigma against people with HIV/AIDS is higher among people in rural households. Regionally, the stigma against people with HIV/AIDS is higher in Galguduud than Mudug at 53 percent and 36 percent respectively.

The data also shows that the discriminatory attitudes towards people with HIV/AIDS decrease as educational levels increase. This means that those with no education have more negative attitudes towards people with HIV/AIDS, compared to those with higher levels of education. It also shows that the negative attitudes towards people with HIV/ AIDS increase with age (Figure 8.5). According to Figure 8.648 percent of women aged 30-39 have discriminatory attitudes towards people living with HIV/AIDS compared to 42 percent among those aged 15-19 years.

The findings indicate that never-married women have less negative attitudes towards people with HIV/ AIDS compared to ever-married women.

### 8.6. Self-reporting of Sexually Transmitted Infections

The survey collected information about sexually transmitted infections or symptoms of an STI. Evermarried 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.

Figure 8.5 Percent of women aged 15-49 with discriminatory attitudes towards people living with HIV/AIDS by Education.


Figure 8.6 Percentage of women aged 15-49 with discriminatory attitudes towards people living with HIV

| 42.42128703 | 42.04928693 | 45.25238644 | 47.5147763 | 43.1658158 |
| :--- | :--- | :--- | :--- | :--- |


| $15-19$ | $20-24$ | $25-29$ <br> Age | $30-39$ |
| :---: | :---: | :---: | :---: |

Table 8.5 shows the self-reported prevalence of STIs and STI symptoms. Only 7 percent of ever-married women reported that they had an STI in the 12 months preceding the survey. 7 percent reported having had a bad smell, or an abnormal discharge while 3 percent had a genital sore or ulcer. In total, 9 percent of women reported having an STI/genital discharge/sore or ulcer.

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 than those who are divorced/separated or widowed. The prevalence varies slightly by age, education, and wealth quintile. The prevalence of STIs is almost twice as high in urban and rural women, compared to nomadic women at 8 percent, 7 percent and 4 percent respectively.

Regionally, the ever-married women in Mudug reported more STI cases at 8 percent than women in Galgaduud at 5 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. The Figure shows that 74 percent of the ever-married women who had an STI or STI symptoms did not seek advice or treatment when they presented with symptoms.

Thirty-nine percent of ever-married women who had STI/STI symptoms sought advice from the public health sector and 10 percent got advice from the private sector while 1 percent of women sought advice or treatment from other sources.

Figure 8.7 Percentage of women aged15-49 reporting an STI or symptoms of an STI in the past 12 months who sought advice or treatment


## List of Tables

Table 8.1 Knowledge of HIV/AIDS 151
Table 8.2 Comprehensive knowledge about HIV/AIDS
Table 8.3 Knowledge of prevention of mother-to-child transmission of HIV/AIDS 153
Table 8.4 Discriminatory attitudes towards people living with HIV/AIDS 154
Table 8.5 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms 155
Table 8.6 Women seeking treatment for STIs 156

## Table 8.1 Knowledge of HIV/AIDS

Percentage of women aged 15-49 who, heard HIV/AIDS by background characteristics, GMHDS 2020

| Background characteristics | Percentage of women who had ever heard about HIV/AIDS | Number of women |
| :---: | :---: | :---: |
| Age |  |  |
| 15-19 | 60.3 | 646 |
| 20-24 | 72.9 | 327 |
| 25-29 | 70.7 | 353 |
| 30-39 | 64.0 | 479 |
| 40-49 | 69.2 | 161 |
| Type of residence |  |  |
| Urban | 76.4 | 727 |
| Rural | 70.9 | 715 |
| Nomadic | 44.6 | 524 |
| Region |  |  |
| Mudug | 64.8 | 1,079 |
| Galgaduud | 67.3 | 887 |
| Education |  |  |
| No education | 59.5 | 1,415 |
| Primary | 78.9 | 375 |
| Secondary | 89.0 | 140 |
| Higher | 90.5 | 36 |
| Wealth quintile |  |  |
| Lowest | 41.4 | 360 |
| Second | 58.3 | 235 |
| Middle | 62.6 | 549 |
| Fourth | 77.7 | 473 |
| Highest | 85.6 | 348 |
| Total 15-49 | 65.9 | 1,966 |

## Table 8.2 Comprehensive knowledge about HIV/AIDS

Percentage of women age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of the AIDS virus, and thepercentage with a comprehensive knowledge about AIDS by background characteristics, GMHDS 2020

| Background characteristics | Percentage of women who say that: |  |  |  | Percentage who say that a healthy-looking person can have HIV and who reject the two most common local misconceptions ${ }^{1}$ |  | Number of respondents |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A healthylooking person can have the AIDS virus | The AIDS virus cannot be transmitted by mosquito bites | The AIDS virus cannot be transmitted by supernatural means | A person cannot become infected by sharing food with a person who has the AIDS virus |  | Percentage with a comprehensive knowledge about AIDS ${ }^{2}$ |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 38.2 | 25.8 | 34.2 | 32.6 | 12.0 | 6.1 | 646 |
| 20-24 | 47.4 | 31.0 | 41.8 | 36.0 | 11.3 | 8.8 | 327 |
| 25-29 | 44.4 | 29.6 | 38.0 | 34.0 | 12.6 | 5.3 | 353 |
| 30-39 | 39.6 | 23.9 | 37.7 | 33.3 | 12.6 | 5.8 | 479 |
| 40-49 | 39.8 | 24.1 | 40.3 | 37.9 | 13.1 | 3.2 | 161 |
| Type of residence |  |  |  |  |  |  |  |
| Urban | 49.6 | 37.4 | 46.9 | 46.7 | 18.9 | 7.9 | 727 |
| Rural | 45.3 | 27.2 | 42.0 | 38.1 | 12.9 | 4.4 | 715 |
| Nomadic | 24.3 | 11.4 | 18.4 | 10.9 | 2.1 | 6.0 | 524 |
| Region |  |  |  |  |  |  |  |
| Mudug | 39.4 | 29.8 | 37.6 | 34.5 | 13.5 | 6.8 | 1,079 |
| Galgaduud | 43.6 | 23.0 | 37.4 | 33.4 | 10.7 | 5.2 | 887 |
| Highest educational level |  |  |  |  |  |  |  |
| No education | 35.0 | 20.6 | 31.2 | 26.7 | 8.2 | 5.0 | 1,415 |
| Primary | 53.3 | 33.1 | 48.7 | 46.4 | 16.2 | 6.7 | 375 |
| Secondary | 63.6 | 59.2 | 62.7 | 63.6 | 32.6 | 12.1 | 140 |
| Higher | (60.9) | (51.5) | (60.4) | (61.2) | (31.6) | (8.0) | 36 |
| Total 15-49 | 41.3 | 26.7 | 37.5 | 34.0 | 12.2 | 6.1 | 1,966 |

${ }^{1}$ The two most common local misconceptions are that HIV/AIDS can be spread by mosquitoes and supernatural means.
${ }^{2}$ 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 age 15-49 who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of mother to child transmission (MTCT) of HIV can be reduced by mother taking special drugs during pregnancy, by background characteristics, GMHDS 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 respondent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | During pregnancy | During delivery | By breastfeeding | By all three means |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | 36.2 | 38.4 | 41.6 | 28.5 | 26.8 | 651 |
| 20-24 | 43.9 | 49.9 | 49.6 | 36.4 | 34.9 | 327 |
| 25-29 | 44.4 | 46.3 | 43.9 | 34.2 | 29.8 | 350 |
| 30-39 | 38.0 | 41.3 | 41.1 | 30.0 | 26.1 | 478 |
| 40-49 | 42.0 | 43.7 | 40.4 | 29.5 | 24.5 | 160 |

Type of
residence

| Urban | 46.9 | 50.1 | 50.1 | 35.0 | 34.1 | 741 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural | 42.7 | 47.6 | 47.5 | 33.1 | 28.8 | 695 |
| Nomadic | 26.2 | 26.6 | 27.6 | 23.7 | 19.5 | 530 |
| Region |  |  |  |  |  |  |
| Mudug | 36.5 | 39.7 | 39.1 | 27.9 | 28.0 | 1,188 |
| Galgaduud | 44.9 | 47.8 | 49.2 | 36.3 | 28.8 | 778 |
| Education |  |  |  |  |  |  |
| No education | 35.1 | 36.1 | 36.6 | 27.4 | 23.0 | 1,412 |
| Primary | 48.7 | 55.3 | 57.0 | 39.8 | 38.5 | 373 |
| Secondary | 60.0 | 67.6 | 64.3 | 43.2 | 47.3 | 144 |
| Higher | (51.6) | (78.7) | (70.9) | (44.5) | (55) | 37 |
| Total 15-49 | 39.8 | 42.9 | 43.1 | 31.2 | 28.3 | 1,966 |
| Note: Figures in parentheses are based on $25-49$ unweighted cases |  |  |  |  |  |  |

Table 8.4 Discriminatory attitudes towards people living with HIV/AIDS

Among women age 15-49 who have heard of HIV or AIDS, with discriminatory attitudes towards people living with HIV, according to background characteristics, GMHDS 2020

| Background characteristics | 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 ${ }^{1}$ | Number of women who have heard of HIV/AIDS |
| :---: | :---: | :---: | :---: | :---: |


| Age |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| $15-24$ | 52.2 | 56.8 | 42.3 | 628 |
| $15-19$ | 53.6 | 55.0 | 42.4 | 390 |
| $20-24$ | 50.0 | 59.7 | 42.0 | 238 |
| $25-29$ | 52.2 | 59.5 | 45.3 | 250 |
| $30-39$ | 57.0 | 60.7 | 47.5 | 307 |
| $40-49$ | 56.0 | 58.3 | 43.2 | 112 |


| Marital status |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Never-married | 50.8 | 54.4 | 40.2 | 399 |
| Married | 54.9 | 59.5 | 46.0 | 741 |
| $\left.\begin{array}{llll}\text { Divorced/ } & 54.8 & 62.9 & 45.8\end{array}\right] 155$ |  |  |  |  |

Type of residence

| Urban | 51.7 | 57.2 | 42.0 | 555 |
| :---: | :---: | :---: | :---: | :---: |
| Rural | 64.3 | 67.2 | 53.4 | 506 |
| Nomadic | 35.4 | 42.2 | 29.5 | 234 |
| Region |  |  |  |  |
| Mudug | 45.4 | 51.4 | 36.3 | 699 |
| Galgaduud | 63.4 | 66.6 | 53.4 | 597 |
| Education |  |  |  |  |
| No education | 54.7 | 58.8 | 45.6 | 842 |
| Primary | 52.7 | 60.6 | 43.8 | 296 |
| Secondary | 52.3 | 53.7 | 40.3 | 124 |
| Higher | 41.7 | 46.4 | 24.4 | 33 |
| Wealth quintile |  |  |  |  |
| Lowest | 38.4 | 42.6 | 30.6 | 149 |
| Second | 41.9 | 50.8 | 36.7 | 137 |
| Middle | 57.7 | 64.2 | 46.6 | 344 |
| Fourth | 64.6 | 63.3 | 52.2 | 368 |
| Highest | 48.5 | 57.0 | 41.6 | 298 |
| Total 15-49 | 53.7 | 58.4 | 44.2 | 1,296 |

${ }^{1}$ 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 ever married women age 15-49, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, GMHDS 2020 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage of respondents who reported having an STI or related symptoms in the past 12 months: |  |  |  |  |
| characteristics | STI | Bad-smelling/ abnormal genital discharge | Genital sore or ulcer | STI/genital discharge/sore or ulcer | Number of evermarried women |
| Age |  |  |  |  |  |
| 15-19 | 4.8 | 4.6 | 2.5 | 6.9 | 104 |
| 20-24 | 5.5 | 6.6 | 2.2 | 7.8 | 248 |
| 25-29 | 9.7 | 8.5 | 4.0 | 12.8 | 338 |
| 30-39 | 4.6 | 5.2 | 2.2 | 6.8 | 474 |
| 40-49 | 7.9 | 8.6 | 5.5 | 12.9 | 160 |
| Marital status |  |  |  |  |  |
| Married | 6.9 | 6.5 | 3.5 | 9.4 | 1,103 |
| Divorced/ separated/ widowed | 4.4 | 7.7 | 0.8 | 8.7 | 221 |
| Type of residence |  |  |  |  |  |
| Urban | 8.3 | 8.4 | 3.7 | 10.9 | 464 |
| Rural | 6.6 | 7.5 | 3.5 | 10.7 | 488 |
| Nomadic | 4.1 | 3.4 | 1.7 | 5.4 | 373 |
| Region |  |  |  |  |  |
| Mudug | 7.6 | 7.1 | 4.3 | 9.3 | 679 |
| Galgaduud | 5.4 | 6.2 | 1.8 | 9.3 | 645 |
| Education |  |  |  |  |  |
| No education | 6.1 | 6.9 | 3.3 | 9.4 | 1,071 |
| Primary | 6.8 | 3.9 | 0.9 | 7.7 | 194 |
| Secondary | (12.6) | (10.6) | (6.0) | (12.6) | 43 |
| Higher | * | * | * | * | 16 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 4.2 | 3.9 | 2.6 | 5.3 | 244 |
| Second | 4.8 | 5.5 | 0.9 | 7.3 | 186 |
| Middle | 5.3 | 6.3 | 3.1 | 8.8 | 359 |
| Fourth | 8.1 | 9.8 | 4.8 | 12.2 | 317 |
| Highest | 10.1 | 6.9 | 3.1 | 11.8 | 217 |
| Total 15-49 | 6.5 | 6.7 | 3.1 | 9.3 | 1,324 |

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 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, GMHDS 2020 |  |
| :---: | :---: |
| Background characteristics | Percentage of Women |
| Public Sector | 38.5 |
| Public Sector | 19.3 |
| Government Hospital | 9.5 |
| Referal Health Center | 2.1 |
| MCH/HC | 7.6 |
| Primary Health Unit (PHU) | 0.0 |
| Mobile Clinic | 0.0 |
| Other Public Sector | 0.0 |
| Private medical sector | 9.6 |
| Private sector | 8.9 |
| ClinicaL | 5.1 |
| Pharmacy | 4.5 |
| Other Private Medical Sector | 0.0 |
| Other sources | 0.7 |
| No advice or Treatment | 74.0 |
| Number with STD or symptoms of STD | 123 |
| Number of women | 123 |

[^13] exceed 100 percent.


## Gender-Based Violence

Key Findings

Experience of physical violence:
14 percent of women aged 15-49 years in Galmudug have experienced physical violence since the age of 12.

Physical violence by place of residence:
Physical violence against women in Galmudug is highest among women in urban areas at 15 percent.

Physical violence by region:
Mudug has the highest physical violence against women at 15 percent.

Perpetrators of the violent acts:
58 percent of women believe that husbands are the most common perpetrators of violent acts against women in Galmudug.

Where violent acts take place:
59 percent of women aged 15-49 years believe that most violent acts against women take place at home.

Violence during pregnancy:
4 percent of women aged 15-49 years experienced physical violence during pregnancy.

Help-seeking behavior:
9 percent of ever-married women aged 15-49 years who had experienced physical or sexual violence had sought help.

In 2015, the UN General Assembly adopted 17 Sustainable Developments Goals (SDGs). Goal 5, calls for the elimination of all forms of violence and discriminatory acts against women and girls. Violence against women can be described as a violation of human rights, and 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 for women in many countries.

Gender-based violence includes sexual, physical, mental and economic harm inflicted in public or in private. It also includes threats of violence, coercion and manipulation. This can take many forms such as intimate partner violence, sexual violence, child marriage, female genital mutilation and so-called 'honour crimes.

The consequences of gender-based violence are devastating and can have life-long repercussions for survivors. It can even lead to death. (UNHCR)

### 9.1. Measurements of Violence

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 years 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 behaviors for those who have experienced violence.

Specifically, the survey asked never-married and evermarried women about the 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. This ensured there were no misunderstandings on the meaning of 'violence' among respondents. The following sets 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 for never-married women, because the questions would be seen as anomalous given the cultural context in Somalia.

### 9.2. Ethical Considerations in GMHDS

Ensuring the confidentiality and privacy of respondents was obligatory for the enumerators during and after the survey interviews. All enumerators were provided rigorous training sessions on how to build a rapport with the respondents, make a good impression, obtain respondents' consent, assure them about the confidentiality of the interview, and ensure that the respondents were interviewed 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 the aim of the survey and context, before each interview began. Respondents were informed about the use of information collected, and that the outcome of the survey would be used to inform policies and formulate programs that address the identified gaps and needs 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 sensitivity involved and ensure respondents felt comfortable discussing this topic.

### 9.3. Opinions about Domestic Violence

The survey asked all women about their opinions about domestic violence. Specifically, they were asked whether domestic violence means:

O Physical abuse
O No participation in household decision-making
O No participation in decision-making regarding children
O Failure to meet basic living costs
O Denial of education
O Forced marriage
O Rape
O Sexual harassment
O Forced labour

Table 9.1 presents the percentage of women aged 1549 years who understand domestic violence to mean specific acts (highlighted in section 9.3 above) according to their background characteristics. Over 60 percent of women in Galmudug considered physical abuse, denial of education, forced marriage, rape, sexual harassment, forced labour as forms of domestic violence.

Forced marriage had the highest proportion of women reporting it as a form of domestic violence at 66 percent followed by physical abuse, rape and forced labor at 65 percent each. The least reported form of violence is failure to meet basic needs reported by 52 percent of the women. Figure 9.1 depicts the difference in understanding of domestic violence by married and never married women.

Married women have a better understanding of acts that constitute domestic violence, followed by the never married and those with the least understanding are the widows and divorcees. Educational attainment plays a role in the understanding of domestic violence. As the level of education increases so is the proportion of women who identify the listed vices as constituting domestic violence.

Regionally, more women in Galgaduud aged 15-49 years believe that rape, forced marriage, denial of education are acts of domestic violence at 70 percent, 69 percent, 65 percent respectively, compared to women in Mudug where 65 percent believe that forced marriage, 64 percent believe that forced labour and physical abuse are acts of domestic violence (Table 9.1).

Percentage of all women aged 15-49 years who understand domestic violence to mean various specified acts, according to marital status


### 9.4. Women's Experience of Physical Violence

Table 9.2 and Figure 9.2 presents data on women (15-49 years of age) who had experienced physical violence since the age of 12 and those that reported they experienced physical violence in the 12 months preceding the survey. It shows that 14 percent of women aged 15-49 years have experienced physical violence since the age of 12 , while 7 percent reported they had experienced physical violence often or sometimes in the 12 months preceding the survey. Younger women are more likely to experience physical violence; with 15 percent of women in the 15-19 age group reporting that they had experienced violence since the age of 12 and 10 percent in the same age group reporting that they experienced violence in the 12 months preceding the survey. Among older women aged 45-49 years, 12 percent reported they had experienced physical violence since the age of 12 years, while 4 percent reported they had experienced physical violence in the 12 months preceding the survey (Figure 9.2).

Physical violence is highest among women residing in the urban at 15 percent and lowest among nomadic women at 13 percent. Women in Mudug are more likely to experience physical violence compared to those in Galgaduud. Fifteen percent of Mudug women have reported they had experienced physical violence
since the age of 12 , while 8 percent reported they had experienced physical violence often or sometimes in the 12 months preceding the survey. Twelve percent of Galgaduud women reported that they had experienced physical violence since the age of 12 , while 6 percent reported they had experienced physical violence in the 12 months preceding the survey.

### 9.5. Perpetrators of physical violence

Table 9.3 shows the opinions of women aged 15-49 years regarding who they consider are the most common perpetrators of violence against women. More than half (58 percent) of women believe that husbands are the most likely to commit violent acts against women in the community and that daughters and sons commit the least violent acts at 3 percent followed by employer or someone at work at 4 percent.

Regionally, the percentage of women who perceive husbands as perpetrators of violence against women in Galgaduud is higher than the women in Mudug at 66 percent and 52 percent respectively. Sixty percent of women in urban and rural perceive husbands to be the most perpetrators of physical violence compared to 52 percent among those residing in the nomadic.

Percent of women aged 15-49 years who have ever experienced physical violence since age 12 by age


As part of the survey, women aged 15-49 years 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, among ever-married women who had experienced physical violence, the most common perpetrator was the husband, reported by 61 percent of women, whereas among the never married the most reported perpetrator of violence is a relative that is neither a parent nor a sibling. Mother/Stepmother is the second most reported perpetrator of violence by both the married and the never married at 17 and 24 percent respectively.

### 9.6 Violence during Pregnancy

Ever-married women who were previously pregnant were asked about their experiences of physical violence during pregnancy. Specifically, they were asked whether anyone has ever hit, slapped, kicked or done anything else that hurt them physically during pregnancy.

Table 9.5 presents the findings on ever-married women aged 15-49 years who experienced violence during pregnancy. It shows that 4 percent of the ever-married women aged 15-49 years reported they experienced physical violence during their pregnancy. The experience of physical violence during pregnancy is highest among
women of age 20-24 and lowest among those aged 1519. Experience of physical violence during pregnancy seems to increase with increase in age with the exception of the 45-59 year olds. Six percent of women in the urban experienced physical violence during pregnancy compared to 4 and 2 percent among those in the rural and nomadic. Physical violence during pregnancy is higher among women in Mudug at 4 percent compared to 3 percent in Galgaduud.

Experience of physical violence during pregnancy is almost four times more among those who are divorced compared to those currently married at 11 and 3 percent respectively. More women in wealth quintile reported having experienced violence during pregnancy (6 percent) compared to women in the lowest wealth quintile (2 percent).

### 9.7 Spousal Violence

Table 9.6 presents data on spousal violence experienced by ever-married women aged 15-49 years who reported physical, sexual violence, or emotional violence, perpetrated by their current or most recent husband in the 12 months preceding the survey. Eleven percent of ever-married women reported physical violence perpetrated against them by a spouse, while 4 percent reported emotional abuse by a spouse and 3 percent reported sexual violence. The patterns of spousal violence vary with the number of children a woman has. Five
percent of women with five or more children reported spousal violence compared to 1 percent of women with no children. Women from urban areas reported they experienced more spousal violence than women in rural and nomadic areas ( 16 percent, 13 percent and 9 percent, respectively).

Regionally, Mudug women reported that they experienced more spouse violence than Galgaduud women (14 percent and 12 percent respectively).

### 9.8 Injuries to Women due to Spousal Violence

Table 9.7 presents findings among ever-married women aged 15-49 years who had sustained injuries due to domestic violence committed by their current or most recent spouses. Thirty-three percent of the women had sustained at least one of the three types of injuries referred to in the table. Among ever-married women aged 15-49 years who had experienced any violence, 8 percent reported they had cuts, bruises or aches; 19 percent had eye injuries, dislocations, sprains or burns; and 21 percent had deep wounds, broken bones or teeth, or any other serious wounds as a result of spousal violence.

Thirty-six percent of women who experienced spousal violence in the last 12 months preceding the survey reported an injury compared to 33 percent among those who reported ever experiencing spousal violence. The most reported injuries are deep wounds, broken bones, broken teeth or any other serious injury at 21 percent for each (Figure 9.3)

### 9.9 Help-seeking Behavior's

Help-seeking behaviors refers to women's responses to their experiences of violence committed by anyone. The GMHDS interviewers inquired whether women who had been subjected to violence had sought any help.

Table 9.8 shows that only 9 percent of ever-married women aged 15-49 years who had experienced emotional, physical or sexual violence had sought help, while 91 percent did not seek any help.

Eleven percent of women in Galgaduud sought help after experiencing emotional, physical or sexual violence compared to 8 percent among those in Mudug.

### 9.10 Places where Violence Against Women usually happens

Table 9.9 shows opinions regarding the most common places where violent acts against women are likely to happen. Women in Galmudug believe that the most violent crimes against women take place at home and workplace at 59 and 9 percent respectively. Less than 1 percent of violent acts against women take place at water points, in market place and in the neighbourhood.

The level of home violence decreases with the age of women. For example, 65 percent of women aged 1519 years experienced home violence, compared to 55 percent of women aged 45-49 years.

Figure 9.3 Injuries to women due to spouse violence

Percent of ever-married women aged 15-49 years who have experienced specific types of spousal violence by types of injuries resulting from the violence


Sixty-five percent of women in urban households believe that violent acts against women take place at home compared to rural and urban areas at 58 percent and 54 percent respectively.

Galgaduud has more women who reported home as the place where most violence occurs at 68 percent compared to 53 percent among those in Mudug.

Women from households in the lowest wealth quintile had the least proportion of those who reported home as the place where violence occurs at 54 percent while those from the fourth wealth quintile were the highest at 64 percent.

Percent distribution of all women aged 15-49 years according to the place where most violence occurs.


## List of Tables

Table 9.1 Acts that mean domestic violence 166
Table 9.2 Experience of physical violence 167
Table 9.3 Opinions regarding the most common perpetrator of violent acts against women 168
Table 9.4 Persons committing physical Violence 169
Table 9.5 Experience of violence during pregnancy 170
Table 9.6 Spousal violence by background characteristics 171
Table 9.7 Injuries to women due to spousal violence 172
Table 9.8 Help-seeking to stop violence 172
Table 9.9 Opinions regarding the most common perpetratror of violent acts against women 173

## Table 9.1 Acts that mean domestic violence

Percentage of all women age 15-49 who understand domestic violence to mean various specified acts, by background characteristics, GMHDS 2020
Acts that mean domestic violence

|  | Acts that mean domestic violence |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristics | 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 | Number of women |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 64.5 | 56.9 | 56.7 | 60.6 | 54.6 | 69.1 | 73.0 | 72.2 | 66.1 | 71.9 | 2.0 | 646 |
| 20-24 | 68.7 | 58.4 | 59.7 | 60.6 | 55.7 | 68.3 | 70.1 | 69.9 | 68.5 | 70.5 | 3.3 | 327 |
| 25-29 | 64.8 | 51.5 | 54.1 | 53.8 | 48.6 | 58.7 | 62.5 | 60.7 | 59.3 | 59.2 | 1.7 | 353 |
| 30-34 | 59.6 | 50.9 | 52.5 | 48.7 | 44.4 | 54.7 | 56.5 | 54.4 | 55.4 | 55.8 | 2.1 | 249 |
| 35-39 | 63.1 | 55.7 | 54.2 | 55.3 | 51.6 | 55.9 | 60.1 | 55.8 | 53.8 | 58.2 | 2.1 | 230 |
| 40-44 | 67.5 | 58.2 | 60.6 | 56.6 | 56.6 | 61.0 | 67.1 | 60.9 | 64.7 | 66.5 | 2.2 | 108 |
| 45-49 | 64.1 | 51.4 | 45.9 | 53.5 | 47.0 | 56.4 | 60.0 | 59.8 | 60.2 | 58.1 | 0.0 | 54 |

Type of resi-
dence

| Urban | 67.8 | 60.5 | 59.9 | 61.0 | 53.6 | 69.9 | 72.1 | 69.3 | 65.8 | 68.4 | 4.2 | 727 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Rural | 65.8 | 53.3 | 54.6 | 55.5 | 49.2 | 63.9 | 65.7 | 65.9 | 60.9 | 64.4 | 1.2 | 715 |
| $\quad$ Nomadic | 58.7 | 50.5 | 51.7 | 53.0 | 53.5 | 52.0 | 59.3 | 56.5 | 59.1 | 61.4 | 0.6 | 524 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |
| Mudug | 64.3 | 54.7 | 55.2 | 57.6 | 54.7 | 61.0 | 64.5 | 60.3 | 62.4 | 64.1 | 2.8 | 1,079 |
| Galgaduud | 65.1 | 55.8 | 56.5 | 55.9 | 48.6 | 65.4 | 68.6 | 69.9 | 62.0 | 66.2 | 1.3 | 887 |

Marital
status

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Nevermar- <br> ried | 21.2 | 19.3 | 19.0 | 20.5 | 18.6 | 23.8 | 24.8 | 24.5 | 22.7 | 24.4 | 0.9 | 642 |
| Married | 36.1 | 29.8 | 30.8 | 30.5 | 27.7 | 32.6 | 34.7 | 33.5 | 33.1 | 34.1 | 1.0 | 1,103 |
| Divorced | 5.4 | 4.6 | 4.6 | 4.5 | 4.3 | 4.9 | 5.3 | 5.1 | 4.9 | 5.1 | 0.2 | 161 |
| Widowed | 1.9 | 1.5 | 1.4 | 1.4 | 1.3 | 1.6 | 1.6 | 1.5 | 1.5 | 1.5 | 0.0 | 60 |

Education

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No educa- <br> tion | 61.7 | 52.1 | 53.1 | 53.8 | 50.7 | 58.8 | 62.7 | 60.6 | 59.8 | 62.1 | 1.7 | 1,415 |
| Primary | 71.7 | 61.9 | 62.8 | 64.9 | 54.4 | 71.4 | 73.9 | 75.1 | 67.4 | 72.6 | 3.1 | 375 |
| Secondary | 73.1 | 66.5 | 64.2 | 63.1 | 58.3 | 76.8 | 77.5 | 72.6 | 69.0 | 69.2 | 3.1 | 140 |
| Higher | $(78.4)$ | $(64.8)$ | $(59.4)$ | $(70.3)$ | $(54.0)$ | $(83.7)$ | $(83.7)$ | $(83.7)$ | $(78.4)$ | $(86.5)$ | $(5.4)$ | 36 |

Wealth quin-
tile

| Lowest | 66.4 | 56.8 | 59.3 | 60.3 | 60.7 | 57.2 | 67.0 | 62.6 | 67.3 | 68.6 | 0.3 | 360 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Second | 53.8 | 46.1 | 46.1 | 48.8 | 46.2 | 52.5 | 54.5 | 55.9 | 50.4 | 58.3 | 1.1 | 235 |
| Middle | 63.5 | 53.6 | 55.8 | 56.1 | 49.8 | 62.1 | 64.8 | 64.0 | 60.2 | 64.4 | 2.2 | 549 |
| Fourth | 67.1 | 57.8 | 57.1 | 57.6 | 51.6 | 66.0 | 68.5 | 67.5 | 61.5 | 62.3 | 2.8 | 473 |
| Highest | 68.7 | 58.5 | 57.1 | 59.0 | 50.8 | 73.0 | 73.3 | 69.7 | 69.1 | 70.9 | 3.7 | 348 |
| Total | $\mathbf{6 4 . 6}$ | $\mathbf{5 5 . 2}$ | $\mathbf{5 5 . 8}$ | $\mathbf{5 6 . 9}$ | $\mathbf{5 2 . 0}$ | $\mathbf{6 2 . 9}$ | $\mathbf{6 6 . 3}$ | $\mathbf{6 4 . 6}$ | $\mathbf{6 2 . 2}$ | $\mathbf{6 5 . 1}$ | $\mathbf{2 . 1}$ | $\mathbf{1 , 9 6 6}$ |

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

Table 9.2 Experience of physical violence

Percentage of women age 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 GMHDS 2020

| Background characteristics | Percentage who have ever experienced physical violence since age 12 | Percentage who have experienced physical violence in the past 12 months |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Often | Sometimes | Often or sometimes |  |
| Age |  |  |  |  |  |
| 15-19 | 14.6 | 6.4 | 3.9 | 10.4 | 646 |
| 20-24 | 15.6 | 4.2 | 3.1 | 7.3 | 327 |
| 25-29 | 14.3 | 3.4 | 4.2 | 7.6 | 353 |
| 30-34 | 12.0 | 1.3 | 2.2 | 3.5 | 249 |
| 35-39 | 11.4 | 1.8 | 1.2 | 3.0 | 230 |
| 40-44 | 12.6 | 1.6 | 1.8 | 3.5 | 108 |
| 45-49 | 11.6 | 3.6 | 0.0 | 3.6 | 54 |
| Type of residence |  |  |  |  |  |
| Urban | 14.9 | 3.6 | 3.5 | 7.1 | 727 |
| Rural | 13.7 | 3.7 | 3.4 | 7.1 | 715 |
| Nomadic | 12.5 | 4.8 | 2.1 | 6.9 | 524 |
| Region |  |  |  |  |  |
| Mudug | 15.0 | 5.1 | 3.1 | 8.2 | 1,079 |
| Galgaduud | 12.3 | 2.6 | 3.1 | 5.7 | 887 |
| Marital status |  |  |  |  |  |
| Never-Married | 5.6 | 2.5 | 1.4 | 3.8 | 642 |
| Married | 6.9 | 1.4 | 1.4 | 2.8 | 1,103 |
| Divorced | 1.1 | 0.1 | 0.3 | 0.5 | 161 |
| Widowed | 0.1 | 0.0 | 0.0 | 0.0 | 60 |
| Education |  |  |  |  |  |
| No education | 13.6 | 4.0 | 2.7 | 6.7 | 1,415 |
| Primary | 15.2 | 3.6 | 4.6 | 8.2 | 375 |
| Secondary | 8.7 | 4.7 | 1.2 | 5.9 | 140 |
| Higher | (27.0) | (5.4) | (8.1) | (13.5) | 36 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 14.8 | 6.4 | 2.6 | 9.0 | 360 |
| Second | 12.1 | 1.1 | 2.3 | 3.4 | 235 |
| Middle | 14.7 | 5.3 | 3.4 | 8.7 | 549 |
| Fourth | 13.4 | 3.4 | 3.3 | 6.8 | 473 |
| Highest | 13.0 | 2.1 | 3.2 | 5.3 | 348 |
| Total | 13.8 | 4.0 | 3.1 | 7.1 | 1,966 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. |  |  |  |  |  |

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, GMHDS 2020

Individual who commits the most violent acts against women

| Background characteristics | Husband | Mother/ Stepmother | Father/ Stepfather | Sister/ Brother | Daughter/ Son | Other <br> Relative | In-laws | Teacher | Employer/ <br> Someone at work | Police/ ASoldier | Total number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 57.4 | 15.7 | 21.6 | 11.2 | 5.7 | 21.1 | 8.3 | 13.8 | 5.8 | 12.4 | 646 |
| 20-24 | 62.1 | 14.5 | 19.8 | 8.1 | 3.0 | 16.0 | 8.8 | 14.5 | 5.6 | 10.3 | 327 |
| 25-29 | 59.6 | 14.6 | 12.8 | 8.4 | 2.1 | 13.9 | 7.7 | 8.4 | 2.8 | 7.2 | 353 |
| 30-34 | 55.4 | 12.1 | 18.3 | 6.3 | 1.3 | 11.1 | 6.3 | 7.8 | 1.3 | 6.9 | 249 |
| 35-39 | 56.5 | 9.2 | 14.9 | 5.4 | 1.8 | 14.0 | 2.9 | 7.5 | 3.1 | 6.1 | 230 |
| 40-44 | 61.4 | 15.0 | 20.8 | 10.2 | 2.4 | 15.2 | 1.9 | 5.6 | 1.6 | 9.2 | 108 |
| 45-49 | 48.6 | 10.8 | 19.7 | 12.0 | 3.2 | 18.7 | 6.8 | 8.0 | 1.6 | 4.8 | 54 |

Type of
residence

| Urban | 60.2 | 11.1 | 19.9 | 11.0 | 3.3 | 16.9 | 6.7 | 13.8 | 5.2 | 10.7 | 727 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural | 60.4 | 12.4 | 18.7 | 8.9 | 2.2 | 11.0 | 3.5 | 6.8 | 2.0 | 10.4 | 715 |
| Nomadic | 52.4 | 19.9 | 16.1 | 5.9 | 4.9 | 23.4 | 12.1 | 12.3 | 4.9 | 5.9 | 524 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Mudug | 51.5 | 13.1 | 19.7 | 9.9 | 5.1 | 26.4 | 11.9 | 16.2 | 6.4 | 7.9 | 1,079 |
| Galgaduud | 66.3 | 14.9 | 16.9 | 7.7 | 1.3 | 4.4 | 1.0 | 4.3 | 1.0 | 11.0 | 887 |

Current marital
status

| Never- <br> married | 58.9 | 15.8 | 21.5 | 11.9 | 5.6 | 21.8 | 9.8 | 16.7 | 7.2 | 13.8 | 642 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Married | 57.5 | 13.1 | 16.8 | 7.4 | 2.6 | 14.2 | 5.8 | 8.4 | 2.3 | 7.4 | 1,103 |
| Divorced | 64.2 | 11.3 | 16.7 | 5.7 | 0.8 | 12.0 | 5.1 | 7.6 | 2.9 | 4.8 | 161 |
| Widowed | 48.3 | 16.2 | 18.7 | 13.1 | 0.0 | 14.3 | 4.3 | 2.8 | 4.3 | 7.6 | 60 |

Education

| 1,415 |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No education | 55.9 | 15.5 | 18.9 | 9.2 | 4.0 | 18.0 | 8.0 | 10.3 | 3.8 | 7.9 | 375 |
| Primary | 65.4 | 11.6 | 17.8 | 8.6 | 1.1 | 10.5 | 3.9 | 10.8 | 2.5 | 10.9 | 140 |
| Secondary | 59.8 | 5.4 | 16.2 | 7.4 | 3.1 | 17.6 | 5.5 | 14.2 | 9.4 | 16.2 |  |
| Higher | $(67.6)$ | $(10.8)$ | $(13.5)$ | $(2.7)$ | $(2.7)$ | $(13.5)$ | $(5.4)$ | $(24.3)$ | $(2.7)$ | $(18.9)$ | 36 |


| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest | 54.5 | 19.8 | 17.4 | 6.7 | 6.4 | 27.8 | 15.9 | 14.2 | 6.7 | 7.0 | 360 |
| Second | 56.2 | 20.7 | 17.5 | 8.0 | 1.2 | 12.5 | 3.8 | 6.7 | 1.1 | 3.6 | 235 |
| Middle | 58.9 | 12.4 | 18.5 | 9.5 | 2.5 | 13.1 | 4.0 | 8.3 | 1.1 | 11.8 | 549 |
| Fourth | 60.3 | 12.7 | 20.2 | 11.6 | 3.0 | 15.7 | 5.9 | 12.0 | 3.9 | 10.6 | 473 |
| Highest | 59.5 | 7.3 | 17.5 | 7.0 | 3.5 | 13.9 | 6.2 | 12.7 | 7.6 | 9.9 | 348 |
| Total | 58.2 | 13.9 | 18.4 | 8.9 | 3.4 | 16.5 | 7.0 | 10.9 | 4.0 | 9.3 | 1,966 |

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

Table 9.4 Persons committing physical Violence

| Among women age 15-49 years who have experienced physical violence since age 12, the percentage who report specific persons who committed the violence according to the respondent's current marital status, GMHDS 2020 |  |  |  |
| :---: | :---: | :---: | :---: |
| Background characteristics | Ever Married | Never Married | Total |
| Persons commit violence |  |  |  |
| Husband | 60.7 | 0.0 | 35.8 |
| Mother/step-mother | 16.9 | 24.2 | 17.3 |
| Father/step-father | 7.6 | 23.2 | 11.2 |
| Sister/brother | 10.7 | 18.6 | 12.6 |
| Daughter/son | 0.5 | 10.3 | 4.3 |
| Other Relative | 3.8 | 39.2 | 15.4 |
| Mother-in-law | 0.5 | 0.0 | 9.0 |
| Father-in-law | 0.9 | 0.0 | 6.9 |
| Other-in-law | 0.0 | 0.0 | 1.8 |
| Neighbour | 7.1 | 4.3 | 6.2 |
| Teacher | 4.2 | 1.1 | 2.8 |
| Employer/someone at work | 0.5 | 6.6 | 2.4 |
| Police/soldier | 1.6 | 0.0 | 1.0 |
| Militia/gangs | 0.5 | 0.0 | 0.3 |
| Other | 0.5 | 0.0 | 0.3 |
| Number of women | 159 | 75 | 234 |


| Among ever-married women age 15-49 years who have ever been pregnant, the percentage who have ever experienced physical violence during pregnancy, by background characteristics, GMHDS 2020 |  |  |
| :---: | :---: | :---: |
| Background characteristics | Percentage who have experienced violence during pregnancy | Total |
| Age |  |  |
| 15-19 | 2.7 | 80 |
| 20-24 | 5.2 | 200 |
| 25-29 | 3.3 | 253 |
| 30-34 | 3.9 | 169 |
| 35-39 | 3.9 | 163 |
| 40-44 | 3.6 | 81 |
| 45-49 | (2.2) | 39 |
| Type of residence |  |  |
| Urban | 5.4 | 363 |
| Rural | 3.5 | 373 |
| Nomadic | 2.0 | 249 |
| Region |  |  |
| Mudug | 4.4 | 472 |
| Galgaduud | 3.3 | 514 |
| Marital status |  |  |
| Married | 2.9 | 821 |
| Divorced | 10.9 | 122 |
| Widowed | (2.0) | 43 |
| Education |  |  |
| No education | 4.0 | 781 |
| Primary | 4.1 | 159 |
| Secondary | (0.0) | 32 |
| Higher | * | 13 |
| Wealth quintile |  |  |
| Lowest | 1.6 | 184 |
| Second | 6.9 | 118 |
| Middle | 3.1 | 269 |
| Fourth | 3.5 | 249 |
| Highest | 5.8 | 166 |
| Total | 3.8 | 986 |

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 9.6 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 years who have ever experienced emotional, physical or sexual violence committed by their husband, by background characteristics, GMHDS 2020

| Background characteristics | Percentage of women whose husband did: |  |  |  |  |  |  | Number of ever-married women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Physical violence | Sexual violence | Emotional abuse | Physical and sexual violence | Physical, sexual and emotional violence | Physical or sexual violence | Physical, sexual or emotional violence |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 6.5 | 0.8 | 3.5 | 0.0 | 0.0 | 7.4 | 9.0 | 104 |
| 20-24 | 10.7 | 2.9 | 1.7 | 1.5 | 0.3 | 12.1 | 12.4 | 245 |
| 25-29 | 13.0 | 2.8 | 5.4 | 2.3 | 0.5 | 13.4 | 15.4 | 331 |
| 30-39 | 10.0 | 3.1 | 5.2 | 2.2 | 1.5 | 10.9 | 13.1 | 464 |
| 40-49 | 9.6 | 3.0 | 3.6 | 1.9 | 0.0 | 10.7 | 12.1 | 160 |
| Type of residence |  |  |  |  |  |  |  |  |
| Urban | 14.7 | 2.8 | 4.4 | 2.4 | 0.7 | 15.1 | 16.3 | 459 |
| Rural | 9.6 | 3.6 | 4.3 | 1.7 | 0.7 | 11.5 | 13.2 | 475 |
| Nomadic | 6.8 | 1.6 | 4.1 | 1.5 | 0.8 | 6.9 | 9.0 | 370 |
| Region |  |  |  |  |  |  |  |  |
| Mudug | 10.5 | 3.2 | 4.3 | 2.1 | 0.8 | 11.6 | 14.0 | 673 |
| Galgaduud | 10.6 | 2.3 | 4.3 | 1.6 | 0.7 | 11.3 | 12.2 | 632 |
| Number of living children |  |  |  |  |  |  |  |  |
| 0 | 0.8 | 0.3 | 0.3 | 0.2 | 0.1 | 0.9 | 1.1 | 148 |
| 1-2 | 2.8 | 1.0 | 0.6 | 0.7 | 0.3 | 3.1 | 3.3 | 286 |
| 3-4 | 2.6 | 0.7 | 1.7 | 0.5 | 0.2 | 2.8 | 3.5 | 361 |
| 5+ | 4.4 | 0.8 | 1.6 | 0.6 | 0.2 | 4.6 | 5.2 | 510 |
| Marital status |  |  |  |  |  |  |  |  |
| Currently married | 10.6 | 2.8 | 5.1 | 1.9 | 0.8 | 11.4 | 13.4 | 1089 |
| Formerly married | 10.6 | 2.5 | 0.0 | 1.6 | 0.0 | 11.5 | 11.5 | 216 |

Employed in the 12 months
preceding the survey

| Employed | 11.7 | 4.6 | 4.3 | 3.8 |  | 12.4 | 14.0 | 113 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Not employed | 10.5 | 2.6 | 4.3 | 1.7 | 0.8 | 11.4 | 13.0 | 1191 |
| Education |  |  |  |  |  |  |  |  |
| No education | 9.7 | 2.3 | 4.2 | 1.7 | 0.8 | 10.3 | 11.9 | 1055 |
| Primary | 16.1 | 5.5 | 5.1 | 2.8 | 0.7 | 18.8 | 20.9 | 190 |
| Secondary | (7.2) | (2.0) | (4.6) | (2.0) | (0.0) | (7.2) | (9.3) | 43 |
| Higher | * | * | * | * | * | * | * | 16 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 7.4 | 2.0 | 5.0 | 2.0 | 1.0 | 7.4 | 9.6 | 243 |
| Second | 9.7 | 2.7 | 4.2 | 1.5 | 0.9 | 10.9 | 12.3 | 184 |
| Middle | 10.5 | 3.6 | 4.3 | 2.2 | 0.8 | 11.9 | 13.1 | 351 |
| Fourth | 11.9 | 2.9 | 4.5 | 2.0 | 0.7 | 12.7 | 14.2 | 310 |
| Highest | 13.1 | 2.1 | 3.1 | 1.3 | 0.0 | 13.9 | 16.2 | 215 |
| Total | 10.6 | 2.8 | 4.3 | 1.9 | 0.7 | 11.4 | 13.1 | 1,304 |

[^14]Table 9.7 Injuries to women due to spousal violence

Percentage of ever-married women age 15-49 years who have experienced specific types of spousal violence by types of injuries resulting from the violence, according to whether they ever experienced violence or in the 12 months preceding the survey GMHDS 2020

| Background characteristics | 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 |  |
| Experienced any violence: |  |  |  |  |  |
| Ever | 8.2 | 19.4 | 20.9 | 33.4 | 80 |
| In the past 12 months | 8.4 | 21.6 | 21.6 | 36.4 | 68 |
| Total 15-49 | 8.2 | 19.4 | 20.9 | 33.4 | 80 |

Table 9.8
Help-seeking to stop violence
Percentage of ever-married women age 15-49 years who have ever experienced emotional, physical or sexual violence committed by background characteristics, GMHDS 2020

|  | Sought help |  |  | Number of ever- married |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Background characteristics | Yes | No | Total |  |
|  |  |  |  |  |
| Region | 7.8 | 92.2 | 100 | 55 |
| Mudug | 10.5 | 89.5 | 100 | 51 |
| Galgaduud | $\mathbf{9 . 1}$ | $\mathbf{9 0 . 9}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 5}$ |
| Total |  |  |  |  |

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

Table 9.9 Opinions regarding the most common perpetratror of violent acts against women

Percent distribution of all women aged 15-49 years according to the place where, in their opinion, most of the violent acts against women occur, by background characteristics, GMHDS 2020

Where do most violent acts take place

| 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 | Neighbourhood | Other | Don't know/ missing |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 64.5 | 13.1 | 8.3 | 3.7 | 1.1 | 4.1 | 0.2 | 0.2 | 0.9 | 3.7 | 100.0 | 646 |
| 20-24 | 64.4 | 8.6 | 6.5 | 2.2 | 0.5 | 2.6 | 0.3 | 0.0 | 0.3 | 14.7 | 100.0 | 327 |
| 25-29 | 53.8 | 8.2 | 6.9 | 1.7 | 0.7 | 2.2 | 1.3 | 0.7 | 0.3 | 24.0 | 100.0 | 353 |
| 30-34 | 52.5 | 3.8 | 5.9 | 0.7 | 0.8 | 3.3 | 1.3 | 1.7 | 0.0 | 30.1 | 100.0 | 249 |
| 35-39 | 54.0 | 5.7 | 4.4 | 1.5 | 0.0 | 3.6 | 0.0 | 1.1 | 0.4 | 29.0 | 100.0 | 230 |
| 40-44 | 61.6 | 4.3 | 3.5 | 0.0 | 3.0 | 3.2 | 0.0 | 0.0 | 0.8 | 23.6 | 100.0 | 108 |
| 45-49 | 55.2 | 1.6 | 8.3 | 0.0 | 0.0 | 3.7 | 0.0 | 1.6 | 2.1 | 27.5 | 100.0 | 54 |

Type of
residence

| Urban | 65.0 | 7.8 | 5.6 | 2.3 | 0.5 | 2.7 | 0.6 | 0.7 | 1.1 | 13.8 | 100.0 | 727 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural | 57.9 | 5.9 | 9.3 | 3.2 | 1.2 | 4.8 | 0.7 | 0.9 | 0.2 | 16.0 | 100.0 | 715 |
| Nomadic | 53.7 | 13.6 | 4.9 | 0.6 | 0.9 | 2.2 | 0.4 | 0.0 | 0.2 | 23.7 | 100.0 | 524 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |
| Mudug | 52.5 | 13.0 | 6.0 | 2.2 | 1.2 | 3.7 | 0.7 | 1.0 | 0.6 | 19.1 | 100.0 | 1079 |
| Galgaduud | 67.7 | 3.4 | 7.6 | 2.1 | 0.4 | 2.8 | 0.4 | 0.2 | 0.5 | 14.9 | 100.0 | 887 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |  |
| Nevermarried | 64.6 | 14.7 | 8.9 | 4.3 | 1.3 | 5.4 | 0.0 | 0.0 | 0.7 | 0.1 | 100.0 | 642 |
| Married | 56.1 | 5.9 | 5.8 | 1.2 | 0.5 | 2.3 | 0.9 | 1.0 | 0.6 | 25.6 | 100.0 | 1103 |
| Divorced | 62.5 | 5.0 | 3.6 | 0.5 | 1.7 | 2.0 | 0.5 | 0.0 | 0.0 | 24.1 | 100.0 | 161 |
| Widowed | 54.7 | 3.9 | 9.2 | 0.0 | 0.0 | 2.8 | 0.0 | 1.4 | 0.0 | 27.9 | 100.0 | 60 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 57.8 | 9.2 | 5.7 | 1.4 | 0.9 | 2.9 | 0.5 | 0.5 | 0.5 | 20.5 | 100.0 | 1415 |
| Primary | 64.9 | 5.6 | 8.7 | 4.2 | 0.9 | 4.4 | 0.9 | 0.7 | 0.5 | 9.3 | 100.0 | 375 |
| Secondary | 58.9 | 10.2 | 11.4 | 4.9 | 0.0 | 4.6 | 0.0 | 1.2 | 1.2 | 7.6 | 100.0 | 140 |
| Higher | (67.6) | (10.8) | (8.1) | (0.0) | (0.0) | (5.4) | (0.0) | (0.0) | 0.0 | (8.1) | 100.0 | 36 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 54.0 | 17.5 | 6.6 | 0.3 | 0.8 | 2.0 | 0.2 | 0.5 | 1.3 | 16.6 | 100.0 | 360 |
| Second | 57.3 | 6.5 | 3.6 | 0.5 | 1.1 | 1.1 | 0.5 | 0.0 | 0.0 | 29.3 | 100.0 | 235 |
| Middle | 60.4 | 6.5 | 8.6 | 2.4 | 1.2 | 2.4 | 1.0 | 0.5 | 0.4 | 16.5 | 100.0 | 549 |
| Fourth | 64.2 | 5.9 | 4.9 | 3.3 | 0.4 | 5.1 | 0.4 | 1.0 | 0.4 | 14.4 | 100.0 | 473 |
| Highest | 58.2 | 8.0 | 8.5 | 3.0 | 0.7 | 5.0 | 0.5 | 0.7 | 0.7 | 14.6 | 100.0 | 348 |
| Total | 59.4 | 8.6 | 6.7 | 2.1 | 0.9 | 3.3 | 0.6 | 0.6 | 0.6 | 17.2 | 100.0 | 1966 |

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

# Female Circumcision 



10 FEMALE CIRCUMCISION

Female circumcision, also known as Female Genital Mutilation/Cutting (FGM/C) has been practised in Galmudug for several decades. The practice is considered harmful because it poses a potential risk to the health and wellbeing 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 survey, both ever-married women and never-married women were asked a series of questions about female circumcision, including whether they had been subjected to it. Women who had undergone the practice were asked at what age it was performed and, the type of female circumcision they underwent, their religious 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 survey used the definitions below of types of female circumcision:
A. Excision of the clitoral hood (prepuce), with or without excision of part or all of 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)

### 10.1. Opinions on Female Circumcision

Table 10.1 presents the percentage distribution of women aged 15-49 years by their religious beliefs regarding female circumcision, according to their ages and other background characteristics. Overall, 70 percent of women believe that FGM/C is a religious requirement. There is little variation in the women's beliefs by age as 73 percent of the women within the age group 15-19 believe it is a religious requirement, compared to 81 percent of those in the age group 45-49 years. More women in nomadic areas at 78 percent compared to rural and urban areas at 68 percent and 66 percent respectively, believe that female circumcision is a religious requirement (Figure 10.1). There is a slight variation in
opinions between regions where 69 percent of women in Galgaduud believe that it is a religious requirement, compared 71 percent of women in Mudug.

Wealth status plays a role in shaping women's beliefs about female circumcision: 81 percent of women from the lowest wealth quintile or poorest households believe female circumcision is a religious requirement, compared to 57 percent from the highest wealth quintile or wealthiest households (Figure 10.2).

Percent of women aged 15-49 by whether FGM/C is required by religion according to Type of residence


Figure 10.2 Opinions on FGM/C by Wealth Status
Percent of women aged 15-49 by whether FGM/C is required by religion based on wealth status $\square$ Required by religion $\quad$ Not required by religion ■ Don't know


### 10.2. Prevalence of Female Circumcision

Table 10.2 presents the percentage of women aged 15-49 years who have undergone female circumcision by background characteristics. Overall, 99 percent of Galmudug women have undergone female circumcision. Pharaonic is the most common type, which has been performed on 69 percent of the women. The findings show that 14 percent of women have undergone Intermediate and Sunni types. Four percent were unaware of the type of female circumcision they had undergone earlier in their lives.

The Pharaonic type of circumcision is largely practised in Nomadic areas at 74 percent compared to rural and urban areas at 70 percent and 64 percent respectively among women aged 15-49 years. Fifteen percent of women aged 15-49 years in both rural and nomadic had undergone the intermediate type of circumcision compared to 13 percent in urban areas. (Figure 10.3)

Figure 10.4 shows that 76 percent of women of Galgaduud underwent Pharaonic circumcision, compared to Mudug at 61 percent. There is a decline in the prevalence of Pharaonic type of circumcision with increase in the level of education while the proportion of women that have undergone Sunni and Intermediate increases with increase in level of education attained (Table 10.2).

Figure 10.5 shows a relationship between the wealth status of the household and the type of FGM/C undergone by women aged 15-49 years. Women from the second wealth quintile recorded the highest proportion of those who underwent the pharaonic type of circumcision at 79 percent compared to the highest wealth quintile at 61 percent.


Figure 10.4 Types of FGM/C by Region


## Figure 10.5 Type of FGM/C by Wealth Status

Percent distribution of women aged 15-49 by type of FGM/C


## 10．3．Age at Female Circumcision

Table 10.3 shows the percent distribution of women aged 15－49 years by the age when they underwent FGM／C， according to their background characteristics．Women were asked how old they were when they underwent female circumcision．The majority of women（71 percent） aged 15－49 years were circumcised when they were aged 5－9 years．Less than 1 percent were circumcised when they were 0－4 years and 1 percent underwent FGM／C when they were above 15 years of age．The levels of education of women aged 15－49 years and the wealth status of their households do not have much influence on the age at which they were circumcised．Seventy－ five percent of women from nomadic areas underwent FGM／C when they were aged 5－9 years，compared to 70 percent of those from rural areas and 68 percent from urban areas（Figure 10．6）．In Galgaduud， 73 and 26 percent of the women underwent circumcision at between 5－9 and 10－14 years respectively while those in Mudug， 68 and 29 percent underwent circumcision at between 5－9 and 10－14 years．

## 10．4．Female Circumcision on Daughters

Ever－married women aged 15－49 years who had daughters were asked if any of their daughters had undergone FGM／C and，if so，how old the girl was when they were circumcised，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 aged 0－14 years who underwent female circumcision by age and their mothers＇background characteristics．One percent of girls aged 0－4 years had been circumcised compared to 11 percent and 14 percent of girls aged 5－9 years and 10－14 years respectively．The prevalence of FGM／C among girls aged 0－14 years was highest in rural areas at 28 percent，compared to 24 and 23 percent among girls in the nomadic and urban areas．In Galgaduud， 26 percent of girls 0－14 years have undergone circumcision compared to 25 percent in Mudug．

Percent of women aged 15－49 by age at FGM／C
$\square<5 \square 5$ to $9 \quad 10$ to $14 \square 15+\square$ Don＇t know
0.1

$\begin{array}{llll}0.4 & 0.7 & 0.3\end{array}$


$\begin{array}{llll}0.6 & 0.4 & 0.9\end{array}$
Rural
Nomadic

Only 6 percent on women with higher education have their daughters ( $0-14$ years) circumcised compared to 27 percent among mothers with no education.

The age pattern reported for daughters differs from that of their mothers, the majority of mothers underwent FGM/C at ages 5-9 years while the daughters were circumcised at slightly older ages of 10-14 years.

### 10.5. Attitudes towards Female Circumcision

Both ever-married and never-married women aged 1549 were asked whether the FGM/C practice should be continued or stopped.

Table 10.5 shows the percentage distribution of women aged 15-49 years by their opinion on the practice of FGM/C. Overall, 82 percent of women believe that
female circumcision should continue, while 15 percent believe that the practice should be stopped.

Eighty-six percent of women in nomadic areas are in support of the practice to be continued compared to rural and urban areas at 81 percent and 79 percent respectively. There is a general declining trend in support of the practice to be continued with the economic status of the household, 87 percent of the households in the lowest wealth quintile are in support of the practice to continue compared to 75 percent in the fourth and highest wealth quintile.

Figure 10.7 presents contrasting views on stopping of female circumcision between regions. Eightythree percent of Mudug women believe that female circumcision should continue, compared to 80 percent of Galgaduud women.

Figure 10.7 Opinions about whether the practice of circumcision should continue

Percent of women aged 15-49 who believe that the practice needs to be continued


## List of Tables

Table 10.1 Opinions on whether female circumcision is required by religion ..... 181
Table 10.2 Prevalence of female circumcision ..... 182
Table 10.3 Age at circumcision ..... 183
Table 10.4 Circumcision of girl's aged 0-14 by mother's background characteristics ..... 184
Table 10.5 Opinions about whether the practice of circumcision should continue ..... 185

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, GMHDS 2020

| Background characteristics | Required by <br> religion | Not required <br> by religion | Don't know | Total | Number of <br> women |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Female circumcision status | 70.2 | 28.1 | 1.7 | 100.0 | 1,170 |
| Circumcised | $*$ | $*$ | $*$ | 100.0 | 7 |

Age

| $15-19$ | 73.0 | 26.0 | 1.0 | 100.0 | 92 |
| :--- | :--- | :--- | :--- | :--- | ---: |
| $20-24$ | 73.3 | 23.4 | 3.3 | 100.0 | 225 |
| $25-29$ | 63.5 | 35.6 | 0.9 | 100.0 | 304 |
| $30-34$ | 69.2 | 27.9 | 2.9 | 100.0 | 216 |
| $35-39$ | 74.3 | 24.9 | 0.9 | 100.0 | 196 |
| $40-44$ | 67.9 | 31.7 | 0.5 | 100.0 | 95 |
| $45-49$ | 81.2 | 18.8 |  | 100.0 | 50 |

Type of residence

| Urban | 68.4 | 30.6 | 1.0 | 100.0 | 414 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Rural | 66.1 | 32.2 | 1.6 | 100.0 | 449 |
| Nomadic | 77.7 | 19.7 | 2.6 | 100.0 | 315 |


| Region |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mudug | 71.3 | 27.1 | 1.6 | 100.0 | 555 |
| Galgaduud | 68.9 | 29.4 | 1.7 | 100.0 | 622 |
| Education |  |  |  |  |  |
| No education | 71.6 | 26.5 | 1.9 | 100.0 | 948 |
| Primary | 64.2 | 35.2 | 0.6 | 100.0 | 179 |
| Secondary | (62.2) | (37.8) | (0.0) | 100.0 | 37 |
| Higher | * | * | * | 100.0 | 13 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 81.2 | 16.8 | 1.9 | 100.0 | 224 |
| Second | 75.3 | 22.6 | 2.1 | 100.0 | 146 |
| Middle | 72.0 | 27.0 | 0.9 | 100.0 | 319 |
| Fourth | 65.3 | 32.7 | 2.0 | 100.0 | 289 |
| Highest | 57.1 | 41.0 | 1.9 | 100.0 | 199 |
| Total | 70.0 | 28.3 | 1.7 | 100.0 | 1,178 |

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 10.2 Prevalence of female circumcision

Percentage of women 15-49 circumcised, and percent distribution of circumcised women by type of circumcision according to background characteristics, GMHDS 2020

| Background characteristics | Percentage of women who have undergone female circumcision | Number of women | Type of female circumcision |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Sunni | Intermediate | Pharaonic | Don't know |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 99.1 | 564 | 24.3 | 15.4 | 55.1 | 5.2 | 100.0 | 559 |
| 20-24 | 98.8 | 294 | 11.7 | 18.4 | 66.9 | 3.0 | 100.0 | 291 |
| 25-29 | 99.6 | 318 | 9.2 | 10.9 | 76.3 | 3.6 | 100.0 | 317 |
| 30-34 | 99.4 | 220 | 7.4 | 12.9 | 77.1 | 2.6 | 100.0 | 219 |
| 35-39 | 99.4 | 197 | 6.8 | 11.8 | 80.4 | 1.0 | 100.0 | 196 |
| 40-44 | 100.0 | 96 | 6.9 | 12.6 | 79.0 | 1.5 | 100.0 | 96 |
| 45-49 | 100.0 | 51 | 8.0 | 10.4 | 78.7 | 2.9 | 100.0 | 51 |

Type of
residence

| Urban | 99.6 | 649 | 19.9 | 12.6 | 64.2 | 3.3 | 100.0 | 646 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural | 99.3 | 663 | 11.9 | 14.6 | 69.6 | 3.8 | 100.0 | 658 |
| Nomadic | 98.9 | 429 | 7.5 | 15.4 | 73.9 | 3.2 | 100.0 | 424 |
| Region |  |  |  |  |  |  |  |  |
| Mudug | 98.8 | 885 | 16.9 | 18.6 | 61.4 | 3.1 | 100.0 | 874 |
| Galgaduud | 99.8 | 855 | 10.7 | 9.4 | 76.0 | 3.9 | 100.0 | 854 |
| Education |  |  |  |  |  |  |  |  |
| No education | 99.2 | 1,234 | 9.8 | 13.4 | 73.1 | 3.6 | 100.0 | 1,225 |
| Primary | 100.0 | 343 | 19.6 | 14.6 | 63.6 | 2.2 | 100.0 | 343 |
| Secondary | 97.5 | 128 | 32.7 | 15.9 | 44.7 | 6.7 | 100.0 | 125 |
| Higher | (100.0) | 34 | (30.5) | (23.8) | (45.7) | (0.0) | 100.0 | 34 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 98.8 | 317 | 7.8 | 16.0 | 72.7 | 3.5 | 100.0 | 313 |
| Second | 99.3 | 180 | 6.0 | 13.3 | 78.9 | 1.9 | 100.0 | 179 |
| Middle | 99.3 | 486 | 12.3 | 13.0 | 70.0 | 4.7 | 100.0 | 482 |
| Fourth | 99.5 | 437 | 17.8 | 13.7 | 65.8 | 2.8 | 100.0 | 434 |
| Highest | 99.5 | 320 | 21.2 | 14.5 | 60.8 | 3.5 | 100.0 | 319 |
| Total | 99.3 | 1,740 | 13.8 | 14.0 | 68.6 | 3.5 | 100.0 | 1,727 |

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

Table 10.3 Age at circumcision

Percent distribution of circumcised women aged 15-49 by age of circumcision according to background characteristics, GMHDS
202

| Background characteristics | Age at circumcision |  |  |  |  |  | Number of women who have undergone circumcision |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <5 | 5 to 9 | 10 to 14 | 15+ | Don't know | Total |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 1.1 | 72.4 | 25.3 | 0.4 | 0.7 | 100.0 | 559 |
| 20-24 | 0.0 | 74.1 | 24.8 | 1.2 | 0.0 | 100.0 | 291 |
| 25-29 | 0.0 | 72.9 | 25.0 | 0.3 | 1.9 | 100.0 | 317 |
| 30-39 | 0.0 | 67.5 | 31.1 | 0.3 | 1.1 | 100.0 | 414 |
| 40-49 | 0.0 | 60.5 | 39.2 | 0.3 | 0.0 | 100.0 | 147 |
| Type of residence |  |  |  |  |  |  |  |
| Urban | 0.1 | 68.0 | 30.6 | 0.4 | 0.7 | 100.0 | 646 |
| Rural | 0.3 | 70.0 | 28.8 | 0.6 | 0.4 | 100.0 | 658 |
| Nomadic | 0.9 | 75.4 | 21.6 | 0.4 | 1.7 | 100.0 | 424 |
| Region |  |  |  |  |  |  |  |
| Mudug | 0.7 | 68.2 | 29.4 | 0.4 | 1.2 | 100.0 | 874 |
| Galgaduud | 0.0 | 73.0 | 26.0 | 0.5 | 0.4 | 100.0 | 854 |
| Education |  |  |  |  |  |  |  |
| No education | 0.4 | 69.0 | 29.3 | 0.4 | 0.9 | 100.0 | 1,225 |
| Primary | 0.0 | 74.6 | 23.9 | 0.9 | 0.6 | 100.0 | 343 |
| Secondary | 0.7 | 73.7 | 24.3 | 0.7 | 0.7 | 100.0 | 125 |
| Higher | (0.0) | (76.5) | (23.5) | (0.0) | (0.0) | 100.0 | 34 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 1.2 | 71.7 | 25.8 | 0.5 | 0.8 | 100.0 | 313 |
| Second | 0.0 | 80.5 | 16.7 | 0.0 | 2.8 | 100.0 | 179 |
| Middle | 0.2 | 69.0 | 30.0 | 0.2 | 0.6 | 100.0 | 482 |
| Fourth | 0.2 | 70.5 | 27.7 | 1.1 | 0.5 | 100.0 | 434 |
| Highest | 0.3 | 66.4 | 32.5 | 0.3 | 0.5 | 100.0 | 319 |
| Total | 0.4 | 70.6 | 27.7 | 0.5 | 0.8 | 100.0 | 1,727 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. |  |  |  |  |  |  |  |

Table 10.4 Circumcision of girl's 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, GMHDS 2020
Current age of girls

| Background characteristics |  |  |  | Total 0-14 |
| :---: | :---: | :---: | :---: | :---: |
|  | 0-4 | 5-9 | 10-14 |  |
| Mother's circumcision status |  |  |  |  |
| Circumcised | 0.7 | 11.2 | 13.6 | 25.4 |
| Not circumcised | 0.0 | 0.0 | 24.6 | 24.6 |
| Type of residence |  |  |  |  |
| Urban | 0.6 | 9.7 | 12.8 | 23.1 |
| Rural | 0.5 | 13.4 | 14.2 | 28.1 |
| Nomadic | 1.1 | 9.5 | 13.8 | 24.3 |
| Region |  |  |  |  |
| Mudug | 1.1 | 9.3 | 14.1 | 24.5 |
| Galgaduud | 0.3 | 12.4 | 13.3 | 26.1 |
| Education |  |  |  |  |
| No education | 0.6 | 11.6 | 14.8 | 27.0 |
| Primary | 0.8 | 8.4 | 9.3 | 18.5 |
| Secondary | 3.7 | 13.9 | 4.3 | 22.0 |
| Higher | 0.0 | 5.6 | 0.0 | 5.6 |
| Wealth quintile |  |  |  |  |
| Lowest | 1.6 | 8.8 | 14.5 | 24.9 |
| Second | 0.0 | 13.9 | 12.9 | 26.8 |
| Middle | 0.4 | 14.0 | 14.7 | 29.2 |
| Fourth | 0.6 | 10.4 | 12.0 | 23.0 |
| Highest | 0.7 | 6.8 | 13.8 | 21.3 |
| Total | 0.7 | 11.1 | 13.6 | 25.4 |

Note: The FGM/C status of girls is reported by their mothers.

Table 10.5 Opinions about whether the 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 continued by background characteristics, GMHDS 2020

| Background characteristics | Opinion to continue with female circumcision practice or not |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Continued | Stopped | Depends | Don't Know |  |  |
| Female circumcision status |  |  |  |  |  |  |
| Circumcised | 81.4 | 15.5 | 2.2 | 0.9 | 100.0 | 1,170 |
| Not circumcised | * | * | * | * | 100.0 | 7 |
| Age |  |  |  |  |  |  |
| 15-19 | 84.6 | 14.0 | 0.5 | 1.0 | 100.0 | 92 |
| 20-24 | 79.1 | 17.9 | 1.7 | 1.3 | 100.0 | 225 |
| 25-29 | 80.6 | 15.0 | 3.5 | 0.9 | 100.0 | 304 |
| 30-34 | 86.9 | 10.7 | 1.8 | 0.6 | 100.0 | 216 |
| 35-39 | 79.4 | 17.3 | 2.0 | 1.3 | 100.0 | 196 |
| 40-44 | 79.0 | 18.5 | 2.5 | 0.0 | 100.0 | 95 |
| 45-49 | 80.6 | 17.7 | 1.8 | 0.0 | 100.0 | 50 |
| Type of residence |  |  |  |  |  |  |
| Urban | 79.4 | 19.1 | 1.2 | 0.3 | 100.0 | 414 |
| Rural | 80.5 | 17.4 | 2.1 | 0.0 | 100.0 | 449 |
| Nomadic | 85.5 | 7.9 | 3.6 | 3.0 | 100.0 | 315 |
| Region |  |  |  |  |  |  |
| Mudug | 83.0 | 12.8 | 3.1 | 1.1 | 100.0 | 555 |
| Galgaduud | 80.1 | 17.8 | 1.4 | 0.7 | 100.0 | 622 |
| Education |  |  |  |  |  |  |
| No education | 83.0 | 13.6 | 2.5 | 1.0 | 100.0 | 948 |
| Primary | 75.7 | 22.2 | 1.4 | 0.6 | 100.0 | 179 |
| Secondary | (81.1) | (18.9) | (0.0) | (0.0) | 100.0 | 37 |
| Higher | * | * | * | * | 100.0 | 13 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 86.7 | 8.3 | 2.7 | 2.4 | 100.0 | 224 |
| Second | 87.4 | 7.2 | 3.7 | 1.8 | 100.0 | 146 |
| Middle | 84.7 | 12.7 | 2.2 | 0.4 | 100.0 | 319 |
| Fourth | 75.4 | 23.5 | 1.1 | 0.0 | 100.0 | 289 |
| Highest | 74.9 | 22.4 | 2.2 | 0.6 | 100.0 | 199 |
| Total 15-49 | 81.5 | 15.4 | 2.2 | 0.9 | 100.0 | 1,178 |

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.


## Key Findings

Access to financial services:
4 percent of women aged 15-49 have a bank account. 80 percent of women own a mobile phone and $\mathbf{7 5}$ percent of those who own a mobile phone uses it for financial transactions.
Participation in decision-making:
35 percent of currently married women aged 1549 make decisions on their own health care by themselves or jointly with their husband.

## Attitudes towards wife beating:

35 percent 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 for at least one of the six specified reasons.

This chapter focuses on women's empowerment in Galmudug 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 survey 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 Galmudug 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.

### 11.1 Married Women's Employment

Table 11.1 shows that 9 percent of currently married women aged 15-49 were employed at the time of the survey or within 12 months preceding the survey. Employment among currently married women increases with age and peaks among those age 40-44 at 22 percent.

Figure 11.1 shows the percentage distribution of currently married women who were employed 12 months preceding the survey by age and type of earnings. Generally, employment is assumed to go hand in hand with payment for work. However, not all women in Galmudug State
receive earnings for the work they do, and among those who do receive earnings, not all receive cash. Seventy-six percent of currently married women who reported being employed at any time in the 12 months preceding the survey received earnings in cash, 13 percent were paid in cash and in kind, 4 percent received their earnings in kind only, while the remaining 7 percent were not paid at all.

Figure 11.1 Employment and cash earnings of currently married women


### 11.2 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.

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.

Figure 11.2 shows the degree of control women have over the use of their earnings with 55 percent of currently married women reporting that they decide how their own earnings will be used, while 39 percent decide jointly with their husbands. Seven percent reported their husband is the main decision maker and controls their cash earnings.

Figure 11.2 Control over women's 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


Table 11.2 shows that 32 percent of women earn less than their husbands, while 24 percent earn more than their husbands. Only 8 percent earn an equal amount to their husbands' earnings. Twenty-eight percent of the currently married women did not know their husbands' earnings, most likely because they are not privy to information about their husbands' earnings.

Regionally, currently married women aged 15-49 in Mudug earn more than their husbands at 32 percent, compared to 17 percent among women in Galgaduud.

### 11.3 Control over Husbands' Earnings

Figure 11.3 shows that 36 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 35 percent, reported that the wife is the main decision maker. Twenty-seven percent reported that the husband is the main decision maker on how his cash earnings are used.

Percent distributions of currently married women aged 15-49 whose husbands receive cash earnings by person who decides how husband's cash earnings are used


The findings on decision making by women on their earnings or their husbands earnings show that generally Galmudug women have some degree of autonomy in decision making concerning cash with at least 25 percent of the women having total or partial control over their cash earnings and at least a third of the women participate in decision making on household income.

### 11.4 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 multiple benefits to individuals and households, including a secure place to live, livelihood, protection during emergencies, and collateral when needed. In the survey, ever-married women were asked whether they own a house and land alone or jointly with their husband.

Table 11.4 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, 18 percent of women own land and 49 percent own a house either alone or jointly. The majority of
women who own houses do so jointly with their husbands, at 22 percent, while 8 percent own land jointly with their husbands. The highest proportion of women who own a house either alone, jointly or both was among those aged 35-39 years who were reported to have a house at 58 percent while the lowest proportion were those aged 25-29 years at 41 percent.

Women in rural areas are more likely to own a house alone at 16 percent compared to women in nomadic and urban areas at 12 and 10 percent respectively. In the ownership of land alone, 6 percent of women in rural and 5 percent of women in the nomadic areas own land alone compared to 3 percent among women in the urban.

Regionally, women in Galgaduud are more likely to own house (Either Alone, Jointly or both alone and jointly), at 37 percent compared to women in Mudug at 29 percent.

### 11.5 Ownership and Use of Bank Accounts and Mobile Phones

Ownership of a bank account and a mobile phone are reflections of autonomy, social functioning, and financial independence. In the survey, women were asked if they had an account in a bank, and if they owned a mobile phone. Those who owned a mobile phone were further asked if they used the phone for financial transactions.

Percent distribution of ever married women aged 15-49 by ownership of housing and land by type of residence and region

## Figure 11.4 Ownership of assets



Table 11.5 shows the percentage of women aged 15-49 who use an account in a bank, percentage who own a mobile phone and use it for financial transactions, according to background characteristics. Four percent of women aged 15-49 have a bank account that they use, 80 percent of the women aged 15-49 own a mobile phone, and among those with the mobile phone 75 percent use their phones for financial transaction. 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 with increase in the levels of education. For example, among women with no education, 2 percent own and use a bank account compared to 32 percent of women with higher education. Similarly, among women with no education, 78 percent have mobile phones, compared to 98 percent of those with higher education (Figure 11.5).

Women from wealthier households are more likely than women from poorer households to have and use a bank account, own a mobile phone and use a mobile phone for financial transactions. Of women from the wealthiest
households, 9 percent own and use a bank account, compared to 3 percent in the poorest households. Fiftysix percent of women in the poorest households use a mobile phone for financial transactions, compared to 90 percent of women from the wealthiest households (Table 11.4).

Women in urban areas are more likely to have and use a bank account, own a mobile phone and use a mobile phone for financial transactions than those from rural and nomadic areas. Seven percent of women from urban areas own a bank account compared to rural and nomadic women at 3 and 2 percent respectively (Figure 11.6).

Regionally, the percentages of women with a bank account and use is higher in Mudug at 5 percent, than Galgaduud at 3 percent, while the percentages of women who own a mobile phone are much higher in Galgaduud at 92 percent than Mudug at 71 percent.

Figure 11.5 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

■ Have and use a bank account ■ Own a mobile phone



Percent of women aged 15-49 who have and use a bank account and own a mobile phone by type of residence

■ Have and use a bank account ■ Own a mobile phone


### 11.6 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 survey, 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 11.6 shows that 40 percent of women indicated that decisions on their own health care are made mainly by their husbands, 35 percent reported they make decisions regarding their own health care jointly with their husbands, while 24 percent indicated that they mainly make these decisions on their own.

A similar pattern is observed regarding major household purchases, visits to family or relatives, with 38 percent of women indicating that their husbands make decisions on major household purchases, 56 percent of women state their husbands make decisions on visits to family or relatives. Generally, men have more influence in household decision-making than women.

### 11.7 Attitudes towards Wife Beating

As part of the survey, 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 11.7 shows that percentage of all women aged 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics. Thirty-five percent of all women believe that a husband is justified in beating his wife for at least one of the six specified reasons. Twenty-two percent of the women believe that wife beating is justified if the wife neglects household duties. Nineteen percent believe that wife beating is justified if she argues with him, while 21 percent believe that wife beating is justified if she neglects the children, 21 percent belief that wife beating is justified when she refuses to have sex with him.

The percentage who believes that a husband is justified in beating his wife for at least one of the six specified reasons decreases as the age of women increases except the age 30-34 at 34 percent. It is high among young women aged 15-19 at 42 percent compared to older women aged 45-49 at 17 percent.

The proportion of women justifying wife beating under any one of the specified circumstances decreases with wealth quintiles. Forty-one percent of women in the poorest households agree that wife beating is justified in at least one of the six specified circumstances, compared to 26 percent of women in the wealthiest households (Figure 11.7).

Percent of women aged 15-49 who agree with at least one specific reason for wife beating by wealth quintile


### 11.8 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 11.6 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.

The second index is the number of reasons why the respondent believes that a husband is justified in beating his wife (see Table 11.8 for the list of reasons).

This index ranges in value from 0 to 5 . A lower score on this indicator is interpreted as reflecting a greater sense of autonomy, self-esteem, and a higher status.

Table 11.8 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 rises with the number of household decisions in which women participate, from 62 percent among women who do not participate in any of the household decisions to 63 percent of women who participate in all three decisions.

The percentage of women participating in all the household decisions who do not agree that wife beating is justified for any reason is 32 percent, while women who accept that wife beating is justified in all six specified reasons is 39 percent.
List of Tables
Table 11.1 Employment and cash earnings of currently married women ..... 195
Table 11.2 Control over women's cash earnings and relative magnitude of women's cash earnings ..... 195
Table 11.3 Control over husbands' cash earnings ..... 196
Table 11.4 Ownership of assets ..... 197
Table 11.5 Ownership and use of bank accounts and mobile phones ..... 198
Table 11.6 Participation in decision making ..... 198
Table 11.7 Attitude toward wife beating: Women ..... 199
Table 11.8 Indicators of women's empowerment ..... 200

Table 11.1 Employment and cash earnings of currently married women

Percent distribution of currently married respondents employed in past 12 months, by type of earnings, GMHDS 2020

Among currently married
respondents: Number of respondents

| Age | respondents: | Number of respondents |
| :---: | :---: | :---: |
|  | Percentage employed in past 12 months | Number of respondents |
| 15-19 | 3.0 | 78 |
| 20-24 | 3.3 | 202 |
| 25-29 | 7.2 | 294 |
| 30-34 | 6.6 | 207 |
| 35-39 | 14.7 | 198 |
| 40-44 | 22.4 | 87 |
| 45-49 | (18.1) | 36 |
| Total | 8.9 | 1,103 |

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

Table 11.2 Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women aged 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, GMHDS 2020

| Background characteristics | Person who decides how wife's cash earnings are used: |  |  | Total | Respondent earns more than husband |  |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mainly wife | Wife and husband jointly | Mainly husband |  | More than him | Less than him | About the same | Husband has no earnings | Don't know |  |  |
| Types of residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 43.9 | 51.0 | 5.0 | 100.0 | 21.0 | 36.6 | 7.9 | 7.2 | 27.3 | 100.0 | 39 |
| Rural | 63.3 | 29.8 | 6.9 | 100.0 | 25.9 | 29.1 | 8.2 | 9.5 | 27.2 | 100.0 | 46 |
| Nomadic | * | * | * | 100.0 | * | * | * | * | * | * | 2 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Mudug | 63.2 | 29.8 | 6.9 | 100.0 | 32.2 | 27.7 | 4.6 | 4.6 | 30.9 | 100.0 | 38 |
| Galgaduud | 48.3 | 45.5 | 6.1 | 100.0 | 17.3 | 35.1 | 10.4 | 11.1 | 26.1 | 100.0 | 50 |
| Total | 54.7 | 38.8 | 6.5 | 100.0 | 23.7 | 31.9 | 7.9 | 8.3 | 28.2 | 100.0 | 87 |

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

Table 11.3 Control over husbands' cash earnings

Percent distributions of currently married women aged 15-49 whose husbands receive cash earnings by person who decides how husband's cash earnings are used, according to background characteristics, GMHDS 2020

| Background characteristics | Person who decides how husbands' cash earnings are used |  |  |  | Total | Number of currently married women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mainly wife | Wife and husband | Mainly husband | Other |  |  |
| Type of residence |  |  |  |  |  |  |
| Urban | 28.2 | 45.0 | 24.6 | 2.1 | 100.0 | 40 |
| Rural | 40.8 | 29.6 | 26.3 | 3.3 | 100.0 | 45 |
| Nomadic | * | * | * | * | * | 3 |
| Region |  |  |  |  |  |  |
| Mudug | 42.1 | 29.6 | 26.1 | 2.3 | 100.0 | 38 |
| Galgaduud | 29.5 | 40.9 | 26.7 | 2.9 | 100.0 | 50 |
| Total | 34.9 | 36.0 | 26.5 | 2.6 | 100.0 | 88 |
| An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed |  |  |  |  |  |  |

Table 11.4 Ownership of assets

Percent distribution of ever married women aged 15-49 by ownership of housing and land, according to background characteristics, GMHDS 2020

| Background characteristics | 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 |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 16.8 | 14.6 | 14.2 | 54.4 | 100.0 | 4.3 | 7.6 | 2.9 | 85.3 | 100.0 | 104 |
| 20-24 | 11.4 | 19.9 | 13.9 | 54.9 | 100.0 | 2.9 | 5.7 | 6.7 | 84.7 | 100.0 | 248 |
| 25-29 | 8.7 | 18.6 | 13.6 | 59.1 | 100.0 | 3.8 | 9.9 | 4.5 | 81.7 | 100.0 | 338 |
| 30-34 | 13.3 | 21.6 | 15.4 | 49.7 | 100.0 | 4.9 | 9.5 | 4.4 | 81.3 | 100.0 | 244 |
| 35-39 | 15.4 | 29.0 | 13.1 | 42.5 | 100.0 | 6.0 | 9.0 | 4.0 | 81.1 | 100.0 | 230 |
| 40-44 | 13.2 | 23.5 | 19.8 | 43.5 | 100.0 | 3.0 | 4.7 | 7.1 | 85.2 | 100.0 | 107 |
| 45-49 | 17.4 | 23.6 | 14.5 | 44.5 | 100.0 | 10.1 | 9.6 | 3.1 | 77.2 | 100.0 | 54 |

Type of residence

| Urban | 9.5 | 18.7 | 11.2 | 60.7 | 100.0 | 3.0 | 5.7 | 2.1 | 89.3 | 100.0 | 464 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Rural | 15.7 | 19.2 | 13.7 | 51.4 | 100.0 | 5.5 | 5.8 | 4.0 | 84.7 | 100.0 | 488 |
| Nomadic | 12.2 | 27.9 | 19.7 | 40.2 | 100.0 | 4.9 | 14.6 | 9.4 | 71.0 | 100.0 | 373 |


| Region |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Mudug | 13.0 | 20.6 | 12.7 | 53.8 | 100.0 | 5.3 | 9.8 | 5.4 | 79.4 | 100.0 | 679 |
| $\quad$ Galgaduud | 12.1 | 22.4 | 16.4 | 49.1 | 100.0 | 3.6 | 6.6 | 4.2 | 85.6 | 100.0 | 645 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 12.1 | 22.4 | 15.6 | 49.9 | 100.0 | 4.6 | 8.7 | 5.3 | 81.4 | 100.0 | 1,071 |
| Primary | 14.5 | 17.2 | 10.5 | 57.9 | 100.0 | 4.3 | 6.3 | 2.9 | 86.5 | 100.0 | 194 |
| Secondary | $(12.6)$ | $(15.2)$ | $(11.5)$ | $(60.7)$ | 100.0 | $(0.0)$ | $(6.6)$ | $(4.0)$ | $(89.4)$ | 100.0 | 43 |
| Higher | $\star$ | $*$ | $*$ | $*$ | 100.0 | $*$ | $*$ | $*$ | $*$ | 100.0 | 16 |

Wealth quintile

| Lowest | 15.4 | 34.4 | 20.1 | 30.1 | 100.0 | 6.2 | 19.1 | 8.4 | 66.3 | 100.0 | 244 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second | 7.8 | 14.5 | 16.7 | 61.1 | 100.0 | 2.1 | 4.7 | 8.9 | 84.3 | 100.0 | 186 |
| Middle | 13.0 | 17.2 | 15.7 | 54.1 | 100.0 | 4.0 | 3.8 | 3.9 | 88.4 | 100.0 | 359 |
| Fourth | 13.9 | 18.2 | 11.4 | 56.5 | 100.0 | 5.0 | 7.1 | 3.1 | 84.9 | 100.0 | 317 |
| Highest | 10.6 | 24.7 | 9.0 | 55.7 | 100.0 | 4.5 | 8.3 | 1.4 | 85.8 | 100.0 | 217 |
| Total | $\mathbf{1 2 . 6}$ | $\mathbf{2 1 . 5}$ | $\mathbf{1 4 . 5}$ | $\mathbf{5 1 . 5}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{4 . 4}$ | $\mathbf{8 . 3}$ | $\mathbf{4 . 8}$ | $\mathbf{8 2 . 5}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 , 3 2 4}$ |

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 11.5 Ownership and use of bank accounts and mobile phones

Percentage of women aged 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, GMHDS 2020

| Background characteristics | 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 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |
| 15-19 | 3.7 | 62.1 | 646 | 57.3 | 401 |
| 20-24 | 5.1 | 86.3 | 327 | 79.9 | 282 |
| 25-29 | 3.4 | 92.4 | 353 | 85.4 | 326 |
| 30-34 | 4.6 | 87.7 | 249 | 80.5 | 218 |
| 35-39 | 3.0 | 87.8 | 230 | 83.2 | 202 |
| 40-44 | 5.1 | 93.7 | 108 | 88.9 | 101 |
| 45-49 | 4.8 | 94.6 | 54 | 90.2 | 51 |
| Type of residence |  |  |  |  |  |
| Urban | 6.5 | 88.4 | 727 | 85.2 | 643 |
| Rural | 2.7 | 83.4 | 715 | 79.2 | 596 |
| Nomadic | 2.4 | 65.3 | 524 | 54.1 | 342 |
| Region |  |  |  |  |  |
| Mudug | 4.6 | 71.0 | 1,079 | 63.2 | 766 |
| Galgaduud | 3.3 | 91.9 | 887 | 88.7 | 815 |


| Education |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| No education | 2.4 | 78.0 | 1,415 | 71.2 | 1,104 |
| Primary | 4.6 | 83.4 | 375 | 80.8 | 313 |
| Secondary | 11.8 | 92.4 | 340 | 88.2 | 129 |
| Higher | $(32.2)$ |  |  |  |  |
| Wealth quintile |  |  | $97.6)$ | 35 |  |
| Lowest | 2.6 | 64.6 | 360 | 56.0 | 233 |
| Second | 2.6 | 70.4 | 545 | 58.0 | 166 |
| Middle | 3.1 | 87.3 | 473 | 77.2 | 447 |
| Fourth | 3.2 | 92.5 | 348 | 82.8 | 413 |
| Highest | 8.9 | $\mathbf{8 0 . 4}$ | $\mathbf{1 , 9 6 6}$ | 90.4 | 322 |
| Total | $\mathbf{4 . 0}$ | $\mathbf{7 4 . 7}$ | $\mathbf{1 , 5 8 1}$ |  |  |

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

Table 11.6 Participation in decision making

Percent distribution of currently married women aged 15-49 by person who usually makes decisions about various issues, GMHDS 2020

|  | Wife and <br> husband <br> jointly | Mainly <br> husband | Someone <br> else | Other | Total | Number |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Decision | Mainly wife | 39.5 | 0.3 | 0.1 | 100.0 | 1,103 |  |
| Own health <br> care | 24.4 | 35.4 | 38.0 | 0.0 | 0.1 | 100.0 | 1,103 |
| Major <br> household <br> purchases | 29.8 | 31.7 | 55.9 | 0.0 | 0.0 | 100.0 | 1,103 |
| Visits to her <br> family or <br> relatives | 23.7 | 19.7 |  |  |  |  |  |

Percentage of all women aged 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, GMHDS 2020

| 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 |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 27.1 | 24.7 | 25.2 | 25.3 | 26.2 | 25.2 | 41.9 | 646 |
| 20-24 | 21.2 | 18.4 | 19.9 | 20.6 | 18.0 | 20.9 | 35.1 | 327 |
| 25-29 | 18.8 | 13.4 | 16.8 | 14.8 | 15.3 | 17.4 | 28.8 | 353 |
| 30-34 | 21.3 | 19.4 | 18.9 | 19.5 | 20.8 | 20.3 | 33.9 | 249 |
| 35-39 | 18.6 | 18.0 | 19.7 | 17.0 | 20.3 | 18.6 | 28.1 | 230 |
| 40-44 | 25.0 | 19.4 | 18.9 | 21.7 | 19.6 | 18.6 | 32.1 | 108 |
| 45-49 | 13.3 | 5.5 | 7.8 | 9.4 | 9.9 | 6.9 | 17.0 | 54 |
| Employment |  |  |  |  |  |  |  |  |
| Not employed | 19.3 | 16.3 | 16.8 | 17.0 | 17.3 | 17.9 | 29.6 | 1,184 |
| Employed for cash | 17.4 | 19.9 | 18.7 | 17.6 | 15.9 | 16.2 | 28.2 | 102 |
| Employed, not for cash | * | * | * | * | * | * | * | 12 |

Number of living

| children |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 26.8 | 23.5 | 25.5 | 24.4 | 25.0 | 25.4 | 41.5 | 790 |
| 1-2 | 19.2 | 17.2 | 16.7 | 18.1 | 17.1 | 19.6 | 32.4 | 289 |
| 3-4 | 19.4 | 15.2 | 17.3 | 16.2 | 17.8 | 16.8 | 30.7 | 372 |
| 5+ | 19.7 | 17.2 | 17.4 | 18.2 | 18.3 | 17.5 | 28.0 | 516 |
| Type of residence |  |  |  |  |  |  |  |  |
| Urban | 21.0 | 19.3 | 20.3 | 19.8 | 20.7 | 19.6 | 32.2 | 727 |
| Rural | 22.8 | 20.4 | 20.6 | 21.7 | 22.0 | 21.8 | 37.5 | 715 |
| Nomadic | 23.9 | 18.0 | 20.7 | 19.1 | 18.9 | 21.2 | 33.9 | 524 |
| Region |  |  |  |  |  |  |  |  |
| Mudug | 22.3 | 18.5 | 20.2 | 18.5 | 19.6 | 19.4 | 33.8 | 1,079 |
| Galgaduud | 22.5 | 20.4 | 21.0 | 22.5 | 22.0 | 22.6 | 35.6 | 887 |
| Mother's education |  |  |  |  |  |  |  |  |
| No education | 23.7 | 18.9 | 19.3 | 20.4 | 20.1 | 20.5 | 34.3 | 1,415 |
| Primary | 20.7 | 22.2 | 21.7 | 21.5 | 22.5 | 23.0 | 35.3 | 375 |
| Secondary | 16.9 | 17.7 | 30.2 | 18.1 | 22.0 | 19.3 | 36.2 | 140 |
| Higher | 12.5 | 13.5 | 18.9 | 14.2 | 19.7 | 16.6 | 29.9 | 36 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 29.4 | 20.8 | 23.6 | 22.7 | 22.3 | 24.3 | 40.9 | 360 |
| Second | 20.7 | 21.1 | 21.5 | 20.3 | 20.6 | 22.7 | 32.8 | 235 |
| Middle | 24.6 | 22.8 | 21.1 | 24.3 | 24.5 | 23.3 | 37.8 | 549 |
| Fourth | 21.0 | 17.9 | 21.8 | 18.1 | 19.3 | 19.1 | 33.5 | 473 |
| Highest | 14.9 | 13.1 | 14.1 | 14.6 | 15.0 | 14.5 | 25.7 | 348 |
| Total | 22.4 | 19.4 | 20.5 | 20.3 | 20.7 | 20.9 | 34.6 | 1,966 |

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

Table 11.8 Indicators of women's empowerment

Percentage of currently married women aged 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, GMHDS, 2020

Percentage who disagree with

| Empowerment indicator | Percentage who participate in <br> all decision making | all the reasons justifying wife <br> beating | Number of women |
| :--- | :---: | :---: | :---: |
| Number of decisions in which <br> women participate ${ }^{1}$ |  |  |  |
| 0 | $\mathrm{~N} / \mathrm{A}$ | 61.9 | 313 |
| $1-2$ | $\mathrm{~N} / \mathrm{A}$ | 67.1 | 427 |
| 3 | 100.0 | 62.6 | 363 |
| Number of reasons for which <br> wife beating is justified ${ }^{2}$ |  |  |  |
| 0 | 32.1 | $\mathrm{~N} / \mathrm{A}$ | 708 |
| $1-2$ | 29.3 | $\mathrm{~N} / \mathrm{A}$ | 139 |
| $3-4$ | 33.5 | $\mathrm{~N} / \mathrm{A}$ | 86 |
| 5 | 38.8 | $\mathrm{~N} / \mathrm{A}$ | 170 |

[^15]

## Key Findings

Chronic diseases:
6 percent of Galmudug household members suffer from at least one chronic disease; this proportion varies in Galmudug regions at 5 percent for Mudug, and 8 for Galgaduud.

Diagnosis and treatment of chronic diseases:
5 percent of household members have been diagnosed by a physician and $\mathbf{4}$ percent are undergoing regular treatment for a chronic disease.

Prevalence of the most common diseases:
Most common of chronic diseases in Galmudug noted in the survey: Blood pressure anomalies/hypertension at 24 percent, diabetic 15 percent, asthma 13 percent and kidney diseases at $\mathbf{1 0}$ percent. The findings indicate also that Prostatic Hypertrophy is least chronic disease in Galmudug

Disability:
Overall, 5 percent of the population in Galmudug suffers from disabilities.

## Most common disability:

sight disability is the most common type of disability at $\mathbf{4 3}$ percent followed by hearing and mobility at $\mathbf{3 0}$ percent of each.

The onset of disability:
The survey shows that age at the onset of disability is higher among children under 5 years at $\mathbf{2 6}$ percent. The survey discovered also that the aging-related and congenital (birthrelated) problems are the main causes of disability at 19 and 17 percent respectively.

Care of disabled persons:
43 percent of disabled people in Galmudug did not receive any care or support for their disability during the 12 months preceding the survey.

## Out-of-pocket health expenses:

35 percent of households paid their health expenses from their income; $\mathbf{2 4}$ percent relies on relatives/friends to cover their health expenses whereas 14 of Galmudug residents sold their assets to cover their health expenses.

Smoking or using tobacco:
3 percent household members in Galmudug mainly smoke cigarette or use tobacco, whereas smoking or using tobacco is higher in households with no education households at $\mathbf{3}$ percent.

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 Galmudug. 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 survey, information on out-of-pocket health expenditure and selected social habits are also presented in this chapter.

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 leading causes of death worldwide. In Galmudug the prevalence of chronic diseases is not exactly known due to the poor health care infrastructure as most of the population lives under harsh conditions.

The survey 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 obtained information on sicknesses that families experienced over the one month preceding the survey, in addition to expenditure on health services received.

### 12.1. Prevalence of Chronic Diseases

Table 12.1 presents data on household members who have at least one chronic disease. Overall, 6 percent of household members in Galmudug were reported to be suffering from at least one chronic disease, similar to 6 percent at the national level. There is a slight variation between the prevalence for males and females - 5 and 7 percent respectively.

Urban and rural household members have a slightly higher reported prevalence of chronic diseases than nomadic household members, at 8 percent, 7 percent, and 3 percent respectively. On comparing data, it can be observed that more women than men reported to have at least one chronic disease, at 7 percent and 5 percent respectively.

The prevalence of at least one chronic disease generally increases with an increase in wealth with 3 percent among those in the lowest wealth quintile to 10 percent among those in the fourth quintile with an exception of the highest quintile at 6 percent.

As noted, disease prevalence increases rapidly with age. The reported prevalence of people with at least one chronic disease increased from 2 percent in the age group $0-4$ years to 12 percent in the age group 35-39 years, to 41 percent in people over 70 years of age (Table 12.1 and Figure 12.1).

Regionally, household members in Galguduud have slightly higher reported prevalence of chronic disease at 8 percent, than in Mudug region at 5 percent (Figure 12.2).

### 12.2 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 receive treatment regularly. The findings show that, overall, 5 percent of household members are reported to have been diagnosed by a physician and 4 percent are undergoing regular treatment for a chronic disease.

Slightly more women than men were diagnosed by a physician, at 6 percent and 5 percent respectively. Similarly, more women than men are undergoing regular treatment for the diseases, at 4 percent versus 3 percent respectively. More urban residents reported having been diagnosed by a physician, at 7 percent, compared to rural and nomadic residents at 6 percent and 2 percent, respectively. Similarly, more urban residents ( 5 percent), reported they had received treatment for chronic diseases, compared to rural and nomadic residents (4 percent and 1 percent respectively). Despite better access to health facilities in the cities, the difference in diagnosis and treatment between urban and rural settings is small.

Figure 12.1 Prevalence of chronic diseases by age

Percentage of household members who have atleast 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


More residents in Galgaduud region reported having been diagnosed by a physician at 7 percent, compared to 4 percent of their counterparts in Mudug region. Similarly, 5 percent of household members in Galgaduud were treated compared to 2 percent in Mudug region

The survey found that 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 households were diagnosed by a physician, while 4 percent received treatment. In contrast 2 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 were diagnosed by a physician against those who get treatment for chronic diseases regularly. The gap between those who get diagnosed by a physician and those who treated increases with increase in age. Whereas half of the children aged 0-4 years who get diagnosed by a physician get treatment for their chronic disease. Among those aged 15-19 years, 4 percent get diagnosed by a physician, while 3 percent get treatment.

Table 12.3 presents the prevalence of some specific chronic diseases diagnosed by a physician, by type of condition, place of residence and sex. The findings show that the most common chronic diseases were: blood pressure anomalies/hypertension, which affects 24 percent of household members, and diabetes, which affects 15 percent of the household members. Thirteen percent of household members are suffering from asthma diseases. Nine percent of household members have arthritis, 7 percent suffer from skin diseases and another 6 percent have inflammation or ulcers. Other diseases that are common include kidney and chronic headache at 10 percent each, arthritis at 9 percent, skin disease at 7 percent, mental illness and heart disease at 6 percent each, chronic back pain and liver diseases at 5 percent each, anaemia and Tuberculosis at 3 percent each.

Percentage of household members who have at least one chronic disease,


The table shows that more urban residents were diagnosed with blood pressure, at 26 percent compared to nomadic and rural residents at 22 percent and 21 percent respectively. The highest proportion of residents diagnosed with diabetes were in rural areas at 16 percent followed by 14 percent of urban residents, while the lowest were nomadic residents at 12 percent. The most common chronic diseases among women are hypertension, diabetes and arthritis, at 26 percent versus 12 percent respectively. The leading chronic diseases among males are hypertension diabetes and asthma at 20, 19 percent, and 13 percent respectively.

The findings further show that, on the whole, more Urban household members than rural and nomadic ones were diagnosed with liver diseases, chronic back pain, and prostatic hypertrophy diseases at 8 percent, 7 percent, 1 percent, respectively. In rural and Nomadic areas, overall, fewer people were diagnosed with these diseases, at 2 percent, 3 percent, 0.9 percent, respectively, for rural populations; and at 3 percent, 3 percent and zero percent respectively, for nomadic populations.

### 12.3 Prevalence of Disability

Table 12.4 presents data on the distribution of the prevalence of disability of household members by sex, age, wealth status 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.

Overall, 5 percent of the population in Galmudug suffers from disabilities, according to findings from the survey. The prevalence of disability among females is slightly higher than that of males at 6 and 5 percent respectively. In the youngest age group, 5 percent of under-fives suffer from disabilities. The prevalence of disability dropped to 3 percent in the slightly older age group of 5-9 years. The prevalence is 32 percent for those aged 70 years and above. In the rural and urban, 7 percent and 6 percent, respectively suffer from disability compared to 2 percent among the nomadic residents.

Regionally, the prevalence of disability is slightly higher in Galgaduud than in Mudug region at 6 percent and 5 percent, respectively.

Figure 12.4 Common chronic diseases
Percentage of household members who have specific chronic diseases diagnosed by a physician


Household members from the lowest wealth quintile have fewer people suffering from disabilities at 3 percent compared to 4 percent among those in the highest wealth quintile and 7 percent in the second and fourth wealth quintile.

The most common disability reported in all the three types of residences was challenges with eyesight, which was reported by 47 percent each of household members in urban and 43 percent in nomadic areas and 40 percent in rural areas.

Figure 12.5 presents the prevalence of disability by age group. It shows a "J-shaped" curve, with the prevalence of disability increasing generally with increase in age particularly after 60 years.

Figure 12.6 shows the prevalence of the most common types of disabilities. These include disabilities of sight (43 percent), hearing and mobility impairments at 30 percent each, followed by mental health at 17 percent and speech at 11 percent.

Regionally, the most common disability reported in all the two regions was challenges with eyesight, which was reported by 49 percent of household members in Mudug and Galgaduud at 36 percent.

### 12.4 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 what they thought was the main reason for or cause of the disability. The analysis indicates that ageing and congenital (birth-related) problems were thought to be the main causes of disability. Ageing accounts for 19 percent of disability, congenital problems account for 17 percent while contagious causes account for 16 percent of the disability.

Prevalence of household members with disabilities


Percentage of people suffering from specific types of disabilities


Ageing accounts for a larger proportion of disabilities among females, at 22 percent, than males, at 15 percent, while childbirth conditions diseases account for a larger proportion of disabilities among males, at 11 percent, than females, at 5 percent.

Table 12.6 presents data on the age at onset of disability. Differences by sex are substantial. As expected, by definition, younger disabled people, the onset of disability occurred at an earlier age. Overall, 26 percent of household population reported onset of disability to have started when they were under the age of five (Figure
12.7). Thirty-two percent of males and 22 percent of females stated that they had first experienced their disabilities before the age of five. Slightly more nomadic household members, at 38 percent, reported their disabilities started while they were under the age of five, compared to urban at 25 percent and rural areas at 24 percent.

Among the regions, the percentage of onset of disability under the age of five is higher in Mudug at 28 percent compared to Galgaduud at 24 percent.

## Figure 12.7 Age at onset of disability

Percentage distribution of disabled people according to age at onset of disability


Support received by household members for people with disabilitiesin the last 12 months


### 12.5 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 characteristics. This includes medical care, welfare, financial support, and nutritional support.

The findings indicate that 43 percent of persons with disabilities in Galmudug had not received any care or support for their condition in the 12 months preceding the survey.

Fifty-nine percent of disabled household members received medical care, while 1 percent received welfare, 3 percent received financial support and 1 percent received nutritional support.

Forty-one and 43 percent of male and female said they had not received any medical care, welfare, financial or nutritional support for their disability in the 12 months preceding the survey.

The percentage distribution of disabled people who received medical care is higher in Mudug at 61 percent than Galgaduud at 57 percent.

### 12.6 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.

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 survey 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 of the advice or treatment. 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 21 percent of households in Galmudug had at least one household member sick in the last month preceding the survey. Among these households 66 percent sought advice or treatment for the household member. Seventy-five percent of urban households and 73 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 34 percent.

Household members who have been sick and where they sought advice/treatment


Twenty-four percent of households had visited a private hospital, clinics or doctors for advice or treatment compared to 20 percent who had visited government hospital. Thirteen percent of households had sought advice or treatment from pharmacies compared to 10 percent from Mother Child Health (MCH) clinics and/ or health centers (HC) (Figure 12.9).

The wealthiest households sought more medical advice and treatment compared to the poorest, at 78 percent and 64 percent respectively. Further, the survey shows that 26 percent of the wealthiest households received medical advice and treatment from a private hospital, clinic or doctor, compared to 24 percent of the lowest wealth quintile or the poorest households.

In Galgaduud 25 percent of households reported members have been sick in the last month, of which 73 percent sought any advice or treatment. While in Mudug 18 percent of households with members have been sick in the last month, of them 56 percent sought any advice or treatment.

Table 12.9 and Figure 12.10 present data on the financial sources that households use to pay for health expenditures. Thirty-five percent of households reported they pay for their health expenses from their income. Twenty-four percent of households reported their relatives or friends supported them to pay their health expenses.

Fourteen percent of the households sold assets to cover their health expenses, while 11 percent borrowed money to pay for their health expenditure.

The data indicates inequities exist in terms of accessing health care. Fifty-two percent of the wealthiest households compared to 32 percent from the poorest households, used their income to pay for their health expenses. Forty-seven percent in urban used their income to pay for medical expenses as compared to rural households at 30 percent.

Mudug has the highest percentage of households who pay for their health expenses from their income at 52 percent compared to Galguduud residents, at 25 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 40 percent had spent between US\$1 and US\$49 for treatment and health care services during this period. Similarly, 26 percent of the respondents had spent between US\$50 and US\$99 for treatment and health care services during that month, 15 percent had spent US\$100-199, 4 percent had spent between US\$ 200-US\$299 and 15 percent had spent US\$300 or more.


### 12.7 Tobacco Use and Khat 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 behavior 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 and Figure 12.11 present the percentage of household members who smoke cigarettes or use tobacco, by background characteristics. Cigarette smoking or any other use of tobacco is rare among women at less than 1 percent, whereas 6 percent of men smoke or use other tobacco products.. Figure 12.11 shows that the use of tobacco or cigarette smoking is higher among those with no education and those with secondary education at three percent each, and the same applies to residents in Galgaduud and Mudug. There is no difference in the proportion of smokers/tobacco users in the different types of residences.

The age groups with highest percentages of smokers/ tobacco users is group of 45-49 at 10 percent, followed by the age group of 50-54 at 7 percent and 60-64 at 7 percent. (Figure 12.12.)

Table 12.12 presents the distribution of household members who chew Khat by background characteristics. It shows that 3 percent of household members of Galmudug chew Khat or have chewed Khat compared to 4 percent nationally. The table also shows $t$ wide gender differences in this practice-whereas 1 percent of women chew or have chewed khat, 7 percent of men stated they chew or have chewed khat. Across the age groups, it can be noted that the practice of chewing khat increases with increase in age and it peaks at 45-49 years 9 percent. However at older ages Khat chewing reduces with only 3 percent of the population aged 70 and above reported to chew Khat.

The data by place of residence indicates that urban dwellers are more likely to chew Khat at 4 percent compared to rural and nomadic households who chews Khat at 3 percent in each.

Data analyzed by regional level shows that Khat consumption among household members in is the same both in Mudug and Galgaduud at 3 percent each.

Khat consumption varied by level of education attained and wealth status-3 percent of household members with no education and the same percent for those with secondary education chew Khat. Among those with higher levels of education, 1 percent chew khat. Data by wealth quintiles indicates that the second and wealthiest household are more likely to chew khat compared to the other households.

Figure 12.13 compares the percentage of household members who chew khat and household members who smoke cigarettes or using 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.

Percentage of household members who smoke cigarettes or use tobacco by wealth quintile


## Figure 12.12 Smoking/tobacco use by Age

Percentage of household members who smoke cigarette or use tobacco, by Age


## Figure 12.13 Cigarette smoking, tobacco use and chewing of Khat

Percentage of household members who smoke cigarettes or use tobacco, and chew khat by age


## List of Tables

Table 12.1 Prevalence of chronic diseases by background characteristics ..... 215
Table 12.2 Prevalence of chronic diseases diagnosed by a physician ..... 216
Table 12.3 Prevalence of specific chronic diseases ..... 217
Table 12.4 Prevalence of disability and common types of disability ..... 218
Table 12.5 Origin of disabilities ..... 219
Table 12.6 Age at onset of disability ..... 220
Table 12.7 Care and Support received by background characteristics ..... 221
Table 12.8 Sources for advice or treatment GMHDS 2020 ..... 222
Table 12.9 Financial sources used to pay for health services ..... 223
Table 12.10 Amount in health expenses ..... 223
Table 12.11 Smoking or using tobacco ..... 224
Table 12.12 Use of Khat ..... 225

Table 12.1 Prevalence of chronic diseases by background characteristics

Percentage of household members who have at least one chronic disease, diagnosed by a physician, who get treatment regularly by background characteristics, GMHDS 2020

| Background Characteristics | Percentage of HH members who have at least one chronic disease | Percentage of HH members who have at least one chronic diagonosed by physician | Percentage of HH Members who have at least one chronic and get treated | Number of Persons |
| :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |
| Male | 5.3 | 4.5 | 3.1 | 5012 |
| Female | 7.3 | 6.2 | 3.8 | 5576 |
| Age |  |  |  |  |
| 0-4 | 1.5 | 1.3 | 0.9 | 2,267 |
| 5-9 | 2.9 | 2.2 | 1.4 | 2,110 |
| 10-14 | 2.7 | 2.2 | 1.2 | 1,579 |
| 15-19 | 3.7 | 3.2 | 1.8 | 1,167 |
| 20-24 | 4.7 | 4.5 | 2.9 | 583 |
| 25-29 | 5.8 | 5.2 | 2.9 | 553 |
| 30-34 | 8.3 | 6.8 | 5.0 | 485 |
| 35-39 | 11.7 | 9.3 | 6.2 | 411 |
| 40-44 | 10.1 | 8.7 | 6.3 | 303 |
| 45-49 | 16.2 | 14.6 | 10.1 | 147 |
| 50-54 | 18.0 | 16.1 | 9.2 | 292 |
| 55-59 | 26.4 | 22.5 | 13.5 | 105 |
| 60-64 | 28.6 | 24.0 | 14.0 | 193 |
| 65-69 | 32.4 | 28.8 | 19.7 | 71 |
| 70+ | 41.2 | 33.3 | 24.6 | 325 |
| Type of residence |  |  |  |  |
| Urban | 8.4 | 7.4 | 4.9 | 3,783 |
| Rural | 6.9 | 6.0 | 4.1 | 4175 |
| Nomadic | 2.7 | 1.5 | 0.6 | 2,630 |
| Region of residence |  |  |  |  |
| Mudug | 5.2 | 3.9 | 2.4 | 5,632 |
| Galgaduud | 7.8 | 7.0 | 4.7 | 4,956 |
| Wealth quintile |  |  |  |  |
| Lowest | 3.0 | 1.9 | 0.9 | 2,825 |
| Second | 6.1 | 4.8 | 2.9 | 2,048 |
| Middle | 8.2 | 7.1 | 4.8 | 2,948 |
| Fourth | 9.7 | 8.9 | 6.1 | 1,697 |
| Highest | 5.5 | 5.1 | 3.8 | 1,070 |
| Total ${ }^{1}$ | 6.4 | 5.4 | 3.5 | 10,589 |
| ${ }^{1}$ Total includes household members with missing information on age. |  |  |  |  |

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, who get treatment regularly by background characteristics, GMHDS 2020
$\left.\begin{array}{lccc}\hline & & \begin{array}{c}\text { Percentage of } \\ \text { HH members } \\ \text { who have at }\end{array} & \begin{array}{c}\text { Percentage of HH } \\ \text { members who have } \\ \text { at least one chronic } \\ \text { disease }\end{array}\end{array} \begin{array}{c}\begin{array}{c}\text { Members who } \\ \text { least one chronic } \\ \text { diage at least one } \\ \text { chronic and get }\end{array} \\ \text { physician }\end{array}\right)$

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 GMHDS 2020 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type of residence |  |  | Sex of household member |  | Total |
|  | Urban | Rural | Nomadic | Male | Female |  |
| Type of disease |  |  |  |  |  |  |
| Blood pressure | 26.4 | 20.6 | 21.7 | 19.7 | 26.0 | 23.5 |
| Diabetes | 13.6 | 16.1 | 12.4 | 19.0 | 11.8 | 14.6 |
| Inflammation/ulcers | 6.1 | 6.7 | 6.5 | 4.8 | 7.5 | 6.4 |
| Anaemia | 3.1 | 2.4 | 7.4 | 2.1 | 3.8 | 3.1 |
| Sickle-cell anaemia | 0.0 | 0.9 | 0.0 | 0.0 | 0.7 | 0.4 |
| Heart disease | 7.1 | 6.1 | 2.2 | 4.0 | 7.9 | 6.4 |
| Kidney disease | 15.1 | 4.1 | 14.5 | 8.7 | 11.2 | 10.2 |
| Liver disease | 7.9 | 1.7 | 3.0 | 4.9 | 4.8 | 4.8 |
| Arthritis | 11.6 | 5.8 | 3.2 | 3.8 | 11.6 | 8.5 |
| Tuberculosis | 3.9 | 2.4 | 4.1 | 5.0 | 2.1 | 3.3 |
| Chronic headache | 12.2 | 8.6 | 2.2 | 9.9 | 10.0 | 9.9 |
| Stroke | 1.3 | 1.9 |  | 2.0 | 1.1 | 1.5 |
| Epilepsy | 4.2 | 5.6 | 4.1 | 5.8 | 4.2 | 4.8 |
| Prostatic hypertrophy | 1.0 | 0.9 |  | 0.8 | 0.9 | 0.9 |
| Cataract | 1.7 | 1.3 | 3.2 | 0.8 | 2.2 | 1.6 |
| Chronic back pain | 6.7 | 3.4 | 5.2 | 4.6 | 5.5 | 5.1 |
| Mental/psychological illness | 5.6 | 5.6 | 7.2 | 6.7 | 5.0 | 5.7 |
| Skin disease | 6.4 | 7.5 | 1.1 | 5.2 | 7.4 | 6.5 |
| Cancerous tumors | 0.3 | 1.3 | 3.0 | 1.0 | 0.9 | 1.0 |
| Asthma | 13.5 | 12.2 | 8.4 | 13.2 | 12.2 | 12.6 |
| Others | 11.0 | 11.3 | 9.3 | 10.2 | 11.5 | 11.0 |
| Number of household members | 278 | 254 | 39 | 227 | 345 | 571 |

Table 12.4 Prevalence of disability and common types of disability

Prevalence of household members with disabilities, percentage who suffer from specific types of disabilities, by Background characteristics, GMHDS 2020

| by background characteristics, GMHDS 2020 | Prevalence of disabled persons | Total | Among household members with disabilities, percentage who suffer from specific types of disabilities |  |  |  |  |  |  | Number of household members with disabilities ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Sight | Hearing | Speech | Learning | Mobility | Selfcare | Mental |  |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 4.7 | 5013 | 37.5 | 23.8 | 14.0 | 1.2 | 32.2 | 11.9 | 19.1 | 234 |
| Female | 5.8 | 5575 | 46.7 | 34.6 | 9.1 | 1.6 | 29.1 | 9.3 | 15.9 | 324 |
| Age |  |  |  |  |  |  |  |  |  |  |
| <5 | 4.7 | 2267 | 35.4 | 25.6 | 15.4 | 0.0 | 34.7 | 9.0 | 13.2 | 107 |
| 5-9 | 3.0 | 2110 | 39.7 | 26.5 | 24.9 | 0.7 | 29.4 | 6.5 | 22.9 | 64 |
| 10-14 | 4.4 | 1579 | 42.3 | 21.5 | 10.1 | 0.0 | 31.4 | 10.9 | 15.5 | 69 |
| 15-19 | 3.7 | 1167 | (30.5) | (39.3) | (12.6) | (0.0) | (27.8) | (4.1) | (26.5) | 43 |
| 20-24 | 2.6 | 583 | * | * | * | * | * | * | * | 15 |
| 25-29 | 2.8 | 553 | * | * | * | * | * | * | * | 15 |
| 30-34 | 3.4 | 485 | * | * | * | * | * | * | * | 17 |
| 35-39 | 4.2 | 411 | * | * | * | * | * | * | * | 17 |
| 40-44 | 3.7 | 303 | * | * | * | * | * | * | * | 11 |
| 45-49 | 10.2 | 147 | * | * | * | * | * | * | * | 15 |
| 50-54 | 8.2 | 292 | * | * | * | * | * | * | * | 24 |
| 55-59 | 10.7 | 105 | * | * | * | * | * | * | * | 11 |
| 60-64 | 14.8 | 193 | (61.4) | (26.3) | (3.4) | (0.0) | (35.2) | (11.2) | (0.0) | 29 |
| 65-69 | 21.7 | 71 | * | * | * | * | * | * | * | 15 |
| 70+ | 32.2 | 325 | 65.5 | 36.2 | 7.2 | 4.7 | 30.7 | 13.5 | 12.0 | 105 |
| Type of residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 6.1 | 3783 | 46.6 | 27.7 | 9.6 | 3.2 | 33.9 | 13.4 | 19.1 | 232 |
| Rural | 6.7 | 4175 | 39.7 | 32.8 | 11.2 |  | 27.5 | 7.5 | 16.0 | 279 |
| Nomadic | 1.8 | 2630 | (42.5) | (26.3) | (18.5) | (1.8) | (30.1) | (12.5) | (15.1) | 47 |

Region of residence

| Mudug | 4.9 | 5632 | 49.3 | 28.5 | 12.0 | 2.3 | 30.1 | 13.6 | 19.4 | 277 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Galgaduud | 5.7 | 4956 | 36.4 | 31.7 | 10.4 | 0.7 | 30.7 | 7.2 | 15.1 | 281 |


| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest | 2.5 | 2825 | 43.5 | 27.3 | 14.4 | 1.2 | 27.3 | 9.7 | 20.9 | 71 |
| Second | 7.0 | 2048 | 35.0 | 28.6 | 7.4 |  | 32.6 | 8.3 | 10.4 | 144 |
| Middle | 6.2 | 2948 | 47.6 | 27.8 | 9.2 |  | 29.7 | 11.8 | 14.4 | 184 |
| Fourth | 7.1 | 1697 | 44.7 | 35.6 | 10.7 | 3.1 | 29.0 | 11.4 | 19.2 | 120 |
| Highest | 3.6 | 1070 | (42.1) | (34.8) | (30.3) | (9.3) | (35.7) | (9.3) | (43.0) | 39 |
| Total ${ }^{1}$ | 5.3 | 10589 | 42.8 | 30.1 | 11.2 | 1.5 | 30.4 | 10.4 | 17.2 | 558 |

${ }^{1}$ Total includes household members with missing information on age. A person may have two reported diseases; consequently, the percentages
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 12.5 Origin of disabilities

| Percentage distribution of disabled people according to Origin of disabilities, by Background characteristics, GMHDS 2020 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Origin of disabilities |  |  |  |  |  |  |  |  |  | Total |  |
| Background characteristics | Congenital | Contagious | Child birth conditions | Other disease | Abuse | Aging | Injury/ accident | Witchcraft | Others | Don't know |  | Number of household members with disabilities |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 16.8 | 15.3 | 10.5 | 19.1 | 1.5 | 14.8 | 11.1 | 0.8 | 7.1 | 3.0 | 100.0 | 135 |
| Female | 17.8 | 17.0 | 4.5 | 21.2 | 0.4 | 21.8 | 7.9 |  | 4.3 | 5.1 | 100.0 | 200 |
| Type of residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 18.2 | 19.1 | 7.8 | 19.0 | 2.1 | 12.7 | 9.0 | 0.8 | 6.5 | 4.8 | 100.0 | 140 |
| Rural | 17.2 | 13.2 | 5.9 | 24.7 | 0.0 | 19.5 | 10.1 | 0.0 | 4.5 | 4.9 | 100.0 | 147 |
| Nomadic | (15.3) | (17.5) | (7.5) | (10.9) | (0.0) | (36.0) | (6.9) | (0.0) | (5.0) | (0.9) | 100.0 | 47 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |
| Mudug | 15.1 | 4.9 | 11.0 | 24.6 | 1.0 | 25.4 | 6.7 | 0.0 | 7.1 | 4.2 | 100.0 | 175 |
| Galgaduud | 19.9 | 28.7 | 2.5 | 15.7 | 0.7 | 12.0 | 11.9 | 0.7 | 3.6 | 4.3 | 100.0 | 160 |
| Total | 17.4 | 16.3 | 6.9 | 20.4 | 0.9 | 19.0 | 9.2 | 0.3 | 5.4 | 4.3 | 100.0 | 335 |

Percentage distribution of disabled people according to Origin of disabailities
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 12.6 Age at onset of disability
percentage distribution of disabled people according to age at onset of disability by Background characteristics, GMHDS 2020

| Background characteristics | Age at onset of disability |  |  |  |  |  |  |  |  | Number of households |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <5 | 5-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70+ |  |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 31.8 | 6.3 | 12.2 | 7.7 | 6.7 | 5.4 | 10.2 | 9.8 | 10.0 | 133 |
| Female | 22.4 | 9.1 | 8.2 | 9.8 | 8.5 | 9.1 | 10.0 | 10.2 | 12.7 | 200 |

Type of
residence

| 140 |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Urban | 25.0 | 7.8 | 13.0 | 12.7 | 9.5 | 8.1 | 9.4 | 4.0 | 10.5 | 140 |
| Rural | 23.5 | 8.1 | 8.9 | 7.3 | 7.4 | 6.5 | 11.0 | 15.9 | 11.3 | 147 |
| $\quad$ Nomadic | $(38.4)$ | $(8.1)$ | $(2.8)$ | $(2.8)$ | $(3.6)$ | $(9.7)$ | $(8.8)$ | $(9.7)$ | $(16.1)$ | 45 |
| Region |  |  |  |  |  |  |  |  |  |  |
| $\quad$ Mudug | 28.4 | 7.3 | 8.7 | 9.1 | 5.5 | 10.7 | 9.7 | 9.2 | 11.4 | 172 |
| $\quad$ Galgaduud | 23.7 | 8.7 | 11.0 | 8.8 | 10.2 | 4.4 | 10.4 | 11.0 | 11.9 | 160 |


| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest | 38.5 | 6.3 | 6.0 | 3.9 | 6.2 | 13.5 | 6.9 | 7.7 | 11.0 | 57 |
| Second | 25.1 | 5.5 | 9.7 | 7.9 | 12.1 | 7.0 | 9.8 | 13.1 | 9.6 | 77 |
| Middle | 21.3 | 8.9 | 10.0 | 11.7 | 6.8 | 3.0 | 12.4 | 13.2 | 12.8 | 101 |
| Fourth | 25.2 | 10.7 | 10.5 | 10.5 | 8.5 | 7.8 | 8.9 | 5.1 | 12.8 | 73 |
| Highest | * | * | * | * | * | * | * | * | * | 24 |
| Total | 26.1 | 8.0 | 9.8 | 9.0 | 7.8 | 7.6 | 10.1 | 10.0 | 11.6 | 332 |

[^16]Table 12.7 Care and Support received by background characteristics

Percentage distribution of disabled people who received any kind of care, and support for their disabilities in the last 12 months by Background characteristics, GMHDS 2020

| Background characteristics | Care and support received |  |  |  |  | Number of persons |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Medical | Welfare | Financial | Nutritional | No support |  |
| Sex |  |  |  |  |  |  |
| Male | 56.9 | 0.9 | 3.0 | 0.4 | 41.9 | 234 |
| Female | 60.4 | 0.6 | 2.4 | 1.5 | 43.1 | 324 |
| Types of residence |  |  |  |  |  |  |
| Urban | 60.4 | 1.7 | 1.9 | 0.4 | 44.1 | 232 |
| Rural | 52.1 |  | 2.4 | 1.7 | 47.8 | 279 |
| Nomadic | (92.5) | (0.0) | (7.5) | (0.0) | (5.0) | 47 |
| Region |  |  |  |  |  |  |
| Mudug | 61.4 | 0.6 | 5.4 | 1.0 | 41.1 | 277 |
| Galgaduud | 56.5 | 0.8 | 0.0 | 1.0 | 44.2 | 281 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 80.7 | 0.0 | 5.0 | 0.0 | 21.0 | 71 |
| Second | 52.7 | 0.0 | 1.9 | 0.7 | 48.1 | 144 |
| Middle | 55.4 | 2.2 | 2.1 | 0.0 | 46.7 | 184 |
| Fourth | 57.7 | 0.0 | 2.4 | 3.9 | 43.1 | 120 |
| Highest | (63.4) | (0.0) | (4.6) | (0.0) | (40.9) | 39 |
| Total | 59.0 | 0.7 | 2.7 | 1.0 | 42.6 | 558 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. |  |  |  |  |  |  |

Table 12.8 Sources for advice or treatment GMHDS 2020

| Percentage of households with members who have been sick in the last month, among the households with members who have been sick in the last month and seek advice or trea ment by background characteristics, GMHDS 2020 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage of households with members who have been sick in the last month | Number of households | Percentage who have been sick and sought any advice or treatment | Percentage who have been sick and did not seek any advice or treatment | Number of households with members who have been sick in the last month | Public Sector |  |  |  |  |  | Private Medical Sector |  |  | Other Source |  | Number of households with members who have been sick in the last month and seeked advice or treatment |
| Background Characteristics |  |  |  |  |  | Government Hospital | 1Re- <br> ferral <br> Health <br> Centre | $\begin{gathered} \mathrm{MCH} / \\ \mathrm{HC} \end{gathered}$ | Primary Health Unit | Mobile Clinic | Other Public Sector | Private Hospital/ Clinic/ Doctor | Pharmacy | Other Private Medical Sector | Shop | Others | Seek Advise or treatment |
| Type of residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 22.3 | 577 | 75.3 | 24.7 | 129 | 23.5 | 4.1 | 14.6 | 4.5 | 2.6 | 0.0 | 27.2 | 10.8 | 0.9 | 0.0 | 1.4 | 97 |
| Rural | 24.0 | 700 | 72.6 | 27.4 | 168 | 23.4 | 0.6 | 10.5 | 2.0 | 0.6 | 1.4 | 27.6 | 19.0 | 1.4 | 0.0 |  | 122 |
| Nomadic | 16.1 | 463 | 34.0 | 66.0 | 75 | (4.3) | (12.2) | (1.7) | (2.1) | (0.0) | (0.0) | (11.4) | (5.4) | (0.0) | (0.0) | (1.6) | 25 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mudug | 18.3 | 903 | 56.2 | 43.8 | 165 | 16.6 | 6.1 | 5.7 | 4.1 | 0.6 | 0.6 | 25.3 | 5.5 | 0.6 | 0.0 | 1.8 | 93 |
| Galgaduud | 24.5 | 838 | 73.4 | 26.6 | 206 | 21.9 | 2.6 | 13.8 | 2.0 | 1.6 | 0.7 | 23.3 | 19.8 | 1.2 | 0.0 |  | 151 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 20.9 | 531 | 64.4 | 10.7 | 111 | 16.6 | 6.4 | 11.7 | 5.4 | 0.0 | 1.3 | 23.8 | 11.6 | 0.0 | 0.0 | 1.6 | 71 |
| Second | 21.1 | 415 | 56.6 | 10.3 | 88 | 15.7 | 2.4 | 1.6 | 2.1 | 3.8 |  | 24.2 | 16.1 | 0.0 | 0.0 | 1.3 | 50 |
| Middle | 22.8 | 316 | 67.1 | 6.4 | 72 | (20.5) | (2.7) | (10.5) | (1.2) | (0.0) | (1.4) | (20.7) | (14.7) | (2.9) | (0.0) | (0.0) | 48 |
| Fourth | 21.6 | 291 | 72.1 | 4.7 | 63 | (25.8) | (1.8) | (18.9) | (0.0) | (0.0) | (0.0) | (27.8) | (13.1) | (2.3) | (0.0) | (0.0) | 45 |
| Highest | 19.9 | 188 | (78.3) | (2.2) | 37 | (25.2) | (8.5) | (10.4) | (5.6) | (2.6) | (0.0) | (26.1) | (10.8) | (0.0) | (0.0) | (0.0) | 29 |
| Total | 21.3 | 1740 | 65.8 | 34.2 | 371 | 19.6 | 4.2 | 10.2 | 2.9 | 1.2 | 0.6 | 24.2 | 13.4 | 0.9 | 0.0 | 0.8 | 244 |
| 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, GMHDS 2020

|  | Financial sources for health services |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background Characteristics | Income | Insurance | Savings | Borrowing | Relatives/ Friends | Sold <br> Assets | Other | Number of households |

Type of residence

| Urban | 47.4 | 4.2 | 5.2 | 15.4 | 26.1 | 11.7 | 3.5 | 90 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Rural | 30.0 | 2.9 | 0.8 | 9.0 | 18.8 | 13.5 | 0.0 | 117 |
| Nomadic | $(16.4)$ | $(0.0)$ | $(5.0)$ | $(5.2)$ | $(39.8)$ | $(19.9)$ | $(3.5)$ | 24 |
| Region of residence |  |  |  |  |  |  |  |  |
| Mudug | 51.7 | 5.3 | 6.5 | 13.8 | 32.5 | 19.0 | 1.0 | 87 |
| Galgaduud | 25.4 | 1.8 | 0.8 | 9.4 | 18.5 | 10.1 | 2.1 | 144 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 32.2 | 2.9 | 1.4 | 11.9 | 28.0 | 14.9 | 3.1 | 65 |
| Second | $(25.6)$ | $(3.0)$ | 4.4 | 9.0 | 20.7 | 18.5 | 0.0 | 47 |
| Middle | $(31.6)$ | $(4.0)$ | $(1.9)$ | $(11.1)$ | $(31.1)$ | $(10.9)$ | $(1.8)$ | 47 |
| Fourth | $(43.6)$ | $(2.6)$ | $(4.6)$ | $(8.4)$ | $(15.2)$ | $(12.9)$ | $(2.6)$ | 43 |
| Highest | $(52.3)$ | $(3.2)$ | $(3.2)$ | $(16.8)$ | $(20.3)$ | $(6.6)$ | $(0.0)$ | 28 |
| Total | $\mathbf{3 5 . 3}$ | $\mathbf{3 . 1}$ | $\mathbf{2 . 9}$ | $\mathbf{1 1 . 1}$ | $\mathbf{2 3 . 8}$ | $\mathbf{1 3 . 5}$ | $\mathbf{1 . 7}$ | $\mathbf{2 3 1}$ |

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

Table 12.10 Amount in health expenses

Amount of money that households incurred for health services in the last month by background characteristics, GMHDS 2020
Amount in health expenses (US \$)
Number of

| 1-49 | 50-99 | 100-199 | 200-299 | 300+ | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | households

Type of
residence

| Urban | 38.8 | 21.0 | 17.6 | 3.2 | 19.4 | 100.0 | 85 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Rural | 44.0 | 28.6 | 12.2 | 3.0 | 12.2 | 100.0 | 110 |
| Nomadic | $(22.6)$ | $(33.4)$ | $(20.2)$ | $(11.7)$ | $(12.0)$ | 100.0 | 24 |

Region of
residence

| Mudug | 27.9 | 24.8 | 21.9 | 8.3 | 17.0 | 100.0 | 84 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\quad$ Galgaduud | 47.0 | 27.0 | 10.9 | 1.4 | 13.7 | 100.0 | 134 |
| Wealth quitile |  |  |  |  |  |  |  |
| Lowest | 34.0 | 29.3 | 15.3 | 6.7 | 14.7 | 100.0 | 62 |
| Second | $(49.0)$ | $(22.7)$ | $(11.3)$ | $(0.0)$ | $(17.0)$ | 100.0 | 44 |
| Middle | $(42.2)$ | $(26.0)$ | $(12.0)$ | $(0.9)$ | $(18.9)$ | 100.0 | 46 |
| Fourth | $(46.6)$ | $(30.5)$ | $(15.6)$ | $(3.5)$ | $(3.7)$ | 100.0 | 41 |
| Highest | $(21.3)$ | $(18.0)$ | $(26.6)$ | $(11.1)$ | $(23.0)$ | 100.0 | 26 |
| Total | $\mathbf{3 9 . 6}$ | $\mathbf{2 6 . 2}$ | $\mathbf{1 5 . 2}$ | $\mathbf{4 . 0}$ | $\mathbf{1 5 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{2 1 9}$ |

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

| percentage of household members who smoke cigarette or using tobacco by background characteristics, GMHDS 2020 |  |  |
| :---: | :---: | :---: |
| Background characteristics | Percentage of household members who smoke cigarettes or use tobacco | Number of household members |
| Sex |  |  |
| Male | 5.9 | 2,711 |
| Female | 0.8 | 3,494 |
| Age |  |  |
| 10-14 | 0.9 | 1,579 |
| 15-19 | 1.1 | 1,167 |
| 20-24 | 2.4 | 583 |
| 25-29 | 4.7 | 553 |
| 30-34 | 5.0 | 485 |
| 35-39 | 5.5 | 411 |
| 40-44 | 4.5 | 303 |
| 45-49 | 10.3 | 147 |
| 50-54 | 7.4 | 292 |
| 55-59 | 3.1 | 105 |
| 60-64 | 7.2 | 193 |
| 65-69 | 0.0 | 71 |
| 70+ | 2.5 | 325 |
| Type of residence |  |  |
| Urban | 3.2 | 2,295 |
| Rural | 2.7 | 2,422 |
| Nomadic | 3.4 | 1,495 |
| Region |  |  |
| Mudug | 3.4 | 3,350 |
| Galgaduud | 2.6 | 2,863 |
| Education |  |  |
| No education | 3.3 | 4,559 |
| Primary | 2.1 | 1,124 |
| Secondary | 3.2 | 395 |
| Higher | 1.3 | 134 |
| Wealth quintile |  |  |
| Lowest | 3.3 | 1,592 |
| Second | 3.1 | 1,174 |
| Middle | 2.5 | 1,732 |
| Fourth | 2.9 | 1,024 |
| Highest | 4.0 | 691 |
| Total | 3.0 | 6,212 |


| percentage of household members who use Khat by background characteristics, GMHDS 2020 |  |  |
| :---: | :---: | :---: |
| Background characteristics | Percentage of household members who use khat | Number of household members |
| Sex |  |  |
| Male | 6.6 | 2,711 |
| Female | 0.6 | 3,494 |
| Age |  |  |
| 10-14 | 0.8 | 1,579 |
| 15-19 | 0.8 | 1,167 |
| 20-24 | 3.1 | 583 |
| 25-29 | 5.2 | 553 |
| 30-34 | 5.4 | 485 |
| 35-39 | 5.9 | 411 |
| 40-44 | 5.9 | 303 |
| 45-49 | 8.7 | 147 |
| 50-54 | 7.0 | 292 |
| 55-59 | 3.5 | 105 |
| 60-64 | 8.2 | 193 |
| 65-69 |  | 71 |
| 70+ | 2.5 | 325 |
| Type of residence |  |  |
| Urban | 3.5 | 2,295 |
| Rural | 3.1 | 2,422 |
| Nomadic | 2.8 | 1,495 |
| Region |  |  |
| Mudug | 3.1 | 3,350 |
| Galgaduud | 3.3 | 2,863 |
| Education |  |  |
| No education | 3.4 | 4,559 |
| Primary | 2.3 | 1,124 |
| Secondary | 3.2 | 395 |
| Higher | 1.3 | 134 |
| Wealth quintile |  |  |
| Lowest | 3.0 | 1,592 |
| Second | 3.9 | 1,174 |
| Middle | 3.0 | 1,732 |
| Fourth | 2.5 | 1,024 |
| Highest | 3.8 | 691 |
| Total | 3.2 | 6,212 |

## References

Henriques, Maria Helena, and J. B. Brilha. "UNESCO Global Geoparks: a strategy towards global understanding and sustainability." (2017)

Rutstein, Shea O. "Effects of preceding birth intervals on neonatal, infant and under-five years mortality and nutritional status in developing countries: evidence from the demographic and health surveys." International Journal of Gynecology \& Obstetrics 89 (2005): S7-S24.

UNESCO Institute for Statistics. Adult and youth literacy: National, regional and global trends, 19852015. Montreal: UNESCO Institute for Statistics, 2013.
https://www.who.int/immunization/monitoring_surveillance/burden/vpd/WHO_
SurveillanceVaccinePreventable_14_NeonatalTetanus_R2.pdf?ua=1
https://data.unicef.org/ (UNICEF global databases, 2020)
https://www.who.int/nutrition/topics/globaltargets_lowbirthweight_policybrief.pdf (WHO,2012).
https://www.who.int/gho/publications/world_health_statistics/EN_WHSO8_Full.pdf (WHO, 2005; WHO, 2008; WHO, 2010).
https://www.who.int/news-room/fact-sheets/detail/tobacco (WHO 2019)


#### Abstract

Antenatal care (ANC)/Prenatal care Care provided by skilled health care professionals (which include doctors/clinical officers or nurs-es/ 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, rela-tion-ship 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 to-bacco, 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.

## Live birth

The complete expulsion from its mother of a product of conception, regardless of the duration of the preg-nancy, 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.

## 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 exci-sion 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.

## 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 pro-
fessional - such as a doctor/clinical officer or nurse/ midwife/nurse - who has been educated and trained to proficiency in the skills needed to manage nor-mal (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 dis-ease first.

## Wealth quintile

A measure of wealth or poverty status of the household based on the ownership of assets and the character-is-tics 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.

## 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 ex-pe-rience 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 ab-normal (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 insufficien-cy, 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 think-ing 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).

## 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 appro-pri-ate for the level of education they are enrolled in. The NAR is expressed as a percentage of the eligible offi-cial school-age population for a particular level in a given school year corresponding with the population.

## 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 differ-ence 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 fami-ly 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 dis-ease, trauma, or congenital or degenerative conditions. Terms such as "partially sighted", "low vision", "le-gally 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 dis-rupted. This can mean stuttering, lisps, etc. Someone who is unable to speak due to a speech disorder is con-sidered 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 push and not into a des-ignated 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 col-lection, 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 flyproof 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 la-trine with slab, not a VIP latrine.

## 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 wa-ter. 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 pro-tected.

## 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 brickwork, 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 de-livered 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.

## 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 fil-tering systems usually include ceramic, sand and composite.


## Sampling Design

## Objectives of the Somali Health and Demographic Survey


#### Abstract

The Galmudug Health and Demographic Survey (GMHDS 2020) was designed to provide estimates of maternal health, child health, child nutrition and other relevant indicators at state level 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 state at the time of the survey.


## Sampling Frame

The sampling frame required to achieve the objective of GMHDS 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 Galmudug 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 GMHDS 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 850 such EAs, also referred to as primary sampling
units (PSUs), were digitized; 452 in urban areas and 398 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, 715 PSU (387 in urban and 328 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 two regions, which are the state'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 467 TNS formed the GMHDS 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 GMHDS 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 6 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 160 PSUs were selected from 6 strata with 70 PSUs from urban and rural each and 20 PSUs from nomadic areas, representing about 14\% of the total frame of all PSUs. In the second stage, a total of 20 PSUs were allocated to urban and rural strata each and the same 20 PSUs to nomadic areas yielding a total of 60 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

O Equally allocate 35 PSUs to urban and rural areas and 10 TNS to all 6 strata.
O PSUs were selected using Probability Proportional to Size (PPS) sampling of digitized dwelling structures

O 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

O Equally allocate 10 SSUs to all 6 strata
O Secondary sampling units (SSUs) were selected using PPS sampling of listed household.

## 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 nevermarried 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 GMHDS 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,

$\mathrm{PSU}_{h} \quad=$ number of PSUs to be sampled in stratum $h ;$ and

MOS $_{\text {hi }}=$ number of dwelling structures for $\mathrm{PSU}_{i}$ in stratum $h$.

The probability of selecting $\mathrm{PSU}_{i}$ in stratum $h$ is

$$
P_{h i}=\frac{m_{h} \times \operatorname{MOS}_{h i}}{\sum_{i \in h} \operatorname{MOS}_{h i}}
$$

## Second Stage: Selection of 10 SSUs from every urban and rural stratum from the $\mathbf{3 5}$ listed PSUs only,

Let
$q \quad=$ total number of SSUs to be sampled;

MOS $_{\text {hij }}=$ number of listed households for $\mathrm{SSU}_{j}$ of $\mathrm{PSU}_{i}$ in stratum $h$; and
$I_{\text {ssu }} \quad=$ sampling interval for the selection of SSUs.

The conditional probability (CP) of selecting SSU from $\mathrm{PSU}_{i}$ in stratum $h$ is;
$C P_{h i j}=\frac{q \times\left(\frac{M O S_{h i j}}{P_{h i}}\right)}{\sum_{h i j}\left(\frac{M O S_{h i j}}{P_{h i}}\right)}=\frac{M O S_{h i j} / P_{h i}}{I_{S S U}}$

Design weight for enumeration areas: $D W_{2 e a}=1 / C P_{h i j}$

## Third and last stage: Selection of $\mathbf{3 0}$ households from each PSU using DHS Program excel sheet template,

let
$d_{h} \quad=$ total number of housing units to be sampled within the stratum h ;
$D_{h} \quad=$ total number of housing units in the stratum h sampling frame;

Let, $r=d_{h} / D_{h^{\prime}}$ then the conditional probability of selecting housing unit $k$ from SSU $j$ of PSUi in stratum $h$ is

$$
C P_{h i j k}=\frac{r}{P_{h i} \times C P_{h i j}}=\frac{r \times I_{S S U}}{M O S_{h i j}}
$$

The overall probability of selecting housing unit $k$ in SSU $j$ of PSU $i$ of stratum $h$ is
$P_{h i j k}=P_{h i} \times C P_{h i j} \times C P_{h i j k}=r$

The design weight for each household in cluster i of stratum $h$ is the inverse of its overall selection probability:
$W_{\text {hijk }}=1 / P_{\text {hijk }}=1 / r$

## 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 $a_{h}$ be the number of PSUs for the first stage and/or SSUs for the second stage selected in stratum $h$; let * $a_{h}$ be the number of clusters (PSUs/SSUs) interviewed. The cluster level response rate in stratum h is therefore;

$$
R_{C L}=* q h / q h
$$

## 2. Household level response rate

Let $k_{h j}$ be the number of households found, as recorded in the household questionnaire, in cluster $j$ of stratum $h$; let ${ }^{*} k_{H, J}$ be the number of households interviewed in the cluster. The household response rate in stratum $h$ is calculated by;

$$
R_{H H}=\sum d_{h j} * k h j / \sum d_{h j} k h j
$$

where dhj 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 $h_{\mathrm{j} \mid}$ be the number of eligible women found in cluster $j$ of stratum $h$; let * $h_{j l}$ be the number of individuals interviewed. The individual response rate in stratum $h$ is calculated as;

$$
R_{I D}=\sum d_{h j} * h j l / \sum d_{h j} h j l
$$

where $d_{h j}$ 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:

## $* d_{h j}=d_{h j} /\left(R_{C L} * R_{H H}\right)$

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:

$$
d_{h j} I D=\frac{* d_{h j}}{R_{I D}}=\frac{d_{h j}}{\left(R_{I D} * R_{H H} * R_{C L}\right)}
$$

## 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.

## References

ICF International. 2015. Demographic and Health Survey Sampling and Household Listing Manual. The DHS Program, Rockville, Maryland, U.S.A.: ICF International.

OECD, 2016. Technical Report of the Survey of Adult Skills. Programme for the International Assessment of Adult Competencies (PIAAC), 2nd Edition.

Fuller, Wayne A. 2009. Sampling Statistics.

Johnson CL, Dohrmann SM, Van de Kerckhove W, et al. National Health and Nutrition Examination Survey: National Youth Fitness Survey Estimation Procedures, 2012. National Center for Health Statistics. Vital Health Stat 2(168). 2014.

## Table A. 1 Household Distribution by region

Distribution of the households in the sampling frame by region and residence, GMHDS 2020

|  | Households in the frame |  |  |  |  | Percentage <br> Region | Urban |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Rural | Nomadic | Total | Percent <br> households | Urban |  |  |
| Mudug | 29,730 | 20,685 | 45,418 | 95,833 | 65 | 31 |  |
| Galguduud | 20,004 | 20,113 | 11,356 | 51,473 | 35 | 39 |  |
| Total | 49,734 | 40,798 | 56,774 | 147,306 | 100 | 34 |  |

## 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, GMHDS 2020

|  | Number of Enumeration areas in frame |  |  |  | Area |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Urban | Rural | Nomadic | Total | Urban | Rural | Nomadic |
| Mudug | 230 | 171 | 294 | 695 | 129 | 121 | 154 |
| Galguduud | 157 | 157 | 173 | 487 | 127 | 128 | 66 |
| Total | 387 | 328 | 467 | 1,182 | 129 | 124 | 122 |

Table A. 3 First stage Sample allocation of clusters and households
GMHDS 2020

| Region | Allocation of clusters |  |  | Allocation of households |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Nomadic | Total | Urban | Rural | Nomadic | Total |
| Mudug | 34 | 31 | 10 | 75 | 2,981 | 2,447 | 384 | 5,812 |
| Galguduud | 35 | 35 | 10 | 80 | 4,512 | 3,200 | 413 | 8,125 |
| Total | 69 | 66 | 20 | 155 | 7,493 | 5,647 | 797 | 13,937 |

Table A. 4 Second stage Sample allocation of clusters and households
Sammple allocation of clusters and households for mian survey by region, according to residence, GMHDS 2020

| Region | Allocation of clusters |  |  | Allocation of households |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Nomadic | Total | Urban | Rural | Nomadic | Total |
| Mudug | 10 | 10 | 10 | 30 | 300 | 299 | 294 | 893 |
| Galguduud | 10 | 10 | 10 | 30 | 297 | 300 | 293 | 890 |
| Total | 20 | 20 | 20 | 60 | 597 | 599 | 587 | 1,783 |



## Estimates of Sampling Errors

Sampling errors are important data quality parameters which give a 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 Galmudug Health and Demographic Survey (GMHDS 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 GMHDS 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 GMHDS 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 GMHDS 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:

$$
S E^{2}(r)=\operatorname{var}(r)=\frac{1}{x^{2}} \sum_{h=1}^{H} \frac{n_{h}\left(1-f_{h}\right)}{n_{h}-1} \sum_{j}\left(z_{h j}-\frac{z_{h}}{n_{h}}\right)^{2}
$$

in which

$$
z_{h i}=y_{h i}-r x_{h i}, \text { and } z_{h}=y_{h}-r x_{h}
$$

where
$h \quad$ represents the sampling stratum which varies from 1 to $H$,
$n_{h} \quad$ is the total number of clusters selected in the hth stratum,
$y_{h j} \quad$ is the sum of weighted values of variable $y$ in the jth cluster in the hth stratum,
$x_{h j} \quad$ is the sum of weighted values of variable $x$ in the jth cluster in the hth stratum,
$f_{h} \quad$ is the sampling fraction in stratum $h$, it can be ignored when it is small
$x \quad$ is the sum of weighted values of variable $x$ over the total sample

Sampling errors for the GMHDS 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 ( $N$ ) and weighted (WN)
cases, the relative standard error (SE/R), and the 95\% confidence limits (R42SE) 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 Galmudug sample is 0.776 ( $77.6 \%$ ) and its standard error is 0.020 . Therefore, to obtain the 95\% confidence limits, one adds and subtracts twice the standard error to the sample estimate, that is, $0.776 \pm 2 \times 0.020$. There is a high probability (95\%) that the true proportion of households access to improved water services for all households is between 0.736 (73.6\%) and 0.816 (81.6\%).

## References

ICF International. 2015. Demographic and Health Survey Sampling and Household Listing Manual.
The DHS Program, Rockville, Maryland, U.S.A.: ICF International.

Fuller, Wayne A. 2009. Sampling Statistics.

| Table B. 1 List of selected variables for sampling errors, GMHDS 2020 |  |  |
| :---: | :---: | :---: |
| Variable | Estimate | Base population |
| 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 pit latrine with slab | Proportion | Total households |
| Proportion with electricity for lighting | Proportion | Total households |
| Proportion with solar for lighting | Proportion | Total households |
| Proportion using Charcoal for cooking | Proportion | Total households |
| Proportion using firewood for cooking | 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 divorced women | Proportion | Total women |
| Proportion with widowed women | Proportion | Total women |
| Proportion with pregnant | Proportion | Total currently married women |
| Proportion Married before age 18 | Proportion | Total Ever married women |


| Table B. 2 Sampling errors for all samples, GMHDS report 2020 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Number of cases |  | Confi | ce limits |
|  | Value (R) | Standard error (SE ) | Unweighted (N) | Relative error (RSE) | R-2SE | R+2SE |
| Households |  |  |  |  |  |  |
| Proportion with improved water sources | 0.776 | 0.020 | 1350 | 0.026 | 0.736 | 0.816 |
| Proportion with unimproved water sources | 0.224 | 0.020 | 390 | 0.089 | 0.184 | 0.264 |
| Proportion with water on premises | 0.693 | 0.017 | 1206 | 0.024 | 0.659 | 0.727 |
| Proportion with less than 30 minutes to a drinking water source | 0.160 | 0.015 | 279 | 0.095 | 0.130 | 0.191 |
| Proportion with 30 minutes or longer to a drinking water source | 0.137 | 0.009 | 238 | 0.069 | 0.118 | 0.155 |
| Proportion with basick drinking water service | 0.726 | 0.017 | 1264 | 0.023 | 0.692 | 0.761 |
| Proportion with limited drinking water service | 0.048 | 0.009 | 83 | 0.189 | 0.030 | 0.066 |
| Proportion with flushed to piped sewer system | 0.038 | 0.006 | 66 | 0.155 | 0.026 | 0.050 |
| Proportion with flush to septik tank | 0.059 | 0.008 | 24 | 0.135 | 0.043 | 0.074 |
| Proportion with flush to pit latrine | 0.188 | 0.013 | 97 | 0.067 | 0.163 | 0.213 |
| Proportion with pit latrine with slab | 0.180 | 0.010 | 111 | 0.057 | 0.160 | 0.201 |
| Proportion with electricity for lighting | 0.288 | 0.029 | 501 | 0.102 | 0.229 | 0.347 |
| Proportion using charcoal for cooking | 0.375 | 0.023 | 652 | 0.062 | 0.328 | 0.421 |
| Proportion using firewood for cooking | 0.549 | 0.027 | 955 | 0.048 | 0.496 | 0.602 |
| Proportion with No education | 0.719 | 0.019 | 1424 | 0.026 | 0.681 | 0.757 |
| Proportion of women with Primary education | 0.191 | 0.013 | 362 | 0.070 | 0.164 | 0.218 |
| Proportion of women with Secondary education | 0.018 | 0.008 | 142 | 0.428 | 0.003 | 0.034 |
| Proportion of women with Higher education | 0.204 | 0.004 | 37 | 0.019 | 0.196 | 0.211 |
| Proportion of women with Literacy | 0.382 | 0.020 | 739 | 0.052 | 0.342 | 0.421 |
| Proportion of Never married Women | 0.327 | 0.018 | 636 | 0.057 | 0.290 | 0.364 |
| Proportion of Currently married Women | 0.561 | 0.018 | 1119 | 0.033 | 0.524 | 0.598 |
| Proportion of Divorced women | 0.082 | 0.007 | 1330 | 0.087 | 0.068 | 0.096 |
| Proportion of widowed women | 0.031 | 0.004 | 153 | 0.146 | 0.022 | 0.039 |
| Proportion of Women with pregnant | 0.179 | 0.013 | 223 | 0.070 | 0.154 | 0.204 |
| Proportion of Women Married before age 18 | 0.455 | 0.026 | 670.000 | 0.056 | 0.404 | 0.506 |



## Data Quality Tables

## Table C. 1 Household age distribution

Single-year age distribution of the de facto household population by sex, GMHDS 2020

| Age | Male |  | Female |  | Age | Male |  | Female |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent |  | Number | Percent | Number | Percent |
| 0 | 230 | 4.6 | 187 | 3.4 | 36 | 18 | 0.4 | 39 | 0.7 |
| 1 | 178 | 3.6 | 172 | 3.1 | 37 | 20 | 0.4 | 29 | 0.5 |
| 2 | 237 | 4.8 | 221 | 4.0 | 38 | 25 | 0.5 | 61 | 1.1 |
| 3 | 282 | 5.7 | 253 | 4.6 | 39 | 17 | 0.3 | 39 | 0.7 |
| 4 | 265 | 5.3 | 261 | 4.7 | 40 | 129 | 2.6 | 80 | 1.5 |
| 5 | 269 | 5.4 | 235 | 4.3 | 41 | 12 | 0.2 | 9 | 0.2 |
| 6 | 252 | 5.1 | 224 | 4.1 | 42 | 15 | 0.3 | 22 | 0.4 |
| 7 | 216 | 4.4 | 211 | 3.8 | 43 | 13 | 0.3 | 8 | 0.1 |
| 8 | 218 | 4.4 | 178 | 3.2 | 44 | 5 | 0.1 | 2 | 0.0 |
| 9 | 142 | 2.9 | 153 | 2.8 | 45 | 57 | 1.1 | 32 | 0.6 |
| 10 | 217 | 4.4 | 182 | 3.3 | 46 | 10 | 0.2 | 8 | 0.1 |
| 11 | 134 | 2.7 | 131 | 2.4 | 47 | 3 | 0.1 | 11 | 0.2 |
| 12 | 197 | 4.0 | 137 | 2.5 | 48 | 11 | 0.2 | 6 | 0.1 |
| 13 | 139 | 2.8 | 158 | 2.9 | 49 | 5 | 0.1 | 4 | 0.1 |
| 14 | 136 | 2.7 | 157 | 2.8 | 50 | 66 | 1.3 | 80 | 1.5 |
| 15 | 106 | 2.1 | 182 | 3.3 | 51 | 12 | 0.2 | 31 | 0.6 |
| 16 | 108 | 2.2 | 144 | 2.6 | 52 | 13 | 0.3 | 33 | 0.6 |
| 17 | 90 | 1.8 | 127 | 2.3 | 53 | 9 | 0.2 | 7 | 0.1 |
| 18 | 91 | 1.8 | 135 | 2.5 | 54 | 10 | 0.2 | 14 | 0.3 |
| 19 | 56 | 1.1 | 88 | 1.6 | 55 | 20 | 0.4 | 39 | 0.7 |
| 20 | 92 | 1.9 | 120 | 2.2 | 56 | 7 | 0.1 | 13 | 0.2 |
| 21 | 33 | 0.7 | 43 | 0.8 | 57 | 5 | 0.1 | 2 | 0.0 |
| 22 | 43 | 0.9 | 64 | 1.2 | 58 | 5 | 0.1 | 4 | 0.1 |
| 23 | 28 | 0.6 | 58 | 1.1 | 59 | 2 | 0.0 | 3 | 0.1 |
| 24 | 33 | 0.7 | 67 | 1.2 | 60 | 67 | 1.4 | 78 | 1.4 |
| 25 | 54 | 1.1 | 101 | 1.8 | 61 | 9 | 0.2 | 8 | 0.1 |
| 26 | 26 | 0.5 | 68 | 1.2 | 62 | 4 | 0.1 | 6 | 0.1 |
| 27 | 29 | 0.6 | 72 | 1.3 | 63 | 2 | 0.0 | 7 | 0.1 |
| 28 | 48 | 1.0 | 85 | 1.5 | 64 | 1 | 0.0 | 3 | 0.1 |
| 29 | 21 | 0.4 | 44 | 0.8 | 65 | 12 | 0.2 | 26 | 0.5 |
| 30 | 103 | 2.1 | 141 | 2.6 | 66 | 1 | 0.0 | 4 | 0.1 |
| 31 | 18 | 0.4 | 27 | 0.5 | 67 | 2 | 0.0 | 2 | 0.0 |
| 32 | 39 | 0.8 | 43 | 0.8 | 68 | 2 | 0.0 | 7 | 0.1 |
| 33 | 24 | 0.5 | 33 | 0.6 | 69 | 2 | 0.0 | 9 | 0.2 |
| 34 | 19 | 0.4 | 29 | 0.5 | 70+ | 132 | 2.7 | 168 | 3.0 |
| 35 | 63 | 1.3 | 85 | 1.5 | Total | 4959 | 100.0 | 5510 | 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, GMHDS 2020"

|  | Household population <br> of women age 10-54 | Interviewed women age 15-49 | Percentage | Percentage of eligible <br> women interviewed |
| :--- | :---: | :---: | :---: | :---: |
| $10-14$ | 765 | na | na | Na |
| $15-19$ | 676 | 635 | 32.3 | 93.9 |
| $20-24$ | 352 | 334 | 17.0 | 94.9 |
| $25-29$ | 370 | 352 | 17.9 | 95.1 |
| $30-34$ | 273 | 249 | 12.7 | 91.2 |
| $35-39$ | 253 | 231 | 11.7 | 91.3 |
| $40-44$ | 121 | 110 | 5.6 | 90.9 |
| $45-49$ | 61 | 55 | 2.8 | 90.2 |
| $50-54$ | 165 | 1,966 | 100 | Na |

Note: the defacto population includes all residents and non-residents 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


## List of Contributors

## STEERING COMMITTEE

- Minister Amb Gamal Hassan (MOPIED)
- Minister Fawziya Abikar Noor (MoH)
- Director General, Sharmake Mohamed Farah (Somalia National Bureau of Statistics )
- Deputy Directior General, Abdirahman Omar Dahir (Somalia National Bureau of Statistics )
- Former Minister Naciima Maxamed Maxamuud Catoosh ( MoH Galmudug)
- Former Minister Abdihakim Ali Gure ( MoPIC, Galmudug)
- Minister Abdinaasir Gelle Elmi ( MoPIC, Galmudug)
- Minister Dr.Abdiweli Abdullahi Jama ( MoH Galmudug)
- Former DG Directorate of National Statistics, Ahmed Elmi (MOPIED)
- Former DG Directorate of National Statistics, Mohamed Moalim (MOPIED)
- Dr. Abdiweli Mohamed Ahmed ( Director General of Ministry of Health, Galmudug State)
- Abdullahi Omer Adan ( Director General of Ministry of Planning, Galmudug State)
- Nur Ahmed Weheliye (GMHDS National Coordinator)
- Dr. Abdulkadir Afrah Weheliye ( (GMHDS Deputy National Coordinator)
- Nuur Ali Mohamud (GMHDS Director)


## PROJECT DESIGN

- Abdi Mohamoud Ali (GMHDS

Coordinator -Puntland)

- Emily Denness (Former International Midwifery Specialist, UNFPA)
- Ezekiel Kutto (Former M\&E Specialist, UNFPA)
- Felix Mulama (Demographer, UNFPA)
- Mariam Alwi (P\&D Specialist/Head of Unit, UNFPA)
- Nikolai Botev (Former Representative, UNFPA)
- Nur Weheliye (GMHDS National Coordinator)
- Osman Warsame (GMHDS Coordinator)
- Richard Ng'etich (Statistician, UNFPA)
- Umikaltuma Ibrahim (GIS Analyst, UNFPA)
- Mohamed Moalim (Former DG)
- Dr. Abdallah Zoubi (Former PD Advisor, ASRO)
- Dr. Mohammed Abulata (Sampling Expert)
- Dr. Werner Haug (Demographer, UNFPA Consultant)
- The Late Dr. Ahmed Abdelmonem (Director, PAPFAM)

SAMPLING DESIGN \& WEIGHTING

- Richard Ng'etich (Statistician, UNFPA) Richard Ng'etich (Statistician, UNFPA)
- Abdinasir Ali Dahir (P\&D Technical Coordinator)
- Said Abdilahi Dhule (Senior Demographer)
- Mohamed Abdinur (Statistician/Data Specialist)
- Amina Omar (GIS Assistant, UNFPA)
- Felix Mulama (Demographer, UNFPA)
- Josyline Gikunda (GIS Assistant, UNFPA)
- Umikaltuma Ibrahim (GIS Analyst, UNFPA)


## TOOLS DEVELOPMENT

- Nikolai Botev (Former Representative, UNFPA)
- Abdi Mohamoud Ali (GMHDS Coordinator)
- Abdi Muse Kamil (HMIS Consultant)
- Abdinasir Abukar Roble
- Abdinasir Ali Dahir (P\&D Technical Coordinator)
- Dr. Abdirisaq Hassan (Director of Planning and Policy)
- Deerow Ahmed Adam (Director of Public Health)
- Dr. Adam Farah (Reproductive and Maternal Specialist UNFPA)
- Dr. Abdulkadir Afrah Weheliye (GMHDS Deputy National Coordinator)
- Faisa Ibrahim (Assistan Representative, UNFPA)
- Felix Mulama (Demographer, UNFPA)
- Hawa Abdullahi Elmi (Midwifery Specialist, UNFPA)
- Ibrahim Mohamed Nur
- Mariam Alwi (P\&D Specialist/Head of Unit, UNFPA)
- Mohamed Hussein Abdullahi (Statistician)
- Mohamed Yarani (Statistician)
- Nur Ahmed Weheliye (GMHDS National Coordinator)
- Osman Warsame (GMHDS Coordinator)
- Richard Ng'etich (Statistician, UNFPA)
- Said Abdilaahi (Senior Demographer, MOPIED)
- Sharmake Hassan (DG, MOPIC Puntland)
- Abdulrazak Karie (Demographer, MOPIED)


## DATABASE DEVELOPMENT

- Boniface Muganda (Database Developer, UNFPA) •
- Felix Mulama (Demographer, UNFPA)
- Samwel Andati (Data Management Assistant, UNFPA)
- Umikaltuma Ibrahim (GIS Analyst, UNFPA)
- Ahmednasir Abdi Mohamoud (GMHDS Data manager)


## DATA PROCESSING

- Boniface Muganda (Data base developer UNFPA)
- Said Abdilaahi (Senior Demographer)
- Abdirahman Omer Ali (Statistician)
- Abdinasir Ali Dahir (P\&D Technical Coordinator)
- Abdirahman Mohamed Sheikh Abdi (SDGs Coordinator)
- Abdulrazak Karie (Demographer)
- Mohamed Yarani Hassan (Director of Statistics, Southwest)
- Boniface Muganda (Database Developer, UNFPA)
- Felix Mulama (Demographer, UNFPA)
- Mohamed Abdinur (Statistician/Data Specialist)
- Mohamed Hussein Abdullahi (Statistician)


## GIS \& SAMPLING FRAME DEVELOPMENT

- Abdifatah Abdikadir Jama
- Abdirahman Omar Dahir
- Abukar Abdulle Elmi
- Ahmed Abdullahi Farah
- Ahmed Nur Jama
- Amina Omar (GIS Assistant, UNFPA)
- Gilbert Sosi (GIS Assistant, UNFPA)
- Halima Mohamed Abdirahman
- Hassan Nor Mohamoud
- Hodan Osman Jama
- Josyline Gikunda(GIS Assistant, UNFPA)
- Mohamed Ali Dhaqane
- Mohamed Ali Ibar
- Mohamed Ali Liban
- Umikaltuma Ibrahim (GIS Analyst, UNFPA)
- Richard Ng'etich (Statistician, UNFPA)


## REVIEWERS

- Mariam Alwi (P\&D Specialist/Head of Unit, UNFPA)
- Richard Ng'etich (Statistician, UNFPA)
- Felix Mulama (Demographer, UNFPA)
- Zena Lyaga (Demographer, UNFPA)
- Josyline Gikunda(GIS Assistant, UNFPA)
- Nasra Adow (Project Assistant, UNFPA)
- Kamal Ahmed (Advocacy and Donor Engagement Specialist, SNBS)
- Abdikadir Adan Jama ( SNBS Coordinator)


## DESIGN \& LAYOUT

- Felix Warentho


## AUTHORS

- Nur Ahmed Weheliye (GMHDS National Coordinator, SNBS)
- Said Abdilaahi Abdi (GMHDS Technical Lead, SNBS )
- Abdulrazak Abdullahi Karie ( Demographer, SNBS)
- Abdirahman Omer Ali ( Statistician, SNBS)
- Ibrahim Yasin Khalif ( Statistician, MoPIC- Galmudug)
- Maslah Mohamed Abdi (M \& E, MoHGalmudug)
- Mohamed Ismail Warsame (M \& E, MoH-Galmudug)
- Mowliid Ali Ahmed ( Statistician, MoPIC- Galmudug)
- Hamida Sheel (Data Analyst, SNBS)
- Kamal Ahmed (Advocacy and Donor Engagement Specialist)
- Faiza Kassim (Finance/Admin Assistant MOPIED)


## ADMINISTRATION \& FINANCE

- Shukri Salad (Finance/Admin Officer SNBS)
- Sella Ouma (International Operations Manager, UNFPA)
- Cyrus Thuku (Travel and Logistics)
- Eva Mwagonah (Programme Assistant, DfID)
- Maimuna Abdalla (Programme Assistant, DfID)
- Faisa Kasim (Finance/Admin Assistant SNBS)
- Kamal Ahmed (Advocacy Support Consultant, UNFPA)
- Kevin Kibubi (Admin/Finance Associate, UNFPA)
- Nasra Adow (Project Assistant, UNFPA)
- Osman Jama (Finance/Admin Officer MOPIC)
- Samwel Andati (Data Management Assistant, UNFPA)
- Halima Ahmed (Project Assistant, UNFPA)


## MAIN SURVEY

- Dr Abdiweli Mohamed Ahmed (GMHDS State DG)
- Abdihakin Mohamed Dirie (GMHDS State Coordinator)
- Abdullahi Warsame Abtidoon (GMHDS Regional Coordination)
- Yusuf Haji Aden (Mudug Regional Coordinator)
- Mohamed Ali Ibar (GIS support)
- Mohamed Adow Hassan (Supervisor)
- Sahra Mohamed Farah (Enumerator)
- Najmo Abdi Ali (Enumerator)
- Raxma Hassan Osoble (Enumerator)
- Hodan Farah Ismail (Supervisor)
- Sowdo Abdullahi Farah (Enumerator)
- Amal Mohamed Hade (Enumerator)
- Sucaad Hassan Yusuf (Enumerator)
- Hamdi Mohamed Yusuf (Supervisor)
- Naimo Abdisalam Alasow (Enumerator)
- Farxiyo Dahir Karie (Enumerator)
- Nasteho Abdinur Ahmed (Enumerator)
- Leyla Ahmed Hussain (Supervisor)
- Sumaya Abdirizak Sheikh (Enumerator)
- Fardowso Abdulkadir Samatar (Enumerator)
- Hodan Ahmed Dhif (Enumerator)
- Sucaad Ali Nuur (Supervisor)
- Ruweydo Abdulahi Mohamed (Enumerator)
- Fardowso Ali Osman (Enumerator)
- Sowdo Garad Abdi (Enumerator)
- Hana Abdikarim Hassan (Supervisor)
- Aisha Ali Yusuf (Enumerator)
- Naima Mohamud Elmi (Enumerator)
- Nafiso Ali Ysuf (Enumerator)
- Ismahaan Olow Arale (Enumerator)
- Fartuun Elmi Alin (Enumerator)
- Halima Adan Farah (Enumerator)
- Aamina Isse (Enumerator)


## MMR

- Shaafici Abdinuur (Coordinator)
- Mohamed Ali isse (Supervisor)
- Abdirahman Ahmed Rooble
(Enumerator)
- Salim Mohamed Ahmed (Enumerator)
- Sowdo Nur Mohamed (Enumerator)
- Mumin Mohamed Barre (Enumerator)
- Mohamed Hassan Salaad (Supervisor)
- Shuuke Mohamed Halane (Enumerator)
- Jama Abdirashid Jama (Enumerator)
- Sadam Hussien Warsame (Enumerator)
- Faysal Salad Mohamud (Enumerator)
- Abdirsak Mohamud Ogle (Supervisor)
- Sharmake Hassan Mohamed (Enumerator)
- Abdikani Artan Mohamed (Enumerator)
- Ayan Hirsi Mohomud (Enumerator)
- Fa'id Abdiaziz Ali (Supervisor)
- Yahye Osman Gedi (Enumerator)
- Aamina Abdi Hussein (Enumerator)
- Ahmed Mawel Salad (Enumerator)
- Abdikafi Dahir Barre (Enumerator)
- Farhia Abdi shire Jayte (Supervisor)
- Fa'id Abdiaziz Ali (Enumerator)
- Aamina Abdi Hussein (Enumerator)
- Abdinasir Ahmed Elmi (Enumerator)
- Mohamed Ahmed Hirsi (Enumerator)
- Osman Gelle Jama (Enumerator)
- Mohamed Abdulahi Hashi (Enumerator)
- Ali Mohamud Abdi (Supervisor) Abdulkadir Abdi Farah (Enumerator)
- Hodan Abdulle Farah (Enumerator)
- Fa'id Ali nur (Enumerator)
- Farah Khalif Hashi (Enumerator)
- Abdirizak Mohamed Ahmed (Supervisor)
- Bashi Ali Hashi (Enumerator)
- Shariif Alinur Kulane (Enumerator)
- Zeynab Mohamed Adan (Enumerator)
- Mohamed Mohamud Mohamed (Enumerator)



## Household Questionnaire

SOMALI MINISTRIE'S OF PLANNING AND HEALTH
QUESTIONNAIRE
SERIAL NUMBER


HOUSEHOLD QUESTIONNAIRE



SOMALI MINISTRIE'S OF PLANNING AND HEALTH
QUESTIONNAIRE SERIAL NUMBER


HOUSEHOLD QUESTIONNAIRE


INTERVIEWER VISITS



Hello. My name is $\qquad$ 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 $\qquad$


| 100 | RECORD THE START TIME. |  |
| :---: | :---: | :---: |
|  |  | HOURS |
|  |  | MINUTES |

HOUSEHOLD SCHEDULE

|  |  | DEMOGRAPHIC CHARACTERISTICS |  |  |  |  |  |  |  | ELIGIBILITY |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | IF AGE 12 <br> OR OLDER | IF AGE 12 \& EVER MARRIED |  |  |  |
| LINE <br> NO. | USUAL RESIDENTS | RELATIONSHIP TO HEAD OF HOUSEHOLD | SEX | RESID | NCE | AGE | YEAR OF BIRTF | MARITAL STATUS | AGE AT FIRST MARRIAGE |  | 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. <br> 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. <br> THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-32 FOR EACH PERSON. | What is the relationship of (NAME) to the head of the household? | Is (NAME) male or female? | Does <br> (NAME) usually live here? | Did <br> (NAME) <br> stay <br> here <br> last <br> night? | How old is (NAME) in completed years? <br> IF 95 <br> OR MORE, RECORD '95'. | What is (NAME's) year of birth? | What is (NAME)'s current marital status? <br> 1 = MARRIED <br> 2 = DIVORCED <br> 3 = ABANDONED <br> 4 = WIDOWED <br> 5 = NEVER- <br> MARRIED | How old was (NAME) when he/she got married for the first time? <br> RECORD AGE IN YEARS <br> IF 95 OR MORE, RECORD '95'. | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> EVER <br> MARRIED <br> WOMEN <br> AGE <br> 12-49 | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> NEVER <br> MARRIED <br> WOMEN <br> AGE <br> 15-49 | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> CHILDREN <br> AGE 0-5 |
| 01 |  |  | M F 12 | $\begin{array}{ll} \mathrm{Y} & \mathrm{~N} \\ 1 & 2 \end{array}$ | $\begin{array}{ll} Y & N \\ 1 & 2 \end{array}$ | IN YEARS | $\begin{array}{\|l\|l\|l\|l\|} \hline Y & Y & Y & Y \\ \hline & & & \\ \hline \end{array}$ | $\square$ | IN YEARS | 01 | 01 | 01 |
| 02 |  | $\square$ | 12 | 12 | 12 | $1$ |  |  |  | 02 | 02 | 02 |
| 03 |  | $\square$ | 12 | 12 | 12 |  |  |  |  | 03 | 03 | 03 |
| 04 |  |  | 12 | 12 | 12 |  |  |  |  | 04 | 04 | 04 |
| 05 |  |  | 12 | 12 | 12 |  |  |  |  | 05 | 05 | 05 |
| 06 |  |  | 12 | 12 | 12 |  |  |  |  | 06 | 06 | 06 |
| 07 |  | $1$ | 12 | 12 | 12 |  |  |  |  | 07 | 07 | 07 |
| 08 |  | $\square$ | 12 | 12 | 12 |  |  |  |  | 08 | 08 | 08 |
| 09 |  | $\square$ | 12 | 12 | 12 |  |  |  |  | 09 | 09 | 09 |
| 10 |  | $1$ | 12 | 12 | 12 |  |  |  |  | 10 | 10 | 10 |


| $\text { 2A) } \begin{aligned} & \text { J } \\ & \\ & \text { th } \\ & \text { ir } \end{aligned}$ | 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 | $\longrightarrow$ | ADD TO <br> 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 <br> TABLE | NO |

[^17]HOUSEHOLD SCHEDULE


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 $\quad$ (if Koranic skip grade)


HOUSEHOLD SCHEDULE

|  |  | DEMOGRAPHIC CHARACTERISTICS |  |  |  |  |  |  |  | ELIGIBILITY |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | IF AGE 12 OR OLDER | $\begin{gathered} \text { IF AGE } 12 \text { \& } \\ \text { EVER } \\ \text { MARRIED } \end{gathered}$ |  |  |  |
| LINE NO. | USUAL RESIDENTS | RELATIONSHIP TO HEAD OF HOUSEHOLD | SEX | RESIDENCE |  | AGE | YEAR OF BIRTF | MARITAL STATUS | AGE <br> AT FIRST MARRIAGE | 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. <br> 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. <br> THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-32 FOR EACH PERSON. | What is the relationship of (NAME) to the head of the household? | Is (NAME) male or female? | Does <br> (NAME) usually live here? | Did <br> (NAME) <br> stay <br> here <br> last <br> night? | How old is (NAME) in completed years? <br> IF 95 <br> OR MORE, RECORD '95'. | What is (NAME's) year of birth? | What is (NAME)'s current marital status? <br> 1 = MARRIED <br> 2 = DIVORCED <br> 3 = ABANDONED <br> 4 = WIDOWED <br> 5 = NEVER- <br> MARRIED | How old was (NAME) when he/she got married for the first time? <br> RECORD <br> AGE IN YEARS <br> IF 95 <br> OR MORE, RECORD '95'. | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> EVER <br> MARRIED <br> WOMEN <br> AGE <br> 12-49 | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> NEVER <br> MARRIED <br> WOMEN <br> AGE <br> 15-49 | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> CHILDREN <br> AGE 0-5 |
| 11 |  |  | $\begin{array}{cc} M & F \\ 1 & 2 \end{array}$ | $\begin{array}{ll} Y & N \\ 1 & 2 \end{array}$ | $\begin{array}{ll} Y & N \\ 1 & 2 \end{array}$ | IN YEARS | $\begin{array}{\|l\|l\|l\|l\|} \hline Y & Y & Y & Y \\ \hline & & & \\ \hline \end{array}$ |  | IN YEARS | 11 | 11 | 11 |
| 12 |  |  | 12 | 12 | 12 |  |  |  |  | 12 | 12 | 12 |
| 13 |  |  | 12 | 12 | 12 |  |  |  |  | 13 | 13 | 13 |
| 14 |  |  | 12 | 12 | 12 |  |  |  |  | 14 | 14 | 14 |
| 15 |  |  | 12 | 12 | 12 |  |  |  |  | 15 | 15 | 15 |
| 16 |  |  | 12 | 12 | 12 |   |  | $\square$ |  | 16 | 16 | 16 |
| 17 |  |  |  |  |  |  | $\begin{array}{l\|l\|l\|} \hline & & \\ \hline \end{array}$ |  |  | 17 | 17 | 17 |
| 18 |  |  |  |  |  |  |  | $\square$ | $1$ | 18 | 18 | 18 |
| 19 |  |  | 12 |  | 12 |  |  | $\square$ |  | 19 | 19 | 19 |
| 20 |  |  | 12 | 12 | 12 |  |  |  |  | 20 | 20 | 20 |

KK HERE IF CONTINUATION SHEET USED $\square$

02 = SPOUSE

|  | 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 |
| LINE NO. | SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS |  |  |  | EVER ATTENDED SCHOOL |  | CURRENT/RECENT SCHOOL ATTENDANCE |  | $\begin{aligned} & \text { LABOUR } \\ & \text { FORCE } \\ & \text { PARTICIPATION } \end{aligned}$ |
|  | 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? <br> IF YES: <br> What is her name? <br> RECORD MOTHER'S LINE NUMBER. <br> IF NO, RECORD '00'. | Is (NAME)'s biological father alive? | Does (NAME)'s biological father usually live in this household? <br> IF YES: <br> What is his name? <br> RECORD <br> FATHER'S LINE <br> NUMBER. <br> IF NO, <br> RECORD '00'. | Has <br> (NAME) <br> ever attended school? | What is the highest level of school (NAME) has attended? <br> 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? <br> 1= WORKING (INCLUDING HOUSE WIVES HAVING ACTIVITY) <br> 2 = NOT WORKING BUT <br> LOOKING FOR WORK <br> 3 = HOUSEWIFE NOT <br> WORKING <br> 4 = STUDENT <br> 5 = RETIRED <br> 6 = DISABLED <br> 7 = OTHER NOT WORKING |
| 11 | $\begin{array}{ccc} Y & N & \text { DK } \\ 1 & 2 & \downarrow^{8} \\ \text { GO TO } 15 \end{array}$ |  | $\begin{array}{ccc} Y & \text { N DK } \\ 1 & 2 \square^{8} \\ \text { GO TO } 17 \end{array}$ |  | $\begin{array}{lll} Y & N \\ 1 & 2 \nabla^{8} \\ \text { GO TO } & { }^{2} \end{array}$ | GRADE | $\begin{array}{lll} Y & N \\ 1 & 2 \Psi^{8} \\ \text { GO TO } 21 \end{array}$ | GRADE $\square$ | $\square$ |
| 12 | GO TO 15 |  | $\begin{array}{cc} 1 & 2 \square^{8} \\ \text { GO TO } 17 \end{array}$ | $1$ | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 21 \end{array}$ |   | $\begin{array}{cc} 1 & 2 \end{array} \nabla^{8}$ | $\square$ | $\square$ |
| 13 | $\begin{array}{ll} 1 & 2 \nabla^{8} \\ \text { GO TO } 15 \end{array}$ | $\square$ | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 17 \end{array}$ | $1$ | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 21 \end{array}$ |   | $\begin{array}{cc} 1 & 2 \square^{8} \\ \text { GO TO } 21 \end{array}$ | $\qquad$ | $\underline{1}$ |
| 14 | $\begin{array}{cc} 1 & 2 \\ \text { GO TO } 15 \end{array}$ |  | $\begin{array}{ll} 1 & 2 \square^{8} \\ \text { GO TO } & 17 \end{array}$ |  | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 21 \end{array}$ | $\square \square$ | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 21 \end{array}$ |  | , |
| 15 | $\begin{array}{cc} 1 & 2 \\ \text { GO TO } 15 \end{array}$ |  | $\begin{array}{cc} 1 & 2 \end{array} \nabla^{8}$ |  | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 21 \end{array}$ |   | $\begin{array}{cc} 1 & 2 \square^{8} \\ \text { GO TO } 21 \end{array}$ |  | + |
| 16 |  |  | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 17 \end{array}$ |  | $\begin{array}{cc} 1 & 2 \square^{8} \\ \text { GO TO } 21 \end{array}$ |  | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 21 \end{array}$ |  | $\square$ |
| 17 | $\begin{array}{ll} 1 & 2 \nabla^{8} \\ \text { GO TO } 15 \end{array}$ |  | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 17 \end{array}$ |  | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 21 \end{array}$ |  | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 21 \end{array}$ |  | $\square$ |
| 18 | $\begin{array}{ll} 1 & 2 \nabla^{8} \\ \text { GO TO } 15 \end{array}$ |  | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 17 \end{array}$ | $1$ | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 21 \end{array}$ |  | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 21 \end{array}$ | $\qquad$ | $\square$ |
| 19 | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 15 \end{array}$ |  | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 17 \end{array}$ | $1$ | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 21 \end{array}$ |  | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 21 \end{array}$ |  | $\square$ |
| 20 | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 15 \end{array}$ | $1$ | $\begin{array}{cc} 1 & 2 \square^{8} \\ \text { GO TO } 17 \end{array}$ | $\square$ | $\begin{array}{cc} 1 & 2 \nabla^{8} \\ \text { GO TO } 21 \end{array}$ |  | $\begin{array}{cc} 1 & 2 \square^{8} \\ \text { GO TO } 21 \end{array}$ |  | $\square$ |

CODES FOR Qs. 18 AND 20: EDUCATION

## LEVEL

## GRADE

$0=$ PRESCHOOL 00 = LESS THAN 1 YEAR COMPLETED
1 = PRIMARY (USE 'OO' 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

|  | REGISTRATION OF BIRTHS | CHRONIC DISEASES |  |  |  | SOCIAL HABITS |  | DISABILITY |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IF AGE 0-4 YEARS |  |  |  |  | $\begin{array}{r} \text { IF AGE } 10 \mathrm{Y} \\ \text { OLD } \end{array}$ | EARS OR |  |  |  |  |
| $\begin{array}{\|c\|} \hline \mathrm{LINE} \\ \mathrm{NO} . \end{array}$ | $\begin{gathered} \text { BIRTH } \\ \text { REGISTRATION } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |
|  | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
|  | Does (NAME) have a birth certificate? <br> IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? <br> $1=$ HAS <br> CERTIFICATE <br> 2 = REGISTERED <br> 3 = NEITHER <br> 8 = DON'T <br> 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)? <br> SEE CODES <br> 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 <br> (NAME) <br> currently <br> chew <br> qat/khat? | Does (NAME) face any of the following limitations? $\begin{aligned} & \mathrm{A}=\text { SIGHT? } \\ & \mathrm{B}=\mathrm{HEARING} ? \\ & \mathrm{C}=\text { SPEECH } \\ & \mathrm{D}=\text { LEARNING } \\ & \mathrm{E}=\text { MOBILITY } \\ & \mathrm{F}=\text { SELF-CARE? } \\ & \mathrm{G}=\text { MENTAL? } \\ & \mathrm{H}=\text { NONE } \end{aligned}$ | What is the main reason for (NAME's) disability? | How old was (NAME) when this condition started? '95'. | During the last 12 months did (NAME) get any of the following forms of support? <br> A= MEDICAL CARE $\mathrm{B}=$ WELFARE <br> C= FINANCIAL <br> D= NUTRITIONAL <br> $\mathrm{Y}=$ NO SUPPORT |
| 11 | $\square$ | $\begin{array}{llr} Y & N & \text { DK } \\ 1 & 2 & \nabla \\ & \begin{array}{c} \downarrow \\ \\ \\ \\ \text { GO TO } \end{array} \\ 27 \end{array}$ | $\begin{array}{lllllll} A & B & C & D & E & F & G \\ H & I & J & K & L & M & N \\ O & P & Q & R & S & T & Y \end{array}$ | Y NDK <br> 128 | $\begin{array}{llc} Y & N & D K \\ 1 & 2 & 8 \end{array}$ | Y N DK 128 | $\begin{aligned} & \text { Y N DK } \\ & 1288 \end{aligned}$ | CODE $\begin{aligned} & \text { A B C D E F G } \\ & \underset{\downarrow}{H} \\ & \text { GO TO } 101 \end{aligned}$ | CODE | IN YEARS | CODE <br> $A B C D Y$ |
| 12 | $\square$ | $\begin{array}{cc} 1 & 2 \text { T }^{\downarrow}{ }^{\downarrow} 8 \\ & \text { GO TO } 27 \end{array}$ | $\begin{array}{lllllll} A & B & C & D & E & F & G \\ H & I & J & K & L & M & N \\ O & P & Q & R & S & T & Y \end{array}$ | 128 | 128 | 128 | 128 | $\begin{aligned} & \text { A B C D E F G } \\ & \underset{\downarrow}{H} \\ & \text { GO TO } 101 \end{aligned}$ |  |  | $A B C D$ |
| 13 | $\square$ | $\begin{array}{lll} 1 & 2 \text { T }^{\downarrow} & 8 \\ & \text { GO TO } 27 \end{array}$ | $\begin{array}{lllllll} A & B & C & D & E & F & G \\ H & I & J & K & L & M & N \\ O & P & Q & R & S & T & Y \end{array}$ | 128 | 128 | 128 | 128 | $\begin{gathered} \text { A B C D E F G } \\ \\ \text { GO TO } 101 \\ \downarrow \end{gathered}$ |  |  | $A B C D$ |
| 14 | $\square$ | $\begin{array}{lll} 1 & 2 \text { T }^{\downarrow} & 8 \\ & \text { GO TO } 27 \end{array}$ | $\begin{array}{lllllll} A & B & C & D & E & F & G \\ H & I & J & K & L & M & N \\ O & P & Q & R & S & T & Y \end{array}$ | 128 | 128 | 128 | 128 | $\begin{aligned} & \text { A B C D E F G } \\ & \underset{\downarrow}{\downarrow} \\ & \text { GO TO } 101 \end{aligned}$ |  |  | $A \quad B \quad C \quad D \quad Y$ |
| 15 | $\square$ | $\begin{array}{ccc} 1 & 2 \underset{\downarrow}{\downarrow} 8 \\ & \text { GO TO } 27 \end{array}$ | $\begin{array}{lllllll} A & B & C & D & E & F & G \\ H & I & J & K & L & M & N \\ O & P & Q & R & S & T & Y \end{array}$ | 128 | 128 | 128 | 128 | $\begin{gathered} \text { A B C D E F G } \\ \\ \\ \text { GO TO } 101 \\ \downarrow \end{gathered}$ |  |  | $A \quad B \quad C \quad D \quad Y$ |
| 16 |  |  | $\begin{array}{lllllll} A & B & C & D & E & F & G \\ H & I & J & K & L & M & N \\ O & P & Q & R & S & T & Y \end{array}$ | 128 | 128 | 128 | 128 | $\begin{gathered} \text { A B C D E F G } \\ \\ \\ \text { GO TO } 101 \\ \downarrow \end{gathered}$ |  |  | A B C D Y |
| 17 |  | $\begin{array}{lll} 1 & 2 & \downarrow \\ & \text { GO TO } 27 \end{array}$ | A $B$ $C$ $D$ $E$ $F$ $G$ <br> $H$ $I$ $J$ $K$ $L$ $M$ $N$ <br> $O$ $P$ $Q$ $R$ $S$ $T$ $Y$ | 128 | 128 | 128 | 128 | $\begin{gathered} \text { A B C D E F G } \\ \\ \\ \text { GO TO } 101 \\ \downarrow \end{gathered}$ |  |  | A B C D Y |
| 18 | $\square$ | $\begin{array}{lll} 1 & 2 \underset{\downarrow}{\downarrow} 8 \\ & \text { GO TO } 27 \end{array}$ | $\begin{array}{lllllll} A & B & C & D & E & F & G \\ H & I & J & K & L & M & N \\ O & P & Q & R & S & T & Y \end{array}$ | 128 | 128 | 128 | 128 | $\begin{gathered} \text { A B C D E F G } \\ \\ \\ \text { GO TO } 101 \\ \downarrow \end{gathered}$ |  |  | $A \quad B \quad C \quad D \quad Y$ |
| 19 |  | 1 $\begin{gathered} 2 \downarrow{ }^{2} 8 \\ \text { GO TO } 27 \end{gathered}$ | $\begin{array}{lllllll} A & B & C & D & E & F & G \\ H & I & J & K & L & M & N \\ O & P & Q & R & S & T & Y \end{array}$ | 128 | 128 | 128 | 128 | $\begin{gathered} \text { A B C D E F G } \\ \\ \text { GO TO } 101 \\ \downarrow \end{gathered}$ |  |  | A B C D Y |
| 20 |  | $\begin{array}{lll} 1 & 2 \underset{\downarrow}{\downarrow} 8 \\ & 8 \text { TO } 27 \end{array}$ | $\begin{array}{lllllll} A & B & C & D & E & F & G \\ H & I & J & K & L & M & N \\ O & P & Q & R & S & T & Y \end{array}$ | 128 | 128 | 128 | 128 | $\begin{gathered} \text { A B C D E F G } \\ \\ \\ \text { GO TO } 101 \\ \downarrow \end{gathered}$ |  |  | A B C D Y |

TICK HERE IF CONTINUATION SHEET USED $\square$

CODES FOR Q. 24: CHRONIC DISEASES

A=BLOOD PRESSURE<br>B=DIABETES H=LIVER DISEASE<br>C=INFLAMMATION/ULCII=ARTHRITIS<br>J=TUBERCULOSIS (TB)<br>E=SICKLE CELL ANEMI/K=CHRONIC HEADACHE<br>THALASSEMIA L=STROKE<br>$\mathrm{F}=\mathrm{HEART}$ DISEASE $\quad \mathrm{M}=$ EPILEPSY

| N=PROSTATIC | R=SKIN DISEASE |
| :--- | :--- |
| HYPERTROPHY | $\mathrm{S}=$ CANCEROUS TUMORS |
| $\mathrm{O}=$ CATARACT | $\mathrm{T}=$ ASTHMA |
| $\mathrm{P}=$ CHRONIC BACK PAIN/ $/ \mathrm{Y}=$ OTHER |  |
| SPINAL PROBLEM <br> $\mathrm{Q}=$ MENTAL/PSYCHOLOGICAL ILLNESS |  |

## CODES FOR Q. 30: CAUSE OF DIABILITY

01=CONGENITAL 08=MAGIC
2=CONTAGIOUS 96=OTHER
03=CHILD BIRTH CONDITION (SPECIFY)
04=OTHER DISEASE
05=ABUSE 98=DON'T KNOW
07=INJURY/ACCIDENT

OUT OF POCKET HOUSEHOLD HEALTH EXPENDITURE


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) |  |  |  |
| 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) <br> a) Current income <br> b) Health insurance <br> c) Savings (including in bank) <br> d) Borrow from banks/other institutions/relatives <br> e) Support from relatives \& friends <br> f) Sold assets <br> g) Other means | a) INCOME <br> b) INSURANCE <br> c) SAVINGS <br> d) BORROWING <br> e) RELATIVES/FRIENDS <br> f) SOLD ASSETS <br> f) OTHER | $\begin{aligned} & \text { YES } \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | $\begin{gathered} \mathrm{NO} \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \end{gathered}$ |  |
| 107 | Does any household member have a health insurance policy? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  |  |  |


| HOUSEHOLD CHARACTERISTICS |  |  |  |
| :---: | :---: | :---: | :---: |
| NO． | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| 201 | What is the main source of drinking water for members of your household？ |  | $\longrightarrow 206$ |
| 202 | What is the main source of water used by your household for other purposes such as cooking and handwashing？ |  | $\longrightarrow 206$ |
| 203a | Where is the main source of water for drinking located？ |  | $\rightarrow$ 204a |
| 203b | How long does it take to go there，get water，and come back in minutes？ | MINUTES ．．．．．．．．．．．．．．．．．   <br> DON＇T KNOW ．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 998   |  |
| 204a | Where is the main source of water for other purposes located？ |  | $\rightarrow 205$ |
| 204b | How long does it take to go there，get water，and come back in minutes？ | MINUTES ．．．．．．．．．．．．．．．．．．   <br> DON＇T KNOW ．．．．．．．．．．．．．．．．．．．．．．．．．．．． 998   |  |



HOUSEHOLD CHARACTERISTICS

| NO. | QUESTIONS AND FILTERS |  | CODING CATEGORIES |  |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 214 | Whats the main source of energy for lighting? |  | ELECTRICITY SOLAR KEROSENE FIREWOOD TORCH OTHER | $\overline{\mathrm{SF}}$ | CIFY) | $\ldots .$. 01 <br> $\ldots .$. 02 <br> $\ldots .$. 03 <br> $\ldots .$. 04 <br> $\ldots$. 05 <br>  96 |  |
| 215 | Whats the main source of energy for cooking? |  |  |  |  |  | $\rightarrow 218$ |
| 216 | Is the cooking usually done in the house, in a separate building, or outdoors? |  |  |  |  |  | $\xrightarrow{\rightarrow} 218$ |
| 217 | Do you have a separate room which is used as a kitchen? |  |  |  |  |  |  |
| 218 | How many rooms in this household are used for sleeping? |  | ROOMS |  |  |  |  |
| 219 | Does this household own any livestock including horses, donkeys and poultry? |  |  |  |  |  | $\longrightarrow 221$ |
| 220 | How many of the following animals does this household own? <br> IF NONE, RECORD '00'. <br> IF 995 OR MORE, RECORD '995'. <br> IF UNKNOWN, RECORD '998'. <br> a) Camel? <br> b) Cattle? <br> c) Shoats? <br> d) Donkeys <br> e) Horses? <br> f) Poultry? |  | a) CAMELS <br> b) CATTLE <br> c) SHOATS <br> d) DONKEYS <br> e) HORSES <br> f) POULTRY. |  |  |   <br>   <br>   |  |
| 221 | Has this household lost any livestock in the last one year due to drought/flooding/disease etc? |  |  |  |  |  | $\longrightarrow 223$ |
| 222 | How many of the following animals did this household loose? <br> IF NONE, RECORD '00'. <br> DUE TO <br> IF 995 OR MORE, RECORD '995'. DROUGHT <br> IF UNKNOWN, RECORD '998'. <br> a) Camel? <br> a) CAMELS <br> b) Cattle? <br> b) CATTLE <br> c) Shoats? <br> c) SHOATS <br> d) Donkeys <br> d) DONKEYS <br> e) Horses? <br> e) HORSES <br> f) Poultry? <br> f) POULTRY |  |  | DUE TO FLOODS | DUE TO DISEASE | TOTAL |  |

HOUSEHOLD CHARACTERISTICS

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 223 | Does any member of this household own any agricultural land? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\longrightarrow 225$ |
| 224 | How many hectares of agricultural land do members of this household own? <br> IF 95 OR MORE, CIRCLE ' 950 '. | UNIT <br> QUANT <br> HECTARES $\qquad$ $\square$ <br> QOODI <br> JABAAL <br> TALAABC $\qquad$ $\square$ <br> OTHER <br> $\overline{(S P E C I F Y)}$ <br> OR MORE DON'T KNOW |  |  |
| 225 | Does your household have: <br> a) A radio? <br> b) A television? <br> c) Non-mobile telephone? <br> d) A computer? <br> e) Internet connectivity? <br> f) A refrigerator? <br> g) Air conditioner/fan? | a) RADIO <br> b) TELEVISION <br> c) NON-MOBILE TELEPHONE <br> d) COMPUTER <br> e) INTERNET <br> f) REFRIGERATOR <br> g) AIR CONDITIONER/FAN |  YES NO <br> . 1 2 <br> . 1 2 <br> . 1 2 <br> . 1 2 <br> . 1 2 <br> . 1 2 <br> .. 1 2 |  |
| 226 | Does any member of this household own: <br> a) A watch? <br> b) A mobile phone? <br> c) A bicycle? <br> d) A motorcycle or motor scooter? <br> e) Donkey cart? <br> f) A car or truck? <br> g) Boat/Canoe? <br> h) Tractor? <br> i) Rickshaw? <br> j) Animal plough? | a) WATCH <br> b) MOBILE PHONE <br> c) BICYCLE <br> d) MOTORCYCLE/SCOOTER <br> e) DONKEY CART <br> f) CAR/TRUCK <br> g) BOAT/CANOE <br> h) TRACTOR <br> i) RICKSHAW <br> j) ANIMAL PLOUGH |  YES NO <br> . 1 2 <br> . 1 2 <br> . 1 2 <br> . 1 2 <br> . 1 2 <br> . 1 2 <br> . 1 2 <br> . 1 2 <br> . 1 2 <br> . 1 2 |  |
| 227 | Does any member of this household have a bank account? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  |  |

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? |  | $\longrightarrow 231$ |
| 229 | OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING. <br> RECORD OBSERVATION. |  |  |
| 230 | OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT AT THE PLACE FOR HANDWASHING. <br> RECORD OBSERVATION. |  |  |
| 231 | OBSERVE MAIN MATERIAL OF THE FLOOR OF THE DWELLING. <br> RECORD OBSERVATION. |  |  |
| 232 | OBSERVE MAIN MATERIAL OF THE ROOF OF THE DWELLING. <br> RECORD OBSERVATION. |  |  |

ADDITIONAL HOUSEHOLD CHARACTERISTICS

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 233 | OBSERVE MAIN MATERIAL OF THE EXTERIOR WALLS OF THE DWELLING. <br> RECORD OBSERVATION. | NATURAL WALLS <br> NO WALLS <br> PALM LEAF/GRASS <br> DIRT <br> RUDIMENTARY WALLS <br> BAMBOO/STICKS/WOOD WITH MUD <br> STONE WITH MUD <br> PLYWOOD <br> IRON SHEETS <br> CARDBOARD <br> CANVAS SHEETS <br> PLASTIC SHEETS <br> CLOTH AND RAGS <br> FINISHED WALLS <br> CEMENT <br> STONE WITH LIME/CEMENT <br> BRICKS <br> CEMENT BLOCKS <br> WOOD PLANKS/SHINGLES <br> OTHER | 11 12 13 <br> 21 <br> 22 <br> 23 <br> 24 <br> 25 <br> 26 <br> 27 <br> 28 <br> 31 <br> 32 <br> 33 <br> 34 <br> 36 <br> 96 |  |
| 234 | In the past four weeks, did you worry that your household would not have enough food? | YES <br> NO |  | $\rightarrow 236$ |
| 235 | How often did this happen? | RARELY (ONCE OR TWICE IN 4 WKS) SOMETIMES (THREE TO TEN TIMES IN4 WKS) OFTEN (MORE THAN TEN TIMES IN 4 WKS) |  |  |
| 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 <br> NO |  | $\rightarrow 238$ |
| 237 | How often did this happen? | RARELY (ONCE OR TWICE IN 4 WKS) SOMETIMES (THREE TO TEN TIMES IN4 WKS) OFTEN (MORE THAN TEN TIMES IN 4 WKS) |  |  |
| 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 <br> NO |  | $\rightarrow 240$ |
| 239 | How often did this happen? | RARELY (ONCE OR TWICE IN 4 WKS) SOMETIMES (THREE TO TEN TIMES IN4 WKS) OFTEN (MORE THAN TEN TIMES IN 4 WKS) |  |  |
| 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 NO |  | $\rightarrow 242$ |
| 241 | How often did this happen? | RARELY (ONCE OR TWICE IN 4 WKS) SOMETIMES (THREE TO TEN TIMES IN4 WKS) OFTEN (MORE THAN TEN TIMES IN 4 WKS) |  |  |
| 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 <br> NO |  | $\rightarrow 244$ |
| 243 | How often did this happen? | RARELY (ONCE OR TWICE IN 4 WKS) SOMETIMES (THREE TO TEN TIMES IN4 WKS) OFTEN (MORE THAN TEN TIMES IN 4 WKS) |  |  |
| 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 <br> NO |  | $\rightarrow 301$ |
| 245 | How often did this happen? | RARELY (ONCE OR TWICE IN 4 WKS) SOMETIMES (THREE TO TEN TIMES IN4 WKS) OFTEN (MORE THAN TEN TIMES IN 4 WKS) |  |  |
| 246 | RECORD THE END TIME. | HOURS <br> MINUTES |  |  |




| 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 <br> NAME |  | LINE NUMBER <br> NAME |  | LINE <br> NUMBER <br> NAME |  |


| 309 | CHECK 303: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS? |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 310 | LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD FROM COLUMN 1 OF HOUSEHOLD SCHEDULE. | LINE <br> NUMBER $\qquad$ $\square$ (RECORD '00' IF NOT LISTED) | LINE <br> NUMBER $\qquad$ $\square$ (RECORD '00' IF NOT LISTED) | LINE <br> NUMBER $\qquad$ $\square$ (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: <br> LINE NUMBER FROM COLUMN 11. | LINE NUMBER <br> NAME |  | LINE NUMBER <br> NAME |  | LINE <br> NUMBER <br> NAME |  |


| 303 | IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: <br> What is (NAME)'s date of birth? | DAY $\ldots . . . . .$.    <br>     <br> MONTH $\ldots \ldots . .$.    <br> YEAR .........    |  | DAY <br> MONTH <br> YEAR |  | DAY <br> MONTH $\square$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 304 | CHECK 303: CHILD BORN IN 20132018? | $\begin{array}{ll} \text { YES } & \ldots . . . \\ \text { NO } & \ldots \ldots \\ & \text { (SKIF } \end{array}$ | $\begin{aligned} & \ldots \ldots . \\ & \ldots . . \\ & \hline 311)^{2} \end{aligned}$ | $\begin{array}{ll} \text { YES } & \ldots \ldots \\ \text { NO } & \ldots \ldots \\ & \text { (SKIF } \end{array}$ | $\begin{aligned} & \ldots \ldots . \\ & \ldots . . \\ & 0 \\ & 0311) \end{aligned}$ | YES <br> NO <br> (SKIP | $\begin{aligned} & \ldots \ldots \\ & \ldots \\ & 3 \\ & 311) \end{aligned}$ |
| 305 | WEIGHT IN KILOGRAMS. | KG. . . . $\square$ <br> NOT PRESENT REFUSED OTHER | $\begin{array}{\|l\|l\|} \hline & \\ \hline & \\ \hline \ldots 9994 \\ \ldots .9995 \\ \ldots .9996 \end{array}$ | KG. . . . $\square$ <br> NOT PRESENT REFUSED OTHER |   <br> . .9994 <br> .. 9995 | KG. <br> NOT PRESENT REFUSED OTHER |  |
| 306 | HEIGHT IN CENTIMETERS. | CM. . . . $\square$ <br> NOT PRESENT REFUSED OTHER | $\begin{aligned} & \square . \square \\ & \ldots .9994 \\ & \ldots 9995- \\ & \ldots .9996 \\ & 308) \end{aligned}$ | CM. $\square$ <br> NOT PRESENT REFUSED OTHER | $\begin{aligned} & \square \cdot \square \\ & \ldots .9994 \\ & \ldots .9995- \\ & \ldots .9996- \\ & 308) \longleftarrow \end{aligned}$ | CM. <br> NOT PRESENT REFUSED OTHER <br> (SKIP TO | $\begin{aligned} & \square . \square \\ & \ldots .9994 \\ & \ldots 9995 \\ & \ldots 9996 \\ & 308) \longleftarrow \end{aligned}$ |
| 307 | MEASURED LYING DOWN OR STANDING UP? | LYING DOWN STANDING UP | $\begin{array}{ll}  & \ldots \\ \ldots . . . & 1 \\ \ldots & 2 \end{array}$ | LYING DOWN STANDING UP | $\begin{array}{ll} \ldots & 1 \\ \ldots . . . & 2 \end{array}$ | LYING DOWN STANDING UP | $\begin{array}{ll} \ldots & 1 \\ \ldots . . & 2 \end{array}$ |
| 308 | MEASURER: ENTER YOUR FIELDWORKER NUMBER. |  | $\square$ <br> NUMBER |  |  |  | $\qquad$ <br> NUMBER |


|  |  | CHILD 4 |  | CHILD 5 |  | CHILD 6 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 302 | CHECK HOUSEHOLD QUESTIONNAIRE: <br> LINE NUMBER FROM COLUMN 11. | LINE NUMBER <br> NAME |  | LINE NUMBER <br> NAME |  | LINE <br> NUMBER <br> 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 $\ldots \ldots . .1$$($ SKIP TO 311) <br> OLDER $\quad \ldots . . . . . . .$. | 0-5 MONTHS $\ldots \ldots . .1$$($ SKIP TO 311) <br> OLDER $\quad \ldots . . . . . . .$. |
| :---: | :---: | :---: | :---: | :---: |
| 310 | LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD FROM COLUMN 1 OF HOUSEHOLD SCHEDULE. | LINE <br> NUMBER $\square$ <br> (RECORD '00' IF NOT LISTED) | LINE <br> NUMBER $\square$ (RECORD '00' IF NOT LISTED) | LINE <br> NUMBER $\square$ <br> (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. <br> IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S). |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | WOMAN 1 | WOMAN 2 | WOMAN 3 |
| 402 | CHECK <br> HOUSEHOLD QUESTIONNAIRE: <br> LINE NUMBER <br> FROM COLUMN 1. <br> NAME FROM COLUMN 2. | LINE <br> NUMBER <br> NAME $\qquad$ | LINE <br> NUMBER <br> NAME $\qquad$ | LINE <br> NUMBER $\qquad$ $\square$ <br> NAME $\qquad$ |
| 403 | CHECK <br> HOUSEHOLD QUESTIONNAIRE COLUMN 9 (MARITAL STATUS): | $\begin{aligned} & \text { CODE } 5 \text { (NEVER IN UNION) • } 1 \\ & \text { OTHER MARITAL STATU! . . } 2 \end{aligned}$ | $\begin{aligned} & \text { CODE } 5 \text { (NEVER IN UNION) . } 1 \\ & \text { OTHER MARITAL STATU: . . } 2 \end{aligned}$ | $\begin{aligned} & \text { CODE } 5 \text { (NEVER IN UNION) . } 1 \\ & \text { OTHER MARITAL STATU: . . } 2 \end{aligned}$ |


| 404 | WEIGHT IN KILOGRAMS. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 405 | HEIGHT IN CENTIMETERS. |  |  |  |
| 406 | CHECK 403: <br> MARITAL STATUS |  |  |  |
| 407A | ASK: <br> Are you pregnant? |  |  | YES $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ 1 <br> NO 8  |

408 GO BACK TO 402 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, END THE INTERVIEW.

## INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW
COMMENTS ABOUT INTERVIEW:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

COMMENTS ON SPECIFIC QUESTIONS
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

ANY OTHER COMMENTS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

SUPERVISOR'S OBSERVATIONS
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

EDITOR'S OBSERVATIONS

## Ever-married Woman's Questionnaire

QUESTIONNAIRE SERIAL NUMBER


EVER MARRIED WOMAN'S QUESTIONNAIRE



EVER MARRIED WOMAN'S QUESTIONNAIRE


SECTION 1. RESPONDENT'S BACKGROUND


SECTION 1. RESPONDENT'S BACKGROUND

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 124 | CHECK 121: <br> MARRIED ONLY ONCE <br> a) In what month and year did you wed with your husband (Aqal gal)? <br> MARRIED MORE THAN ONCE <br> b) Now I would like to ask about your first husband. In what month and year did you wed with him (Aqal gal)? | MONTH <br> DON'T KNOW MONTH <br> YEAR . . . . . . . . . . . . <br> DON'T KNOW YEAR | 98 <br> 9998 |  |
| 125 | How old were you when you wedded with your (first) husband (Aqal gal)? | AGE <br> NOT YET WEDDED |  |  |
| 126 | Did the marriage contract (Nikaax) and wedding (Aqal gal) happen at the same time? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |

SECTION 2. REPRODUCTION


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





| SECTION 2. REPRODUCTION |  |  |  |
| :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| 239 | When did your last menstrual period start? <br> (DATE, IF GIVEN) <br> CIRCLE DAYS AGO AND PUT 00 IF STARTED the Same day |  |  |
| 240 | How old were you when you had your first menstrual period? |  |  |
| 241 | From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant? |  | $\rightarrow 243$ |
| 242 | Is this time just before her period begins, right after her period has ended, or halfway between two periods? |  |  |
| 243 | After the birth of a child, can a woman become pregnant before her menstrual period has returned? |  |  |


| 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. <br> 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 years. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 02 | Injectables. <br> PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months. | YES | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 03 | Implants. <br> 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 NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 04 | Pill. <br> PROBE: Women can take a pill every day to avoid becoming pregnant. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 05 | Condom. <br> PROBE: Men can put a rubber sheath on their penis before sexual intercourse. | YES NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 06 | Female Condom. <br> PROBE: Women can place a sheath in their vagina before sexual intercourse. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 07 | Emergency Contraception. <br> PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy. | YES | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 08 | Standard Days Method. <br> 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. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 09 | Lactational Amenorrhea Method (LAM). <br> PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 10 | Rhythm Method. <br> PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant. | $\begin{aligned} & \text { YES } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 11 | Withdrawal. <br> PROBE: Men can be careful and pull out before climax. | YES NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 12 | Have you heard of any other ways or methods that women or men can use to avoid pregnancy? | YES, | A <br> B <br> Y |


| SECTION 3. BIRTH SPACING |  |  |  |
| :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| 302 | CHECK 226: <br> NOT PREGNANT OR UNSURE $\square$ | PREGNANT $\square$ | $\rightarrow 309$ |
| 303 | Are you or your husband currently doing something or using any method to delay or avoid getting pregnant? |  | $\rightarrow 309$ |
| 304 | Which method are you using? <br> RECORD ALL MENTIONED. <br> IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST. |  |  |
| 305 | What is the brand name of the pills you are using? <br> IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE. |  | $\xrightarrow{\rightarrow}$ |
| 306 | What is the brand name of the condoms you are using? <br> IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE. |  |  |
| 307 | Since what month and year have you been using (CURRENT METHOD) without stopping? <br> PROBE: For how long have you been using (CURRENT METHOD) now without stopping? |  |  |
| 308 | CHECK 307, 215 AND 231: ANY BIRTH OR PREGNANC OF USE OF CONTRACEPTION IN 307 <br> GO BACK TO 307 START OF CONTI AFTER | ERMINATION AFTER MONTH AND YEAR OF START YES $\square$ <br> ROBE AND RECORD MONTH AND YEAR AT OUS USE OF CURRENT METHOD (MUST BE ST BIRTH OR PREGNANCY TERMINATION). |  |



| SECTION 3. BIRTH SPACING |  |  |  |
| :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| 311 | CHECK THE CALENDAR FOR USE OF ANY CONTRA <br> NO METHOD USED $\square$ | TIVE METHOD IN ANY MONTH <br> ANY METHOD USED $\square$ | 313 |
| 312 | Have you ever used anything or tried in any way to delay or avoid getting pregnant? |  | $\rightarrow 322$ |
| 313 | CHECK 304: <br> CIRCLE METHOD CODE: <br> IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST. |  |  |
| 314 | You first started using (CURRENT METHOD) in (DATE FROM 307). Where did you get it at that time? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL . . . . . . . . . . . . . . . . . 11 <br> REFERRAL HEALTH CENTRE . . . . . . . . . . . . . . 12 <br> MCH/HC <br> PRIMARY HEALTH UNIT (PHU $\qquad$ <br> MOBILE CLINIC <br> COMMUNITY <br> OTHER PUBLIC SECTOR $\qquad$ <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC/DOCTOF . . . . . . . . . 21 <br> PHARMACY $\square$ <br> OTHER PRIVATE MEDICAL SECTOR $\qquad$ <br> OTHER SOURCE <br> SHOP <br> FRIEND/RELATIVE . . . . ............................... 32 <br> OTHER $\qquad$ 96 |  |
| 315 | CHECK 304: <br> CIRCLE METHOD CODE: <br> IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST. |  |  |


| 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? | $\begin{array}{lll} \text { YES } & \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots & 2 \end{array}$ |  |
| 317 | Were you told what to do if you experienced side effects or problems? |  |  |
| 318 | CHECK 316: |  | $\rightarrow 320$ |
| 319 | Were you ever told by a health worker about other methods of birth spacing that you could use? |  |  |
| 320 | CHECK 304: <br> CIRCLE METHOD CODE: <br> IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST. |  |  |


| SECTION 3．BIRTH SPACING |  |  |  |
| :---: | :---: | :---: | :---: |
| No． | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| 321 | Where did you obtain（CURRENT METHOD）the last time？ <br> PROBE TO IDENTIFY THE TYPE OF SOURCE． <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR，WRITE THE NAME OF THE PLACE． <br> （NAME OF PLACE） | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL ．．．．．．．．．．．．．．．．．．．． 11 <br> REFERRAL HEALTH CENTRE ．．．．．．．．．．．．． 12 <br> MCH／HC <br> PRIMARY HEALTH UNIT（PHU ．．．．．．．．．．．．．． 14 <br> MOBILE CLINIC ．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 15 <br> COMMUNITY HEALTH WORKER ．．．．．．．．．．． 16 <br> OTHER PUBLIC SECTOR $\qquad$ <br> （SPECIFY） <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL／CLINIC／DOCTOF ．．．．．．．． 21 <br> PHARMACY ．．．．．．．．．．．．．．．．．．．．．．．．．．．． 22 <br> OTHER PRIVATE MEDICAL SECTOR $\qquad$ 26 <br> （SPECIFY） <br> OTHER SOURCE <br> SHOP ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 31 <br> FRIEND／RELATIVE ．．．．．．．．．．．．．．．．．．．．．．．．．．．． 32 <br> OTHER $\qquad$ 96 |  |
| 322 | Do you know of a place where you can obtain a method of birth spacing？ |  |  |
| 323 | In the last 12 months，were you visited by a fieldworker？ |  | $\rightarrow 325$ |
| 324 | Did the fieldworker talk to you about birth spacing？ |  |  |
| 325 | CHECK 202：LIVING WITH CHILDREN <br> YES <br> a）In the last 12 months， have you visited a health facility for care for yourself or your children？ <br> b）In the last 12 months， have you visited a health facility for care for yourself？ |  | 401 |
| 326 | Did any staff member at the health facility speak to you about birth spacing methods？ |  |  |

SECTION 4. PREGNANCY AND POSTNATAL CARE

| 401 | CHECK 224: <br> ONE OR MORE BIRTHS IN 2013-2018 $\square$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 402 | CHECK 215. RECORD THE BIRTH HISTORY NUMBER IN 403 AND THE NAME AND SURVIVAL STATUS IN 404 FOR EACH BIRTH IN 2013-2018. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. <br> IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). <br> Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately) |  |  |  |
| 403 | BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY. | LAST BIRTH <br> BIRTH <br> HISTORY <br> NUMBER | NEXT-TO-LAST <br> BIRTH <br> HISTORY <br> NUMBER |  |
| 404 | FROM 212 AND 216: |  | NAME $\qquad$ <br> LIVING $\square$ |  |
| 405 | When you got pregnant with (NAME), did you want to get pregnant at that time? |  | YES <br> (SKIP |  |
| 406 | CHECK 208: <br> ONLY ONE BIRTH OR MORE THAN ONE BIRTH <br> a) Did you want to have a baby later on? | LATER $\ldots \ldots \ldots \ldots \ldots \ldots$ NO MORE/NONE $\ldots \ldots \ldots \ldots$ $\left.\begin{array}{ll}\text { (SKIP TO 408) } & 2 \\ & \end{array}\right]$ | LATER NO MORE/NONE (SKIP | 1 <br> 2 |
| 407 | How much longer did you want to wait? |  | MONTHS $\qquad$ <br> YEARS ......... 2 <br> DON'T KNOW |  |
| 408 | Did you see anyone for antenatal care for this pregnancy? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 2  <br>   $($ SKIP TO 414)  |  |  |
| 409 | Whom did you see? <br> Anyone else? <br> PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED. |  |  |  |

SECTION 4. PREGNANCY AND POSTNATAL CARE


SECTION 4. PREGNANCY AND POSTNATAL CARE

| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME |
| :---: | :---: | :---: | :---: |
| 417 | At any time before this pregnancy, did you receive any tetanus injections? |  |  |
| 418 | Before this pregnancy, how many times did you receive a tetanus injection? <br> IF 7 OR MORE TIMES, RECORD '7'. |  |  |
| 419 | CHECK 418: <br> ONLY <br> ONE <br> a) How many years ago did you receive that tetanus injection? <br> MORE THAN ONE <br> b) How many years ago did you receive the last tetanus injection prior to this pregnancy? | YEARS AGO |  |
| 420 | During this pregnancy, were you given or did you buy any iron tablets or iron syrup? <br> SHOW TABLETS/SYRUP. |  |  |
| 421 | During the whole pregnancy, for how many days did you take the tablets or syrup? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS. |  |  |
| 422 | During this pregnancy, did you take any drug for intestinal worms? |  |  |
| 423 | During this pregnancy, did you take SP/Fansidar to keep you from getting malaria? |  |  |
| 424 | How many times did you take SP/Fansidar during this pregnancy? <br> PROBE: MALARIA PREVENTION DRUG | TIMES .......... $\square$ |  |
| 425 | Did you get the SP/Fansidar during any antenatal care visit, during another visit to a health facility or from another source? <br> IF MORE THAN ONE SOURCE, RECORD THE HIGHEST SOURCE ON THE LIST. | ANTENATAL VISIT . . . . . . . . . . 1 <br> ANOTHER FACILITY VISIT . . . 2 <br> OTHER SOURCE . . . . . . . 6 |  |

SECTION 4. PREGNANCY AND POSTNATAL CARE

| NO. | QUESTIONS AND FILTERS | NAST BIRTH |  | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 426 | When (NAME) was born, was (NAME) very large, larger than average, average, smaller than average, or very small? | VERY LARGE <br> LARGER THAN <br> AVERAGE <br> AVERAGE <br> SMALLER THAN <br> AVERAGE <br> VERY SMALL <br> DON'T KNOW | 1 <br> 2 3 <br> 4 <br> 5 8 |  |
| 427 | Was (NAME) weighed at birth? |  | $\begin{array}{ll} \therefore & 1 \\ \stackrel{2}{4} & 2 \\ \leftarrow & 8 \end{array}$ |  |
| 428 | How much did (NAME) weigh? <br> RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE. | KG FROM CARD $\square$ <br> KG FROM RECALL $\square$ $\square$ <br> DON'T KNOW | $\square$ $9998$ | KG FROM CARD $\square$ $\square$ <br> KG FROM RECALL <br> 2 $\square$ $\square$ <br> DON'T KNOW |
| 429 | Who assisted with the delivery of (NAME)? <br> Anyone else? <br> PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. <br> IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY. | HEALTH PERSONNEL DOCTOR <br> CLINICAL OFFICER NURSE/MIDWIFE AUXILIARY MIDWIFE <br> OTHER PERSON <br> TRADITIONAL BIRTH ATTENDANT RELATIVE/FRIEND OTHER | . A <br> . B <br> . C <br> . D <br> $E$ $F$ $X$ $Y$ | HEALTH PERSONNEL <br> DOCTOR ............... A <br> CLINICAL OFFICER ......... B <br> NURSE/MIDWIFE ......... C <br> AUXILIARY <br> MIDWIFE . . . . . ......... D <br> OTHER PERSON <br> TRADITIONAL BIRTH <br> ATTENDANT ........... E <br> RELATIVE/FRIEND ......... F <br> OTHER $\qquad$ |



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 <br> NO <br> （SKIP | $\begin{aligned} & 1 \\ & 2 \\ & \hline \end{aligned}$ |  |
| 436 | How long after delivery did the first check take place？ <br> IF LESS THAN ONE HOUR RECORD ＇00＇；IF LESS THAN ONE DAY， RECORD HOURS； IF LESS THAN ONE WEEK， RECORD DAYS． | HOURS ．．．．．．．．． 1 <br> DAYS ．．．．．．．．．．． 2 <br> WEEKS ．．．．．．．．． 3 <br> DON＇T KNOW | $98$ |  |
| 437 | Who checked on your health at that time？ <br> PROBE FOR MOST QUALIFIED PERSON． | HEALTH PERSONNEL DOCTOR ．．．．．．．． CLINICAL OFFICER NURSE／MIDWIFE AUXILIARY MIDWIFE ．．．．． <br> OTHER PERSON <br> TRADITIONAL BIRT ATTENDANT ． COMMUNITY HEAL WORKER <br> OTHER | 11 <br> 12 <br> 13 <br> 14 <br> 21 <br> 22 <br> 96 |  |
| 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 NO <br> （SKIP <br> DON＇T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & \hline 8 \end{aligned}$ |  |
| 439 | How long after delivery was（NAME）＇s health first checked？ <br> IF LESS THAN ONE HOUR RECORD ＇00＇；IF LESS THAN ONE DAY， RECORD HOURS； <br> IF LESS THAN ONE WEEK， RECORD DAYS． | HOURS ．．．．．．．．． 1 <br> DAYS ．．．．．．．．．．． 2 <br> WEEKS ．．．．．．．．． 3 <br> DON＇T KNOW |  |  |
| 440 | Who checked on（NAME）＇s health at that time？ <br> PROBE FOR MOST QUALIFIED PERSON． | HEALTH PERSONNEL DOCTOR ．．．．．．．．． CLINICAL OFFICER NURSE／MIDWIFE AUXILIARY MIDWIFE <br> OTHER PERSON TRADITIONAL BIRT ATTENDANT ． COMMUNITY HEAL WORKER <br> OTHER | 11 <br> 12 <br> 13 <br> 14 <br> 21 <br> 22 <br> 96 |  |

SECTION 4. PREGNANCY AND POSTNATAL CARE


SECTION 4. PREGNANCY AND POSTNATAL CARE


SECTION 4. PREGNANCY AND POSTNATAL CARE

|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH |
| :---: | :---: | :---: | :---: |
| No. | QUESTIONS AND FILTERS | NAME | NAME |
| 450 | How long after delivery did the first check take place? <br> IF LESS THAN ONE HOUR RECORD '00'; IF LESS THAN ONE DAY, RECORD HOURS; <br> IF LESS THAN ONE WEEK, RECORD DAYS. |  |  |
| 451 | Who checked on your health at that time? <br> PROBE FOR MOST QUALIFIED PERSON. |  |  |
| 452 | Where did this first check take place? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE) | HOME $\qquad$ <br> OTHER HOME ............ 12 <br> PUBLIC SECTOR <br> GOVERNMENT HOSPITAL . . 21 <br> REFERRAL HEALTH CENTRE 22 <br> MCH/HC .................. 23 <br> PRIMARY HEALTH UNIT (PHU 24 <br> MOBILE CLINIC ............ 25 <br> OTHER PUBLIC SECTOR $\qquad$ <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/ <br> CLINIC ............... 31 <br> OTHER PRIVATE <br> MEDICAL SECTOR $\qquad$ 36 <br> (SPECIFY) <br> OTHER $\qquad$ 96 <br> (SPECIFY) |  |
| 453 | 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? |  |  |

SECTION 4. PREGNANCY AND POSTNATAL CARE

|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH |
| :---: | :---: | :---: | :---: |
| No. | QUESTIONS AND FILTERS | NAME | NAME |
| 454 | How many hours, days or weeks after the birth of (NAME) did the first check take place? <br> IF LESS THAN ONE HOUR RECORD 'OO'; IF LESS THAN ONE DAY, RECORD HOURS; <br> IF LESS THAN ONE WEEK, RECORD DAYS. |  |  |
| 455 | Who checked on (NAME)'s health at that time? <br> PROBE FOR MOST QUALIFIED PERSON | ```HEALTH PERSONNEL DOCTOR ................... 11 CLINICAL OFFICER . . . . . . . . 12 NURSE/MIDWIFE .......... 13 AUXILIARY MIDWIFE ..... 14 OTHER PERSON TRADITIONAL BIRTH ATTENDANT........... 21 COMMUNITY HEALTH WORKER ........... 22 OTHER``` $\qquad$ <br> ```96None``` |  |
| 456 | Where did this first check of (NAME) take place? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE) | HOME <br> HER HOME . . . . . . . . . . . . . 11 <br> OTHER HOME . . . . . . . . . . 12 <br> PUBLIC SECTOR <br> GOVERNMENT HOSPITAL . . 21 <br> REFERRAL HEALTH CENTRE 22 <br> MCH/HC . . . . ............. 23 <br> PRIMARY HEALTH UNIT (PHU 24 <br> MOBILE CLINIC . . . . . . . . . 25 <br> OTHER PUBLIC SECTOR $\qquad$ 26 <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/ <br> CLINIC ............... 31 <br> OTHER PRIVATE <br> MEDICAL SECTOR $\qquad$ 36 <br> (SPECIFY) <br> OTHER $\qquad$ 96 |  |



SECTION 4. PREGNANCY AND POSTNATAL CARE

| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: |
| 466 | CHECK 404: IS CHILD LIVING? | LIVING | LIVING $\begin{array}{r} \text { DEAD } \square \\ (\mathrm{SKIP} \mathrm{TO} 468) \longleftarrow \end{array}$ |
| 467 | Are you still breastfeeding (NAME)? | $\begin{array}{ll} \text { YES } \quad \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \end{array}$ |  |
| 468 | Did (NAME) drink anything from a bottle with a nipple yesterday or last night? | YES $\quad \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1  <br> NO $\quad \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 2  <br> DON'T KNOW $\ldots \ldots \ldots \ldots \ldots$ 8 | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1  <br> NO $\quad \ldots \ldots \ldots \ldots \ldots \ldots$ 2  <br> DON'T KNOW $\ldots \ldots \ldots \ldots \ldots$ 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 ONE OR MORE BIRTHS IN 2015-2018 $\square$ | -2018? <br> O BIRTHS IN 2015-2018 | $\rightarrow 601$ |
| 502A | RECORD THE NAME AND BIRTH HISTORY NUMBER <br> NAME OF LAST BIRTH $\qquad$ | M 212 OF THE LAST CHILD BORN IN 2015-2018. <br> BIRTH HISTORY NUMBER $\square$ |  |
| 503A | CHECK 216 FOR CHILD: <br> LIVING $\square$ | $\text { DEAD } \square$ | $\rightarrow$ 501B |
| 504A | Do you have a card or other document where (NAME)'s vaccinations are written down? | YES, HAS ONLY A CARD YES, HAS ONLY AN OTHER DOCUMENT YES, HAS CARD AND OTHER DOCUMENT NO, NO CARD AND NO OTHER DOCUMENT | $\begin{aligned} & \longrightarrow 507 \mathrm{~A} \\ & \longrightarrow 507 \mathrm{~A} \end{aligned}$ |
| 505A | Did you ever have a vaccination card for (NAME)? |  |  |
| 506A | CHECK 504A: <br> CODE '2' CIRCLED $\square$ | CODE '4' CIRCLED $\square$ | $\rightarrow 511 \mathrm{~A}$ |
| 507A | May I see the card or other document where (NAME)'s vaccinations are written down? | YES, ONLY CARD SEEN YES, ONLY OTHER DOCUMENT SEEN YES, CARD AND OTHER DOCUMENT SEEN NO CARD AND NO OTHER DOCUMENT SEEN | $\rightarrow 511 \mathrm{~A}$ |

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)


SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
|  | NAME OF LAST BIRTH | BIRTH HISTORY NUMBER |  |  |
| 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 <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\rightarrow 520 \mathrm{~A}$ |
| 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 <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 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 <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\rightarrow$ 516A |
| 514A | Did (NAME) receive the first oral polio or IPV vaccine in the first two weeks after birth or later? | FIRST TWO WEEKS LATER | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 515A | How many times did (NAME) receive the oral polio or IPV vaccine? | NUMBER OF TIMES DON'T KNOW | $\underset{8}{\square}$ |  |
| 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 <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\longrightarrow$ 518A |
| 517A | How many times did (NAME) receive the pentavalent vaccine? | NUMBER OF TIMES DON'T KNOW |  |  |


| SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| No. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
|  | NAME OF LAST BIRTH | BIRTH HISTORY NUMBER . |  |  |
| 518A | Has (NAME) ever received a measles vaccination, that is, an injection in the arm to prevent measles? | YES <br> No DONT KNOW | $\begin{array}{llll}  & 1 \\ \cdots \cdots \cdots \cdots & 2 \\ \cdots \cdots \cdots & 8 \end{array}$ | $\xrightarrow{ }{ }^{\text {220A }}$ |
| 519A | How many times did (NAME) receive the measles vaccine? | NUMBER OF TIMES <br> DON'T KNOW |  |  |
| 520A | In the last 7 days was (NAME) given: <br> a) [LOCAL NAME FOR MULTIPLE MICRONUTRIENT POWDER]? <br> b) [LOCAL NAME FOR READY TO USE THERAPEUTIC FOOD SUCH AS PLUMPY'NUT]? <br> c) [LOCAL NAME FOR READY TO USE SUPPLEMENTAL FOOD]? | a) [POWDER/BUSICUIT] <br> b) [PLUMPY'NUT] <br> c) [PLUMPY'DOZ] | $\begin{array}{cc} \hline \text { S } & \mathrm{NO} \\ \hline 2 & 8 \\ & 2 \\ \hline & 8 \\ & 2 \\ \hline \end{array}$ |  |
| 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 BIR MORE BIRTHS IN 2015-2018 $\square$ NO | IN 2015-2018? <br> E BIRTHS IN 2015-2018 | $\rightarrow 601$ |
| 502B | RECORD THE NAME AND BIRTH HISTORY NUMBER 2018. <br> NAME OF NEXT-TO- <br> LAST BIRTH | M 212 OF THE NEXT-TO-LAST CHILD BORN IN 2015- <br> BIRTH HISTORY NUMBER |  |
| 503B | CHECK 216 FOR CHILD: | DEAD | $\rightarrow$ 521B |
| 504B | Do you have a card or other document where (NAME)'s vaccinations are written down? | $\begin{array}{ll} \text { YES, HAS ONLY A CARD } & \ldots . . . . . . . . . . . . . . . . . . . . . . . . ~ \\ \text { YES, HAS ONLY AN OTHER DOCUMENT } & 1 \\ \text { YES, HAS CARD AND OTHER DOCUMENT } & \ldots . . \\ \text { NO, NO CARD AND NO OTHER DOCUMENT } & 2 \\ \hline \end{array}$ | $\begin{array}{\|l} \longrightarrow 507 \mathrm{~B} \\ \longrightarrow 507 \mathrm{~B} \end{array}$ |
| 505B | Did you ever have a vaccination card for (NAME)? |  |  |
| 506B | CHECK 504B: CODE '2' CIRCLED | CODE '4' CIRCLED | $\rightarrow$ 511B |
| 507B | May I see the card or other document where (NAME)'s vaccinations are written down? | $\begin{array}{llll} \text { YES, ONLY CARD SEEN } \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ & 1 \\ \text { YES, ONLY OTHER DOCUMENT SEEN . . . . . } & 2 \\ \text { YES, CARD AND OTHER DOCUMENT SEEN } & . & 3 \\ \text { NO CARD AND NO OTHER DOCUMENT SEEN .. } & 4 \end{array}$ | $\rightarrow$ 511B |

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
|  | NAME OF NEXT-TO- <br> LAST BIRTH $\qquad$ | BIRTH HISTORY NUMBER . . . . . . . . . |  |
| 508B | COPY DATES FROM THE CARD. <br> WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A <br> BCG <br> 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 <br> MEASLES <br> VITAMIN A (MOST RECENT) | Se was given, but no date is recorded. |  |
| 509B | CHECK 508B: 'BCG' TO 'MEASLES' ALL RECORDED? <br> NO $\square$ | YES | 520B |
| 510B | 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? <br> RECORD 'YES' ONLY IF THE RESPONDENT mentions at least one of the vaccinations IN 508B THAT ARE NOT RECORDED AS HAVING been given. |  |  |

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
|  | NAME OF NEXT-TO- <br> LAST BIRTH $\qquad$ | BIRTH HISTORY NUMBER |  |  |
| 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 <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\rightarrow 520 \mathrm{~B}$ |
| 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 NO DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 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 NO DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\rightarrow$ 516B |
| 514B | Did (NAME) receive the first oral polio or IPV vaccine in the first two weeks after birth or later? | FIRST TWO WEEKS LATER | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 515B | How many times did (NAME) receive the oral polio or IPV vaccine? | NUMBER OF TIMES DON'T KNOW |  |  |
| 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 NO DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\rightarrow$ 518B |
| 517B | How many times did (NAME) receive the pentavalent vaccine? | NUMBER OF TIMES DON'T KNOW |  |  |

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
|  | NAME OF NEXT-TO- <br> LAST BIRTH $\qquad$ | BIRTH HISTORY NUMBER . |  |  |
| 518B | Has (NAME) ever received a measles vaccination, that is, an injection in the arm to prevent measles? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots \ldots \ldots \cdots & 1 \\ \cdots \cdots \cdots \cdots & 2 \\ \hdashline \cdots \cdots \cdots & 8 \end{array}$ | $\xrightarrow{ } \rightarrow 520 \mathrm{~B}$ |
| 519B | How many times did (NAME) receive the measles vaccine? | NUMBER OF TIMES DON'T KNOW |  |  |
| 520B | In the last 7 days was (NAME) given: <br> a) [LOCAL NAME FOR MULTIPLE MICRONUTRIENT POWDER/BUSCUIT]? <br> b) [LOCAL NAME FOR READY TO USE THERAPEUTIC FOOD SUCH AS PLUMPY'NUT]? <br> c) [LOCAL NAME FOR READY TO USE SUPPLEMENTAL FOOD SUCH AS PLUMPY'DOZ]? | a) [POWDER] <br> b) [PLUMPY'NUT] <br> c) [PLUMPY'DOZ] | YES NO DK <br> 1 2 8 <br> 1 2 8 <br> 1 2 8 |  |
| 521B | CHECK 215 IN BIRTH HISTORY: ANY MORE BIRTHS IN | 15-2018? <br> NO MORE BIRTHS <br> IN 2015-2018 |  | $\rightarrow 601$ |

SECTION 6. CHILD HEALTH AND NUTRITION

| 601 | CHECK 224: |  |  |
| :---: | :---: | :---: | :---: |
|  | ONE OR MORE BIRTHS <br> IN 2013-2018 |  |  |
| 602 | CHECK 215: RECORD THE BIRTH HISTORY NUMBER IN 603 AND THE NAME AND SURVIVAL STATUS IN 604 FOR EACH BIRTH IN 2013-2018. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. <br> IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). <br> Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately) |  |  |
| 603 | BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY. | LAST BIRTH <br> BIRTH <br> HISTORY <br> NUMBER | NEXT-TO-LAST BIRTH <br> BIRTH <br> HISTORY <br> NUMBER |
| 604 | FROM 212 AND 216: |  | NAME $\qquad$ <br> LIVING |
| 605 | In the last six months, was (NAME) given a vitamin A dose like [this/any of these]? <br> SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS. |  |  |
| 606 | In the last seven days, was (NAME) given iron pills, sprinkles with iron, or iron syrup like [this/any of these]? <br> SHOW COMMON TYPES OF PILLS/SPRINKLES/SYRUPS. |  |  |
| 607 | Was (NAME) given any drug for intestinal worms in the last six months? |  |  |
| 608 | Has (NAME) had diarrhea in the last 2 weeks? |  |  |

SECTION 6. CHILD HEALTH AND NUTRITION

| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME |
| :---: | :---: | :---: | :---: |
| 609 | CHECK 467: CURRENTLY BREASTFEEDING? <br> 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? <br> IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less? <br> NO/ NOT ASKED <br> 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? <br> IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less? | MUCH LESS . . . . . . . . . . . . . . . . 1 <br> SOMEWHAT LESS . . . . . . . 2 <br> ABOUT THE SAME . . . . . . . . . 3 <br> MORE . . . . . . . . . . 4 <br> NOTHING TO DRINK $\quad . . . .$. 5 <br> DON'T KNOW . . . . . . . . . . 8 | MUCH LESS . . . . . . . . . . . . . . . . 1 <br> SOMEWHAT LESS . . . . . . . 2 <br> ABOUT THE SAME . . . . . . . . . 3 <br> MORE . . . . . . . . . . 4 <br> NOTHING TO DRINK $\quad . . . .$. 5 <br> DON'T KNOW . . . . . . . . . . 8 |
| 610 | When (NAME) had diarrhea, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat? <br> IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less? | MUCH LESS . . . . . . . . . . . . . . . . 1 <br> SOMEWHAT LESS . . . . . . . . 2 <br> ABOUT THE SAME . . . . . . . . . 3 <br> MORE . . . . . . . . . . . . 5 <br> STOPPED FOOD . . . . . . . . 5 <br> NEVER GAVE FOOD 6 <br> DON'T KNOW . . . . . . . . . . 8 | MUCH LESS . . . . . . . . . . . . . . . 1 <br> SOMEWHAT LESS . . . . . . . 2 <br> ABOUT THE SAME . . . . . . . . . 3 <br> MORE . . . . . . . . . . . 4 <br> STOPPED FOOD . . . . . . . 5 <br> NEVER GAVE FOOD . . . . . . 6 <br> DON'T KNOW . . . . . . . . . . 8 |
| 611 | Did you seek advice or treatment for the diarrhea from any source? |  |  |

## SECTION 6. CHILD HEALTH AND NUTRITION



SECTION 6. CHILD HEALTH AND NUTRITION

| NO. | QUESTIONS AND FILTERS | LAST BIRTH |  |  | NEXT-TO-LAST BIRTH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 615 | Was (NAME) given any of the following at any time since (NAME) started having the diarrhea: <br> a) A fluid made from a special packet called [LOCAL NAME FOR ORS PACKET]? <br> b) A pre-packaged ORS liquid? <br> c) A government-recommended homemade fluid? <br> d) Zinc tablets or syrup? | a) FLUID FROM ORS PACKET .. 1 <br> b) ORS LIQUID . . 1 <br> c) HOMEMADE <br> FLUID ..... . 1 <br> d) ZINC ........ 1 | NO <br> 2 2 <br> 2 | DK <br> 8 <br> 8 <br> 8 <br> 8 | a) FLUID FROM ORS PACKET .. 1 <br> b) ORS LIQUID . . 1 <br> c) HOMEMADE <br> FLUID ..... 1 <br> d) ZINC ........ 1 | $\begin{gathered} \mathrm{NO} \\ \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \end{gathered}$ | DK <br> 8 <br> 8 <br> 8 <br> 8 |
| 616 | CHECK 615: <br> ANY 'YES' <br> a) Was anything else given to treat the diarrhea? <br> ALL 'NO' OR 'DK' <br> b) Was anything given to treat the diarrhea? | YES <br> NO <br> (SKIP <br> DON'T KNOW | 8) | $\begin{aligned} & 1 \\ & 2 \\ & \hline 8 \end{aligned}$ | YES <br> NO <br> (SKIP <br> DON'T KNOW |  | $\begin{aligned} & 1 \\ & 2 \\ & \hline 8 \end{aligned}$ |
| 617 | CHECK 615: <br> ANY 'YES' <br> a) What else was given to treat the diarrhea? <br> Anything else? <br> ALL 'NO' OR 'DK' <br> b) What was given to treat the diarrhea? <br> Anything else? | PILL OR SYRUP <br> ANTIBIOTIC ANTIMOTILITY OTHER (NOT ANTIB OR ANTIMOTILIT UNKNOWN PILL OR SYRUP <br> INJECTION <br> ANTIBIOTIC NON-ANTIBIOTIC UNKNOWN INJECTION <br> (IV) INTRAVENOUS $\qquad$ <br> HOME REMEDY/ <br> HERBAL MEDICINE <br> OTHER | IC | A <br> B <br> C <br> D <br> E <br> F <br> G <br> H <br> I <br> X | PILL OR SYRUP <br> ANTIBIOTIC <br> ANTIMOTILITY <br> OTHER (NOT ANTIBI OR ANTIMOTILIT <br> UNKNOWN PILL <br> OR SYRUP <br> INJECTION <br> ANTIBIOTIC <br> NON-ANTIBIOTIC <br> UNKNOWN <br> INJECTION <br> (IV) INTRAVENOUS <br> HOME REMEDY/ <br> HERBAL MEDICINE <br> OTHER | IC | A <br> B <br> C <br> D <br> $E$ $F$ <br> G <br> H <br> 1 <br> $x$ |
| 618 | Has (NAME) been ill with a fever at any time in the last 2 weeks? | YES <br> NO <br> (SKIP <br> DON'T KNOW |  | $\begin{gathered} 1 \\ 2 \\ \hline 8 \end{gathered}$ | $$ | ) | $\begin{aligned} & 1 \\ & 2 \\ & \hline 8 \end{aligned}$ |
| 619 | At any time during the illness, did (NAME) have blood taken from (NAME)'s finger or heel for testing? | YES <br> NO <br> DON'T KNOW |  | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | YES <br> NO <br> DON'T KNOW |  | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |
| 620 | Has (NAME) had an illness with a cough at any time in the last 2 weeks? | YES <br> NO <br> DON'T KNOW |  | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | YES <br> NO <br> DON'T KNOW |  | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |
| 621 | Has (NAME) had fast, short, rapid breaths or difficulty breathing at any time in the last 2 weeks? |  | 23) | $\begin{gathered} 1 \\ 2 \\ \hline 8 \end{gathered}$ |  | 23) | $\begin{gathered} 1 \\ 2 \\ \hline 8 \end{gathered}$ |

SECTION 6. CHILD HEALTH AND NUTRITION

| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: |
| 622 | Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose? |  |  |
| 623 | CHECK 618: HAD FEVER? | YES $\square$ $\square$$\quad \begin{gathered}\text { NO OR DK } \\ \text { (SKIP TO 646) } \\ \square\end{gathered}$ | YES $\square$ $\square$$\quad \begin{gathered}\text { NO OR DK } \\ \text { (SKIP TO 646) } \\ \square\end{gathered}$ |
| 624 | Did you seek advice or treatment for the illness from any source? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 2 <br>    <br>  (SKIP TO 629)  | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 2 <br>    <br>  (SKIP TO 629$)$  |
| 625 | Where did you seek advice or treatment? <br> Anywhere else? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL .. A REFERRAL HEALTH CENTRE B MCH/HC $\qquad$ C PRIMARY HEALTH UNIT (PHU D MOBILE CLINIC $\qquad$ E CHW $\qquad$ F <br> OTHER PUBLIC SECTOR $\qquad$ G <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/DOCTOR/ CLINIC <br> PHARMACY <br> OTHER PRIVATE MEDICAL SECTOR $\qquad$ <br> (SPECIFY) <br> OTHER SOURCE <br> SHOP .................. K <br> TRADITIONAL <br> PRACTITIONER ......... L <br> MARKET .................. M <br> KORAN .................. N <br> OTHER $\qquad$ x | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL .. A REFERRAL HEALTH CENTRE B MCH/HC ................. C PRIMARY HEALTH UNIT (PHU D MOBILE CLINIC $\qquad$ E CHW $\qquad$ F <br> OTHER PUBLIC SECTOR $\qquad$ G <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/DOCTOR/ CLINIC <br> PHARMACY <br> OTHER PRIVATE <br> MEDICAL SECTOR $\qquad$ J <br> (SPECIFY) <br> OTHER SOURCE <br> SHOP $\quad$.... <br> PRACTITIONER ......... L <br> MARKET .................. M <br> KORAN .................. N <br> OTHER $\qquad$ X |
| 626 | CHECK 625: |  |  |

SECTION 6. CHILD HEALTH AND NUTRITION

| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME |
| :---: | :---: | :---: | :---: |
| 627 | Where did you first seek advice or treatment? <br> USE LETTER CODE FROM 625. | FIRST PLACE ......... | FIRST PLACE |
| 628 | How many days after the illness began did you first seek advice or treatment for (NAME)? <br> IF THE SAME DAY RECORD '00'. | DAYS | DAYS |
| 629 | At any time during the illness, did (NAME) take any drugs for the illness? |  |  |
| 630 | What drugs did (NAME) take? <br> Any other drugs? <br> RECORD ALL MENTIONED. | ANTIMALARIAL DRUGS <br> ARTEMISININ COMBINATION <br> THERAPY (ACT)/ AL ..... A <br> SP/FANSIDAR ........... B <br> CHLOROQUINE ............ C <br> AMODIAQUINE ............ D <br> QUININE <br> PILLS ................... E <br> INJECTION/IV ......... F <br> ARTESUNATE <br> RECTAL .............. G <br> INJECTION/IV ......... H <br> OTHER ANTIMALARIAL $\qquad$ <br> (SPECIFY) <br> ANTIBIOTIC DRUGS <br> PILL/SYRUP . . . . . . . . . . . . . J <br> INJECTION/IV ............ K <br> OTHER DRUGS <br> ASPIRIN .................. L <br> PANADOL/PARACETAMOL. . M <br> IBUPROFEN ................ N <br> OTHER $\qquad$ X <br> DON'T KNOW <br> Z | ANTIMALARIAL DRUGS ARTEMISININ COMBINATION <br> THERAPY (ACT)/ AL . . . . . A <br> SP/FANSIDAR ............ B <br> CHLOROQUINE ........... C <br> AMODIAQUINE ............ D <br> QUININE <br> PILLS ................... E <br> INJECTION/IV ......... F <br> ARTESUNATE <br> RECTAL .............. G <br> INJECTION/IV ......... H <br> OTHER ANTIMALARIAL <br> (SPECIFY) <br> ANTIBIOTIC DRUGS <br> PILL/SYRUP ................ J <br> INJECTION/IV ............ K <br> OTHER DRUGS <br> ASPIRIN .................. L <br> PANADOL/PARACETAMOL. . M <br> IBUPROFEN ................ N <br> OTHER $\qquad$ X |
| 631 | CHECK 630: <br> ANY CODE A-I CIRCLED? |  |  |



SECTION 6. CHILD HEALTH AND NUTRITION

| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: |
| 640 | CHECK 630: <br> QUININE ('E' OR 'F') GIVEN |  |  |
| 641 | How long after the fever started did (NAME) first take quinine? |  |  |
| 642 | CHECK 630: <br> ARTESUNATE ('G' OR 'H') GIVEN |  |  |
| 643 | How long after the fever started did (NAME) first take artesunate? |  |  |
| 644 | CHECK 630: <br> OTHER ANTIMALARIAL ('I') GIVEN |  |  |
| 645 | How long after the fever started did (NAME) first take (OTHER ANTIMALARIAL)? | SAME DAY $\ldots \ldots \ldots \ldots \ldots$ <br> NEXT DAY $\ldots \ldots \ldots \ldots \ldots$ <br> TWO DAYS AFTER <br> FEVER $\ldots \ldots \ldots \ldots \ldots$ <br> THREE OR MORE DAYS <br> AFTER FEVER <br> 1 <br> DON'T KNOW $\ldots \ldots \ldots$. |  |
| 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: <br> NO CHILD <br> RECEIVED FLUID $\square$ <br> FROM ORS PACKET OR <br> PRE-PACKAGED ORS LIQUID | ANY CHILD <br> RECEIVED FLUID $\square$ <br> FROM ORS PACKET OR RE-PACKAGED ORS LIQUID | $\rightarrow 649$ |
| 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 <br> NO |  |
| 649 | CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2016-2018 LIVING WITH THE RESPONDENT <br> ONE OR MORE NONE $\square$ |  | $\rightarrow 701$ |

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． <br> Did（NAME FROM 649）drink or eat： <br> a）Plain water？ | $\begin{gathered} \text { YES } \\ 1 \end{gathered}$ |  | $\begin{gathered} \text { DK } \\ 8 \end{gathered}$ |  |
|  | b）Juice or juice drinks？ | b）$\ldots \ldots \ldots \ldots .1$ | 2 | 8 |  |
|  | c）Clear broth（soup）？ | c）$\ldots \ldots \ldots \ldots .1$ | 2 | 8 |  |
|  | d）Canned／powdered livestock milk？ <br> IF YES：How many times did（NAME）drink canned／powdered milk？ <br> IF 7 OR MORE TIMES，RECORD＇7＇． | d） $\qquad$ 1 <br> NUMBER OF TIMES DRANK CANNED／ | 2 | 8 |  |
|  | e）Fresh livestock milk？？ <br> IF YES：How many times did（NAME）drink fresh milk？ <br> IF 7 OR MORE TIMES，RECORD＇7＇． | e） $\qquad$ 1 <br> NUMBER OF TIMES DRANK | 2 | 8 |  |
|  | f）Infant formula？ <br> IF YES：How many times did（NAME）drink infant formula？ <br> IF 7 OR MORE TIMES，RECORD＇7＇． | f） $\qquad$ <br> NUMBER OF TIMES DRANK | 2 | 8 |  |
|  | g）Any other liquids？ | g）$\ldots \ldots \ldots . . .$. | 2 | 8 |  |
|  | h）Yogurt？ <br> IF YES：How many times did（NAME）eat yogurt？ <br> IF 7 OR MORE TIMES，RECORD＇7＇． | h） $\qquad$ <br> NUMBER OF TIMES ATE | 2 | 8 |  |
|  | i）Any［BRAND NAME OF COMMERCIALLY FORTIFIED BABY FOOD，E．G．，Cerelac］？ | i）$\ldots \ldots \ldots \ldots . .1$ | 2 | 8 |  |
|  | j）Bread，dough，pancake，rice，noodles，porridge，or other foods made from grains？ | j）$\ldots \ldots . . . . . .$. | 2 | 8 |  |
|  | k）Pumpkin，carrots，squash，or sweet potatoes that are yellow or orange inside？ | k）．．．．．．．．．．． 1 | 2 | 8 |  |
|  | I）White potatoes，white yams，manioc／cassava，or any | I）$\ldots \ldots \ldots \ldots . .1$ | 2 | 8 |  |
|  | m）Any dark green，leafy vegetables？ | m）．．．．．．．．．．． 1 | 2 | 8 |  |
|  | n）Ripe mangoes，papayas，orange，bananas，water | n）$\ldots \ldots \ldots \ldots .1$ | 2 | 8 |  |
|  | o）Any other fruits or vegetables？ | о）$\ldots \ldots \ldots \ldots .1$ | 2 | 8 |  |
|  | p）Liver，kidney，heart，or other organ meats？ | p）$\ldots \ldots \ldots \ldots .1$ | 2 | 8 |  |
|  | q）Any meat，such as beef，lamb，goat，chicken？ | q）$\ldots \ldots \ldots \ldots .1$ | 2 | 8 |  |
|  | r）Eggs？ | r）$\ldots \ldots \ldots \ldots .1$ | 2 | 8 |  |
|  | s）Fresh or dried fish or shellfish？ | s）$\ldots \ldots \ldots \ldots . .1$ | 2 | 8 |  |
|  | t）Any foods made from beans，peas，lentils，or nuts？ | t）$\ldots \ldots . . . . . . .1$ | 2 | 8 |  |
|  | u）Cheese or other food made from milk？ | u）$\ldots \ldots \ldots \ldots .1$ | 2 | 8 |  |
|  | v）Any other solid，semi－solid，or soft food？ | v）$\ldots \ldots \ldots \ldots .1$ | 2 | 8 |  |
| 651 | CHECK 650 （CATEGORIES＇g＇THROUGH＇v＇）： <br> ALL ARE＂NO＂ | ST ONE＇YES＇ |  |  | 653 |

SECTION 6. CHILD HEALTH AND NUTRITION

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 652 | Did (NAME FROM 649) eat any solid, semi-solid, or soft foods yesterday during the day or at night? <br> IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat? |  | $\longrightarrow 654$ |
| 653 | How many times did (NAME FROM 649) eat solid, semisolid, or soft foods yesterday during the day or at night? <br> IF 7 OR MORE TIMES, RECORD ' 7 '. | NUMBER OF TIMES $\qquad$ $\square$ |  |
| 654 | The last time (NAME FROM 649) passed stools, what was done to dispose of the stools? |  |  |


| SECTION 7. FERTILITY PREFERENCES |  |  |  |
| :---: | :---: | :---: | :---: |
| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| 701 | CHECK 226: <br> PREGNANT $\square$ | T PREGNANT OR UNSURE | $\rightarrow 703$ |
| 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 NO MORE UNDECIDED/DON'T KNOW | $\begin{aligned} & \longrightarrow 704 \\ & \longrightarrow 710 \end{aligned}$ |
| 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 NO MORE/NONE SAYS SHE CAN'T GET PREGNANT UNDECIDED/DON'T KNOW | $\begin{array}{\|l} \longrightarrow \\ \\ \hline \end{array} 06$ |
| 704 | CHECK 226: <br> NOT PREGNANT OR UNSURE $\square$ <br> a) How long would you like <br> b) After the birth of the to wait from now before child you are expecting the birth of (a/another) now, how long would child? you like to wait before the birth of another child? | MONTHS <br> YEARS ..................... 2 <br> SOON/NOW <br> SAYS SHE CAN'T GET PREGNANT AFTER MARRIAGE <br> OTHER $\qquad$ <br> (SPECIFY) <br> DON'T KNOW | $\begin{array}{\|l} \longrightarrow \\ \longrightarrow^{709} \\ 711 \\ 709 \end{array}$ |
| 705 | CHECK 226: <br> NOT PREGNANT OR UNSURE $\square$ | PREGNANT | $\rightarrow 710$ |
| 706 | CHECK 303: USING A CONTRACEPTIVE METHOD? $\begin{array}{r} \text { NOT } \\ \text { CURRENTLY } \\ \text { USING } \downarrow \end{array}$ | CURRENTLY USING | $\rightarrow 711$ |
| 707 | CHECK 704: | '00-23' MONTHS OR '00-01' YEAR $\square$ | $\rightarrow 711$ |

## SECTION 7. FERTILITY PREFERENCES



SECTION 7. FERTILITY PREFERENCES

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIE |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 713 | In the last three months have you: <br> a) Heard about birth spacing on the radio? <br> b) Seen anything about birth spacing on the television? <br> c) Read about birth spacing in a newspaper or magazine? <br> d) Received a voice or text message about birth spacing on a mobile phone? <br> e) Have you read about birth spacing on internet or social media? <br> f) Have you heard about birth spacing from a health care worker/in the health facility? | a) RADIO <br> b) TELEVISION <br> c) NEWSPAPER OR MAGAZINE <br> d) MOBILE PHONE <br> e) SOCIAL MEDIA <br> f) $\mathrm{HCWs} / \mathrm{HF}$ | YES NO <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 |  |
| 714 | CHECK 303: USING A CONTRACEPTIVE METHOD? <br> CURRENTLY USING $\square$ | NOT ENTLY $\square$ USING |  | $\begin{array}{\|l} \longrightarrow \\ \\ \\ \\ 716 \end{array}$ |
| 715 | Would you say that using contraception is mainly your decision, mainly your husband's decision, or did you both decide together? | MAINLY RESPONDENT <br> MAINLY HUSBAND <br> JOINT DECISION <br> OTHER $\qquad$ | $\begin{array}{ll} \ldots \ldots & 1 \\ \cdots \cdots & 2 \\ \cdots \cdots & 3 \\ & 6 \\ \hline \end{array}$ | $\rightarrow 717$ |
| 716 | Would you say that not using contraception is mainly your decision, mainly your husband's decision, or did you both decide together? | MAINLY RESPONDENT <br> MAINLY HUSBAND <br> JOINT DECISION <br> OTHER $\qquad$ | $\begin{array}{ll} \ldots \ldots & 1 \\ \cdots \cdots & 2 \\ \cdots \cdots & 3 \\ & 6 \\ & \\ \hline \end{array}$ |  |
| 717 | Does your husband want the same number of children that you want, or does he want more or fewer than you want? | SAME NUMBER MORE CHILDREN FEWER CHILDREN DON'T KNOW | $\begin{array}{ll} \cdots \cdots & 1 \\ \cdots \cdots & 2 \\ \cdots \cdots & 3 \\ \cdots \cdots & 8 \end{array}$ |  |

SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

| NO. | QUESTIONS AND FILTERS | CODING CATE |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 801 | CHECK 119 \& 120: <br> CURRENTLY MARRIED | NOT IN UNION |  | $\rightarrow 809$ |
| 802 | How old was your husband on his last birthday? IF 95 OR MORE, RECORD '95' | AGE IN COMPLETED YEARS $\square$ DON'T KNOW AGE |  |  |
| 803 | Did your husband ever attend school? | $\begin{array}{lr} \text { YES } & \ldots . . . \\ \text { NO } \\ \text { DON'T KNOW } \end{array}$ | 1 2 8 | $\xrightarrow{\longrightarrow} 806$ |
| 804 | What was the highest level of school he attended: primary, secondary, or higher? |  |  | $\longrightarrow 806$ |
| 805 | What was the highest [GRADE/FORM/YEAR] he completed at that level? <br> IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'. | [GRADE/FORM/YEAR] . . . . . . . . . . . . .DON'T KNOW . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 98 |  |  |
| 806 | Has your husband done any work in the last 7 days? |  |  | $\longrightarrow 808$ |
| 807 | Has your husband done any work in the last 12 months? |  |  | $\xrightarrow{\longrightarrow} 809$ |
| 808 | What is your husband's occupation? That is, what kind of work does he mainly do? <br> NB- REFER TO THE INTERVIEWER'S MANUAL FOR THE CODES ON OCCUPATION |  |  |  |
| 809 | Aside from your own housework, have you done any work in the last seven days? |  |  | $\longrightarrow 813$ |
| 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? |  |  | $\longrightarrow 813$ |
| 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? |  |  | $\rightarrow 813$ |
| 812 | Have you done any work in the last 12 months? |  |  | $\longrightarrow 817$ |
| 813 | What is your main occupation? That is, what kind of work do you mainly do? <br> NB- REFER TO THE INTERVIEWER'S MANUAL FOR THE CODES ON OCCUPATION |  |  |  |

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? |  |  |
| 815 | Do you usually work throughout the year, or do you work seasonally, or only once in a while? |  |  |
| 816 | Are you paid in cash or kind for this work or are you not paid at all? |  |  |
| 817 | CHECK119\&120: <br> CURRENTLY <br> MARRIED | NOT IN UNION | $\rightarrow 825$ |
| 818 | CHECK 816: CODE '1' OR '2' CIRCLED $\square$ | OTHER | $\rightarrow 821$ |
| 819 | Who usually decides how the money you earn will be used: you, your husband, or you and your husband jointly? |  |  |
| 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? |  | $\longrightarrow 822$ |
| 821 | Who usually decides how your husband's earnings will be used: you, your husband, or you and your husband jointly? |  |  |
| 822 | Who usually makes decisions about health care for yourself: you, your husband, you and your husband jointly, or someone else? |  |  |
| 823 | Who usually makes decisions about making major household purchases? |  |  |

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? |  |  |
| 825 | Do you own this or any other house either alone or jointly with someone else? |  | $\longrightarrow 828$ |
| 826 | Do you have a title deed for any house you own? |  | $\xrightarrow{\longrightarrow} 828$ |
| 827 | Is your name on the title deed? |  |  |
| 828 | Do you own any agricultural or non-agricultural land either alone or jointly with someone else? |  | $\longrightarrow 901$ |
| 829 | Do you have a title deed for any land you own? |  | $\xrightarrow{\longrightarrow} 901$ |
| 830 | Is your name on the title deed? |  |  |


| SECTION 9. HIVIAIDS \& 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? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \end{array}$ | $\rightarrow 918$ |
| 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 <br> NO DON'T KNOW | $\begin{array}{cc} \ldots \ldots & 1 \\ \cdots \cdots & 2 \\ \cdots \cdots & 8 \end{array}$ |  |
| 903 | Can people get HIV from mosquito bites? | YES $\quad \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ DON'T KNOW | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 904 | Can people reduce their chance of getting HIV by using a condom every time they have sex? | YES No DON'T KNOW | $\begin{array}{cc}\ldots \ldots & 1 \\ \cdots \cdots & 2 \\ \cdots \cdots & 8\end{array}$ |  |
| 905 | Can people get HIV by sharing food with a person who has HIV? | YES <br> NO <br> DON'T KNOW | $\begin{array}{cc} \ldots \ldots & 1 \\ \cdots \cdots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 906 | Can people get HIV because of witchcraft or other supernatural means? | YES NO DON'T KNOW | $\begin{array}{ll} & \\ \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots . . & 8\end{array}$ |  |
| 907 | Is it possible for a healthy-looking person to have HIV? | YES <br> NO DON'T KNOW | $\begin{array}{ll}\text {..... } & 1 \\ \ldots . . & 2 \\ \ldots \ldots . & 8\end{array}$ |  |
| 908 | Can HIV be transmitted from a mother to her baby: <br> a) During pregnancy? <br> b) During delivery? <br> c) By breastfeeding? | YES <br> a) DURING PREGNANCY .. 1 <br> b) DURING DELIVERY..... 1 <br> c) BREASTFEEDING $\qquad$ | NO DK <br> 2 8 <br> 2 8 <br> 2 8 |  |
| 909 | CHECK 908: <br> AT LEAST $\square$ ONE 'YES' $\square$ | OTHER $\square$ |  | $\rightarrow 911$ |
| 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 NO DON'T KNOW | $\begin{array}{ll} \ldots \ldots & 1 \\ \cdots \cdots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 911 | Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV? | YES <br> NO DON'T KNOW/NOT SURE/DEPENDS | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 912 | Do you think children living with HIV should be allowed to attend school with children who do not have HIV? | YES NO DON'T KNOW/NOT SURE/DEPENDS | $\begin{array}{ll} \ldots \ldots & 1 \\ \cdots \cdots & 2 \\ \cdots \cdots & 8 \end{array}$ |  |
| 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 <br> NO DON'T KNOW/NOT SURE/DEPENDS | $\begin{array}{ll} \cdots \cdots & 1 \\ \cdots \cdots & 2 \\ \cdots \cdots & 8 \end{array}$ |  |
| 914 | Do people talk badly about people living with HIV, or who are thought to be living with HIV? | YES NO DON'T KNOW/NOT SURE/DEPENDS | $\begin{array}{ll} \cdots \cdots & 1 \\ \cdots \cdots & 2 \\ \cdots \cdots & 8 \end{array}$ |  |
| 915 | Do people living with HIV, or thought to be living with HIV, lose the respect of other people? | yes No DON'T KNOW/NOT SURE/DEPENDS | $\begin{array}{ll} \ldots \ldots & 1 \\ \cdots \cdots & 2 \\ \cdots \cdots & 8 \end{array}$ |  |
| 916 | Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV. | AGREE disagree DON'T KNOW/NOT SURE/DEPENDS | $\begin{array}{ll} \ldots \ldots \cdots & 1 \\ \cdots \cdots \cdots & 2 \\ \hdashline \ldots \cdots & 8 \end{array}$ |  |
| 917 | Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV? | YES NO <br> SAYS SHE HAS HIV DON'T KNOW/NOT SURE/DEPENDS | $\begin{array}{ll} \ldots \ldots \cdots & 1 \\ \cdots \cdots \cdots & 2 \\ \cdots \cdots \cdots & 3 \\ \ldots \ldots & 8 \end{array}$ |  |


| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 918 | CHECK 901: <br> HEARD ABOUT HIV OR AIDS <br> a) Apart from HIV, have you heard about other infections that can be transmitted through <br> NOT HEARD ABOUT $\square$ HIV OR AIDS <br> b) Have you heard about infections that can be transmitted through sexual contact? sexual contact? |  |  |
| 919 | CHECK 918: HEARD ABOUT OTHER SEXUALLY TRAN <br> YES $\square$ | IITTED INFECTIONS? <br> No $\square$ | $\rightarrow 926$ |
| 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? |  |  |
| 921 | Sometimes women experience a bad-smelling abnormal genital discharge. During the last 12 months, have you had a bad-smelling abnormal genital discharge? |  |  |
| 922 | Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer? |  |  |
| 923 | CHECK 920, 921, AND 922: <br> HAS HAD AN $\square$ INFECTION (ANY 'YES') | HAS NOT HAD AN $\square$ INFECTION OR DOES NOT KNOW | $\rightarrow 926$ |
| 924 | The last time you had (PROBLEM FROM 920/921/922), did you seek any kind of advice or treatment? |  | $\longrightarrow 926$ |
| 925 | Where did you go? <br> Any other place? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. |  |  |
| 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 $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$  <br> DON'T KNOW $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 8 |  |

SECTION 10. OTHER HEALTH ISSUES

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 1001 | 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? <br> IF YES: How many injections have you had? <br> 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. | NUMBER OF INJECTIONS <br> NONE | $\text { ........ } 00$ | $\longrightarrow 1004$ |
| 1002 | Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? <br> 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. | NUMBER OF INJECTIONS <br> NONE | 00 | $\longrightarrow 1004$ |
| 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? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots & 2 \\ \ldots . . & 8 \end{array}$ |  |
| 1004 | Do you currently smoke cigarettes every day, some days, or not at all? | EVERY DAY <br> SOME DAYS <br> NOT AT ALL | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 3 \end{array}$ | $\rightarrow 1006$ |
| 1005 | On average, how many cigarettes do you currently smoke each day? | NUMBER OF CIGARETTES |  |  |
| 1006 | Do you currently smoke or use any other type of tobacco every day, some days, or not at all? | EVERY DAY <br> SOME DAYS <br> NOT AT ALL | $\begin{array}{ll} \ldots \ldots & 1 \\ \cdots \cdots \cdots & 2 \\ \cdots \cdots & 3 \end{array}$ | $\rightarrow 1008$ |
| 1007 | What other type of tobacco do you currently smoke or use? <br> RECORD ALL MENTIONED. | KRETEKS <br> PIPES FULL OF TOBACCO <br> CIGARS, CHEROOTS, OR CIGARILLOS <br> WATER PIPE <br> SNUFF BY MOUTH <br> SNUFF BY NOSE <br> CHEWING TOBACCO <br> BETEL QUID WITH TOBACCO <br> OTHER $\qquad$ |  |  |
| 1008 | 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: <br> a) Getting permission to go to the doctor? <br> b) Getting money needed for advice or treatment? <br> c) The distance to the health facility? <br> d) Not wanting to go alone? |   BIG <br> PROBLEM   <br> a) PERMISSION TO GO $\ldots$ 1   <br> b) GETTING MONEY $\ldots$ $\ldots$ 1  <br> c) DISTANCE $\ldots$ $\ldots$ $\ldots$ 1 <br> d) GO ALONE $\ldots$ $\ldots$ 1  <br> d)  $\ldots$ 1  | NOT A BIG PROBLEM <br> 2 <br> 2 <br> 2 <br> 2 |  |

SECTION 10. OTHER HEALTH ISSUES

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 1009 | Are you covered by any health insurance? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | 1 | $\rightarrow 1011$ |
| 1010 | What type of health insurance are you covered by? <br> RECORD ALL MENTIONED. | MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE <br> HEALTH INSURANCE THROUGH EMPLOYER SOCIAL SECURITY OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE <br> OTHER $\qquad$ | D $\times$ |  |
| 1011 | FISTULA <br> 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. <br> Have you ever experienced a constant leakage of urine or stool from your vagina during the day and night? | YES <br> NO |  | $\rightarrow 1013$ |
| 1012 | Have you ever heard of this problem? | YES NO | 1 | $\longrightarrow 1101$ |
| 1013 | Did this problem start after you delivered a baby or had a stillbirth? | AFTER DELIVERED BABY AFTER HAD STILLBIRTH NEITHER | 1 2 3 | $\longrightarrow 1017$ |
| 1014 | Did this problem start after a normal labor and delivery, or after a very difficult labor and delivery? | NORMAL LABOR/DELIVERY . . . ... VERY DIFFICULT LABOR/DELIVERY | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 1015 | How many days after delivery did the leakage start? <br> ENTER '90' IF 90 DAYS OR MORE. | NUMBER OF DAYS AFTER DELIVERY/OTHER EVENT . . . . . . . . . . |  |  |
| 1016 | Have you sought treatment for this condition? | YES <br> NO |  | $\rightarrow 1018$ |
| 1017 | Why have you not sought treatment? <br> PROBE AND RECORD ALL MENTIONED. | DO NOT KNOW CAN BE FIXED DO NOT KNOW WHERE TO GO TOO EXPENSIVE TOO FAR POOR QUALITY OF CARE COULD NOT GET PERMISSION EMBARRASSMENT <br> OTHER $\qquad$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~B} \\ & \mathrm{C} \\ & \mathrm{D} \\ & \mathrm{E} \\ & \mathrm{~F} \\ & \mathrm{G} \\ & \mathrm{X} \end{aligned}$ | $\rightarrow_{1111}$ |
| 1018 | From whom did you last seek treatment? | HEALTH PROFESSIONAL <br> DOCTOR <br> CLINICAL OFFICER <br> NURSE/MIDWIFE <br> OTHER PERSON <br> COMMUNITY/VILLAGE <br> HEALTH WORKER <br> HERBALIST <br> OTHER $\qquad$ | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |
| 1019 | Did you have an operation to fix the problem? | YES <br> NO |  |  |
| 1020 | Did the treatment stop the leakage completely? <br> IF NO: Did the treatment reduce the leakage? | YES, STOPPED COMPLETELY <br> NOT STOPPED BUT REDUCED <br> NOT STOPPED AT ALL . <br> DID NOT RECEIVE TREATMENT | 1 2 3 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？ |  | $\rightarrow 1103$ |
| 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？ |  | $\rightarrow 1201$ |
| 1103 | Have you yourself ever been circumcised？ |  | $\rightarrow 1109$ |
| 1104 | What type of circumcision did you undergo？ |  |  |
| 1105 | Please describe what was exactly done <br> CIRCLE ONLY ONE OPTION <br> a）Excision of the clitoral hood（prepuce），with or without excision of part or all of the clitoris <br> b）Excision of the clitoris with partial or total excision of the labia minora <br> c）Excision of part or all of the external genitalia and stitching／narrowing of the vaginal opening（Infibulation） <br> 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 |  |  |
| 1106 | How old were you when you were circumcised？ <br> IF THE RESPONDENT DOES NOT KNOW THE EXACT AGE，PROBE TO GET AN ESTIMATE． |  |  |
| 1107 | Who performed the circumcision？ |  |  |
| 1108 | CHECK 213， 215 AND 216： <br> HAS ONE OR MORE <br> LIVING DAUGHTERS <br> BORN IN 2006 OR LATER | AS NO LIVING HTERS BORN 006 OR LATER | $\rightarrow 1116$ |

SECTION 11. FEMALE CIRCUMCISION


SECTION 12. MATERNAL DEATHS



| 1211 | Did (NAME) die during childbirth? | YES <br> NO | $\begin{gathered} 1 \\ \downarrow \\ \downarrow \text { тO } \\ \text { 213) } \\ 2 \end{gathered}$ |  | $\begin{gathered} 1 \\ \downarrow \\ \downarrow \\ \text { P TO } \\ (213) \\ 2 \end{gathered}$ | YES <br> NO | $\begin{gathered} 1 \\ \downarrow \\ \downarrow \\ \text { тO } \\ \text { 213) } \\ 2 \end{gathered}$ |  | $\begin{gathered} 1 \\ \downarrow \\ \downarrow \text { TO } \\ \text { 213) } \\ 2 \end{gathered}$ |  |  | YES | $\begin{array}{r} 1 \\ \downarrow \\ \text { IP TO } \\ \text { 1213) } \\ 2 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1212 | Did (NAME) die within six weeks after the end of a pregnancy or childbirth? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | YES NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 1213 | How many live born children did (NAME) give birth to during her lifetime? |  |  |  |  |  |  |  |  |  |  |  |  |
| 1214 | IF NO MORE BROTHERS OR SISTERS, GO TO 1301. |  |  |  |  |  |  |  |  |  |  |  |  |

SECTION 13. GENDER BASED VIOLENCE (GBV)

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1301 | CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED. <br> PRIVACY <br> OBTAINED ........... 1 |  |  |  | > 1331 |
| 1302 | READ TO THE RESPONDENT: <br> Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in in your country. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions. 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. |  |  |  |  |
| 1303 | First I am going to ask you about your understanding of domestic violence. What does domestic violence mean to you? Does it mean: <br> a) Physical abuse? <br> b) No participation in decision-making for household? <br> c) No participation in decision-making for children? <br> d) Better treatment of males than females? <br> e) Failing to meet basic living costs? <br> f) Denial of education? <br> g) Forced marriage? <br> h) Rape? <br> i) Sexual harassment? <br> j) Forced labour? <br> k) Other | ABUSE <br> HH DECISION CHILDREN DECISION BETTER TREATMENT NO LIVING COSTS EDU DENIAL FORCED MARRIAGI RAPE $\qquad$ <br> SEX HARASSMENT FORCED LABOUR <br> OTHER | YES NO <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 | DK 8 8 8 8 8 8 8 8 8 8 8 |  |
| 1304 | Who is the person who commits the most violent acts against women in the community? | HUSBAND <br> MOTHER/STEP-MOTHER <br> FATHER/STEP-FATHEF <br> SISTER/BROTHER <br> DAUGHTER/SON <br> OTHER RELATIVE <br> IN-LAWS <br> TEACHER <br> EMPLOYER/SOMEONE AT <br> POLICE/SOLDIER <br> OTHER $\qquad$ | WORk <br> IFY) | $\begin{gathered} \mathrm{A} \\ \mathrm{~B} \\ \mathrm{C} \\ \mathrm{D} \\ \mathrm{E} \\ \mathrm{~F} \\ \mathrm{G} \\ \mathrm{H} \\ \mathrm{I} \\ \mathrm{~J} \end{gathered}$ |  |
| 1305 | Where do most violent acts take place? | AT HOME . WORKPLACE STREET SCHOOL <br> WATER POINT RURAL/GRAZING AREAS MARKET PLACE NEIGHBOURHOOD <br> OTHER $\qquad$ | IFY) | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \\ & 6 \\ & 7 \\ & 9 \end{aligned}$ |  |
| 1306 | CHECK 119 \& 120 <br> CURRENTLY MARRIED OR DIVORCED/ABANDONED | WIDOWED $\square$ |  |  | $\rightarrow 1318$ |
| 1307 | In your opinion, is a husband justified in hitting or beating his wife in the following situations: <br> a) If she goes out without telling him? <br> b) If she neglects the children? <br> c) If she neglects household duties including cooking? <br> d) If she argues with him? <br> e) If she wastes resources? <br> g) If she refuses to have sex with him? | a) GOES OUT <br> b) NEGLECTS CHILDREN <br> c) NEG. HH DUTIES <br> d) ARGUES <br> e) WASTES RESOURCES <br> e) REFUSES SEX | YES NO <br>   <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 | $\begin{gathered} \text { DK } \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \end{gathered}$ |  |




| 1319 | Who has hurt you in this way? <br> Anyone else? <br> RECORD ALL MENTIONED. |  |  |
| :---: | :---: | :---: | :---: |
| 1320 | In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all? |  |  |
| 1321 | CHECK 201. 226. AND 230: | NEVER BEEN PREGNANT $\square$ $\square$ | $\rightarrow 1324$ |
| 1322 | Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant? |  | $\rightarrow 1324$ |
| 1323 | Who has done any of these things to physically hurt you while you were pregnant? <br> Anyone else? <br> RECORD ALL MENTIONED. |  <br> OTHER $\qquad$ x |  |



INTERVIEWER'S OBSERVATIONS TO BE FILLED IN AFTER COMPLETING INTERVIEW

## COMMENTS ABOUT INTERVIEW:

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

COMMENTS ON SPECIFIC QUESTIONS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

ANY OTHER COMMENTS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

SUPERVISOR'S OBSERVATIONS
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

EDITOR'S OBSERVATIONS
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

INSTRUCTIONS:
ONLY ONE CODE SHOULD APPEAR IN ANY BOX COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

CODES FOR EACH COLUMN:
COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE (2)

```
    B BIRTH
    P PREGNANCIES
    T TERMINATIONS
    O NO METHOD
    1 IUD
    INJECTABLES
    IMPLANTS
    4 ~ P I L L
    5 CONDOM
    6 ~ F E M A L E ~ C O N D O M ~
    7 EMERGENCY CONTRACEPTION
    ] STANDARD DAYS METHOD
    K LACTATIONAL AMENORRHEA METHOD
    L RHYTHM METHOD
    M WITHDRAWAL
    X OTHER MODERN METHOD
    OTHER TRADITIONAL METHOD
```

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

0 INFREQUENT SEX/HUSBAND AWAY
1 BECAME PREGNANT WHILE USING
2 WANTED TO BECOME PREGNANT
3 HUSBAND DISAPPROVED
WANTED MORE EFFECTIVE METHOD
SIDE EFFECTS/HEALTH CONCERNS
LACK OF ACCESS/TOO FAR
COSTS TOO MUCH
INCONVENIENT TO USE
UP TO GOD/FATALISTIC
DIFFICULT TO GET PREGNANT/MENOPAUSAL
MARITAL DISSOLUTION/SEPARATION
X OTHER
(SPECIFY)
DON'T KNOW
(1) Year of fieldwork is assumed to be 2018. For fieldwork beginning in 2019, all references to calendar years should be increased by one; for example, 2012 should be changed to 2013, 2013 should be changed to 2014, 2014 should be changed to 2015, and similarly for all years throughout the questionnaire.
(2) Response categories may be added for other methods, including fertility awareness methods.

|  |  |  | COL. 1 |  | COL. 2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 12 | DEC | 01 |  |  |  |
|  | 11 | NOV | 02 |  |  |  |
|  | 10 | OCT | 03 |  |  |  |
| 2 | 09 | SEP | 04 |  |  | 2 |
|  | 08 | AUG | 05 |  |  | 0 |
| 0 | 07 | JUL | 06 |  |  | 0 |
| 1 | 06 | JUN | 07 |  |  | 1 |
|  | 05 | MAY | 08 |  |  |  |
| 8 | 04 | APR | 09 |  |  |  |
| (1) | 03 | MAR | 10 |  |  |  |
|  | 02 | FEB | 11 |  |  |  |
|  | 01 | JAN | 12 |  |  |  |
|  | 12 | DEC | 13 |  |  |  |
|  | 11 | NOV | 14 |  |  |  |
|  | 10 | OCT | 15 |  |  |  |
| 2 | 09 | SEP | 16 |  |  | 2 |
|  | 08 | AUG | 17 |  |  | 2 |
| 0 | 07 | JUL | 18 |  |  | 0 |
| 1 | 06 | JUN | 19 |  |  | 1 |
|  | 05 | MAY | 20 |  |  | 1 |
| 7 | 04 | APR | 21 |  |  |  |
|  | 03 | MAR | 22 |  |  |  |
|  | 02 | FEB | 23 |  |  |  |
|  | 01 | JAN | 24 |  |  |  |
|  | 12 | DEC | 25 |  |  |  |
|  | 11 | NOV | 26 |  |  |  |
|  | 10 | OCT | 27 |  |  |  |
| 2 | 09 | SEP | 28 |  |  | 2 |
|  | 08 | AUG | 29 |  |  | 0 |
| 0 | 07 | JUL | 30 |  |  | 0 |
| 1 | 06 | JUN | 31 |  |  | 1 |
|  | 05 | MAY | 32 |  |  |  |
| 6 | 04 | APR | 33 |  |  |  |
|  | 03 | MAR | 34 |  |  |  |
|  | 02 | FEB | 35 |  |  |  |
|  | 01 | JAN | 36 |  |  |  |
|  | 12 | DEC | 37 |  |  |  |
|  | 11 | NOV | 38 |  |  |  |
|  | 10 | OCT | 39 |  |  |  |
| 2 | 09 | SEP | 40 |  |  | 2 |
|  | 08 | AUG | 41 |  |  |  |
| 0 | 07 | JUL | 42 |  |  | 0 |
| 1 | 06 | JUN | 43 |  |  | 1 |
| 5 | 05 | MAY | 44 |  |  |  |
| 5 | 04 | APR | 45 |  |  | 5 |
|  | 03 | MAR | 46 |  |  |  |
|  | 02 | FEB | 47 |  |  |  |
|  | 01 | JAN | 48 |  |  |  |
|  | 12 | DEC | 49 |  |  |  |
|  | 11 | NOV | 50 |  |  |  |
|  | 10 | OCT | 51 |  |  |  |
| 2 | 09 | SEP | 52 |  |  | 2 |
|  | 08 | AUG | 53 |  |  |  |
| 0 | 07 | JUL | 54 |  |  | 0 |
| 1 | 06 | JUN | 55 |  |  | 1 |
| 4 | 05 | MAY | 56 |  |  |  |
| 4 | 04 | APR | 57 |  |  | 4 |
|  | 03 | MAR | 58 |  |  |  |
|  | 02 | FEB | 59 |  |  |  |
|  | 01 | JAN | 60 |  |  |  |
|  | 12 | DEC | 61 |  |  |  |
|  | 11 | NOV | 62 |  |  |  |
|  | 10 | OCT | 63 |  |  |  |
| 2 | 09 | SEP | 64 |  |  | 2 |
|  | 08 | AUG | 65 |  |  |  |
| 0 | 07 | JUL | 66 |  |  | 0 |
| 1 | 06 | JUN | 67 |  |  | 1 |
| 3 | 05 | MAY | 68 |  |  |  |
| 3 | 04 | APR | 69 |  |  |  |
|  | 03 | MAR | 70 |  |  |  |
|  | 02 | FEB | 71 |  |  |  |
|  | 01 | JAN | 72 |  |  |  |

## Never-married Woman's Questionnaire

SOMALI MINISTRIE'S OF PLANNING AND HEALTH


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?


SECTION 1. RESPONDENT'S BACKGROUND

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 101 | RECORD THE START TIME. | HOURS <br> MINUTES |  |
| 102 | In what month and year were you born? |  |  |
| 103 | How old were you at your last birthday? <br> COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT. | AGE IN COMPLETED YEARS . . . . . . $\square$ |  |
| 104 | Have you ever attended school? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . | $\longrightarrow 108$ |
| 105 | What is the highest level of school you attended: primary, secondary, or higher? |  |  |
| 106 | What is the highest [GRADE/FORM/YEAR] you completed at that level? <br> IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'. | [GRADE/FORM/YEAR] $\square$ |  |
| 107 | CHECK 105: <br> KORANIC, PRIMARY OR $\square$ SECONDARY | GHER | 110 |
| 108 | Now I would like you to read this sentence to me. <br> SHOW CARD TO RESPONDENT. <br> IF RESPONDENT CANNOT READ WHOLE SENTENCE, <br> PROBE: Can you read any part of the sentence to me? |  |  |

SECTION 1. RESPONDENT'S BACKGROUND

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 109 | CHECK 108: | OR '5' RCLED | $\rightarrow 111$ |
| 110 | Do you read a newspaper or magazine at least once a week, less than once a week or not at all? |  |  |
| 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 <br> LESS THAN ONCE A WEEK 1 <br> NOT AT ALL $\ldots \ldots \ldots \ldots .$. 2 <br> N . . . . . . . . . . . . . . . . . . . . . 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 <br> LESS THAN ONCE A WEEK . . . . . . . . . . . . . 2 <br> NOT AT ALL . . . . . . . . . . . . . . . . . . . 3 |  |
| 113 | Do you own a mobile telephone? |  |  |
| 114 | Do you use a mobile phone for any financial transactions? |  |  |
| 115 | Do you have an account in a bank or other financial institution that you yourself use? |  |  |
| 116 | Have you ever used the internet? |  | $\longrightarrow 201$ |
| 117 | In the last 12 months, have you used the internet? <br> IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE. |  | $\longrightarrow 201$ |
| 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? |  |  |

SECTION 2. HIVIAIDS 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? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{ll} \ldots \ldots . & 1 \\ \ldots \ldots . & 2 \end{array}$ | $\rightarrow 218$ |
| 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 <br> NO DON'T KNOW | $\begin{array}{ll} \ldots \ldots \ldots & 1 \\ \ldots \ldots \ldots & 2 \\ \ldots \ldots \ldots & 8 \end{array}$ |  |
| 203 | Can people get HIV from mosquito bites? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots \ldots & 2 \\ \ldots \ldots \ldots & 8 \end{array}$ |  |
| 204 | Can people reduce their chance of getting HIV by using a condom every time they have sex? | YES <br> NO DON'T KNOW | $\begin{array}{ll} \ldots \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 205 | Can people get HIV by sharing food with a person who has HIV? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 206 | Can people get HIV because of witchcraft or other supernatural means? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 207 | Is it possible for a healthy-looking person to have HIV? | YES <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 208 | Can HIV be transmitted from a mother to her baby: <br> a) During pregnancy? <br> b) During delivery? <br> c) By breastfeeding? | YES <br> a) DURING PREGNANCY.. 1 <br> b) DURING DELIVERY..... 1 <br> c) BREASTFEEDING ..... 1 | NO DK <br> 2 8 <br> 2 8 <br> 2 8 |  |
| 209 | CHECK 208: <br> AT LEAST ONE 'YES' | OTHER |  | $\rightarrow 211$ |
| 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 <br> NO DON'T KNOW | $\begin{array}{ll} \ldots \ldots \ldots & 1 \\ \ldots \ldots \ldots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 211 | Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV? | YES <br> NO DON'T KNOW/NOT SURE/DEPEND | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots \ldots & 8 \end{array}$ |  |
| 212 | Do you think children living with HIV should be allowed to attend school with children who do not have HIV? | YES <br> NO <br> DON'T KNOW/NOT SURE/DEPEND | $\begin{array}{ll} \ldots \ldots \ldots & 1 \\ \ldots \ldots \ldots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 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 <br> NO DON'T KNOW/NOT SURE/DEPEND | $\begin{array}{ll} \ldots \ldots \ldots & 1 \\ \cdots \cdots & 2 \\ \cdots \cdots & 8 \end{array}$ |  |
| 214 | Do people talk badly about people living with HIV, or who are thought to be living with HIV? | YES <br> NO <br> DON'T KNOW/NOT SURE/DEPEND | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 215 | Do people living with HIV, or thought to be living with HIV, lose the respect of other people? | YES <br> NO <br> DON'T KNOW/NOT SURE/DEPEND | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 216 | Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV. | AGREE DISAGREE DON'T KNOW/NOT SURE/DEPEND | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 217 | Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV? | YES <br> NO <br> SAYS SHE HAS HIV <br> DON'T KNOW/NOT SURE/DEPEND | $\ldots \ldots \ldots$ 1 <br> $\ldots \ldots \ldots$ 2 <br> $\ldots \ldots \ldots$ 3 <br> $\ldots \ldots .$. 8 |  |

SECTION 2. HIVIAIDS AND VACCINATION

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 218 | CHECK 201: <br> HEARD ABOUT HIV OR AIDS <br> a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact? <br> NOT HEARD ABOUT <br> b) Have you heard about infections that can be transmitted through sexual contact? |  |  |
| 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? |  |  |
| 220 | Have you received the following immunizations? <br> a) Flu (Influenza)? <br> b) Tetanus, diphtheria, pertussis? <br> c) HPV (Human papillomavirus)? <br> d) Meningococcal? <br> e) Pneumococcal? <br> f) Hepatitis A <br> g) Hepatitis B <br> h) Polio? <br> i) Measles <br> j) Chickenpox (varicella) |  |  |



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 do you? Does it mean: <br> a) Physical abuse? <br> b) No participation in decision-making for household? <br> c) No participation in decision-making for children? <br> d) Better treatment of males than females? <br> e) Failing to meet basic living costs? <br> f) Denial of education? <br> g) Forced marriage? <br> h) Rape? <br> i) Sexual harassment? <br> j) Denial of inheritance? <br> k) Other |  |  |
| 402 | Who is the person who commits the most violent acts against women? |  |  |
| 403 | Where is the place with most violent acts? |  |  |
| 404 | Does any form of violence cause damage? |  | $\rightarrow 406$ |
| 405 | What is the most serious damage caused by violence? |  |  |
| 406 | In your opinion, is a husband justified in hitting or beating his wife in the following situations: <br> a) If she goes out without telling him? <br> b) If she neglects the children? <br> c) If she neglects household duties including cooking? <br> d) If she argues with him? <br> e) If she wastes resources? <br> f) If she does not respect his family? |  YES NO DK <br> GOES OUT ............ 1 2 8 <br> NEGL. CHILDREN .... 1 2 8 <br> NEGL. OTHER HH DUTIES 1 2 8 <br> ARGUES . ............ 1 2 8 <br> WASTE RESOURCES . . 1 2 8 <br> NOT RESP. FAMILY... 1 2 8 |  |
| 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? |  |
|  |  |  OFTEN SOME- <br> TIMES NOT IN LAST <br> 12 MONTHS <br> $\longrightarrow$ 1 2 3 |  |



| 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? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | 1 | $\longrightarrow 507$ |
| 502 | Did you reach your desired desination? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | 1 | $\rightarrow 504$ |
| 503 | What means of transportation did you use to reach your destination during your last such attempt? | ON FOOT <br> LAND TR <br> AIR TRA <br> MARITIM | OR | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 504 | Did you experience any violence on your way? | YES <br> NO |  | 1 | $\longrightarrow 506$ |
| 505 | What kind of violence did you experience? | PHYSIC SEXUAL CAPTIVI RANSO ROBBER VERBAL WATER <br> OTHER | C <br> VAVES <br> (SPECIFY) | 1 2 3 4 5 6 7 |  |
| 506 | What motivated you to take the decision to migrate? | UNEMP LOW PA SEAR POOR INSECU POVER HOPELE LONELI INEQUA PEER IN SOCIAL OTHER | ETTER OPPORTUNITIES EDUCATION <br> AL EXCLUSIOI <br> ERACTIONS/ POSTS <br> (SPECIFY) | 1 <br> 2 <br> 3 <br> 4 <br> 5 <br> 6 <br> 7 <br> 8 <br> 9 <br> 10 <br> 96 |  |
| 507 | Do you know any of your peers who lost their lives due to illegal migration? | YES <br> NO | . . . . . . . . . . . . |  |  |
| 508 | What can be done to address the problem of illegal migration/tahrib? | JOB CR <br> BETTER <br> BUSINE <br> GRANTS <br> AWARE <br> STATE R <br> LAW EN <br> OTHER | OBS <br> TUNITIES <br> FACILITIE <br> ATION <br> UCTIO <br> NT <br> (SPECIFY) | $\begin{gathered} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \end{gathered}$ |  |
| 509 | RECORD THE TIME YOU END THE INTERVIEW. |  |  |  |  |

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## COMMENTS ON SPECIFIC QUESTIONS:

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

ANY OTHER COMMENTS
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

SUPERVISOR'S OBSERVATIONS
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
EDITOR'S OBSERVATIONS
$\qquad$

# Maternal Mortality Questionnaire 

SOMALI HEALTH \＆ DEMOGRAPHIC SURVEY 2018－2019

SOMALI MINISTRIE＇S OF PLANNING AND HEALTH
QUESTIONNAIRE SERIAL NUMBER


MATERNAL MORTALITY QUESTIONNAIRE


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 $\qquad$ DATE $\qquad$
RESPONDENT AGREES

TO BE INTERVIEWED . | RESPONDENT DOES NOT AGREE |
| ---: |
|  |
|  |
|  |
|  |



SECTION 1: HOUSEHOLD SCHEDULE


SECTION 1: HOUSEHOLD SCHEDULE






MINISTRY FOR FOREIGN AFFAIRS OF FINLAND


ITALIAN AGENCY
FOR DEVELOPNENT
CO DERATEN
COOPERATION
Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Agency for Development and Cooperation SDC


[^0]:    ${ }^{1}$ 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.

[^1]:    ${ }^{3}$ 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.

[^2]:    ${ }^{1}$ Completed $8^{\text {th }}$ grade at the primary level
    ${ }^{2}$ Completed $12{ }^{\text {th }}$ grade at the secondary level
    Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted

[^3]:    ${ }^{1}$ Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown separately.
    ${ }^{2}$ Defined as use of improved facilities shared by 2 or more households.

[^4]:    'Camel cattle, shoats horses, donkeys, poultry

[^5]:    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

[^6]:    Note: The age at first marriage is defined as the age at which the respondent got married to her first spouse na $=$ 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

[^7]:    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

[^8]:    Percentage receiving two or more injections during the Percentage whose most recent live birth was protected against pregnancy for the most recent live birth
    neonatal tetanus1

[^9]:    ${ }^{1}$ Includes only the most recent birth in the five years preceding the survey.
    Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[^10]:    Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.
    Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
    ${ }^{1}$ Skilled provider includes doctor, nurse, midwife, and auxiliary nurse/midwife
    ${ }^{2}$ Includes only the most recent birth in the five years preceding the survey

[^11]:    Figure 6.1 Child's weight and size at birth

    Births with a reported birth weight of less than 2.5 kg by regions
    

[^12]:    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

[^13]:    Note: The categories are not mutually exclusive and the sum of percentages may

[^14]:    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.

[^15]:    N/A = Not applicable

[^16]:    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.

[^17]:    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 NO
    DAUGHTER-IN-LAW
    $05=$ GRANDCHILD
    $06=$ PARENT
    08 = BROTHER OR SISTER $09=$ NEPHEW/NIECE
    $10=$ BROTHER/SISTER-IN-LAW
    11 = OTHER RELATIVE
    12 = ADOPTED/FOSTER/
    STEPCHILD
    $98=$ DON'T KNOW

