USAID FROM THE AMERICAN PEOPLE

Ministry of Health

Strengthening Ethiopia's Urban Health Program (SEUHP)

John Snow Inc. Addis Ababa, Ethiopia

Formative Behavior Change Communication (BCC) Assessment Report

March 2015

Consultant:

Sub-Saharan Africa Research and Training Center P.L.C

Study team:

Dr. Wakgari Deressa

Tigist Addis

Tseganeh Demissie

Andenet Haile

Wahid Manaye

JSI John Snow, Inc.

FORMATIVE BEHAVIOR CHANGE COMMUNICATION (BCC) ASSESSMENT REPORT

Commissioned by: Strengthening Ethiopia's Urban Health Program (SEUHP)
John Snow, Inc. (JSI)
Under Cooperative Agreement No AID-663-A-13-00002

Consultant: Sub-Saharan Africa Research and Training Center P.L.C
Besides Bole Medhanialem Church,
Abyssinia Bldg., 4thfloor,
✆+251-118-49 38 65 — ✉4125
Addis Ababa, Ethiopia
www.sartconsult.com
info@sartconsult.com

Disclaimer: This publication was made possible through support provided by the Office of HIV/AIDS, Bureau for Health, U.S. Agency for International Development, under the terms of USAID Ethiopia Cooperative Agreement No 663-A-13-00002. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of JSI or the U.S. Agency for International Development.

ACKNOWLEDGEMENTS

JSI Ethiopia would like to acknowledge the great efforts of the consultancy team that led this formative assessment. The team was composed of Dr. Wakgari Deressa, W/ro Tigist Addis, Mr. Tseganeh Demissie, Mr. Andenet Hailu, and Mr. Wahid Manaye. JSI would also like to acknowledge the contributions from Mr. Alemayehu G/Mariam (chief of party), Mr. Addis Tesfaye (research, monitoring, and evaluation senior advisor), and Mr. Abiy Alazar (community mobilization and BCC advisor) from inception to write-up of this formative assessment.

JSI would like to acknowledge the regional health bureaus and the city/town administrations for giving us permission to conduct this formative assessment. JSI would also like to acknowledge the critical role of the enumerators and field supervisors. JSI is especially grateful to health facility authorities, focal persons at the health facilities, community representatives, kebele leaders, and study participants. This study would not have been possible without their involvement.

ABBREVIATIONS AND ACRONYMS

AA	Addis Ababa
AIDS	Acquired immunodeficiency syndrome
ANC	Antenatal care
ART	Antiretroviral therapy
ARV	Antiretroviral
BCC	Behavior change communication
BCG	Bacillus Calmette-Guerin
C/THO	City/town health office
CBO	Community-based organization
DD	Dire Dawa
DHS	Demographic and health survey
DPT	Diphtheria, pertussis, and tetanus
EBC	Ethiopia Broadcasting Corporation
EBF	Exclusive breast feeding
EPI	Expanded program of immunization
FGAE	Family Guidance Association of Ethiopia
FGD	Focus group discussion
FM	Frequency modulation
FMOH	Federal Ministry of Health
FP	Family planning
GOE	Government of Ethiopia
GTP	Growth and Transformation Plan
HC	Health center
HDA	Health development army
HEP	Health Extension Program
HIV	Human immunodeficiency virus
HSDP	Health Sector Development Program
HCT	HIV counseling and testing
HW	Health worker
IDI	In-depth interview
IEC	Information, education, and communication
IUD	Intra-uterine device
JSI	John Snow, Inc.
KAP	Knowledge, attitude, and practice
LAM	Lactational amenorrheamethod
MCH	Maternal and child health
MDG	Millennium Development Goal
NCD	Non-communicable disease
NGO	Nongovernmental organization
NS	Not sure
PHC	Population and housing census
PLHIV	People living with HIV

PMTCT	Prevention of mother-to-child-transmission
PNC	Postnatal care
PPS	Probability proportion to size
PSU	Primary sampling unit
RHB	Regional health bureau
SBCC	Social behavioral change communication
SD	Standard deviation
SEUHP	Strengthening Ethiopia's Urban Health Program
SNNPR	Southern Nations Nationalities & Peoples Region
SSU	Secondary sampling unit
STI	Sexually transmitted infection
TB	Tuberculosis
TBA	Traditional birth attendant
TT	Tetanus toxoid
UHEP	Urban Health Extension Program
UHE-p	Urban health extension professional
USAID	U.S. Agency for International Development
USU	Ultimate sampling unit
VCT	Voluntary counseling and testing
WHO	World Health Organization
ZHD	Zonal health department

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

EXECUTIVE SUMMARY

Background

John Snow, Inc. (JSI) is supported by the U.S. Agency for International Development (USAID) to improve the health status of the urban population in Ethiopia by reducing HIV/tuberculosis (TB)-related and maternal, neonatal, and child mortality and morbidity, as well as the impact of communicable and non-communicable diseases (NCDs). The Strengthening Ethiopia's Urban Health Program (SEUHP) is follow-on to the JSI-implemented USAID/Urban Health Extension Program (UHEP) program. The objective of the SEUHP is to strengthen the Government of Ethiopia's UHEP by improving the quality, use, and management of community-level urban health and related services.

This formative behavior change communication (BCC) assessment was conducted in five administrative regions and two city administrations in Ethiopia, in all the JSI project sites nationwide. The main aim of the formative assessment was to assess the knowledge of and attitudes toward health care services and the current practices in utilizing health care services, specifically: family planning methods; antenatal care (ANC); health facility delivery; postnatal care (PNC); child immunization, human immunodeficiency virus and acquired immunodeficiency syndrome (HIV and AIDS), including prevention of mother to child transmission (PMTCT), HIV counseling and testing (HCT), and people living with HIV (PLHIV); tuberculosis (TB); and non-communicable diseases (NCDs). Furthermore, this study assessed barriers and motivators for health service utilization. In addition, the study assessed exposure to UHEP activities and sources of information for BCC.

Methods

The formative BCC assessment was conducted in July 2014 in all JSI-SEUHP targeted cities/towns in Ethiopia. The study covered 35 kebeles distributed over 22 towns/cities in five regional states (Amhara, Oromia, Tigray, SNNP, and Harari) and two city administrations (Addis Ababa and Dire Dawa). A mixed quantitative and qualitative research methods using a cross-sectional design collected data from target population, program implementers, and stakeholders. A total of 1,047 respondents, women between 20-59, and men between 20-64 years old, were included in the quantitative study. A uniform sample size of 30 households was sampled per kebele. In the qualitative study, both in-depth interviews (IDIs) and focus group discussions (FGDs) were used. A total of 121 IDIs were conducted with mothers of children less than two years old (n=56); health service providers at health centers (n=14); pregnant woman using PMTCT services through exit interview (n=14); TB patients through exit interview (n=14); and others (n=23). Furthermore, 42 FGDs were conducted with fathers of children less than two years old (n=14); urban health extension professionals (UHE-ps) (n=14); and PLHIV associations (women and men in separate groups) (n=14) identified from 14 kebeles in the study areas. The findings from the various methods were triangulated and used to address the study objectives.

The quantitative data generated through the household survey were entered into a computer program using SPSS Version 21. Data were tabulated and summarized primarily based on descriptive statistics. Frequencies were run for all the variables cross-tabulated by regions/city administrations.

Qualitative data generated through IDIs and FGDs were recorded and translated into English. All recorded sessions were transcribed by experts. The qualitative data analyses included triangulation of data across groups to complement and/or explain the quantitative results. Finally, some quotes from the qualitative findings were identified and presented along with the quantitative data to give more insight into the perceptions and practices of the community.

Main findings

Family planning methods

The majority of the respondents were able to mention the commonly used family planning methods, namely; pill (86.8%); injectable (79.7%); intrauterine device (IUD) (67.1%); implant (53.0%); and condom (46.1%). The majority of the study participants were knowledgeable about the benefits of contraceptive methods including delaying/spacing children (73.0%); economic/financial benefit (45.9%);and reducing unplanned pregnancies(37.0%).

About 64% (n=645) of the respondents reported that they or their partners ever used any contraceptive methods, of which injectables and pills constituted 58.8% and 41.2%, respectively. No male or female sterilization method was reported by the respondents. The current contraceptive use rate was about 66% among the ever-users. Health centers (55.3%), government hospitals (12.9%), and private health facilities (10.3%) were the major sources of contraception for the current users. Among the current non-users of contraceptives (n=218), the most commonly mentioned reasons for not using any method were being unmarried and the desire to have more children. The findings identified media such as television and radio as the primary source of information on family planning methods, followed by health workers at health centers. Only one-third of the respondents reported that UHE-ps discussed family planning with them in the past 12 months.

The findings indicate that some women in the community still don't use family planning methods so they can have more children; other women fear hypertension and the widespread rumors about the side effects of the contraceptives such as infertility, skin discoloration, weight gain, loss of appetite, pain, and anemia. Among the current non-users of contraceptives (n=218), about one-third reported intention to use them in the future. The majority of the respondents (90.2%) had a favorable attitude toward involving men in family planning endeavors, while the rest disfavored the participation of men. The findings also indicate that some women don't use the contraceptive methods, stating that its use is against their religion.

The main barriers to family planning constituted perception that family planning methods cause irregular and excessive menstrual bleeding, infertility, weight gain or loss, serious headache, face discoloration; poor knowledge about the use and benefits of the methods; religious concerns; low partner involvement; poor spousal communication about family planning methods; and long waiting hours at health facilities. In contrast, the main facilitators/motivators of the utilization of contraceptive methods identified include high awareness and knowledge about the methods, easy accessibility of family planning methods, economic problems associated with having many children and ability to limit family size through fertility control, involvement of religious leaders, and the continued concerted social mobilization efforts.

Antenatal care

The study findings indicate that the majority (75%) of the respondents knew about the timing of the first antenatal contact within the first three months immediately after conception. Public health centers (94.9%), government hospitals (54.1%) and private clinics/hospitals (28.8%) were the most commonly cited place for a pregnant woman to get ANC services. About 86% of the study participants stated that a pregnant woman should change or improve her daily diets by eating diversified foods such as vegetables, milk, and adopting iron and protein rich diets.

ANC coverage in the study population was relatively high. Among those who reported pregnancy within the past two years (n=228), almost all reported that they attended ANC, about 72% four or more times. The majority of the ANC seeking was done at health centers (54.4%), government hospitals (19.9%), and private health facilities (18.1%). In fact, about two-thirds attended ANC within the first three months of conception. Nearly one-third (31.9%) of them sought ANC after their fourth month of pregnancy. About 31% of the respondents/partners were visited by the UHE-ps during the most recent pregnancy, mainly at home.

About 24% of the respondents reported some foods (as well as alcohol and cigarettes) that should be avoided by a pregnant woman. While general indications are that there are no food prohibitions, coffee, and salty and fatty foods were mentioned as foods that are avoided. The majority of the respondents (86.3%) had the opinion that a pregnant woman should consult health workers for early check-up for her own health and the fetus, followed by check-up for early detection of some complications and screening for anemia, sexually transmitted infections (STIs), and HIV.

This formative assessment identified several barriers against the utilization of ANC services by pregnant women. The most notable include lack of knowledge about the use and benefits of ANC by some pregnant women, financial problems related to transportation, misconduct by some health professionals, long waiting time at the health facilities, low motivation among some health workers, and distant health facilitates. With regard to the motivating factors for ANC service utilization, the respondents indicated that health facilities are safe for a woman to check for her fetus in addition to the availability of qualified staff and close proximity of the facilities. The findings also revealed several motivating factors, such as availability of delivery and immunization services, free ANC counseling and screening services, easy accessibility of health facility, and benefits of immunization.

Health facility delivery

The study participants revealed the superiority of health facility delivery in contrast to home delivery. The respondent's knowledge about the advantages of health facility delivery was high. A larger percentage of the respondents (79%) stated lack of knowledge about the benefit of facility delivery as the main reason for home delivery. The participants also identified too much blood loss, use of unsafe delivery materials, and the possibility of death during delivery at home.

About 79% of the recent births were reported to be delivered in the health facilities (health centers, hospitals, and private health facilities). Almost two-third of the deliveries took place in public health facilities, while a small proportion of mothers used private hospitals for the delivery. However, 21% were delivered at home, mainly due to high transportation cost and the sudden onset of labor.

The majority of the respondents (93.4%) said that pregnant woman should deliver in the health facilities. However, about 5% still had the opinion that delivery should be done at home using traditional birth attendants (TBAs).

The main barriers to health facility delivery constituted transportation problem; shortage or lack of free ambulance; shortage or lack of delivery beds at health facilities; referral of mother with labor to other health facilities due to shortage of beds; preference of home delivery over institutional delivery by some women; lack of knowledge about the benefits of health facility delivery; distance to the health facility; financial problems; lack of equipment and inadequate medical supplies; forced home delivery due to sudden and fast labor; pressure from and support for TBAs for home delivery; pressure from elders in support of home delivery; bad experience during previous delivery at health facility; traditional belief that women who stays at home get help from God; and belief that babies would be exposed to cold if delivered in health facility.

The following factors were cited by the qualitative participants as motivators of health facility delivery: availability of medical care in case of complications during delivery, availability of ambulances for health for transport to facilities, support services from health professionals, UHE-ps, and the community including husbands and relatives, and policy support and health professionals encouragement for health facility delivery over home delivery.

Postnatal care

More than half of the respondents reported the main benefits of PNC as reducing maternal and neonatal mortality. The majority of the respondents were knowledgeable about the basic PNC services, which include counseling on exclusive breastfeeding (EBF), advice on subsequent postnatal contacts, family and social support, and counseling on nutrition, hygiene, and the use of family planning methods.

Among 650 respondents who reported delivery, a larger percentage of respondents/partners (68.9%, n=448) received a postnatal checkup from a health worker after the most recent birth, while about 30% received no PNC service. Only a few (14%) received the first postnatal check-up within 2-3 days after delivery, as per the recommendation. Overall, only 24% received PNC services within the first seven days of postpartum. More than half (54.2%) of the respondents reported that the first postnatal check-up was six weeks after delivery. With regard to the frequency of PNC checkups, 36.8% made it once and very few (14.7%) made it twice.

The main barriers to PNC identified through this study included perception of being healthy, lack of transport and financial problems, dissatisfaction with health services, lack of adequate counseling, belief that mother should stay at home for 40 days after delivery, lack of awareness and knowledge about the benefit of PNC, and long waiting time at health facilities.
The following were considered as the motivators of PNC service utilization: regular house-to-house visit by UHE-ps, availability of the health facilities, and high knowledge about the benefits of PNC.

Child immunization

Almost all respondents were aware of immunization services. Polio, measles, BCG and DPT were the most commonly cited vaccine-preventable childhood diseases. Health professionals were identified as the principal source of information on child vaccination. Health workers at private health facilities, UHE-ps, and family/friends were other sources of information about child vaccination. The qualitative participants also acknowledged the importance of child immunization to prevent childhood illnesses such as polio, measles, and TB. Very few respondents mentioned short-term side effects of vaccines, such as fever after vaccination, due to lack of knowledge about these side effects.

With regard to immunization coverage by respondent's recall for the most recent birth, the coverage of the specific antigens was high: BCG (92.3%), polio (95.7%), DPT (94.3%), and measles (89.5%). However, there were considerable variations between the regional states and city administrations. Despite the availability of vaccines, there are still unvaccinated or partially vaccinated children in the community. The majority of the study participants had a positive attitude, as they view immunization as being important for the health of their children.

Among some participants, lack of knowledge about the importance of vaccinating children and fear of side effects of the vaccines were identified as barriers to child immunization..The following motivating factors for child immunization services were identified in the qualitative findings: better understanding about the benefits of immunization by the community, door-to-door service by the health workers (UHE-ps and facility based clinical team), free vaccination services, and supportive visits and encouragement by UHE-ps.

PMTCT

The majority (81.4%) of the respondents had heard about PMTCT; while 18.6% reported that they had never heard about it. About 81% of the respondents knew that a pregnant woman infected with HIV can transmit the virus to her unborn baby. A high percentage of the respondents (76.1%) knew that an HIV+ pregnant woman can reduce the risk of transmission of the virus to her fetus by taking a medication such as ARV. Delivery in the health facility and avoiding breastfeeding were also cited as ways to reduce the risk of HIV transmission from the HIV+ woman to her unborn baby. Health centers, government hospitals, and private health facilities were cited as the main sources of PMTCT and ART services for HIV+ mothers and PLHIV. The main sources of information about PMTCT were facility based health professionals, television, and radio. The knowledge of the participants about the UHE-ps as a source of information on PMTCT was insignificant.

Most respondents indicated the positive attitude of husbands in encouraging pregnant women to seek PMTCT services. Nevertheless, a few participants revealed that husbands oppose the use of PMTCT services by their wives, mainly due to lack of knowledge and understanding about its benefits. The main barriers to PMTCT services include lack of knowledge and understanding about the benefits of PMTCT; HIV+ mother's fear of disclosure; confidentiality issues; fear of stigma and discrimination; poor counseling by health professionals; long waiting and shortage of time; lack of partner/husband support; transportation problems; dissatisfaction with the health services; and shortage of rooms for privacy issues at health facilities. The main motivators for the utilization of the PMTCT services include free of counseling, ART, and ARV prophylaxis, and the ability to deliver a healthy child even if the mother is HIV+.

HIV and AIDS

The findings indicate high knowledge about HIV and AIDS prevention and control. About 72% of the respondents mentioned condom use as an effective means of avoiding HIV infection, followed by faithfulness (64.9%), and abstaining from sex (60.8%). The majority (88.6%) of the respondents agreed that "A healthy looking person could be infected with HIV" and a high percentage of participants (65.5%) knew that HIV can be prevented by avoiding sharing of sharp objects like needle and razorblades. About 83% of the respondents had heard of ART, of which 58.2% and 39.1% heard from television and health workers, respectively. Furthermore, 34.9% and 34.5% received such information from radio and family/friend/colleagues, respectively. The knowledge of the participants about UHE-ps as a source of information on ART services was mentioned only by 9% of the respondents.

More than 95% of the respondents were willing to take care for a family member with HIV. About 55% and 34% of the respondents were willing to disclose their results to parents or spouse, respectively, if they were HIV infected. However, about 11% did not want to disclose their results to anybody. About 86% of the respondents reported that they had been tested for HIV; 36.5% of whom were tested within the last one year.

The main barriers to HIV and AIDS services included lack of knowledge and understanding; concerns about lack of confidentiality; fear of stigma and discrimination; lack of partner notification; shortage of medicine for opportunistic infections; fear of being positive after HCT; belief that holy water is superior to ART; belief that ART and holy water should not be used simultaneously; lack of interest in HCT; long waiting time and poor-quality services at health facilities; misconduct by health workers; belief that AIDS can be cured by faith; fear of side effects of ART; fear of parents, family, and community members in using ART; lifelong medication that is monotonous; fear of discontinuation of ART after starting it due to shortage; and distance and transportation problems.

The following were cited by the qualitative study participants as motivators of HIV and AIDS service utilization: availability of mobile voluntary counseling and testing (VCT) services and rapid test results; TV and radio promotional works on HIV and AIDS; knowledge about the availability of free ART services; better awareness and understanding about HIV and AIDS in the community; knowledge about the confidentiality of HCT services; and existence of youth anti-HIV clubs and PLHIV associations.

Tuberculosis

Knowledge of TB was generally high. The majority of the respondents were aware ofits signs and symptoms, source of information, and means of prevention. Cough (70%), cough of three or more weeks (33%), coughing up blood (35.5%), and weight loss (35.5%) were the main symptoms reported by majority of the respondents. The three most commonly cited means of prevention include covering mouth and nose when coughing or sneezing (66.2%), use of separate dishes rather than sharing utensils (50%), and opening windows at home (37.7%). The respondents were quite aware of worsening and prolonged treatment and also death with incomplete anti-TB treatment. A higher percentage of respondents (37%) also reported development of anti-TB drug resistance for its incomplete treatment. Television (59.8%), radio (37.1%), and health professionals (36.8%) constituted the principal source of information on TB.

About 12% of the respondents reported that they or anyone in the family had been diagnosed with TB, and preferred government health institution (hospital and health center) in the initial treatment seeking for the illness (diagnosis as well as treatment), followed by consultation at private health facilities (8.5%). Stigma about TB was found to be high. Most of the participants stated the people are usually scared of TB and had negative attitude toward people with it. Some participants also believed that TB is directly linked to AIDS. Social isolation and rejection as well as misconceptions about TB were prevalent. Some of the TB patients also said they hide their status and do not tell other people due to the fear that people might isolate themselves from them.

The fear of stigma was seen as a major barrier for TB patients in getting proper care and support. One of the problems facing TB patients was their confinement to isolated houses or rooms due to the fear that it would be transmitted to other family members or relatives. Promotional works on TB prevention and control, provision of free service and medication, desire to recover from the disease, family encouragement, and UHE-p referral of people with prolonged cough were cited as motivating factors of TB service utilization.

Non-communicable diseases

Both quantitative and qualitative findings show that the awareness about NCDs was very high. About 79% of the respondents had heard about NCDs. The most commonly cited NCDs constituted hypertension (74%), diabetes (73.4%), and cancer (35.5%). A larger percentage of the respondents also mentioned mental illness, kidney problems, gastritis, asthma, and alcoholism. The main reported risk factors associated with NCDs included dietary problems (49.9%), overweight and obesity (40.4%), physical inactivity (32.4%), and substance abuse including alcohol and tobacco (30.5%). The frequently cited risk factors of NCDs by the participants of the qualitative study included lack of physical activity and the consumption of salt, fat, and sugar. Some participants associated NCDs with stress and anger as well as over-consumption of coffee and tea. The frequently cited measures to prevent NCDs included consumption of healthy diets, physical exercise, controlling weight gain, and reducing or avoiding alcohol and tobacco use.

Only 25% of the respondents who heard about NCDs received medical checkup with the last six months. Overall, the health-seeking behavior of people for NCDs is poor because they don't visit health facilities unless they are sick. Respondents identified lack of knowledge about NCDs, low physical activity and exercise, cost and unavailability of drugs, poor habit of regular checkup, preference to traditional treatments for NCDs, the need for specialized care at hospitals, lack of early diagnosis and prompt treatment and concern about the side effects of the drugs to be taken over a longer or life long period as the main barriers to healthy lifestyle and NCD related facility based service seeking. There were very few motivating factors identified regarding use of NCD services, which include teaching and advice by health professionals, awareness creation by UHE-ps, losing weight to feel better and healthy, and the recent media increase in health promotion and education on NCDs.

Exposure to Urban Health Extension Program activities

The exposure of the study participants to the UHEP activities seemed to be low as this initiative is relatively new in urban areas. About 31% of the respondents reported that they had been visited by the UHE-ps at home within the past six months and 66.8% did not. Home visit by UHE-ps was generally low, particularly in Addis Ababa and Harari. About 13% and 32% of the respondents responded that they were visited at home by UHE-ps weekly or quarterly, respectively. The majority of the respondents knew about the type of information they received from UHE-ps, including child immunization, HIV and AIDS, hygiene, pit latrine construction and use, use of safe water, and family planning methods.

Sources of information for behavior change communication

This study also investigated respondent's main sources of information on maternal and child health (MCH), TB, HIV and AIDS, immunization, and NCDs to design appropriate BCC strategies. Television (78%), radio (52%) and health professionals at public and private health facilities (43.5%) were identified as the main sources of information. The three frequently mentioned radio stations the respondents listened to included Ethiopia radio, Fana Frequency Modulation (FM), and FM 97.1. Ethiopia radio was reported as the preferred radio station among majority of the respondents across all the study areas. UHE-ps and community meetings at village levels and schools were also mentioned as sources of information on BCC.

Recommendations

The findings of this study have yielded insight in the knowledge, attitudes, and practices (KAP) of the people and associated factors to stimulate health service utilization in the urban setting, which is useful for designing information, education, and communication (IEC)/BCC strategies to improve utilization of available services. After reviewing the findings of both quantitative and qualitative data and describing the KAP of the community as well as the related multiple factors that influence health service utilization in general and specific health services in particular, the following recommendations were offered for the general health service utilization and specific health services.

General health service utilization

The formative assessment revealed various factors affecting the utilization of different health services. Some of the factors are related to individuals, some are institution-related, and others are related to the cultural beliefs in the community. The community should be aware of the advantages and benefits of early health service utilization using relevant IEC/BCC interventions. The current strategic approach of using UHE-ps at community level to focus on demand creation from the community perspective on utilization of health services seems encouraging.

Family planning

The community should be continually educated about the importance and benefits of family planning methods and UHE-ps should be more involved in teaching the community about the importance and benefits of family planning methods. A mix of family planning methods should be available at the health facilities to address the preferences of the clients, and the quality of the family planning services should be improved and user-friendly.

Antenatal care

The formative assessment revealed widespread use of ANC, but short of the recommended timing of the first contact within the first three months following conception. Despite the high ANC coverage reported in this study, there are still women who don't seek ANC services due to several factors that can be amended by strong individual and community-level IEC/BCC interventions.

Health facility delivery

About 21% of the most recent deliveries occurred at home. This calls for a strong health education program to be continuously given to the community and pregnant women about the importance of institutional delivery to overcome the traditional beliefs that encourage home delivery.

Postnatal care

Continuous education about the importance of PNC, particularly during the first week after delivery, should be given to the mothers and the community. The UHE-ps should be activity involved in teaching and convincing mothers to visit the health facilities after delivery. IEC/BCC interventions should focus on societal and cultural factors that facilitate or hinder the health-seeking behavior after delivery.

Child immunization

Effective strategies to promote immunization uptake should be in place while addressing the child, maternal, and household factors that hinder full immunization of children. Outreach programs should be strengthened for child immunization in the community accompanied by continuous appropriate IEC/BCC interventions addressing the mothers and the community on the importance and benefits of child immunization.

PMTCT

This study highlights the importance of health professionals to convince pregnant mothers about the importance of VCT and the benefits of medication if the mother is HIV+. In addition, it highlights the importance of husband's attitudes when designing interventions to raise the use of PMTCT services by pregnant women. This may result in increased maternal health service utilization during pregnancies.

HIV and AIDS

Despite concerted efforts to improve access to HCT and ART medication, the continuous availability and uptake of HIV testing should be scaled up. Activities should be accompanied by relevant IEC/BCC interventions that improve the KAPs for HIV and AIDS services. Efforts should decrease negative attitudes toward PLHIV.

Tuberculosis

Social stigma about TB is widespread in the communities. Facility- and community-based education should be provided to improve knowledge and attitudes about TB prevention and control. Extensive health education is needed to inform the public about the disease, and should emphasize that TB is a curable disease. In order to eliminate social stigma against TB patients, joint efforts of media, health professionals, community, and TB patients are required. The study also highlights the importance of availability of TB services at low-level health facilities to improve accessibility of anti-TB drugs.

Non-communicable diseases

Most respondents knew about the NCDs, but the behavior for health check-ups was reported to be poor. A community-based health education program would be a practical way to increase the level of NCD knowledge within the communities. Television and radio should increase promotion of NCD prevention and control and focus on the benefits of healthy diet, physical exercises, and regular health check-ups, and the harmful effects of alcohol, cigarette smoking, and use of addictive substances.

1. INTRODUCTION

In the last decade, Ethiopia has taken critical steps in policy and programs to improve the country's health status. It has shown encouraging improvements both in the health service coverage as well as in the utilization of services at all levels of the health care system. Significant achievements have been realized in the expansion and construction of health facilities and improvement of the quality of health service provision. According to the Growth and Transformation Plan (GTP) of Ethiopia, which is the leading development plan of the government currently, the highest priority areas for health sector development program are maternal and newborn care, child health, and halting and reversing the spread of major communicable diseases such as human immunodeficiency virus and acquired immunodeficiency syndrome (HIV and AIDS), tuberculosis (TB), and malaria.[1] The program designed to support the health-related policies, strategies, and targets of the Ethiopia's GTP period is the Health Sector Development Plan (HSDP) IV (2010-2015).

One of the strategic objectives of the HSDP IV is to improve access to health services. Under this strategic objective, the government plans to improve accessibility of health services in order to ensure utilization.[2]HSDP IV is designed to provide massive training of health professionals to improve the provision of high-quality health services. Maternal and child health, and major communicable diseases such as HIV and AIDS, TB, and malaria are the priorities of HSDP IV. It is expected that better accessibility will lead to improvements in health and mitigate HIV and AIDS, TB, malaria, and other communicable and non-communicable diseases through increased use of prevention and treatment services from health facilities.

One of the most effective strategies for promotion of health services in Ethiopia is the Health Extension Program (HEP). This program is a primary vehicle for prevention, health promotion, behavioral change communication, and basic curative care. This program works to improve the health status of families with their full participation, using local technologies and the community's skills to produce and maintain their own health. The Urban Health Extension Program (UHEP) is also a priority in the current HSDP IV, as it is one of the instruments designed by the GOE to facilitate and ensure the achievement of priority health targets in urban settings. The UHEP plans to improve health quality by creating demand for essential health services through the provision of health information at a household level and access to services through referral to health facilities. HSDP IV focuses on scale-up of urban HEP in its implementation period. This priority is in response to the various socio-economic and demographic factors that stretched urban health services beyond their limit.

The HEP is one of the most innovative community-based health programs in Ethiopia. It is based on the assumption that access to and quality of primary health care in rural communities can be improved through transfer of health knowledge and skills to households. Since it became operational in 2004–2005, the program has had a tangible effect on the thinking and practices of rural people regarding disease prevention,

[1] Federal Democratic Republic of Ethiopia, Growth and Transformation plan 2009/10-2014/15, Ministry of Finance and Economic Development, 2010
[2] MOH, Health Sector Development Program IV, 2010/11-2014/15

family health, hygiene, and environmental sanitation. It has enabled Ethiopia to increase primary health care coverage from 76.9% in 2005 to 90% in 2010.
While the focus of initial phase of the HEP was on improving the health of the communities, particularly in rural areas, the (GOE) has started the scale up of the HEP in urban areas through UHEP. With 15 HEP packages, the UHEP was started in 2009 in seven regions of the country (Tigray, Amhara, Oromia, SNNPR, Harari, DD, and AA). The aim of the UHEP is to improve access to and quality of public health information and services for urban populations by deploying urban health extension professional (UHE-ps), who are female nurses, to provide the services through house-to-house health services.

The GOE is committed to achieve Millennium Development Goal 5 (MDG5) to improve maternal health, with a target of reducing maternal mortality ratio (MMR) by three-quarters over the period 1990 to 2015.[3] Achieving good maternal health requires high-quality reproductive health services. One of the main interventions to improve maternal health is provision of high-quality family planning methods. Antenatal care (ANC) coverage provides a measure of access to the health system and is critical to identify maternal risks and improve health outcomes for the mother and the newborn. The percentage of deliveries attended by skilled health personnel is a key intervention for reducing maternal deaths and it is considered as a proxy indicator for measuring improvements in maternal mortality. Measures of postnatal care (PNC) services are also critical elements on the continuum of care. According to Ethiopia's Demographic and Health Survey (DHS) 2011, neonatal mortality was 41 in urban areas while it was 43 in rural areas. The same is true for under-five mortality, which was 83 in urban and 114 in rural areas. Unmet need for family planning is 15%. Only 50% of urban Ethiopian women with a live birth in the past five years received the recommended four or more ANC visits. Approximately half of all urban Ethiopian women deliver at home.

Ethiopia is one of the countries in sub-Saharan Africa that have a generalized HIV epidemic with about one million people living with HIV. In 2010/11[4], the HIV incidence was estimated at 0.29% with an adult prevalence rate of 2.4% (1.9% among males and 2.9% among females). Women account for the larger proportion (59%) of people living with HIV. Wide variations in HIV prevalence exist across regions, ranging from 0.9% in Somali Region to 9.2% in Addis Ababa. Urban and rural HIV prevalence rates were estimated at 7.7% and 0.9%, respectively. The prevalence in urban settings is 4.2%, which is significantly higher than the national average. This shows that the urban health situation needs to be addressed side--by-side with the rural health priorities of the country.

Ethiopia is one of the TB high burden countries in the world, and third in Africa. According to the 2011 national TB survey of Ethiopia,[5] the prevalence of smear-positive TB among people ages 15 and above was found to be108/100,000, whereas prevalence of bacteriological confirmed TB within the same age group was 277/100,000. With extrapolation to the total population, including children (using data from routine reporting of case notifications), prevalence of smear-positive TB was estimated to be 63/100,000 population.

[3] MOH, Health Sector Development Program IV, 2010/11-2014/15
[4] MOH. HSDP IV Annual Performance Report, 2010/2011
[5] MOH and EHNRI. National Population Based TB Prevalence Survey, 2011.

Non-communicable diseases (NCDs) are the leading global cause of death. Current trends indicate the growing and disproportionate impact of the NCD epidemic in low- and middle-income countries. According to the World Health Organization (WHO) report, NCDs such as heart disease, stroke, cancers, chronic respiratory diseases, and diabetes are by far the leading cause of mortality in the world, and more than 80% of NCD deaths occur in low- and middle-income countries.[6]

In Africa, NCDs are rising rapidly and are projected to exceed communicable, maternal, prenatal, and nutritional diseases as the most common causes of death in the coming few decades. A large percentage of NCDs are preventable through the reduction of the four behavioral risk factors; tobacco use, physical inactivity, harmful use of alcohol, and unhealthy diet. These behavioral risk factors lead to four key metabolic/physiological changes: high blood pressure, overweight/obesity, and raised cholesterol and blood glucose levels. A double burden of disease is already emerging in Ethiopia[7] at the early stage of the epidemiological transition, with a mix of persistent, emerging, and re-emerging infectious diseases and increasing prevalence of chronic conditions and injuries.

JSI's Strengthening Ethiopia's Urban Health Program (SEUHP): This program is supported by the U.S. Agency for International Development (USAID) to improve the health status of the urban population in Ethiopia by reducing HIV/TB-related and maternal, neonatal, and child mortality and morbidity, as well as the impact of communicable and NCDs. The SEUHP is follow-on to the JSI-implemented USAID/UHEP program. The objective of JSI-SEUHP is to strengthen the GOE's UHEP by improving the quality, use, and management of community-level urban health and related services. The program plans to increase demand for facility-level health services. This will be accomplished with information, education, and communications/behavior change communications (IEC/BCC) that will improve communication skills of urban health extension professionals (UHE-ps) and engage urban champions to promote positive attitudes and practices, and educate target urban populations.

The role of BCC in increasing demand for facility-level health services in urban health context: One of the intermediate results of JSI's SEUHP is to increase demand for facility-level health services. One of the most effective interventions to deliver this result is implementation of an effective social and behavioral change communication strategy (SBCC). Effective BCC can influence people's knowledge, attitude, and practice (KAP) on essential health services. BCC interventions also improve sense-of-self efficacy on individuals to adopt new behaviors. Such interventions also stimulate community dialogue and discussion. This approach requires provision of demand generation via health education, communication materials, and awareness campaigns but also upgrading of health communication skills and capacity of Federal Ministry of Health (FMOH), regional health bureaus (RHB), zonal health departments (ZHD), city/town health offices (C/THO), kebele, and health center health promotion staff, as well as UHE-ps and other community agents such as health development armies (HDAs) and model families.

Expanding access to and utilization of IEC materials and tools contextualized to the urban health priorities is essential. This requires identifying the most essential actions to be adopted, developing key messages and IE/BCC materials, pre-testing the developed materials, and disseminating and using the materials and methods at scale. In addition, for successful implementation of the SBCC strategy and interventions, enhancing the communication, mobilization, and facilitation skills of frontline implementers including UHE-ps, the HAD, and champions who can promote the issues.

[6]WHO. Global status report on non-communicable diseases, 2010.
[7]MOH. HSDP IV Annual Performance Report, 2010/2011

To this end, the JSI-SEUHP has undertaken BCC assessment to clearly identify the IEC needs of its target urban dwellers; identify their practices and behaviors in accessing health care services; define their social networks and their risk setting that limit their utilization of health care services; and identify their health service needs to be able to design appropriate BCC approaches to promote increased utilization of essential health care services.[8]

2. OBJECTIVES

2.1. General objective

The general objective of the study was to assess the knowledge of and attitudes toward health care services and the current practices in utilizing health care services, specifically HCT, TB, ANC, PMTCT, health facility delivery, family planning (FP), PNC, EPI/immunization, antiretroviral therapy (ART), and NCD services in selected program implementation towns.

2.2. Specific objectives

The specific objectives of the study were to:

- Explore the common knowledge and attitudes of the urban communities toward the health care services, specifically HCT, TB, ANC, PMTCT, health facility delivery, FP, PNC, EPI/immunization, ART, and NCD services.
- Assess the current practices among urban communities in health care service utilization, especially services for HTC, TB, ANC, PMTCT, health facility delivery, FP, PNC, EPI/immunization, ART, and NCDs and barriers for utilization of these services.
- Identify the key benefits that motivate urban communities to adopt improved health service utilization practices.
- Explore opportunities and resources for BCC interventions to motivate and promote increased utilization of health services. What are the existing and potential BCC enablers (popular opinion leaders, etc.) and challenges (stigma/negative attitudes, power dynamics)?
- Assess and identify existing BCC approaches/practices and materials designed and implemented to promote increased utilization of health care services targeting urban communities.

[8]Essential health care services specifically refer to HIV testing and counseling (HTC), TB, antenatal care (ANC), prevention of mother-to-child transmission (PMTCT), institutional delivery, nutrition, family planning (FP), postnatal care (PNC), EPI/immunization, antiretroviral treatment (ART), and non-communicable diseases (NCDs).

3. METHODOLOGY

3.1. Study design and sampling methods

This study was conducted in July 2014 in JSI-SEUHP targeted cities/towns in five regional states (Oromia, Amhara, SNNPR, Tigray, and Harari) and two city administrations (Addis Ababa and Dire Dawa) in Ethiopia. In the cross-sectional study design, quantitative and qualitative research methods were used in combination to explore and understand community awareness, knowledge, attitudes, and current use of health services. The qualitative method was employed for further explanation and validation of the quantitative findings. The detailed methodological approaches pertaining to both research methods used in this formative assessment are presented below.

Quantitative study

The purpose of the quantitative study was to collect information on variables related to the knowledge of and the attitude toward essential health services as well as on variables related to the general service utilization targeting the general (i.e., reproductive age) population living in 22 urban towns (from a total of 28 project intervention areas) in the aforementioned regions and city administrations. A pre-tested structured questionnaire was used for quantitative data collection through house-to-house interview from the selected households. The data were collected on MCH (ANC, institutional delivery, PNC, EPI/Immunization, PMTCT, and FP), HIV and AIDS, TB, and NCDs.

Study participants

The target populations for the quantitative study was the general population (of reproductive age),and apart from the knowledge, attitudes, and practice variables regarding the various health services, the quantitative survey also collected data on HIV and AIDS and NCD-related prevention variables. However, this did not properly address the practice variables regarding care and treatment, as the target sample was not specific to those who actually needed the service.

Sampling strategy

Study population

The study population was people living in the 28 urban/towns (JSI-SEUHP targeted intervention areas) distributed in Oromia, Amhara, SNNPR, Tigray, Harari, Addis Ababa, and Dire Dawa regions and city administrations. The entire adult population residing in these areas was targeted for this study.

Sample size

The sample size considered for this study was 1,047 households (20-59 years old for women and 20-64 years for men). The sample size was calculated based on a single proportion sample size determination formula.[9]It was calculated by setting proportion of study variables (e.g., ever-utilized health service) at 50% (i.e., maximum variability to ensure largest sample size), and 0.05 margin of error at 95% level of confidence (associated z value 1.96, two-tailed test) using the following formula:

$$n = \frac{Z^2.p.q.}{d^2}$$

Where:

n= sample size
p= population proportion
q= 1-p
d= margin of error = 0.05
Considering Response rate= 80%
Design effect[10] = 2

Sample selection procedure

The sampling frame was the lists of kebeles in each region based on the 2007 Population and Household Survey obtained from the Central Statistical Agency of Ethiopia. The detail of the selection of kebeles, households, and respondents is presented below.

Stage 1: Sample allocation in regions by sample kebeles

Kebeles were used as the primary sampling units (PSUs).The target population for the study was adult individuals, including males and females residing in the 28 JSI-SEUHP intervention towns in the study regions and city administrations.
After determining the total sample size, the number of clusters (in this case kebeles[11]) and the required number of households per kebele were determined after considering the two important aspects described below.[12]

- As the number of households per cluster increases, sampling precision is lost or there might be increased sampling error because individuals within clusters tend to exhibit some degree of homogeneity with regard to background characteristics and possibly behaviors.
- The resources available to undertake the survey fieldwork determined the feasibility of the study. As the number of clusters to be visited increases, the survey cost also tends to increase. Hence, the survey costs were minimized when the number of clusters was kept minimal.

[9]Bhandarkar, P. L. & Wilkinson, T.S. (1999). Methodology and Techniques of Social Research. Delhi: Himalaya Publishing House.
[10]It provides a correction for the loss of sampling efficiency resulting from the use of cluster sampling instead of simple random sampling.
[11]Equivalent to "ward"
[12]Magnani, Robert (1997). Sampling Guide. Food and Nutrition Technical Assistance.

From a sampling precision point of view, smaller clusters are preferred over larger clusters. Thus, for a fixed target sample size of 1,000 households, a design with 50 clusters of 20 households each would be preferred to one with 20 clusters with 50 households, which would be preferred over one with 10 clusters of 100 households. It is crucial to have a figure that ensures that samples of target group members are sufficiently spread across enough clusters so that survey estimates are not improperly influenced by a handful of clusters. It is also advisable that each cluster has the same number of sample elements owing to the fact that it relates to avoidance of estimation bias by helping to ensure a self-weighting sample.

The total sample was allocated proportionally to the size of each of the geographic locations in order to guarantee representation of important domains, in this case regions. Based on the above points, assuming an equal selection of households from the kebeles, which was set at 30 households, the total number of kebeles or PSUs for each region is presented in Table 3.1 below. The total PSUs or kebeles required for this study was35. The kebeles were selected in each region by probability proportionate to size (PPS)[13] sampling method.

Table 3-1: Study area population proportion and total number of kebeles for the study

Regions (29 sites)	Total population [14]	Adult population proportion (age 20+)[15]	Target population	Target group proportion (%)	Sample proportion	Kebeles[16](adjusted to the next whole no.)
Amhara[17]	965,826	0.50	482,913	23%	218	8
Oromia[18]	904,383	0.48	434,104	20%	196	7
SNNP[19]	591,702	0.45	266,266	12%	120	4
Tigray[20]	463,039	0.49	226,889	11%	102	4
Harari	110,457	0.58	64,065	3%	29	1
Dire Dawa	262,884	0.56	147,215	7%	66	3
Addis Ababa[21]	820,800	0.62	508,896	24%	229	8
Total	**4,162,426**	**-**	**2,130,348**	**100%**	**960**[22]	**35**

[13]Large clusters are given higher probability of selection
[14]Central Statistical Agency, 2012 (the figures only considered those project intervention areas, i.e., 30 cities)
[15]2007 Population Census
[16]For the calculated number of EAs in decimal points of greater than zero, the next whole number was considered
[17]Bahir Dar, Debre Markos, Dessie, Gondar, Debre Birhan, Kombolcha, and Debre Tabor
[18]Adama, Jimma, Nekemte, Shashemene, Bishoftu, Asela, & Sebeta
[19]Arbaminch, Hawassa, Hossana, Wolayta Sodo, & Dilla
[20]Adigrat, Axum, Mekelle, Shire, & Maichew
[21]Arada, Yeka, & Akaki Kality Sub Cities
[22]The actual target sample size exceeds by ninety

Stage 2: Selection of the households

Study households were randomly selected from the PSUs and they formed the secondary sampling units (SSUs). An equal proportion of households were selected from each kebele, i.e., thirty households per kebele. Once kebeles were selected, random-walk method using systematic sampling was applied to select households by choosing random starting points from the possible starting points (e.g., landmarks such as churches, mosques, junctions,).

Random-walk method entails: 1) randomly choosing a starting point and a direction of travel within a sample cluster; 2) conducting an interview in the nearest household; and 3) continuously choosing the next sampled household for an interview until the target number of interviews has been obtained. This approach could proceed by selecting the starting point from a boundary map. When a map of the sample cluster is available, a number of possible starting points should be selected at different, easily identifiable locations, and from these a starting point should be randomly chosen. The advantage is that supervisory personnel can choose the starting point before the field work begins, reducing any risk of bias that could arise when starting points are chosen on the basis of convenience as opposed to randomly.

Stage 3: Selection of the respondent

The individual respondent formed the ultimate sampling units (USUs). There are various methods of randomizing respondent selection at household level for households with more than one person age above 20+ years, and the Kish Grid[23] method was employed for this assessment (Table 3.2). Only one survey questionnaire was administered per household.

Table 3-2: Three-stage cluster sampling scheme

Type of survey	Target population	Cluster definition	Sampling frames (clusters)	Cluster sample selection	Sample element selection	Respondent selection
General population survey	Population with age 20+ living in the project intervention area (i.e., in the 30 cities)	Kebeles	List of kebeles in all cities stratified by regions	Probability proportional to kebele size sampling method by region (to ensure representation of each region)	Random-walk method by selecting starting points within a selected kebele and choosing an equal number of households from each sampled kebele (i.e. 30 households)	Random sampling using Kish Grid

[23]The technique involves constructing a list of eligible individuals at a particular address, ordered by age, and then selecting according to the serial number of the household itself. The system is devised so that all individuals in a household have an equal chance of selection. Its major difficulty is that the individual who supplies the household listing is often not the one to be interviewed.

Qualitative study

The main purpose of the qualitative aspect of this study was to generate detailed information on the health service utilization in the assessment areas. In addition to cross-validating information and findings from the quantitative method, the qualitative study was used to gather information on barriers and motivating factors for health service utilization. It was also used to address the existing opportunities and resources to implement and strengthen SBCC interventions to promote health service utilization in the target regions and cities. The qualitative methods incorporated data from different perspectives including the target population, program implementers, and stakeholders, and collected relevant information that might not have been obtained using the quantitative questions.

Qualitative study participants

Mothers with child less than two years of age

Mothers who have a child younger than two years of age were main sources of information because they were thought to have a better health service utilization experience and opportunity compared to the general population, especially on services related to family planning, ANC, PMTCT, delivery, PNC, and EPI. This was designed with intention to minimize recall bias and finding as many mothers as needed in a kebele who gave birth in the last two years.

Fathers with child less than two years of age

This group was selected to capture information on accessibility, quality, and facilitators and barriers of health services utilization. Fathers' involvement was also crucial because of their role in decisions to access maternal and child health services.

Health service providers at health center level and urban health extension professionals

Information regarding the challenges and opportunities related to provision and utilization of health services, socio-cultural, and traditional factors that either motivate or hinder the community to access and utilize basic health services and other BCC interventions, and health care needs and information utilization practice of the community were gathered from health service providers at health centers and from UHE-ps.

Government representatives (Urban Health Directorate at FMOH, RHBs, and city/town health bureau)

Representatives of the regional health bureaus and city/town health offices were selected to obtain information about the trends in health service utilization in the community. In addition, these respondents provided information on the government of rate and trend of health service utilization and SBCC interventions.

People living with HIV (PLHIV)

People living with HIV (PLHIV) were also interviewed to generate data on experiences related to HIV and AIDS prevention, care, and treatment, and HIV and AIDS and TB services.

Pregnant women using PMTCT services and TB patients

Pregnant women using PMTCT and TB patients asked about their knowledge, attitude, experiences with barriers and motivators of service utilization and health care needs.

Data collection methods

Qualitative research methods (in-depth interviews [IDIs] and focus group discussions [FGDs]) were conducted to collect data from different target groups in the population listed above to maximize heterogeneity in terms of study population, partners, and program implementers. These methods were also useful in generating information that could be used to triangulate and cross-validate data from the quantitative methods. Semi-structured discussion guides were developed, field tested, and used by trained moderators and co-moderators across the groups. Each session of the IDIs and FGDs were audio taped.

In-depth interviews (IDIs)

A total of 121 IDIs were conducted to assess participants' knowledge, experience, and opinion. These individual interviews were useful for discussing issues that might have been too personal for a group. Innovative interview techniques such as free listing[24] were used, and helped generate a range of information while making the interview process lively and interactive.

The IDIs were conducted with mothers of children less than two years of age, health service providers at health centers, officials at federal, regional and town/city health bureaus, pregnant women using PMTCT services, and TB patients. In 14selected towns/cities IDIs interviews were conducted with different health service providers in rotation to address the three broad service categories of this formative assessment (MCH, HIV and AIDS, and NCDs).

It would be difficult to recruit pregnant women who currently use PMTCT service and people who are TB patients unless at health facilities. Hence, some of the IDIs were conducted as exit interviews as targeted patients finished appointments. The exit interviews were conducted using semi-structured interview guides prepared for the respective subpopulations. Table 3.3 shows the number of IDIs conducted along with each target group.

[24]Free listing is a systematic data collection method where the informant is asked to list all the different components of the health service utilization and BCC practices. For example, all the different BCC activities in their area, main challenges faced in accessing health services in the community.

Table 3-3: Number of in-depth interviews

S. No.	Study participants	Number of IDIs per town/city	Achievements	Total number of IDIs
1	Mothers with children less than two years of age	2	2	28
2	Pregnant women	2	2	28
3	Health service providers at health centers(in rotation; MCH, HIV and AIDS, and NCDs)	1	1	14
4	Pregnant woman (using PMTCT services) exit interview	1	1	14
5	TB patients (exit interview)	1	1	14
6	Federal Ministry of Health	-	1	1
7	Regional health bureaus	-	5	5
8	City/town health offices (C/THOs)	1	1	14
9	Addis Ababa subcity	3	3	3
Total				**121 IDIs**

Focus group discussions (FGDs)

Forty-two FGDs, each consisting of 6 to 8 participants, were conducted to collect data from UHE-ps, PLHIV, and fathers with a child less than two years of age. Participants of the group discussions were sampled randomly as detailed in the sampling section of this report. Projective methods were used to identify barriers and motivators for health service seeking behaviors and health service utilization among discussion participants. This discussion technique helped to clear vague, ambiguous, and unstructured ideas during the discussion in which the subjects "projects" the participants' personality, attitude, and opinions. Table 3.4 shows the number of FGDs conducted for each target group.

Table 3-4: Number of focus group discussions

S. No.	Study participants	Number of FGDs per town	Achieved	Total number of FGDs
1	Fathers with child less than two years of age	1	1	14
2	Urban health extension professionals (UHE-ps)	1	1	14
3	PLHIV associations (women and men in separate groups)	1	1	14
Total			**42 FGDs**	

Inventory of BCC practices and materials

An inventory of available BCC practices and materials was collected using a checklist with the town/city health bureau and during health facility visits. The checklist was also used to collect information through observation. The variables of interest here were what available BCC activities and materials were used, the respective implementing agencies, the targeted population group, and other related information that could inform the development of the SBCC strategy.

Document review

Documents relevant to the program were identified in consultations with JSI-SEUHP. The documents related to the program, like program documents, health policies, similar studies on primary health care services, and epidemiological data were reviewed and analyzed. The review informed the study by providing information from different time periods; it also allowed in-depth understanding of the program and thus guided the study.

Sampling strategy

Sampling of mothers for IDIs

Based on realities on the ground, sampling of mothers with a child less than two years followed either of the two approaches below. In order to reduce researcher bias in the selection process and to get geographically representative respondents, systematic random sampling was used. Four mothers were selected in each study town for the IDIs. It was assumed that the UHE-ps have a list of lactating mothers in their catchment areas, and before sample selection, lists of mothers from different UHE-ps were consolidated. This method was expected to represent variations. Where there was no list of lactating mothers, preparation of fresh list of sampling frame was conducted in collaboration with UHE-ps, HDA, health center information, community-based organizations (CBOs), and local informants in the community. This approach enriched the sampling frame by providing names of mothers who were not utilizing any service at health centers.

The respondent selection procedure used for both approaches is presented below:

Step 1: Calculate the sampling interval, reckoned by dividing the total number of mother on the list by the number of mothers to be sampled (e.g., if the list of mothers is 20 and the sample size for each kebele is 4 mothers; dividing 20 by 4 gives a sampling interval of 5).

Step 2: Select a random serial number between one and the sampling interval from the list of mothers from which sampling will start, say number 3.

Step 3: Starting from number three select every fifth mother on the list. Thus, the women who are numbered 3, 8, 13, and 18 will be sampled.

Sampling of fathers for FGDs

Selection of fathers with a child less than two years of age involved the same procedure for selection of mothers, indicated above. However, unlike the mothers, who were interviewed mostly in their household, fathers were directed to a pre-identified gathering.

Sampling of UHE-ps

The UHE-ps were selected from different kebeles of each town where the study was conducted. The FGDs were organized in collaboration with JSI field staff. If there were more than eight UHE-ps in a given town, random selection was used.

Sampling of other study participants

Health service providers and federal, regional, and woreda health office representatives were also selected because of their knowledge, roles, and responsibilities to the participants as related to the study objectives. Health providers at the health center working on MCH, HIV and AIDS, and NCD were selected in rotation in every selected town. So if the health provider in the first town was interviewed about MCH, the health provider with experience in HIV and AIDS was interviewed from the second town, and so on.

3.2. Training of field personnel

Four-day training was organized to acquaint the field team with key concepts, issues, and procedures of the survey. It combined theoretical and practical approaches to help participants understand and internalize the objectives of the study. The first day of the training was conducted jointly with both quantitative and qualitative data collection teams. The remaining days of training were held in different rooms with different trainers. The training covered the following major subject areas:

- Introduction to the objectives of the assessment
- Basic background on primary health care
- Sampling method employed
- Key interviewing and facilitation skills
- Enumerator/interviewer/moderator roles and responsibilities
- Ethical considerations (informed consent, privacy, and potential challenges)
- Survey instrument and discussion guides (a section-by-section discussion of interpersonal, behavioral, and knowledge questions)

The training methodologies included PowerPoint presentations, discussion, group exercise and presentation, recap by participants, and multimedia presentation. The group work and recaps were instrumental in actively engaging the participants.

In-depth discussions on the questionnaire and guides with the training participants contributed to the refinement of the contents and editorial corrections. The process ensured common understanding on each

question, and contextualized the questionnaire. It was also instrumental in identifying translations and editing errors.

The pilot was conducted in two selected sub-cities (Bole and Nifas Silk Lafto) in Addis Ababa and Bishoftu. – both non-study cites Each training participant did a practice interview, which helped them internalize the instrument and gave them a chance to identify challenging sections and question of the questionnaire.

In total, 24 people (20 survey enumerators and four supervisors) were trained for the quantitative field data collection, and 10 (four moderators and note-takers and six interviewers) for the qualitative field data collection. There were also four back-checkers and three reserves (two for quantitative and one for qualitative data collection) trained for the field work.

3.3. Data processing and analysis

Quantitative data analysis

The quantitative data generated through the household survey were entered into a computer program using SPSS Version 21.Data were tabulated and summarized primarily based on descriptive statistics, i.e., percentage distribution, means, standard deviations, and cross-tabs, and presented using tables. Frequencies were run for all the variables cross-tabulated by regions/city administrations.

Qualitative data analysis

Qualitative data generated through IDIs and FGDs were recorded and translated into English. All recorded sessions were transcribed by experts. In the analytic phase of the study, the English transcripts of the data were used. Co-investigators and field coordinators were engaged in preliminary analysis of the data during the fieldwork. Analytic strategies used in the field included a continuous review of field notes to determine if research objectives were being met and if new interview questions need to be added, and to further research emergent ideas and to decide if the study needed more data.[25]

The study used thematic analysis, which describes and interprets participants' views based on emerging themes. This process generated themes whose interpretation of interrelation provided insights into the issue under scrutiny. Questions relating to health service utilization in the data were systematically sought. The following procedures were used during the qualitative data analysis:

- Preparing and organizing the data
- Having an overall understanding of the data
- Developing categories and a coding scheme
- Testing the coding scheme
- Coding the data
- Displaying data
- Detailed analysis

[25]Alan Bryman & Robert G.Burgess (eds.) Analyzing qualitative data, London: Routledge 1994 Page 7

Independent coders read the transcripts and created separate codebooks with operational definitions. The codebook consisted mainly of deductive codes generated from research questions and the moderator guide. All the IDIs and FGDs transcripts were then coded independently using the codebook to assign codes to appropriate segments of text in the transcript. Finally, computer software was used to organize and manage the transcripts. The inventory of BCC practices were summarized in a table format focusing on specific health care services, type of BCC materials, target audiences, responsible organization, and town and site available.

The data presentation included triangulation of data across groups (target population, program implementers, and stakeholders) to complement and/or explain each of quantitative or quantitative results. Data on barriers and facilitators for behavioral outcomes were triangulated across the study targets. Similarly, data on barriers and facilitators for program implementation and sustainability were triangulated across the different groups. Qualitative data from the target population were triangulated with the quantitative findings and used to confirm or explain the quantitative findings as appropriate. Finally, some quotes from the qualitative findings that could explain the context of the health service utilization were identified and presented in respondents' own words to provide insight into the perceptions and practices of the community along with the quantitative data.

3.4. Ethical considerations

Essential ethical issues to safeguard participants' rights and concerns were considered during research:

- Prior approval and permission for ethical and logistical reasons were obtained from regional and local authorities for the study.
- Informed consent of participants was requested before starting interviews and discussions. Verbal informed consent was obtained after consent forms were read aloud to participants by interviewers or discussion moderators. For people below the age of 18, consent was obtained from a parent or guardian.
- Each participant was assured that the confidentiality of information they shared would not be passed to other people, and that no personal identifiers were recorded or retained from any study participants.
- All interviews conducted with vulnerable populations were consented to and privacy, confidentiality, and anonymity were maintained.
- Participants were informed about the benefits that might accrue to them as a result of participating, as well as risks they might face.
- All interviews were conducted in a place where the process could not be watched by other people. Participants were encouraged to express themselves freely and assured they could make statements without facing negative consequences.
- Permission to undertake the survey was obtained from every relevant authority at all levels (regional, woreda, and kebele).
- The participants were informed of their rights, including refusing to participate, terminating the interview, and refusing to answer any question they were not comfortable with.
- Measures to assure confidentiality of the information after data collection were taken.

3.5. Quality assurance

In effort to attain high-quality data, different mechanisms were deployed during the design stage, data collection, and post fieldwork. A summary of these mechanisms follows.

Recruitment of enumerators: The recruitment process was conducted to ensure that interviewers, discussion moderators, and supervisors had the qualities and attributes to fulfill their respective responsibilities.

Training field personnel: Interviewers, discussion moderators, and supervisors participated in a four-day training on the basic objectives of the study, procedures, and ethical considerations.

Pre-testing: The survey tools**, i**nterview, and FGD guides and checklists were piloted prior to the actual fieldwork.

Fieldwork quality assurance: The quality of fieldwork has a definite effect on the quality of the result. Thus, fieldwork quality assurance procedures were designed and adopted.

- **Supervisors–**Supervisors were assigned to oversee the field exercise and monitored interviews and group discussions. They conducted spot checks and accompanied interviewers and discussion moderators to ensure that they adhered to the tools, guides, and procedures, and probed sufficiently. Ten percent of the total interviews and group discussions were subjected to this process.
- **Back-checkers–**The back-checkers revisited selected households and approached study participants a few days after interviews and discussions. They inquired whether reported study participants were actually interviewed or participated in group discussions. Back-checking was done for 5% of study participants.
- **Debriefing–**A debriefing session was held at the end of each field day. The session, led by the supervisors and/or research coordinators, was an opportunity for interviewers, moderators, logistics coordinators, and supervisors to reflect their observations, challenges, and other issues.
- **Use of time stamps-**Transcripts from the qualitative study had time stamps on major interview sections. Moreover, the accuracy of the transcriptions was cross-checked against audio recordings. Ten percent of total interviews were subjected to this process.

4. RESULTS

4.1. Characteristics of study participants

The study covered five regional states (Amhara, Oromia, Tigray, SNNP, and Harari) and two city administrations (Addis Ababa [AA] and Dire Dawa [DD]) in Ethiopia, which were also used for unit of data analysis and presentation. Overall, the survey planned to interview 960 respondents. However, 1,047 households were included in the study mainly due to the use of proportional sampling technique. The largest number of households were surveyed in AA city administration (n=239) and Amhara Region (n=239), followed by Oromia Region (n=209). Tigray and SNNP regions each constituted 120 households, while DD and Harari represented 90 and 30 households, respectively. The sample distribution across the different regional states and city administrations was as intended because of the focus of the JSI-SEUHP on AA and Amhara areas. This study was conducted in 35 kebeles distributed in 22 JSI-SEUHP-targeted towns/cities in five regional states and two city administrations (see Annex I).

Table 4.1 presents the distribution of the socio-demographic details of the sample households and their members. Specifically, it presents information on sex composition, age structure, religion, marital status, education and literacy, occupation, and average monthly income of the respondents. Study participants had similar characteristics across the study areas. About 74% of the study sample was composed of females, ranging from 67% in AA to 87% in Harari. The age of the participants ranged from 20 to 64 years. Approximately, 89% of the sample was between the ages of 20-49, while 11% was older than50 years. The mean age for the overall sample was 32.4 years (ranging from 30.2 in Tigray to 33.7 in both AA and Oromia), with a median age of 29.Beginning with the age 20-29 (51.3%), the proportion of respondents gradually dropped in older age groups.

The majority of the respondents (71.6%) were followers of Orthodox Christianity, while the remaining respondents reported Muslim (15.3%), Protestant (11.9%), and other (1.2%). There was a great regional variation in the religious composition of the respondents, where about one-third in Harari were Muslim and about 42% were Protestants in SNNPR. More than half (53.1%) of the respondents were married, while roughly one-third (31%) reported being never married or single. Among survey respondents, 13.5% had no formal education, while 84% reported having at least a primary or higher education. The percentage of respondents reporting no formal schooling ranged from 8.3% in Tigray to about 20% in DD and Harari.

Table 4.1 also presents the occupational status and average monthly income of the respondents and the family/households, respectively. About one-third (29.6%) of the sample respondents were housewives, while professionals, businesspersons and students constituted about 23%, 19%, and 11%, respectively. The average monthly income of the family ranged from less than 500 Birr (11%) to more than 2500 Birr (24%).About 10% of the overall respondents either didn't answer or know the average family's monthly income.

Table 4-1: Socio-demographic information by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Sex								
Male	79 (33.1)	53 (22.2)	56 (26.8)	28 (23.3)	31 (25.8)	24 (26.7)	4 (13.3)	275 (26.3)
Female	160 (66.9)	186 (77.8)	153 (73.2)	92 (76.7)	89 (74.2)	66 (73.3)	26 (86.7)	772 (73.7)
Age in years								
20-29	103 (43.1)	135 (56.5)	98 (46.9)	70 (58.3)	72 (60.0)	46 (51.1)	13 (43.3)	537 (51.3)
30-39	76 (31.8)	54 (22.6)	50 (23.9)	34 (28.3)	22 (18.3)	20 (22.2)	12 (40.0)	268 (25.6)
40-49	33 (13.8)	25 (10.5)	35 (16.7)	6 (5.0)	14 (11.7)	12 (13.3)	3 (10.0)	128 (12.2)
50-59	20 (8.4)	23 (9.6)	22 (10.5)	9 (7.5)	11 (9.2)	11 (12.2)	2 (6.7)	98 (9.4)
60-69	7 (2.9)	2 (0.8)	4 (1.9)	1 (0.8)	1 (0.8)	1 (1.1)	0 (0.0)	16 (1.5)
Mean (SD)	33.7(10.9)	31.5(10.2)	33.7(11.1)	30.2 (9.9)	30.7(10.7)	33.1(10.8)	32.8 (8.8)	32.4 (10.6)
Median	31.0	28.0	30.0	27.0	25.5	10.8	30.0	29.0
Religion								
Orthodox	192 (80.3)	202 (84.5)	138 (66.0)	105 (87.5)	62 (51.7)	33 (36.7)	18 (60.0)	750 (71.6)
Muslim	16 (6.7)	25 (10.5)	40 (19.1)	11 (9.2)	3 (2.5)	55 (61.1)	10 (33.3)	160 (15.3)
Protestant	25 (10.5)	11 (4.6)	31 (14.8)	2 (1.7)	53 (44.2)	1 (1.1)	2 (6.7)	125 (11.9)
Other	6 (2.5)	1 (0.4)	0 (0.0)	2 (1.7)	2 (1.7)	1 (1.1)	0 (0.0)	12 (1.2)
Marital status								
Never married	84 (35.1)	78 (32.6)	46 (22.0)	48 (40.0)	37 (30.0)	24 (26.7)	9 (30.0)	326 (31.1)
Married	119 (49.8)	118 (49.4)	130 (62.2)	50 (41.7)	67 (55.8)	54 (60.0)	18 (60.0)	556 (53.1)
Widowed	14 (5.8)	17 (7.1)	20 (9.6)	10 (8.3)	10 (8.3)	4 (4.4)	2 (6.7)	77 (7.4)
Divorced	14 (5.8)	19 (7.9)	9 (4.3)	6 (5.0)	4 (3.3)	8 (8.9)	0(0.0)	60 (5.7)
Separated	8 (3.3)	7 (2.9)	4 (1.9)	6 (5.0)	2 (1.7)	0 (0.0)	1 (3.3)	28 (2.7)
Education								
No education	23 (9.6)	37 (15.5)	35 (16.7)	10 (8.3)	13 (10.8)	17 (18.9)	6 (20.0)	141 (13.5)
Writing/reading	9 (3.8)	7 (2.9)	5 (2.4)	3 (2.5)	1 (0.8)	3 (3.3)	0 (0.0)	28 (2.7)
Primary	52 (21.8)	46 (19.2)	64 (30.6)	28 (23.3)	37 (30.8)	31 (34.4)	3 (10.0)	261 (24.9)
Secondary	77 (32.2)	73 (30.5)	70 (33.5)	44 (36.7)	39 (32.5)	27 (30.0)	12 (40.0)	342 (32.7)
Tech/vocational	22 (9.2)	32 (13.4)	14 (6.7)	4 (3.3)	12 (10.0)	4 (4.4)	1 (3.3)	89 (8.5)
Higher	56 (23.4)	44(18.4)	21(10.0)	31 (25.8)	18 (15.0)	8 (8.9)	8 (26.7)	186 (17.8)
Occupation								
Housewife	67 (28.0)	68 (28.5)	73 (34.9)	38 (31.7)	33 (27.5)	24 (26.7)	7 (23.3)	310 (29.6)
Professional	73 (30.5)	57 (23.8)	42 (20.1)	16 (13.3)	33 (27.5)	15 (16.7)	7 (23.3)	243 (23.2)
Business person	35 (14.6)	46 (19.2)	46 (22.0)	25 (20.8)	17 (14.2)	27 (30.0)	7 (23.3)	203 (19.4)
Student	24 (10.0)	19 (7.9)	15 (7.2)	22 (18.2)	23 (19.2)	5 (5.6)	3 (10.0)	111 (10.6)
Daily laborer	21 (8.8)	17 (7.1)	17 (8.1)	7 (5.8)	9 (7.5)	12 (13.3)	2 (6.7)	85 (8.1)
Unemployed	12 (5.0)	20 (8.4)	14 (6.7)	9 (7.5)	4 (3.3)	7 (7.8)	3 (10.0)	69 (6.6)
Other	7 (2.9)	12 (5.0)	2 (1.0)	3 (2.5)	1 (0.8)	0 (0.0)	1 (3.3)	26 (2.5)
Average monthly income in Birr								
<500	18 (7.5)	20 (8.4)	28 (13.4)	13 (10.8)	22 (18.3)	11 (12.2)	3 (10.0)	115 (11.0)
501-1,500	67 (28.0)	75 (31.4)	69 (33.0)	45 (37.5)	33 (27.5)	21 (23.3)	8 (26.7)	318 (30.4)
1,501-2,500	55 (23.0)	66 (27.6)	59 (28.2)	22 (18.3)	35 (29.2)	21 (23.3)	7 (23.3)	265 (25.3)
2,501-4,000	39 (16.3)	45 (18.8)	16 (13.3)	16 (13.3)	15 (12.5)	14 (15.6)	6 (20.0)	151 (14.4)
4,001-5,500	11 (4.6)	13 (5.4)	1 (0.5)	1 (0.8)	2 (1.7)	4 (4.4)	1 (3.3)	42 (4.0)
5,501-7,000	10 (4.2)	8 (3.3)	4 (1.9)	1 (0.8)	0 (0.0)	3 (3.3)	1 (3.3)	24 (2.3)
Above 7,000	15 (6.3)	4 (1.7)	6 (2.5)	1 (0.8)	2 (1.7)	5 (5.6)	0 (0.0)	33 (3.0)
Did not answer	5 (2.1)	6 (2.5)	2 (0.8)	7 (5.8)	1 (0.8)	3 (3.3)	2 (6.7)	32 (3.1)
Did not know	19 (7.9)	2 (0.8)	14 (6.7)	14 (11.7)	10 (8.3)	8 (8.9)	2 (6.7)	69 (6.6)
Total, n (%)	**239 (22.8)**	**239 (22.8)**	**209 (20.0)**	**120 (11.5)**	**120 (11.5)**	**90 (8.6)**	**30 (2.9)**	**1,047 (100)**

Table 4.2 provides information on birth history and number of living children. A high percentage of respondents (62%) reported having ever given birth, while approximately 38% of the respondents reported that at the time of the survey, they had never given birth. Nearly two-thirds (58%) of respondents reported having one or two living children. About a quarter (26.6%) of respondents reported having three to four living children, and about 15% reported having five or more children living. In fact, the average number of living children for the total sample was 2.5, ranging from 2.1 in Amhara to 3 in SNNP.

Table 4-2: History of giving birth and number of living children by regional state/city administration

Variable	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Ever given birth								
Yes	144 (60.3)	145 (60.7)	139 (66.5)	68 (56.7)	75 (62.5)	61 (67.8)	18 (60.0)	650 (62.1)
No	95 (39.7)	94 (33.5)	70 (43.3)	52 (37.5)	45 (32.2)	29 (40.0)	12 (37.9)	397 (37.9)
Total, n (%)	**239 (22.8)**	**239 (22.8)**	**209 (20.0)**	**120 (11.5)**	**120 (11.5)**	**90 (8.6)**	**30 (2.9)**	**1047 (100)**
Number of living children								
1	44 (30.6)	59 (40.7)	38 (27.3)	21 (30.9)	21 (28.0)	18 (29.5)	6 (33.3)	207 (31.8)
2	45 (31.3)	45 (31.0)	32 (23.8)	21 (30.9)	12 (16.0)	12 (19.7)	6 (33.3)	173 (26.6)
3	28 (19.4)	16 (11.0)	22 (15.8)	10 (14.7)	9 (12.0)	8 (13.1)	3 (16.7)	96 (14.8)
4	17 (11.8)	13 (9.0)	12 (8.6)	12 (17.6)	10 (13.3)	11 (18.0)	2 (11.1)	77 (11.8)
5 or more	10 (6.9)	12 (8.3)	35 (25.2)	4 (5.9)	23 (30.7)	12 (19.7)	1 (5.6)	97 (14.9)
Mean	2.3	2.1	2.8	2.4	3.0	2.8	2.2	2.5
Total, n (%)	**144 (22.2)**	**145 (22.3)**	**139 (21.4)**	**68 (10.5)**	**75 (11.5)**	**61 (11.5)**	**18 (2.9)**	**650 (100)**

In the qualitative study, both IDIs and FGDs were used. A total of 121 IDIs were conducted with mothers with children less than two years of age (n=56); health service providers at health centers (n=14); pregnant woman using PMTCT services through exit interview (n=14); TB patients through exit interview (n=14); and others (n=23). Furthermore, 42 FGDs were conducted with fathers with a child less than two years of age (n=14);UHE-ps(n=14); and PLHIV associations (women and men in separate groups) (n=14) from 14 kebeles in the study areas. The IDIs and FGDs were conducted by qualitative experts following a four-day training session conducted in Addis Ababa by the research team.

4.2. Knowledge, attitude, and practice about family planning methods

The knowledge of contraceptive methods was widespread among the study population as well as across the different study regions and city administrations, with less than 5% reported having never heard of any family planning method (Table 4.3). According to EDHS 2011, 2.8% of all women and 1.6% of men never heard about any method of contraceptive.[26]Among the different contraceptive methods, spacing methods—pill (86.8%), injectable (79.7), intrauterine device (IUD) (67.1%), implant (53.0%), and condom (46.1%)—were frequently cited by study participants. About 10% of the respondents were aware of the emergency pill, and about 4% with the diaphragm. Traditional methods of contraception such as rhythm (12.9%), lactational amenorrhea method (LAM) (3.0%), withdrawal (2.9%), and abstinence (2.6%) were mentioned by few respondents. None of the respondents mentioned the terminal method of sterilization (i.e., tubectomy and vasectomy).There was no major regional variation with regard to the knowledge of contraceptive methods among the study participants.

[26]EDHS knowledge about contraceptive methods was collected by stating each method and asking respondents if s/he had heard of it; while knowledge of contraceptive methods in this study was assessed spontaneously.

The IDIs and FGDs show that the women's awareness of the different family planning methods was high. The majority of the FGD and IDI participants also stated the different types and benefits of the contraceptive methods. Some side effects, such as weight gain and hypertensive due to the use of injectable contraceptives, were identified as problems associated with the use of contraceptives. Quite a large number of FGD and IDI participants demonstrated their knowledge of the different types of contraceptive methods, where the majority reported pills and injectable. The mothers in the FGDs and IDIs also indicated the knowledge of their husbands about the different family planning methods and their benefits. The mothers reported that some husbands had good knowledge, while others had poor knowledge, which potentially affects the use of contraceptive methods by the mothers.

Table 4.3 also shows benefits and side effects (or disadvantages) of contraceptive methods reported by respondents who ever heard of any contraceptive method. The most commonly cited benefits of contraceptive methods included delaying/spacing children (73.0%); economic/financial benefit (45.9%); reducing unplanned pregnancy and birth (37.0%); having an acceptable number of children (29.3%); and improving the health of the mother and child (17.5%). With regard to the side effects of contraceptives, a substantial proportion (15.9%) of respondents did not know any, while others mentioned infertility (9.5%); weight gain (8.4%); skin discoloration particularly face (or melasma) (6.5%); and menstrual disorder (5.9%). There was no major regional variation in respondent knowledge of benefits or side effects (or disadvantages) in using contraceptive methods.

Table 4-3: Knowledge about contraceptive methods and its benefits and disadvantages by regional state/city administration

Variable	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Ever heard of any contraceptive method								
Yes	226(94.6)	232(97.1)	204(97.6)	113(94.2)	114(95.0)	83(92.2)	30 (100)	1002(95.7)
No	13 (5.4)	7 (2.9)	5 (2.4)	7 (5.8)	6 (5.0)	7 (7.8)	0 (0.0)	45 (4.3)
Total, n (%)	**239 (22.8)**	**239 (22.8)**	**209 (20.0)**	**120 (11.5)**	**120 (11.5)**	**90 (8.6)**	**30 (2.9)**	**1,047 (100)**
Types of contraceptive methods known								
Pill	194(85.8)	210(90.5)	180(88.2)	99 (87.6)	93 (81.6)	68 (81.9)	26(86.7)	870(86.8)
IUD	145(64.2)	162(69.8)	141(69.1)	87 (77.0)	78 (68.4)	42 (50.6)	17 (56.7)	672(67.1)
Injectable	181(80.1)	198(85.3)	158(77.5)	87 (77.0)	87 (76.3)	64 (77.1)	24 (80.0)	799(79.7)
Condom	111(49.1)	112(48.3)	82 (40.2)	60 (53.1)	42 (36.8)	37 (44.6)	18 (60.0)	462(46.1)
Implant	121(53.5)	135(58.2)	101(49.5)	60 (53.1)	51 (44.7)	47 (56.6)	16 (53.3)	531(53.0)
Diaphragm	13 (5.8)	9 (3.9)	5 (2.5)	3 (2.7)	3 (2.6)	3 (3.6)	4 (13.3)	40 (4.0)
Emergency pill	31 (13.7)	27 (11.6)	12 (5.9)	6 (5.3)	10 (8.8)	5 (6.0)	6 (20.0)	97 (9.7)
LAM	9 (4.0)	5 (2.2)	3 (1.5)	4 (3.5)	2 (1.8)	4 (4.8)	3 (10.0)	30 (3.0)
Rhythm	28 (12.4)	27 (11.6)	19 (9.3)	24(21..2)	9 (7.9)	12 (14.5)	10 (33.3)	129(12.9)
Withdrawal	6 (2.7)	6 (2.6)	3 (1.5)	4 (3.5)	1 (0.9)	4 (4.8)	5 (16.7)	29 (2.9)
Sexual abstinence	8 (3.5)	7 (3.0)	1 (0.5)	1 (0.5)	2 (1.8)	2 (2.4)	5 (16.7)	26 (2.6)
Did not know	3 (1.3)	1 (0.4)	1 (0.5)	0 (0.0)	0 (0.0)	3 (3.6)	1 (3.3)	9 (0.9)
Benefits of contraceptive methods known								
Delaying/spacing children	168(74.3)	155(66.8)	158(77.5)	78 (69.0)	88 (77.2)	58 (69.9)	21 (70.0)	725 (72.5)
Reduce unplanned pregnancies and birth	86 (38.1)	103(44.4)	65 (31.9)	54 (47.8)	30 (26.3)	19 (22.9)	11 (36.7)	368 (36.7)
Limit # of children	71 (31.4)	80 (34.5)	45 (22.1)	32 (28.3)	23 (20.2)	27 (32.5)	13 (43.3)	291(29.0)
Improve health	39 (17.3)	19 (8.2)	42 (20.6)	29 (25.7)	14 (12.3)	21 (25.3)	6 (20.0)	170(17.0)
Economic benefit	117(51.8)	95 (40.9)	88 (43.1)	51 (45.1)	41 (36.0)	44 (53.0)	20 (66.7)	456(45.5)
Reduce population size	4 (1.8)	1 (0.4)	1 (0.5)	3 (2.7)	0 (0.0)	0 (0.0)	0 (0.0)	9 (0.9)
Protect from STIs	0 (0.0)	4 (1.7)	0 (0.0)	5 (4.4)	2 (1.8)	0 (0.0)	0 (0.0)	11 (1.1)
Did not know	1 (0.4)	2 (0.9)	2 (1.0)	1 (0.9)	0 (0.0)	6 (7.2)	0 (0.0)	12 (1.2)
Side effects (disadvantages) of contraceptive methods								
Infertility	23 (10.2)	18 (7.8)	17 (8.3)	13 (11.5)	15 (13.2)	6 (7.2)	2 (6.7)	94 (9.4)
Weight gain	25 (11.1)	21 (9.1)	14 (6.9)	8 (7.1)	9 (7.9)	4 (4.8)	3 (10.0)	84 (8.4)
Skin discoloration-face	14 (6.2)	8 (3.4)	23 (11.3)	6 (5.3)	12 (10.5)	2 (2.4)	0 (0.0)	65 (6.5)
Menstrual disorder	15 (6.6)	17 (7.3)	11 (5.4)	7 (6.2)	6 (5.3)	3 (3.6)	0 (0.0)	59 (5.9)
Womb pain or disorder	3 (1.3)	12 (5.2)	2 (1.0)	2 (1.8)	7 (6.1)	1 (1.2)	1 (3.3)	28 (2.8)
Headache	3 (1.3)	5 (2.2)	4 (2.0)	3 (2.7)	5 (4.4)	3 (3.6)	1 (3.3)	24 (2.4)
Inhibits desired pregnancy	5 (2.2)	4 (1.7)	3 (1.5)	5 (4.4)	0 (0.0)	4 (4.8)	1 (3.3)	22 (2.2)
Weight loss	2 (0.9)	2 (0.9)	6 (2.9)	0 (0.0)	8 (7.0)	4 (4.8)	0 (0.0)	22 (2.2)
High blood pressure	4 (1.8)	1 (0.4)	9 (4.4)	1 (0.9)	2 (1.8)	4 (4.8)	1 (3.3)	22 (2.2)
Did not know	31 (13.7)	28 (12.1)	32 (15.7)	12 (10.6)	31 (27.2)	19 (22.9)	6 (20.0)	159(15.9)
Total, n (%)	**226 (22.6)**	**232 (23.2)**	**204 (20.4)**	**113 (11.3)**	**114 (11.4)**	**83 (8.3)**	**30(3.0)**	**1,002 (100)**

Some of the IDI and FGD respondents also stated that using contraceptives has no side effects since they have used it for many years without any recognized health problem. Most of the participants also noted the absence of opposing views from the husbands, families, relatives, and the community.

In most cases, the participants emphasized the absence of major problems with service providers, except where some of the husbands in FGDs complained about the shortage of contraceptives of their choice.

The study also investigated the knowledge of the various sources of contraceptive methods to assess the relative importance of the sources. Almost all of the respondents knew at least one source of contraceptive methods almost universally (>98%) in all study areas (Table 4.4). Public health facilities, consisting of health centers (91.8%) and hospitals (49.7%), were the major sources of contraception known by the respondents. By contrast, the health post, which is the core of the HEP of the health sector in rural areas, was the least reported (4.8%) by the respondents, ranging from as low as 1.8% in Tigray to as high as 16.7% in Harari, despite the smallest sample size in the latter study area. Knowledge about private health facilities, such as private clinic/hospital (24.4%) and pharmacy/drug shop (19.8%),the as sources of contraceptives was also substantial. NGO clinics (17.9%) were also reported as the source of contraceptive methods.

Nevertheless, there was a substantial variation among regions with regard to knowledge of the sources of contraceptive methods from private health facilities and NGO clinics. About 35% of respondents in AA and 28% in Amhara region reported private clinics/hospitals as a source of contraceptive methods, while these figures were the lowest in SNNP (12.5%) and Tigray (15.9%) regions. Likewise, the knowledge of NGO clinics as a source of contraceptives was the lowest in Amhara region (10.8%) and highest in Oromia (28.1%) and Harari (46.7%) regions.

Table 4-4: Knowledge about the sources of family planning methods by regional state/city administration

Variable	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Knew where family planning methods can be obtained								
Yes	223 (98.7)	231 (99.6)	203 99.5)	113 (100)	112 (98.2)	82 (98.8)	30 (100)	994 (99.2)
No	3 (1.3)	1 (0.4)	1 (0.5)	0 (0.0)	2 (1.2)	1 (1.2)	0 (0.0)	8 (0.8)
Total, n (%)	**226(22.6)**	**232 (23.2)**	**204 (20.4)**	**113(11.3)**	**114 (11.4)**	**83 (8.3)**	**30 (3.0)**	**1,002(100)**
Sources of family planning methods cited								
Government hospital	93 (41.7)	113 (48.9)	115 (56.7)	58 (51.3)	51 (45.5)	43 (52.4)	21 (70.0)	494 (49.7)
Health centers	205 (91.9)	211 (91.3)	192 (94.6)	105 (92.9)	94 (83.9)	78 (95.1)	27 (90.0)	912 (91.8)
Health posts	8 (3.6)	8 (3.5)	8 (3.9)	2 (1.8)	11 (9.8)	6 (7.3)	5 (16.7)	48 (4.8)
NGO clinics	32 (14.3)	25 (10.8)	57 (28.1)	20 (17.7)	13 (11.6)	17 (20.7)	14 (46.7)	178 (17.9)
Pharmacy/drug shop	60 (26.9)	38 (16.5)	38 (18.7)	13 (11.5)	23 (20.5)	16 (19.5)	9 (30.0)	197 (19.8)
Private clinic/hospital	77 (34.5)	62 (26.8)	49 (24.1)	18 (15.9)	14 (12.5)	17 (20.7)	7 (23.3)	243 (24.4)
Total, n (%)	**223 (22.4)**	**231 (23.2)**	**203(20.4)**	**113(11.4)**	**112(11.3)**	**82 (8.2)**	**30 (3.0)**	**994 (100)**

This study assessed respondent attitude toward to male involvement in family planning activities. The majority of the respondents (90.2%) had a favorable attitude toward involving men in family planning endeavors, while (9.8%) disfavored their participation (Table 4.5). This indicates the importance of involving men in family planning programs. Among respondents who thought men should be involved in family planning activities, they thought that cultural influence (29.8%); inadequate information about contraceptive methods (25.2%); and lack of knowledge about the methods (12.4%); were the main barriers hindering male involvement in family planning activities. Other minor factors cited as obstacles to male involvement were lack of time for family planning activities (3.3%) and lack of access to contraceptive suppliers (4.2%). Very few respondents (1.8%) mentioned lack of spousal communication regarding family planning. About one-quarter (24%) of the respondents replied that nothing could prevent men from being involved in family planning activities.

Table 4-5: Respondent opinion about male involvement in family planning by regional state/city administration

Variable	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Thought that men should be involved in family planning								
Yes	209 (92.5)	215 (92.7)	182 (89.2)	99 (87.6)	96 (84.2)	78(94.0)	25 (83.3)	904 (90.2)
No	17 (7.5)	17 (7.3)	22 (10.8)	14 (12.4)	18 (15.8)	5 (6.0)	5 (16.7)	98 (9.8)
Total, n (%)	**226 (22.6)**	**232 (23.2)**	**204 (20.4)**	**113 (11.3)**	**114 (11.4)**	**83 (8.3)**	**30 (3.0)**	**1,002 (100)**
Barriers hindering men participation in family planning								
Lack of adequate information about family planning	59(28.2)	29(13.5)	68(37.4)	12(12.1)	28 (29.1)	22(28.2)	10(40.0)	228(25.2)
Lack of knowledge about the methods	20 (9.6)	12 (5.6)	32 (17.6)	9 (9.1)	24 (25.0)	11(14.1)	4 (16.0)	112(12.4)
Lack of time for family planning activities	12 (5.7)	4 (1.9)	2 (1.1)	3 (3.0)	4 (4.2)	4 (5.1)	1 (4.0)	30 (3.3)
Lack of access to sources of modern contraceptives	17 (8.1)	2 (0.9)	9 (4.9)	1 (1.0)	5 (5.2)	4 (5.1)	0 (0.0)	38 (4.2)
Lack of concern	64 (30.6)	64 (29.8)	60 (33.0)	13 (13.1)	37 (38.5)	23(29.5)	8 (32.0)	269(29.8)
Cultural influence	9 (4.3)	15 (7.0)	5 (2.7)	7 (7.1)	1 (1.0)	3 (3.8)	1 (4.0)	41 (4.5)
Women not candid in discussion with men	4 (1.9)	3 (1.4)	3 (1.6)	4 (4.0)	0 (0.0)	2 (2.6)	0 (0.0)	16 (1.8)
Nothing can prevent them	41 (19.6)	76 (35.3)	33 (18.1)	44 (44.4)	8 (8.3)	11(14.1)	4 (16.0)	217(24.0)
Did not know	6 (2.9)	11 (5.1)	1 (0.5)	1 (1.0)	1 (1.0)	3 (3.8)	2 (8.0)	25 (2.8)

One of the issues discussed in IDIs and FGDs was partner support and encouragement for using family planning methods. The participants acknowledged the burden of contraceptive use every day by a woman and stressed the need for support and encouragement by their partners/husbands. This was identified as most important, especially when women decide to take the long-acting or permanent family planning methods. Some participants also stated the current improvement of open communication between partners is encouraging more people to access the service. However, participants also stated that some women used contraceptive methods without the knowledge of their partners, creating disagreement between the two partners.

> "After a week she came and asked us to remove the implant. We initially advised her to bring her husband. He [the husband] said that [he was]not comfortable with the method, and either she should remove the implant or we would get divorced. Then, we removed it immediately."
>
> Amhara-Bahir Dar health care worker (MCH)-IDI

The qualitative participants identified mixed issues about the involvement of partners, although the majority stated that partners were highly supportive. There were situations in which some husbands opposed the use of family planning methods by their wives. There were also situations in which husbands encouraged their wives to use family planning methods, but women resisted the advice of their husbands because they did not like using contraceptives.

> "Some husbands do not allow their spouses to use any kind of family planning methods but they are very few."
>
> SNNPR-Sodo health care worker (MCH)-IDI

> "My husband does not need more than one child; more than one child does not go well with our income."
>
> SNNPR-Sodo mother-IDI

The participants of IDIs and FGDs expressed their opinions about use of family planning methods. In many instances, they indicated that most women in the community use contraceptive methods and acknowledged the benefits and advantages. Despite promotion of contraceptive use, especially on television and radio, it was reported that some women in the community do not use family planning methods because they want to have many children. Other women fear hypertension and widespread rumors about the side effects such as infertility, weight gain, loss of appetite, pain, and anemia.

> "In my community there are beliefs…that injection would lead to infertility, loop would make an ovarian wall thin, and pills cause side effects such as anaemia. Even injection, which is given on the arm, has the side effect of weight gain. The injection, which is taken for three months, also causes the difficulty of menstruation, which can lead to overweight. It is not clear that some women become fat, while others become thin."
>
> SNNPR-Hawassa pregnant woman-IDI

Some participants mentioned that the use of family planning methods is now considered a sign of modernity among women. The role of religion in contraceptive use was described as something of the past.

"Nowadays, using family planning methods is seen as modernism but previously it was considered against the religious view; there was a belief that using family planning is…dishonoring God, destroying his gift."

Amhara- Dessie mother-IDI

"As compared to the previous times the community, to a certain extent understands the importance of family planning and has become better in using family planning methods."

Amhara- Bahir Dar health care worker (MCH)-IDI

This study assessed respondent and partner ever and current use of contraceptives (Table 4-6). In this study, not only was the knowledge of contraceptive methods high among the respondents (95.7%), the ever-use was high (64.4%), although reported use was less than knowledge. The most commonly reported ever-used methods were injectable (58.8%), pill (41.2%), condom (20.2%), and implant (15.2%). The less frequently reported ever-used methods include IUD (9.6%), rhythm (7.6%), emergency pill (3.1%), and LAM (0.8%). The distribution of the ever-used contraceptive methods across the regions and city administrations are similar. No male or female sterilization method was reported by the respondents.

Reported current contraceptive prevalence (66.2%) was high among the respondents and partners. About seven in every 10 respondents reported using a contraceptive method. According to the EDHS 2011 and Ethiopia Mini DHS 2014, the urban contraceptive prevalence was 52.5% and 59.6% respectively.[27]

Injectable was frequently reported as both ever- and currently used contraceptive method (58.8% and 46.1%, respectively). The rest of the contraceptives, including pill (15.0%), condoms (12.6%), IUD (7.5%), and rhythm (5.2%) were also reported as presently used by some of the respondents.

[27] The current study areas are more of major towns/cities of regions, whereas EDHS uses nationally defined urban areas.

Table 4-6: Contraceptive use and its sources by regional state/city administration

Variable	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Ever used any contraceptive methods								
Yes	144(63.7)	153(65.9)	137(67.2)	66 (58.4)	69 (60.5)	53 (63.9)	23 (76.7)	645(64.4)
No	82 (36.3)	79 (34.1)	67 (32.8)	47 (41.6)	45 (39.5)	30 (36.1)	7 (23.3)	357(35.6)
Total, n (%)	**226 (22.6)**	**232 (23.2)**	**204 (20.4)**	**113 (11.3)**	**114 (11.4)**	**83 (8.3)**	**30 (3.0)**	**1002 (100)**
Type of contraceptives ever used								
Pill	61 (42.4)	53 (34.6)	67 (48.9)	18 (27.3)	36 (52.2)	22 (41.5)	9 (39.1)	266(41.2)
IUD	14 (9.7)	11 (7.2)	11 (8.0)	3 (4.5)	19 (27.5)	3 (5.7)	1 (4.3)	62 (9.6)
Injectable	74 (51.4)	104(68.0)	79 (57.7)	42 (63.6)	46 (66.7)	23 (43.4)	11 (47.8)	379 (58.8)
Condom	33 (22.9)	27 (17.6)	21 (15.3)	14 (21.2)	16 (23.2)	13 (24.5)	6 (26.1)	130(20.2)
Implant	21 (14.6)	22 (14.4)	18 (13.1)	12 (18.2)	12 (17.4)	7 (13.2)	6 (26.1)	98 (15.2)
Emergency pill	7 (4.9)	6 (3.9)	2 (1.5)	2 (3.0)	0 (0.0)	2 (3.8)	1 (4.3)	20 (3.1)
Rhythm	12 (8.3)	8 (5.2)	10 (7.3)	6 (9.1)	2 (2.9)	10 (18.9)	1 (4.3)	49 (7.6)
LAM	2 (1.4)	0 (0.0)	0 (0.0)	3 (4.5)	0 (0.0)	0 (0.0)	0 (0.0)	5 (0.8)
Currently using any contraceptive method								
Yes	92 (63.9)	108(70.6)	83 (60.6)	52 (78.8)	45 (65.2)	38 (71.7)	9 (39.1)	427(66.2)
No	52 (36.1)	45 (29.4)	54 (39.4)	14 (21.2)	24 (34.8)	15 (28.3)	14 (60.9)	218(33.8)
Total, n (%)	**144 (22.3)**	**153 (23.7)**	**137 (21.2)**	**66 (10.2)**	**69 (10.7)**	**53 (8.2)**	**23 (3.6)**	**645 (100.0)**
Type of contraceptives currently used								
Pill	16 (17.4)	15 (13.9)	14 (16.9)	7 (13.5)	6 (13.3)	5 (13.2)	1 (11.1)	64 (15.0)
IUD	9 (9.8)	9 (8.3)	4 (4.8)	1 (1.9)	3 (6.7)	5 (13.2)	1 (11.1)	32 (7.5)
Injectable	31 (33.7)	49 (45.4)	48 (57.8)	26 (50.0)	28 (62.2)	13 (34.2)	2 (22.2)	197(46.1)
Condom	17 (18.5)	17 (15.7)	7 (8.4)	7 (13.5)	1 (2.2)	3 (7.9)	2 (22.2)	54 (12.6)
Implant	13 (14.1)	16 (14.8)	9 (10.8)	8 (15.4)	5 (11.1)	6 (15.8)	4 (44.4)	61 (14.3)
Diaphragm	1 (1.1)	2 (1.9)	0 (0.0)	0 (0.0)	1 (2.2)	0 (0.0)	0 (0.0)	4 (0.9)
Emergency pill	1 (1.1)	2 (1.9)	1 (1.2)	0 (0.0)	0 (0.0)	1 (2.6)	0 (0.0)	5 (1.2)
LAM	1 (1.1)	0(0.0)	1 (1.2)	2 (3.8)	0 (0.0)	2 (5.3)	0 (0.0)	6 (1.4)
Rhythm	7 (7.6)	5 (4.6)	3 (3.6)	1 (1.9)	1 (2.2)	5 (13.2)	0 (0.0)	22 (5.2)
Sources of currently used contraceptive methods								
Government hospitals	10 (10.9)	10 (9.3)	10 (12.0)	7 (13.5)	14 (31.1)	2 (5.3)	2 (22.2)	55 (12.9)
Health centers	50 (54.3)	60 (55.6)	46 (55.4)	31 (59.6)	19 (42.2)	26 (68.4)	4 (44.4)	236(55.3)
NGO clinics	5 (5.4)	14 (13.0)	9 (10.8)	4 (7.7)	4 (8.9)	3 (7.9)	1 (11.1)	40 (9.4)
Pharmacy/drug shops	17 (18.5)	12 (11.1)	6 (7.2)	5 (9.6)	2 (4.4)	0 (0.0)	2 (22.2)	44 (10.3)
Private clinics/hospitals	5 (5.4)	9 (8.3)	8 (9.6)	3 (5.8)	5 (11.1)	1 (2.6)	0 (0.0)	31 (7.3)
Friends/relatives	4 (4.3)	2 (1.9)	2 (2.4)	2 (3.8)	0 (0.0)	5 (13.2)	0 (0.0)	15 (3.5)
Kiosk	1 (1.1)	1 (0.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.5)
Did not remember	0 (0.0)	0 (0.0)	2 (2.4)	0 (0.0)	1 (2.2)	1 (2.6)	0 (0.0)	4 (0.9)
Total, n (%)	**92 (21.5)**	**108 (25.3)**	**83 (19.4)**	**52 (12.2)**	**45 (10.5)**	**38 (8.9)**	**9 (2.1)**	**427 (100.0)**

Of the participants who reported the current use, health centers (55.3%) constituted the main source of contraceptive methods, followed by government hospitals (12.9%), pharmacy/drug shops (10.3%), and NGO clinics (5.4%) (Fig.4.1). This assessment identified that modern contraceptives are primarily supplied through public health facilities, followed by private and NGO clinics.

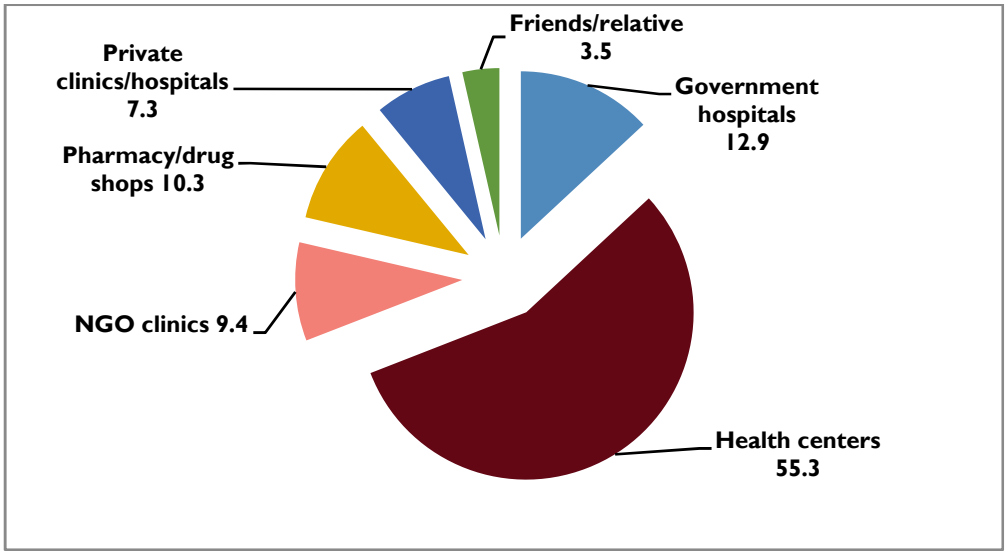

Figure 4.1: Percentage of source of currently used contraceptive methods

Table 4-7 below shows the current contraceptive use of the study participants by background characteristics. Married couples (72.0%)and never-married people (72.7%) had the highest rate of contraceptive use. Whereas among the total widowed participants of the study, only 15.4% were using contraceptives during the study period. Among the Muslims participants, 73.9% were current users of contraceptive methods. The majority of the respondents who attended technical/vocational and higher education were currently using contraceptive methods, 74.5% and 69.8%, respectively. Respondents with one or two children had the highest current contraceptive rate (71.8%); contraceptive prevalence decreases as the number of children increases. There is significant association between current use of contraceptives and marital status, household income, and number of children.

Table 4-7: Current use of contraceptive methods by background characteristics

Variables		Are you/your partner currently using any contraception method? n (%)			*p*-value
		Yes	No	Total	
Marital status					
	Married	322 (72.0)	125 (28.0)	447 (100.0)	<0.001
	Divorced	19 (45.2)	23 (54.8)	42 (100.0)	
	Widowed	6 (15.4)	33 (84.6)	39 (100.0)	
	Separated	8 (44.4)	10 (55.6)	18 (100.0)	
	Never married	72 (72.7)	27 (27.3)	99 (100.0)	
Religion					
	Orthodox	312 (65.8)	162 (34.2)	474 (100.0)	0.141*
	Muslim	65 (73.9)	23 (26.1)	88 (100.0)	
	Protestant	47 (59.5)	32 (40.5)	79 (100.0)	
Educational level					
	No education	45 (56.3)	35 (43.8)	80 (100.0)	0.180*
	Only writing and reading	8 (50.0)	8 (50.0)	16(100.0)	
	Primary	115 (66.5)	58 (33.5)	173 (100.0)	
	Secondary	150 (67.3)	73 (32.7)	223 (100.0)	
	Technical/vocational	35 (74.5)	12 (25.5)	47 (100.0)	
	Higher	74 (69.8)	32 (30.2)	106(100.0)	
Household income					
	Less than 500 Birr	33 (53.2)	29 (46.8)	62 (100.0)	0.037
	501 – 1500 Birr	123 (64.1)	69 (35.9)	192 (100.0)	
	1501– 2500Birr	119 (71.3)	48 (28.7)	167 (100.0)	
	2501 – 4000 Birr	71 (71.3)	34 (28.7)	105 (100.0)	
	4001 – 5500 Birr	22 (66.7)	11 (33.3)	33 (100.0)	
	5501 – 7000 Birr	16 (94.1)	1 (5.9)	17 (100.0)	
	Above 7001	11 (50.0)	11 (50.0)	22 (100.0)	
Number of children					
	0	101 (67.3)	49 (32.7)	150 (100.0)	<0.001
	1-2	214 (71.8)	84 (28.2)	298 (100.0)	
	3-4	84 (65.1)	45 (34.9)	129 (100.0)	
	5+	28 (41.2)	40 (58.8)	68 (100.0)	

**** There is no significant association at p-value<0.05.***

The IDI and FGD respondents mentioned the availability of different contraceptive methods such as pills, Depo Provera (injectable), implant, IUD, and condoms. Contraceptives can be obtained from public and private health facilities, and the most commonly used is injectable.

IDIs and FGDs respondents indicated their experience with side effects from and acceptance of contraceptive methods. The participants indicated that due to fear of side effects, some women do not use any family planning method, despite easy accessibility.

> "I know a girl and when she got married she weighed 45 kilograms and start using this injection but after a while she becomes 80 kilogram. Since I see this one I started believing what the community says."
>
> SNNPR-Hawassa pregnant woman-IDI

Some participants stated the influence of religion on use of family planning methods. Although the husbands acknowledge and support the use of the contraceptives, some Muslim wives secretly use the methods, stating that this is against the religion.

> "Obviously, it is not allowed in Muslim faith. Even if I am using the service without the knowledge of my husband, my religion does not allow me to use it. But I secretly use injection to ease my problems."
>
> Dire Dawa mother-IDI

Table 4-8 shows the distribution of satisfaction with family planning services, reasons for current non-use of contraceptives, and intention to use among current non-users. About 87% of the respondents were satisfied with the family planning services they obtained from the health services, while 3.7% reported that they were dissatisfied. Among current non-users of contraceptives, the most commonly mentioned reasons for not using any method were being unmarried (99.5%) and the desire to have more children (33.0%).Minor reasons for not using contraceptives include religious prohibition (10.1%), partner opposition (8.7%), and health-related problems (2.8%).Nevertheless, among the current non-users of contraceptive methods, 46.1% intended to use them in the future, while 19.1% were not sure. More than one-third (34.8%) did not intend to use contraceptives in the future. This reflects the need for ongoing family planning program efforts to increase contraceptive use.

Table 4-8: Respondent satisfaction level with family planning services obtained from health services and reasons for nonuse by regional state/city administration

Variable	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Satisfaction level								
Satisfied	69 (79.3)	91 (86.7)	72 (91.1)	46 (92.0)	42 (95.5)	26(81.3)	8 (88.9)	354(87.2)
Neither satisfied nor dissatisfied	4 (4.6)	2 (1.9)	3 (3.8)	0 (0.0)	1 (2.3)	4 (12.5)	1 (11.1)	15 (3.7)
Dissatisfied	2 (2.3)	6 (5.7)	2 (2.5)	0 (0.0)	1 (2.3)	0 (0.0)	0 (0.0)	11 (2.7)
Did not know	12 (13.8)	6 (5.7)	2 (2.5)	4 (8.0)	0 (0.0)	2 (6.3)	0 (0.0)	26 (6.4)
Total, n (%)	**87(21.4)**	**105(25.9)**	**79(19.5)**	**50(12.3)**	**44(10.8)**	**32 (7.9)**	**9 (2.2)**	**406(100.0)**
Reasons for currently not using any contraceptive methods								
Not married	7 (13.5)	6 (13.3)	1 (1.9)	3 (21.4)	1 (4.2)	2 (13.3)	1 (7.1)	21 (9.6)
Dislike by partner	1 (1.9)	1 (2.2)	2 (3.7)	0 (0.0)	1 (4.2)	1 (6.7)	1 (7.1)	7 (3.2)
Religious prohibition	2 (3.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (13.3)	0 (0.0)	4 (1.8)
Desire for more children	3 (5.8)	7 (15.6)	8 (14.8)	1 (7.1)	6 (25.0)	3 (20.0)	3 (21.4)	31 (14.2)
Medical problem	1 (1.9)	0 (0.0)	2 (3.7)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	4 (1.8)
Intention not to use now	37 (71.2)	31 (68.9)	39 (72.2)	9 (64.3)	13 (54.2)	7 (46.7)	8 (57.1)	144 (66.1)
Other	1 (1.9)	0 (0.0)	2 (3.7)	0 (0.0)	3 (12.5)	0 (0.0)	1 (7.1)	7 (3.2)
Intention to use contraceptive methods among current nonusers in the future								
Yes, I/partner intends to use	12(23.1)	18 (40.0)	14 (25.9)	7 (50.0)	5 (20.8)	2 (13.3)	5 (35.7)	63 (28.9)
Not sure	24 (46.2)	11 (24.4)	11 (20.4)	3 (21.4)	5 (20.8)	6 (40.0)	4 (28.6)	64 (29.4)
No, I/partner does not intend to use	16 (30.8)	16 (35.6)	29 (53.7)	4 (28.6)	14 (58.3)	7 (46.7)	5 (35.7)	91 (41.7)
Total, n (%)	**52(23.9)**	**45(20.6)**	**54 (24.8)**	**14 (6.4)**	**25 (11.5)**	**15 (6.9)**	**14 (6.4)**	**218 (100)**

The relative importance of various sources of family planning information was assessed in this study, and media such as television (71.7%) and radio (44.0%) constituted the primary source of information, followed by health workers at health centers (42.0%) (Table 4-9).The proportion of respondents reported radio and television as a source of family planning information was the lowest (18.1% and 49.4%, respectively) in DD. About one-quarter (25.8%) of the respondents get information about family planning methods from friends and families, while newspaper/magazine/brochure constituted only 9.8%. The UHE-ps and students were also cited as important sources of information for family planning methods; 16.1% and 15.2%, respectively. The respondents were also asked if UHE-ps visited and discussed family planning with them in the past 12 months, and only 32.5% affirmatively answered the question. The reported visit of households by the UHE-ps was lowest (13.7%) in Addis Ababa, and highest in Tigray (48.7%) and SNNP (49.1%). About two-thirds (61.2%) of the respondents reported that they were never told about contraceptive methods at a health facility within the last 12 months, a more or less equal proportion across the study regions. This reflects the major work to be done to improve information about family planning through UHE-ps and health professionals at health facilities.

Table 4-9: Common sources of information about family planning by regional state/city administration

Variable	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Sources of information								
Radio	112 (49.6)	98 (42.2)	83 (40.7)	55 (48.7)	60 (52.6)	15 (18.1)	18 (60.0)	441 (44.0)
Television	189 (83.6)	172 (74.1)	136 (66.7)	83 (73.5)	74 (64.9)	41 (49.4)	23 (76.7)	718 (71.7)
Newspaper/magazine/brochure	30 (13.3)	28 (12.1)	15 (7.4)	6 (5.3)	8 (7.0)	7 (8.4)	4 (13.3)	98 (9.8)
UHE-ps	9 (4.0)	42 (18.1)	27 (13.2)	22 (19.5)	39 (34.2)	20 (24.1)	2 (6.7)	161 (16.1)
Friends and family	59 (26.1)	60 (25.9)	51 (25.0)	33 (29.2)	22 (19.3)	30 (36.1)	4 (13.3)	259 (25.8)
Health centers	84 (37.2)	90 (38.8)	99 (48.5)	54 (47.8)	41 (36.0)	40 (48.2)	13 (43.3)	421 (42.0)
School	36 (15.9)	27 (11.6)	27 (13.2)	25 (22.1)	10 (8.8)	18 (21.7)	9 (30.0)	152 (15.2)
Religious institution &*idir*	2 (0.9)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (0.3)
None	4 (1.8)	2 (0.9)	1 (0.5)	1 (0.9)	0 (0.0)	1 (1.2)	0 (0.0)	9 (0.9)
HEW visited and discussed about family planning within the past 12 months								
Yes	31 (13.7)	89 (38.4)	51 (25.0)	51 (45.1)	55 (48.2)	37 (44.6)	12 (40.0)	326 (32.5)
No	195 (86.3)	143 (61.6)	153 (75.0)	62 (54.9)	59 (51.8)	46 (55.4)	18 (60.0)	676 (67.5)
Ever told about family planning at a health facility within the last 12 months								
Yes	70 (31.0)	78 (33.6)	84 (41.2)	55 (48.7)	56 (49.1)	34 (41.0)	12 (40.0)	389 (38.8)
No	156 (69.0)	154 (66.4)	120 (58.8)	58 (50.9)	58 (50.9)	49 (59.0)	18 (60.0)	613 (61.2)
Total, n (%)	**226 (22.6)**	**232 (23.2)**	**204 (20.4)**	**113 (11.3)**	**114 (11.4)**	**83 (8.3)**	**30 (3.0)**	**1,002 (100)**

4.3. Knowledge, attitude, and practice about antenatal care

The majority of respondents (86.3%) (above 80% for all regions and city administrations), believed that pregnant women should consult health workers for early check-up for herself and the fetus, followed by check-up for early detection of complications (49.4%), and screening for anemia, sexually transmitted infections (STIs), and HIV(20.8%) (Table4-10). A good proportion of the respondents (17.5%) mentioned the importance of consulting health professionals for counseling on healthy lifestyle and diet for pregnant women. Very few respondents (7.7%) gave reasons related to preventive measures such as tetanus toxoid (TT) immunization, deworming, and iron and folic acid supplementation. The most commonly cited place for a pregnant woman to get ANC services was public health centers (94.9%), followed by government hospitals (54.1%) and private clinics/hospitals (28.8%). Few respondents mentioned NGO clinics (10.9%) and UHE-ps (4.0%).The proportion of respondents citing private clinics/hospitals as a place for ANC service was least in SNNPR (7.5%), as compared to more than one-third in AA, Amhara, DD, and Harari regions.

This study also investigated respondent knowledge about the time after conception during which the pregnant woman should visit or consult a health professional for the first antenatal contact. The main response was immediately (first trimester) between 1-3 months (74.9%); this figure was least reported for SNNPR (52.5%) and was highest in Harari (96.7%) (Table 4-10). This indicates that a higher proportion of respondents from the SNNPR reflected a late first antenatal contact. About 17% of the respondents cited that the first visit for ANC by a pregnant woman was in the middle of the pregnancy (second trimester) between 4-6 months after conception. About 7.4% of the respondents did not know the time after pregnancy during which a pregnant woman should visit a health professional.

Table 4-10: Knowledge about ANC visit by a pregnant woman by regional state/city administration

Variable	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Reasons for a pregnant woman to consult health workers								
Close follow-up for mother and fetus	213 (89.1)	200 (83.7)	183 (87.6)	105 (87.5)	98 (81.7)	78 (86.7)	27 (90.0)	904 (86.3)
Check for possible complications	130 (54.4)	89 (37.2)	115 (55.0)	57 (47.5)	45 (37.5)	59 (65.6)	22 (73.3)	517 (49.4)
Screening for anemia, STIs, HIV, etc.	41 (17.2)	63 (26.4)	46 (22.0)	15 (12.5)	17 (14.2)	28 (31.1)	8 (26.7)	218 (20.8)
Preventive measures such as TT, deworming, iron, and folic acid	22 (9.2)	12 (5.0)	14 (6.7)	0 (0.0)	3 (2.5)	22 (24.4)	8 (26.7)	81 (7.7)
Counseling for healthy lifestyle and diet	46 (19.2)	34 (14.2)	41 (19.6)	16 (13.3)	24 (20.0)	16 (17.8)	6 (20.0)	183 (17.5)
To have healthy baby and mother	4 (1.7)	23 (9.6)	1 (0.5)	9 (7.5)	0 (0.0)	0 (0.0)	1 (3.3)	38 (3.6)
Did not know	4 (1.7)	5 (2.1)	3 (1.4)	0 (0.0)	6 (5.0)	1 (1.1)	0 (0.0)	19 (1.8)
Place where a pregnant woman can get ANC								
Government hospital	114 (47.7)	133 (55.6)	117 (56.0)	81 (67.5)	55 (45.8)	46 (51.1)	20 (66.7)	566 (54.1)
Health centers	225 (94.1)	230 (96.2)	203 (97.1)	112 (93.3)	107 (89.2)	88 (97.8)	29 (96.7)	994 (94.9)
UHE-ps	7 (2.9)	9 (3.8)	5 (2.4)	3 (2.5)	11 (9.2)	2 (2.2)	5 (16.7)	42 (4.0)
NGO clinics	28 (11.7)	9 (3.8)	39 (18.7)	9 (7.5)	12 (10.0)	9 (10.0)	8 (26.7)	114 (10.9)
Pharmacy/drug shop	3 (1.3)	1 (0.4)	3 (1.4)	2 (1.7)	1 (0.8)	1 (1.1)	1 (3.3)	12 (1.1)
Private clinics/hospitals	94 (39.3)	79 (33.1)	51 (24.4)	30 (25.0)	9 (7.5)	28 (31.1)	11 (36.7)	302 (28.8)
Did not know	2 (0.8)	2 (0.8)	0 (0.0)	2 (1.7)	3 (2.5)	1 (1.1)	0 (0.0)	10 (1.0)
When a woman should go for a pregnancy consultation								
First trimester(1-3 months)	188 (78.7)	196 (82.0)	148 (70.8)	93 (77.5)	63 (52.5)	67 (74.4)	29 (96.7)	784 (74.9)
In the middle of pregnancy (4-6 months)	34 (14.2)	32 (13.4)	40 (19.1)	21 (17.5)	38 (31.7)	13 (14.4)	1 (3.3)	179 (17.1)
At the end of her pregnancy (7-9months)	0 (0.0)	0 (0.0)	1 (0.5)	0 (0.0)	2 (1.7)	2 (2.2)	0 (0.0)	5 (0.5)
At the beginning of labor or delivery	0 (0.0)	0 (0.0)	1 (0.5)	0 (0.0)	1 (0.8)	0 (0.0)	0 (0.0)	2 (0.2)
Did not know	17 (7.1)	11 (4.6)	19 (9.1)	6 (5.0)	16 (13.3)	8 (8.9)	0 (0.0)	77 (7.4)
Total, n (%)	**239 (22.8)**	**239 (22.8)**	**209 (20.0)**	**120 (11.5)**	**120 (11.5)**	**90 (8.6)**	**30 (2.9)**	**1,047 (100)**

The women participants of the FGDs and IDIs reported on timing and the benefits of ANC, with the majority indicating the need of starting ANC visits just after conception to get adequate follow-up and care by health professionals. The mothers also reported that a pregnant woman should avoid hard work and carrying heavy loads and should get a balanced diet. They also stated the importance of ANC both for the health of the mother and the fetus, especially in detecting any danger signs or complications. The following quote illustrates good understanding about the importance of ANC.

> "You get advice on how to care for you and the fetus. If a pregnant woman does not make the ANC follow-up, the baby to be born may have a problem."
>
> Addis Ababa-Akaki Kaliti pregnant woman-IDI

The majority (85.8%) of the study participants stated that a pregnant woman should change or improve her daily diet by eating better food such as vegetables and milk, and increase iron and protein (Table 4.11). About 65% of the respondents mentioned that the specific foods recommended for pregnant woman are available in the community. The study participants also indicated alcohol and cigarette smoking, and salty and fatty food should not to be taken by a pregnant woman. This assessment also identified misconceptions held by a few study participants that prohibit pregnant women from eating foods such as meat and coffee (9.9%) particularly in AA and Amhara region, banana and porridge (8.7%), vegetables (8.3%) and milk (7.5%).

Table 4-11: Knowledge about improving the diet for a pregnant woman by regional state/city administration

Variable	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
How a pregnant woman should change/improve her diet								
Eat better food (more vegetables and milk), increase iron and protein	208 (87.0)	213 (89.1)	176 (84.2)	108 (90.0)	98 (81.7)	70 (77.8)	25 (83.3)	898 (85.8)
Eat more food	12 (5.0)	22 (9.2)	9 (4.3)	1 (0.8)	10 (8.3)	4 (4.4)	0 (0.0)	58 (5.5)
Eat less food	6 (2.5)	5 (2.1)	6 (2.9)	5 (4.2)	2 (1.7)	1 (1.1)	0 (0.0)	25 (2.4)
Eat foods that she likes and makes her comfortable	3 (1.3)	6 (2.5)	5 (2.4)	5 (4.2)	2 (1.7)	3 (3.3)	0 (0.0)	24 (2.3)
As per doctors' advice	6 (2.5)	4 (1.7)	5 (2.4)	1 (0.8)	0 (0.8)	4 (4.4)	1 (3.3)	21 (2.0)
Suitable foods for the fetus	1 (0.4)	2 (0.8)	6 (2.9)	2 (1.7)	2 (1.7)	4 (4.4)	3 (10.0)	20 (1.9)
Did not know	20 (8.4)	8 (3.3)	11 (5.3)	5 (4.2)	10 (8.3)	6 (6.7)	2 (6.7)	62 (5.9)
Are the specific food that are recommended for pregnant women availability in the community?								
Yes	148 (61.9)	145 (60.7)	136 (65.1)	98 (81.7)	100 (83.3)	40 (44.4)	13 (43.3)	680 (64.9)
No	47 (19.7)	29 (12.1)	48 (23.0)	2 (1.7)	4 (3.3)	36 (40.0)	13 (43.3)	179 (17.1)
Did not know	44 (18.4)	65 (27.2)	25 (12.0)	20 (16.7)	16 (13.3)	14 (15.6)	4 (13.3)	188 (18.0)
Availability of a specific food that a pregnant woman should not eat in the community								
Yes	53 (22.2)	47 (19.7)	65 (31.1)	25 (20.8)	49 (40.8)	8 (8.9)	6 (20.0)	253 (24.2)
No	109 (45.6)	110 (46.0)	100 (47.8)	69 (57.5)	41 (34.2)	63 (70.0)	20 (66.7)	512 (48.9)
Did not know	77 (32.2)	82 (34.3)	44 (21.1)	26 (21.7)	30 (25.0)	19 (21.1)	4 (13.3)	282 (26.9)
Total, n (%)	239 (22.8)	239 (22.8)	209 (20.0)	120 (11.5)	120 (11.5)	90(8.6)	30(2.9)	1,047 (100)
Types of food to be eaten by a pregnant woman								
Fruits and vegetables	104 (70.3)	99 (68.3)	96 (70.6)	56 (57.1)	68 (68.0)	20 (50.0)	10 (76.9)	453 (66.6)
Iodized Salt and balanced diet	11 (7.4)	5 (3.4)	27 (19.9)	14 (14.3)	17 (17.0)	11 (27.5)	1 (7.7)	86 (12.6)
Milk	13 (8.8)	24 (16.6)	4 (2.9)	14 (14.3)	0 (0.0)	3 (7.5)	0 (0.0)	58 (8.5)
Carbohydrate foods	8 (5.4)	7 (4.8)	2 (1.5)	5 (5.1)	4 (4.0)	2 (5.0)	2 (15.4)	30 (4.4)
Egg	2 (1.4)	3 (2.1)	3 (2.2)	1 (1.0)	5 (5.0)	1 (2.5)	0 (0.0)	15 (2.2)
Fatty foods	5 (3.4)	3 (2.1)	1 (0.7)	3 (3.1)	1 (1.0)	2 (5.0)	0 (0.0)	15 (2.2)
Total, n (%)	148 (21.8)	145 (21.3)	136 (20.0)	98 (14.4)	100 (14.7)	40 (5.9)	13 (1.9)	680 (100.0)
Types of food not to be eaten by a pregnant woman								
Alcohol and cigarette smoking	22 (41.5)	16 (34.0)	25 (38.5)	8 (32.0)	10 (20.4)	1 (12.5)	2 (33.3)	84 (33.2)
Meat and coffee	9 (17.0)	5 (10.6)	10 (15.4)	0 (0.0)	1 (2.0)	0 (0.0)	0 (0.0)	25 (9.9)
Salty and fatty food	0 (0.0)	3 (6.4)	9 (13.8)	2 (8.0)	9 (18.4)	2 (25.0)	0 (0.0)	25 (9.9)
Banana, porridge, and coffee	3 (5.7)	6 (12.8)	6 (9.2)	2 (8.0)	3 (6.1)	1 (12.5)	1 (16.7)	22 (8.7)
Vegetables	4 (7.5)	6 (12.8)	2 (3.1)	2 (8.0)	3 (6.1)	3 (37.5)	1 (16.7)	21 (8.3)
Milk	1 (1.9)	3 (6.4)	3 (4.6)	4 (16.0)	8 (16.3)	0 (0.0)	0 (0.0)	19 (7.5)
Total, n (%)	53 (20.9)	47 (18.6)	65 (25.7)	25 (9.9)	49 (19.4)	8 (3.2)	6 (2.4)	253 (100.0)

Table 4-12 shows sources of information on ANC. Overall, 60.7% and 41% of respondents cited television and health workers/health facility, respectively, as the main sources of information for ANC. Most participants also highlighted radio (37.8%) and families, friends, neighbors, and colleagues (32.5%) as sources of information on ANC. However, the proportion of written materials as well as UHE-ps as a source of information for ANC was insignificant. Surprisingly, 20 respondents had never heard information about ANC.

Table 4-12Knowledge and sources of information about ANC by regional state/city administration

Variable	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Sources of information about ANC								
Newspaper and magazine	26 (10.9)	16 (6.7)	7 (3.3)	6 (5.0)	10 (8.3)	4 (4.4)	4 (13.3)	73 (7.0)
Radio	105(43.9)	93 (38.9)	67 (32.1)	48 (40.0)	56 (46.7)	16 (17.8)	11 (36.7)	396(37.8)
Television	164(68.6)	159(66.5)	125(59.8)	69 (57.5)	66 (55.0)	36 (40.0)	15 (50.0)	634 (60.6)
Billboards	17 (7.1)	3 (1.3)	4 (1.9)	0 (0.0)	5 (4.2)	0 (0.0)	1 (3.3)	30 (2.9)
Brochures, posters, and other printed materials	19 (7.9)	19 (7.9)	8 (3.8)	9 (7.5)	9 (7.5)	4 (4.4)	3 (10.0)	71 (6.8)
Health workers/facility	96 (40.2)	100(41.8)	92 (44.0)	52 (43.3)	39 (32.5)	40 (44.4)	10 (33.3)	429(41.0)
UHE-p	8 (3.3)	42 (17.6)	26 (12.4)	21 (17.5)	34 (28.3)	20 (22.2)	3 (10.0)	154(14.7)
Family, friends, neighbors, and colleagues	67 (28.0)	69 (28.9)	64 (30.6)	65 (54.2)	25 (20.8)	39 (43.3)	11 (36.7)	340(32.5)
School	8 (3.3)	2 (0.8)	7 (3.3)	11 (9.2)	3 (2.5)	4 (4.4)	4 (13.3)	39 (3.7)
Never heard of ANC	5 (2.1)	3 (1.3)	2 (1.0)	3 (2.5)	2 (1.7)	5 (5.6)	0 (0.0)	20 (1.9)
Other (textbook and youth association)	3 (1.3)	3 (1.3)	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	7 (0.7)
Total, n (%)	**239 (22.8)**	**239 (22.8)**	**209 (20.0)**	**120 (11.5)**	**120 (11.5)**	**90 (8.6)**	**30 (2.9)**	**1,047 (100)**

About 21.8% of the respondents/their partners reported that they became pregnant within the past two years, and almost all (99.1%) reported that they attended ANC during the most recent birth (Table 4-13). By far the most visited health facility for ANC was a health center (54.4%), followed by a private clinic/hospital (18.1%), and a public hospital (19.9%). This study also identified the number of ANC visits made by pregnant women and the months of pregnancy at the first visit. With regard to the frequency of ANC visits for the most recent birth, the majority (72.1%) had four or more contacts with a health facility, while 15.5% made three or fewer visits. Women in Tigray (80%) and Oromia (77.4%) regions were slightly more likely to make four or more ANC visits than women in Amhara region (67.4%) or AA (66.7%)(Fig. 2). However, about 10% of the respondents did not remember the frequency of ANC visits made by them for the most recent birth. Under normal circumstances, the WHO recommends that a pregnant woman without complications should make at least four ANC visits to detect reproductive health risk factors.

However, in the event of a complication, a pregnant woman is advised to make more frequent visits to a hospital or health center. A substantial proportion (15.5%) of the study participants reported that they did not make the recommended number of ANC visits, and only 61.9% made their first ANC visit within the first three months of pregnancy. Nearly one-third (31.9%) of the pregnant women sought ANC after their fourth month of pregnancy. There was little regional variation in terms of when the first ANC visit was made.

Table 4-13: Respondent/partner history of pregnancy and ANC use by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Respondent/partner pregnant within the past two years								
Yes	42 (17.6)	44 (18.4)	53 (25.4)	31 (25.8)	20 (16.7)	30 (33.3)	8 (26.7)	228(21.8)
No	197(82.4)	195(81.6)	156(74.6)	89 (74.2)	100(83.3)	60 (66.7)	22 (73.3)	819(78.2)
Total, n (%)	**239 (22.8)**	**239 (22.8)**	**209 (20.0)**	**120 (11.5)**	**120 (11.5)**	**90 (8.6)**	**30 (2.9)**	**1,047 (100)**
Attended ANC during the most recent birth								
Yes	42(100.0)	43 (97.7)	53(100.0)	30 (96.8)	20(100.0)	30(100.0)	8 (100.0)	226(99.1)
No	0 (0.0)	1 (2.3)	0 (0.0)	1 (3.2)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.9)
Total, n (%)	**42 (18.4)**	**44 (19.3)**	**53 (23.2)**	**31(13.6)**	**20 (8.8)**	**30 (13.2)**	**8 (3.5)**	**228 (100)**
Type of health facility at which ANC was visited for the most recent birth								
Government hospital	6 (14.3)	13 (30.2)	8 (15.1)	2 (6.7)	9 (45.0)	6 (20.0)	1 (12.5)	45 (19.9)
Health center	26 (61.9)	14 (32.6)	33 (62.3)	19 (63.3)	9 (45.0)	19 (63.3)	3 (37.5)	123(54.4)
NGO clinic	2 (4.8)	6 (14.0)	2 (3.8)	5 (16.7)	1 (5.0)	0 (0.0)	1 (12.5)	17 (7.5)
Private clinic/hospital	8 (19.1)	10 (23.3)	10 (18.9)	4 (13.3)	1 (5.0)	5 (16.7)	3 (37.5)	41 (18.1)
No. of ANC visits for the most recent birth from the health facility								
Once	0 (0.0)	0 (0.0)	3 (5.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (1.3)
Twice	1 (2.4)	0 (0.0)	0 (0.0)	0 (0.0)	1 (5.0)	5 (16.7)	1 (12.5)	8 (3.5)
Three times	6 (14.3)	6 (0.0)	4 (7.5)	0 (0.0)	3 (15.0)	4 (13.3)	1 (12.5)	24 (10.6)
Four or more	28 (66.7)	29 (67.4)	41 (77.4)	24 (80.0)	14 (70.0)	21 (70.0)	6 (75.0)	163(72.1)
Did not remember	6 (14.3)	7 (16.3)	4 (7.5)	5 (16.7)	1 (5.0)	0 (0.0)	0 (0.0)	23 (10.2)
No response	1 (2.4)	1 (2.3)	1 (1.9)	1 (3.3)	1 (5.0)	0 (0.0)	0 (0.0)	5 (2.2)
Time of pregnancy during the first ANC visit								
Within the 1st 3 months	28 (66.7)	24 (55.8)	27 (50.9)	22 (73.3)	10 (50.0)	23 (76.7)	6 (75.0)	140(61.9)
Between 3-6 months	11 (26.2)	17 (39.5)	22 (41.5)	7 (23.2)	7 (35.0)	5 (16.7)	2 (25.0)	71 (31.4)
Within the last 3 months	2 (4.8)	1 (2.3)	1 (1.9)	0 (0.0)	2 (10.0)	0 (0.0)	0 (0.0)	6 (2.7)
Did not remember	1 (2.4)	1 (2.3)	3 (5.7)	1 (3.3)	1 (5.0)	2 (6.7)	0 (0.0)	9 (3.5)
Total, n (%)	**42 (18.6)**	**43 (19.0)**	**53 (23.5)**	**30 (13.3)**	**20 (8.8)**	**30 (13.3)**	**8 (3.5)**	**226(100)**

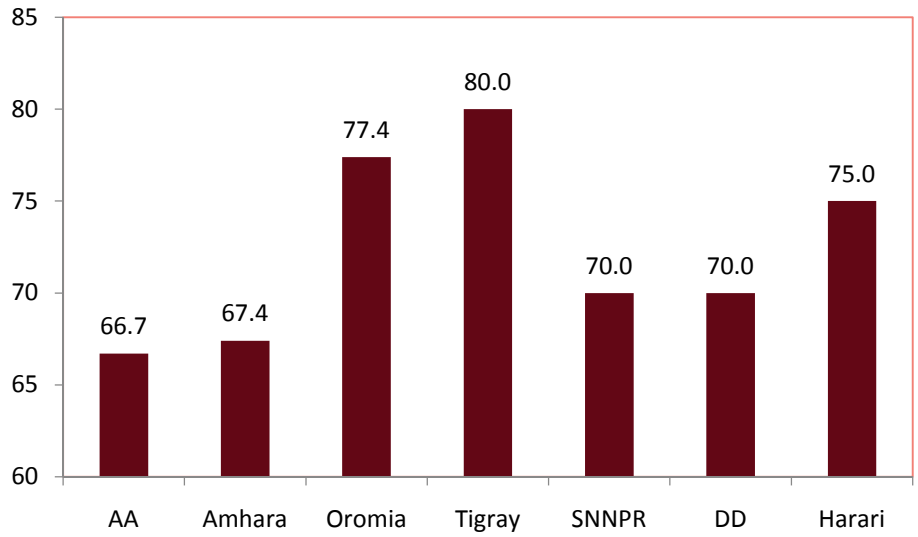

Figure 4.2: Percentage of four or more times of ANC visits for the most recent birth by region

The IDIs and FGDs participants discussed their experiences with ANC services. In most cases, they reported the use of ANC services by the pregnant women. As reported, most pregnant women start visiting ANC upon learning that they are pregnant. The participants also described the package of the ANC services, which includes HCT, urine and blood test, blood pressure check, measuring and weighing, advice for institutional delivery, vaccination, iron foliate supplementation, and checking for other danger signs pregnancy. Health centers were identified as the most preferred facility of ANC services for many pregnant women.

The household survey participants were asked about health facility-related motivating factors for ANC visits and their satisfaction level about the services provided (Table 4-14). The majority (81.9%) of respondents reflected that health facilities are safe for a woman to check for her fetus, followed by the availability of qualified staff (13.3%), and closeness to home (10.6%). The overwhelming majority (90.3%) of respondents replied that they were satisfied with the quality of the services provided during the ANC visits at the health facilities. Responses did not vary much by region or city administration in reports of motivating factors and satisfaction levels of services.

Table 4-14: Motivating factors for ANC visit and satisfaction level about ANC services by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Health facility related motivating factors for ANC visit								
Close to home	2 (4.8)	0 (0.0)	10 (18.9)	4 (13.3)	0 (0.0)	5 (16.7)	3 (37.5)	24 (10.6)
Adequate qualified staff available	2 (4.8)	6 (14.0)	15 (28.3)	2 (6.7)	2 (10.0)	1 (3.3)	2 (25.0)	30 (13.3)
All the medicines available	3 (7.1)	1 (2.3)	8 (15.1)	1 (3.3)	0 (0.0)	0 (0.0)	0 (0.0)	13 (5.8)
Safe for a woman to check her fetus	34 (81.0)	32 (74.4)	45 (84.9)	23 (76.7)	18 (90.0)	25 (83.3)	8 (100.0)	185(81.9)
Fees affordable	1 (2.4)	1 (2.3)	4 (7.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	6 (2.7)
To ensure myself and the baby healthy	5 (11.9)	7 (16.3)	1 (1.9)	2 (6.7)	0 (0.0)	0 (0.0)	0 (0.0)	15 (6.6)
Satisfaction level								
Satisfied	35 (83.3)	38 (88.4)	48 (90.6)	28 (93.3)	19 (95.0)	29 (96.7)	7 (87.5)	204(90.3)
Neither satisfied nor dissatisfied	2 (4.8)	1 (2.3)	1 (1.9)	0 (0.0)	0 (0.0)	1 (3.3)	0 (0.0)	5 (2.2)
Dissatisfied	4 (9.5)	3 (7.0)	4 (7.5)	2 (6.7)	0 (0.0)	0 (0.0)	1 (12.5)	14 (6.2)
No response	1 (2.4)	1 (2.3)	0 (0.0)	0 (0.0)	1 (5.0)	0 (0.0)	0 (0.0)	3 (1.3)
Total, n (%)	**42 (18.6)**	**43 (19.0)**	**53 (23.5)**	**30 (13.3)**	**20 (8.8)**	**30 (13.3)**	**8 (3.5)**	**226(100)**

This study also asked if UHE-ps visited pregnant women at home during the most recent pregnancy; only 30.7% were visited by the UHE-ps (Table 4-15). Most visits by the UHE-ps were made at home (92.9%) and the remaining at the health center. With regard to the components of services provided to the pregnant women by the UHE-ps, the majority (81.4%) were advised about delivery at a health center, vaccination, and HCT, followed by advice on proper nutrition and personal hygiene (18.6%).

Table 4-15: Frequency of UHE-p visit of pregnant woman and type of services provided by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
UHE-p visit during the most recent pregnancy								
Yes	4 (9.5)	22 (50.0)	6 (11.3)	19 (61.3)	9 (45.0)	9 (30.0)	1 (12.5)	70 (30.7)
No	38 (90.5)	22 (50.0)	47 (88.7)	12 (38.7)	11 (55.0)	21 (70.0)	7 (87.5)	158(69.3)
Total, n (%)	**42 (18.4)**	**44 (19.3)**	**53 (23.2)**	**31 (13.6)**	**20 (8.8)**	**30 (13.2)**	**8 (3.5)**	**228(100)**
Place of UHE-ps visit during the most recent pregnancy								
Home	4 (100.0)	22(100.0)	5 (83.3)	17 (89.5)	8 (88.9)	8 (88.9)	1 (100.0)	65 (92.9)
Health center	0 (0.0)	0 (0.0)	1 (16.7)	2 (10.5)	1 (11.1)	1 (11.1)	0 (0.0)	5 (7.1)
Services provided by UHE-ps during the visit of the most recent birth								
Advice to visit health center for delivery, vaccination,& HIV test	4 (100.0)	19 (86.4)	6 (100.0)	10 (52.6)	9 (100.0)	8 (88.9)	1 (100.0)	57 (81.4)
Advice on nutrition and personal hygiene	0 (0.0)	3 (13.6)	0 (0.0)	9 (47.4)	0 (0.0)	1 (11.1)	0 (0.0)	13 (18.6)
Total, n (%)	**4 (5.7)**	**22 (31.4)**	**6 (8.6)**	**19 (27.1)**	**9 (12.9)**	**9 (12.9)**	**1 (1.4)**	**70 (100)**

4.4. Knowledge, attitude, and practice about health facility delivery

One of the main approaches to reducing health risks of mothers and children is to increase the proportion of pregnant women delivering in health facilities. Table 4-16 presents information about the respondent opinion so preferred place of delivery for women in the community, and their knowledge about the advantages of health facility delivery compared to home delivery, or disadvantages of home delivery compared to health facility. The majority (93.4%) of the respondents across all the study areas preferred woman to deliver their babies in the health facility. Very few respondents (<5%) indicated home delivery with skilled or traditional birth attendants. About 80% of the respondents identified advantages of health facility delivery such as provision of expert help (27.8%); prevention of too much blood flow (23.4%); provision of special care for the baby (20.1%); and medication for the mother during labor (11%).

The participants of the FGDs and IDIs indicated the importance of delivering at health facilities to avoid unforeseen problems during delivery, indicating cleanness, appropriate care for the baby, and early initiation of immunization. The following quotes illustrate the importance of health facility delivery.

> "I don't expect that there is a mother who delivers at home without going to the health facility because currently it is considered as a culture."
>
> Addis Ababa-Arada father FGD

> "Any unforeseen problem can occur during delivery; hence, facility delivery is advantageous to manage bleeding and save mother's lives. Assisted delivery is essential for the lives of the new born and gets the appropriate care right after delivery."
>
> Addis Ababa-Akaki Kaliti mother IDI

When respondents were asked about the disadvantages of home delivery compared to health facility, about 70% cited too much blood loss or unsafe delivery materials (38.8%) and death during delivery (31%) (Table 4-16). Although there was not much difference in opinion and knowledge about the preference of place of delivery or advantages of health facility delivery, a significant proportion of respondents (60%) in Tigray region cited too much blood loss or unsafe delivery materials as the disadvantages of home delivery, compared to the findings of other study regions.

Table 4-16: Knowledge about the advantages and disadvantages of health facility delivery compared to home delivery by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Respondent opinion about the need for the place of delivery in the community								
Health facility	224 (93.7)	223 (93.3)	190 (90.9)	115 (95.8)	108 (90.0)	88 (97.8)	30 (100.0)	978 (93.4)
Home with skilled birth attendance	8 (3.3)	0 (0.0)	13 (6.2)	1 (0.8)	1 (0.8)	0 (0.0)	0 (0.0)	23 (2.2)
Home with traditional birth attendance	1 (0.4)	9 (3.8)	1 (0.5)	1 (0.8)	7 (5.8)	2 (2.2)	0 (0.0)	21 (2.0)
No response	6 (2.5)	7 (2.9)	5 (2.4)	3 (2.5)	4 (3.3)	0 (0.0)	0 (0.0)	25 (2.4)
Advantages of health facility delivery compared to home delivery								
Get expertise help	77 (32.2)	60 (25.1)	62 (29.7)	37 (30.8)	25 (20.8)	26 (28.9)	4 (13.3)	291 (27.8)
Prevent too much blood flow	47 (19.7)	62 (25.9)	49 (23.4)	38 (31.7)	25 (20.8)	14 (15.6)	10 (33.3)	245 (23.4)
Provide special care for the baby	37 (15.5)	53 (22.2)	49 (23.4)	17 (14.2)	25 (20.8)	23 (25.6)	6 (20.0)	210 (20.1)
Give medication to mother during labor	30 (12.6)	21 (8.8)	16 (7.7)	9 (7.5)	25 (20.8)	7 (7.8)	7 (23.3)	115 (11.0)
Normal delivery without stress	5 (2.1)	21 (8.8)	5 (2.4)	6 (5.0)	11 (9.2)	6 (6.7)	1 (5.3)	55 (5.3)
Deliver healthy baby	18 (7.5)	7 (2.9)	1 (0.5)	3 (2.5)	3 (2.5)	3 (3.3)	0 (0.0)	35 (3.3)
As an insurance	9 (3.8)	0 (0.0)	12 (5.7)	0 (0.0)	0 (0.0)	10 (11.1)	0 (0.0)	31 (3.0)
Safe from blood contamination	11 (4.6)	7 (2.9)	5 (2.4)	5 (4.2)	2 (1.7)	1 (1.1)	0 (0.0)	31 (3.0)
To be protected from STIs	3 (1.3)	6 (2.5)	4 (1.9)	3 (2.5)	2 (1.7)	0 (0.0)	2 (6.7)	20 (1.9)
Other	2 (0.8)	2 (0.8)	6 (2.9)	2 (1.7)	2 (1.7)	0 (0.0)	0 (0.0)	14 (1.4)
Disadvantages of home delivery compared to health facility								
Too much blood loss or delivery materials not clean	90 (37.7)	84 (35.1)	85 (40.7)	72 (60.0)	33 (27.5)	25 (27.8)	17 (56.7)	406 (38.8)
Death may happen	59 (24.7)	90 (37.7)	73 (34.9)	26 (21.7)	33 (27.5)	36 (40.0)	8 (26.7)	325 (31.0)
Poor care for baby and mother	23 (9.6)	12 (5.0)	18 (8.6)	3 (2.5)	10 (8.3)	10 (11.1)	1 (3.3)	77 (7.4)
Labor may be prolonged and baby may die	20 (8.4)	10 (4.2)	3 (1.4)	6 (5.0)	13 (10.8)	5 (5.6)	0 (0.0)	57 (5.4)
Baby could be suffocated	13 (5.4)	7 (2.9)	7 (3.3)	3 (2.5)	8 (6.7)	2 (2.2)	1 (3.3)	41 (3.9)
Exposure to blood contamination	8 (3.3)	17 (7.1)	5 (2.4)	2 (1.7)	5 (4.2)	3 (3.3)	0 (0.0)	40 (3.8)
Lack of medicine for labor	3 (1.3)	4 (1.7)	1 (0.5)	2 (1.7)	2 (1.7)	2 (2.2)	1 (3.3)	15 (1.4)
Other	23 (9.6)	15 (6.3)	17 (8.1)	6 (5.0)	16 (13.3)	7 (7.8)	2 (6.7)	86 (8.2)
Total, n (%)	**239 (22.8)**	**239 (22.8)**	**209 (20.0)**	**120 (11.5)**	**120 (11.5)**	**90 (8.6)**	**30 (2.9)**	**1047 (100)**

Respondents were also asked about the main reasons that women do not deliver at the health facilities. Lack of awareness (79%) about the advantages of health facility delivery was followed by a significantly low percentage of respondents who mentioned cost of delivery (7.6%), distance to the health facility (6.3%), or cultural influence (4.8%) (Table 4-17). Sudden labor at home (4.5%) was also cited as a reason for not delivering at health facility.

Table 4-17: Respondent perception of reasons for pregnant women not to deliver in the health facilities by regional state/city administration

Reasons not to deliver in health facility	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Lack of awareness	197 (82.4)	185 (77.4)	172 (82.3)	79 (65.8)	101 (84.2)	69 (76.7)	24 (80.0)	827 (79.0)
Cost of delivery	29 (12.1)	16 (6.7)	19 (9.1)	3 (2.5)	8 (6.7)	5 (5.6)	0 (0.0)	80 (7.6)
Distance of facility	12 (5.0)	14 (5.9)	19 (9.1)	2 (1.7)	15 (12.5)	3 (3.3)	1 (3.3)	66 (6.3)
Cultural influence	6 (2.5)	19 (7.9)	4 (1.9)	15 (12.5)	3 (2.5)	3 (3.3)	0 (0.0)	50 (4.8)
Sudden labor	12 (5.0)	15 (6.3)	8 (3.8)	9 (7.5)	0 (0.0)	1 (1.1)	2 (6.7)	47 (4.5)
Scared to deliver at health facility	8 (3.3)	6 (2.5)	8 (3.8)	0 (0.0)	1 (1.1)	1 (1.1)	0 (0.0)	24 (2.3)
Family influence	2 (0.8)	9 (3.8)	2 (1.0)	1 (0.8)	1 (0.8)	3 (3.3)	2 (6.7)	20 (1.9)
Lack of understanding about its use	1 (0.4)	3 (1.3)	0 (0.0)	6 (5.0)	0 (0.0)	3 (3.3)	0 (0.0)	13 (1.2)
Poor service	2 (0.8)	2 (0.8)	2 (1.0)	1 (0.8)	2 (1.7)	1 (1.1)	0 (0.0)	10 (1.0)
Other	2 (0.8)	5 (2.1)	1 (0.5)	7 (5.8)	1 (0.8)	0 (0.0)	0 (0.0)	16 (1.5)
Total, n (%)	**239 (22.8)**	**239 (22.8)**	**209 (20.0)**	**120 (11.5)**	**120 (11.5)**	**90 (8.6)**	**30 (2.9)**	**1,047 (100)**

The participants of the IDIs and FGDs indicated the superiority of health facility delivery over home delivery. The health facility delivery was considered best since it is clean and the scissors/razors used for cutting the placenta are sterile. Participants also noted that the newborn gets appropriate care and services and any maternal bleeding can be easily managed. One health worker noticed the increasing number of pregnant women delivering in the health facilities.

> "The number of pregnant women who come to health facilities for delivery has increased and recently most women prefer to give birth in the health facility."

The participants of the IDIs and FGDs reported that there is no any advantage in home delivery. They noted that many pregnant women delivering at home encounter excessive bleeding resulting in death of the mother. Some of them also reported that home delivery might result in infection and HIV transmission from infected/unsterilized cutting tools.

Table 4-18 shows data on the knowledge of the respondents about the length of stay for a mother and a newborn in a health facility to receive necessary care and postnatal care services. More than half (51.2%) of the respondents reported that a mother and newborn baby should leave a health facility 24 hours after delivery, while 16.8% reported that they should leave immediately after delivery. Other respondents reported five days after delivery (14.6%), and 3.6% said it should depend on the condition of the mother and baby. About 12% of the respondents did not know the appropriate length of stay in a health facility after delivery. Table 4-18 also shows respondent knowledge of basic postnatal care services. It should be noted that most respondents were knowledgeable about the basic postnatal care services, which include counseling on exclusive breastfeeding (EBF) (43.2%), advice on subsequent postnatal contacts (29.2%), family and social support (12.5%), and counseling on nutrition (28.9%), hygiene (29.3%), and family planning (20.2%). Quite a significant number (19%) of respondents were not aware of any basic postnatal care services.

Table 4-18: Respondent knowledge about length of stay for a mother and newborn in a health facility to receive care and basic postnatal care services by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Length of stay after delivery								
Should leave immediately after delivery	33 (13.8)	32 (13.4)	34 (16.3)	17 (14.2)	31 (25.8)	23 (25.6)	6 (20.0)	176 (16.8)
24 hours after delivery	121 (50.6)	107 (44.8)	125 (59.8)	57 (47.5)	58 (48.3)	50 (55.6)	18 (60.0)	536 (51.2)
5 days	12 (5.0)	21 (8.8)	8 (3.8)	12 (10.0)	4 (2.3)	6 (6.7)	1 (3.3)	64 (6.1)
A week	23 (9.6)	21 (8.8)	12 (5.7)	22 (18.3)	8 (6.7)	1 (1.1)	2 (6.7)	89 (8.5)
Depend on the health of the mother	12 (5.0)	19 (7.9)	4 (1.9)	2 (1.7)	0 (0.0)	0 (0.0)	1 (3.3)	38 (3.6)
As per the doctor advice	1 (0.4)	5 (2.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	6 (0.6)
Other	5 (2.0)	3 (1.2)	0 (0.0)	4 (3.3)	0 (0.0)	0 (0.0)	1 (3.3)	13 (1.3)
Did not know	32 (13.4)	31 (13.0)	26 (12.4)	6 (5.0)	19 (15.8)	10 (11.1)	1 (3.3)	125 (11.9)
Knowledge of basic postnatal care services								
Counseling on EBF	113 (47.3)	87 (36.4)	103 (49.3)	35 (29.2)	53 (44.2)	42 (46.7)	19 (63.3)	452 (43.2)
Advice on subsequent postnatal contacts	65 (27.2)	52 (21.8)	78 (37.3)	28 (23.3)	46 (38.3)	28 (31.1)	9 (30.0)	306 (29.2)
Family and social support	26 (10.9)	32 (13.4)	24 (11.5)	23 (19.2)	6 (5.0)	13 (14.4)	7 (23.3)	131 (12.5)
Counseling on nutrition	71 (29.7)	80 (33.5)	66 (31.6)	25 (20.8)	30 (25.0)	22 (24.4)	9 (30.0)	303 (28.9)
Counseling on hygiene	68 (28.5)	80 (33.5)	54 (25.8)	22 (18.3)	36 (30.0)	34 (37.8)	13 (43.3)	307 (29.3)
Counseling on FP	54 (22.6)	42 (17.6)	50 (23.9)	14 (11.7)	13 (10.8)	29 (32.2)	10 (33.3)	212 (20.2)
Vaccination services and general checkup for the mother's health	24 (10.0)	30 (12.6)	15 (7.2)	11 (9.2)	12 (10.0)	9 (10.0)	2 (6.7)	103 (9.8)
Other	2 (0.8)	4 (1.6)	0 (0.0)	5 (4.2)	0 (0.0)	0 (0.0)	0 (0.0)	11 (1.1)
Did not know	41 (17.2)	59 (24.7)	32 (15.3)	29 (24.2)	24 (20.0)	12 (13.3)	2 (6.7)	199 (19.0)
Total, n (%)	**239 (22.8)**	**239 (22.8)**	**209 (20.0)**	**120 (11.5)**	**120 (11.5)**	**90 (8.6)**	**30 (2.9)**	**1,047 (100)**

Respondents who had ever given birth were asked about the place of delivery for the most recent child (Fig4.3). About 80% of the recent births were reported to be delivered in a health facility (health centers, hospitals, and private health facilities), where it is assumed that there are adequate number of skilled health providers and necessary resources for routine and emergency care, though this is not true in every health facility. Almost two-thirds of the deliveries took place in governmental health centers and hospitals, while a small proportion of mothers (10.3%) used private hospitals for delivery. Quite a large proportion (20.8%) of deliveries took place at home, with more than 25% each in Oromia and DD. The percentages of health facility delivery for Oromia (74.8%) and DD (72.1%) were lower than other regions.

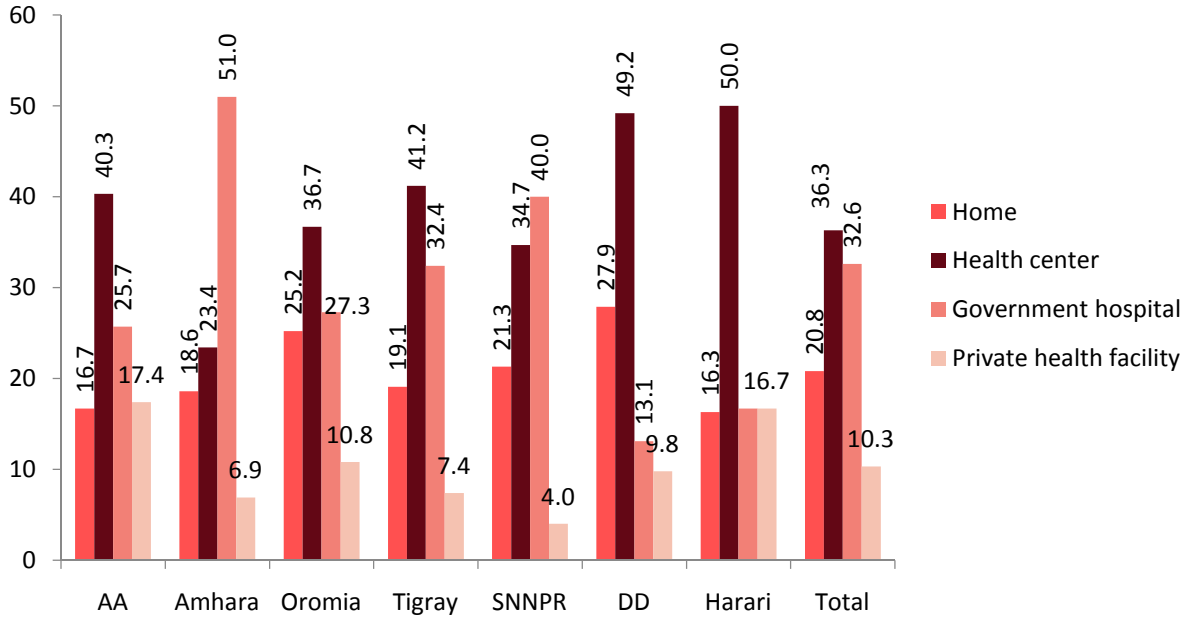

Figure 4:3: Percentage of place of delivery for the most recent child by region

The IDI and FGD participants revealed that most pregnant women deliver in health facilities, particularly in health centers and hospitals. Most women IDIs respondents delivered at health facilities, which they regard highly.

> "There is appropriate care for both mother and baby … the umbilicus is removed safely, there will not be a contamination and everything will be safe and healthy."
>
> Amhara-Dessie mother IDI

However, some participants noted problems during delivery, particularly in the hospitals.

> "I went to the hospital at 6:00 pm in the evening and delivered the next day at 1:00 pm. There are problems in the hospital they tell you there is no water, they also refer you to other health institutions after a very tiresome prolonged labour."
>
> Addis Ababa-Akaki Kaliti mother IDI

Although the coverage of facility delivery in Ethiopia is generally low (10%) according to the EDHS 2011, the findings of this study identified high coverage of health facility delivery because most of the participants in this study were from towns/cities. The women IDIs stated that health facility delivery used to be a problem and most women preferred to deliver at home, partly due to mistreatment by the health professionals, especially nurses. However, participants stressed that the trend in home delivery is changing, mainly due to the availability of midwives and UHE-ps. Participants noted that some health professionals were committed but others were rude, especially during child delivery. Some of the participants noted that the hospitality and care given by the health professionals to pregnant women during ANC was much better than the care given during delivery. The misconduct of some professionals thus appears to deter health facility delivery and encourage home delivery.

> "If I am being mistreated by the nurses, I don't have to open my legs. I would rather give birth at home and accept whatever consequence happens to me."
>
> Addis Ababa-Yeka mother IDI

Table 4-19 shows the frequency and percent distribution of the most recent births by the type of assistance during delivery. About 82% of the births were assisted by health professionals (doctors, nurses and midwives. Assistance by a health professional during the recent birth was slightly lower in Oromia and DD (76.1% and 74.1%, respectively) than other areas (82.2%-85.2%).Traditional birth attendants (TBAs) assisted 10.9% of deliveries, and relatives or other untrained people assisted 5.5%. About 1% of the births were delivered without assistance. TBAs also assisted births in AA, DD. and Harari areas. UHE-ps contribution to delivery was insignificant (0.6%) across all study areas.

Table 4-19: Distribution of place of delivery and type of assistance during the most recent birth by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Person provided assistance during the most recent child[28]								
Health worker (doctors, nurse, midwife)	121 (85.2)	119 (85.0)	102 (76.1)	57 (85.1)	60 (82.2)	44 (74.1)	15 (83.3	517 (81.8)
UHE-p	0 (0.0)	0 (0.0)	3 (2.2)	0 (0.0)	0 (0.0)	1 (1.7)	0 (0.0)	4 (0.6)
TBA	10 (7.0)	15 (10.7)	19 (14.2)	5 (7.5)	10 (13.7)	7 (12.1)	3 (16.7)	69 (10.9)
Relative/someone else	9 (6.3)	4 (2.9)	10 (7.5)	5 (7.5)	2 (2.7)	5 (8.6)	0 (0.0)	35 (5.5)
Not assisted	2 (1.4)	2 (1.4)	0 (0.0)	0 (0.0)	1 (1.4)	2 (3.4)	0 (0.0)	7 (1.1)
Total, n (%)	**142 (22.6)**	**140 (22.2)**	**134 (21.2)**	**67 (10.6)**	**73 (11.6)**	**59 (9.2)**	**18 (2.8)**	**632 (100)**

[28] Data missing for 18 respondents

Respondents who reported delivery in a health facility or at home were asked the reasons they delivered there. Table 4-20 shows that of respondents who reported health facility delivery for the most recent birth, 62% and 57.3% stated that it is safer for the mother as well as safer for the baby, respectively. The availability of skilled providers at a health facility was reported by 47% of the respondents. About 12% reported either close proximity of a health facility or recommendation by a relative. Overall, there were marked variations in reasons for delivery in a health facility among the regions. Table 4-20 also shows reasons for home delivery, and 12.6% reported that delivery in a health facility demands high transportation cost, or they gave birth suddenly at home (24.4%). About 10% of respondents reported lack of knowledge about the importance of health facility delivery, and 3.7% did not want deliver in a health facility (3.7%).

Table 4-20: Reasons for delivery in health facility and at home for the most recent birth by regional state/city administration

	Regional state/city administration, n (%)							
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	Total, n (%)
Reasons for health facility delivery for the most recent child								
Safer for mother	67 (55.8)	82 (69.5)	78 (75.0)	21 (38.2)	38 (64.4)	21 (47.7)	12 (80.0)	319 (61.9)
Safer for child	61 (50.8)	62 (52.5)	79 (76.0)	17 (30.9)	40 (67.8)	24 (54.5)	12 (80.0)	295 (57.3)
Skilled care	54 (45.0)	49 (41.5)	48 (46.2)	36 (65.5)	31 (52.5)	18 (40.9)	6 (40.0)	242 (47.0)
Close to health facility	9 (7.5)	5 (4.2)	12 (11.5)	2 (3.6)	1 (1.7)	5 (11.4)	0 (0.0)	34 (6.6)
Recommended by relative	9 (7.5)	5 (4.2)	7 (6.7)	3 (5.5)	0 (0.0)	5 (11.4)	1 (6.7)	30 (5.8)
Preference to deliver in the hospital	1 (0.8)	2 (1.7)	0 (0.0)	3 (5.5)	0 (0.0)	1 (2.3)	0 (0.0)	7 (1.4)
Other	3 (2.5)	2 (1.7)	0 (0.0)	1 (1.8)	0 (0.0)	0 (0.0)	0 (0.0)	6 (1.2)
Total, n (%)	**120 (23.3)**	**118(22.9)**	**104(20.2)**	**55 (10.7)**	**59 (11.5)**	**44 (8.5)**	**15 (2.9)**	**515 (100)**
Reasons for home delivery for the most recent child								
No fees charged	1 (4.2)	2 (7.4)	2 (5.7)	0 (0.0)	1 (6.3)	3 (17.6)	0 (0.0)	9 (6.7)
Facility delivery requires high transport cost	3 (12.5)	2 (7.4)	6 (17.1)	0 (0.0)	3 (18.8)	3 (17.6)	0 (0.0)	17 (12.6)
Did not trust/like health facility	1 (4.2)	0 (0.0)	4 (11.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (3.7)
Better care at home	1 (4.2)	2 (7.4)	1 (2.9)	1 (7.7)	1 (6.3)	0 (0.0)	0 (0.0)	6 (4.4)
Recommended by relative	0 (0.0)	1 (3.7)	1 (2.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.5)
Not satisfied by the service of health facility	0 (0.0)	0 (0.0)	1 (2.9)	1 (7.7)	2 (12.5)	0 (0.0)	0 (0.0)	3 (2.2)
Health center far away	2 (8.3)	1 (3.7)	1 (2.9)	0 (0.0)	2 (12.5)	4 (23.5)	0 (0.0)	10 (7.4)
Regularly practiced in the community	2 (8.3)	2 (7.4)	4 (11.4)	0 (0.0)	0 (0.0)	3 (17.6)	0 (0.0)	11 (8.1)
Accidentally happened at midnight	4 (16.7)	2 (7.4)	1 (2.9)	2 (15.4)	1 (6.3)	1 (5.9)	0 (0.0)	9 (6.7)
Gave 1st birth at home without any problem	5 (20.8)	0 (0.0)	1 (2.9)	0 (0.0)	0 (0.0)	1 (5.9)	0 (0.0)	7 (5.2)
Gave birth suddenly	6 (25.0)	5 (18.5)	11 (31.4)	3 (23.1)	6 (37.5)	0 (0.0)	2 (66.7)	33 (24.4)
Didn't like to give birth in the health center	0 (0.0)	1 (3.7)	0 (0.0)	3 (23.1)	0 (0.0)	1 (5.9)	0	5 (3.7)
Lack of knowledge	0 (0.0)	3 (11.1)	4 (11.4)	1 (7.7)	1 (6.3)	3 (17.6)	1 (33.3)	13 (9.6)
Total, n (%)	**24 (17.8)**	**27 (20.0)**	**35 (25.9)**	**13 (9.6)**	**16 (11.9)**	**17 (12.6)**	**3 (2.2)**	**135 (100)**

4.5. Knowledge, attitude, and practice about postnatal care

A number of problems experienced by the mother and child occur during the period of six weeks following delivery. Such problems can be identified and treated through proper follow-up visits for women during PNC. Therefore, knowledge about PNC is important to treat complications arising from delivery, and to provide a mother with important information on how to care for herself and her child. Table 4-21 shows the distribution of respondent knowledge about the benefits of postnatal care. Reduction of maternal and neonatal mortalities (49.1% and 54.1%, respectively) were the two main benefits of PNC reported by the respondents, followed by provision of FP services (22.3%) and counseling on EBF services (22.3%). Provision of PMTCT service for HIV+ mothers was mentioned by 6.5% of the respondents. There was a marked regional variation in the knowledge of the respondents about the benefits of PNC.

IDI and FGD respondents recognized the importance of PNC services, indicating that a mother should stay in the health facility at least for six hours following delivery in order to get proper management of bleeding, immunize to the child, check for raised blood pressure or any problem associated with breathing as well as heartbeat, none of which would be possible at home delivery. Some IDI mothers associated PNC with the traditional 40 days of confinement period after delivery during which the mother is expected to care for herself and the child.

Table 4-21: Respondent knowledge about the benefits of postnatal care by regional state/city administration

Knowledge about PNC	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Reduce maternal mortality	121 (50.6)	112 (46.9)	133 (63.6)	26 (21.7)	59 (49.2)	42 (46.7)	21 (70.0)	514 (49.1)
Reduce neonatal death	128 (53.6)	125 (52.3)	140 (67.0)	23 (19.2)	74 (61.7)	54 (60.0)	22 (73.3)	566 (54.1)
Emotional and psychological support	7 (2.9)	7 (2.9)	6 (2.9)	3 (2.5)	3 (2.5)	3 (3.3)	1 (3.3)	30 (2.9)
Provision of PMTCT service for HIV+ mothers	15 (6.3)	22 (9.2)	13 (6.2)	4 (3.3)	7 (5.8)	3 (3.3)	4 (13.3)	68 (6.5)
Provision of FP services	47 (19.7)	42 (17.6)	50 (23.9)	26 (21.7)	26 (21.7)	35 (38.9)	7 (23.3)	233 (22.3)
Counseling on EBF	46 (19.2)	60 (25.1)	35 (16.7)	41 (34.2)	16 (13.3)	25 (27.8)	10 (33.3)	233 (22.3)
To ensure the health of mother	7 (2.9)	16 (6.7)	1 (0.5)	2 (1.7)	0 (0.0)	5 (5.6)	1 (3.3)	32 (3.1)
To know about child vaccination	7 (2.9)	8 (3.3)	12 (5.7)	21 (17.5)	5 (4.2)	3 (3.3)	0 (0.0)	56 (5.3)
Didn't know	26 (10.9)	43 (18.0)	15 (7.2)	24 (20.0)	15 (12.5)	8 (8.9)	2 (6.7)	133 (12.7)
Total, n (%)	**239 (22.8)**	**239 (22.8)**	**209 (20.0)**	**120 (11.5)**	**120 (11.5)**	**90 (8.6)**	**30 (2.9)**	**1,047 (100)**

This study also asked respondents whether they had a health checkup following delivery, the timing, and number of postnatal checkups for the recent birth. Table 4-22 indicates that 68.9% of the respondents reported they received a health checkup for the most recent birth, with marked variations among the regions (54.1% in DD to 88.9% in Harari), while a great proportion (30.2%) of respondents reported that a postnatal checkup was not received for the most recent birth. Among respondents who reported a postnatal checkup, only 14.1% received a first postnatal checkup within 2-3 days after delivery as per the recommendations, followed by 4-5 days (4.2%), and 6-7 days (14.5%). More than half (54.2%) of the respondents reported that the first postnatal checkup was not until six weeks after delivery.

More than 60% of the respondents in Amhara, Oromia, and SNNP regions reported the first postnatal checkup at six weeks. Almost 37% of the respondents reported that mothers received postnatal checkups only once during the first six weeks of the most recent delivery, followed by twice (14.7%), which is quite insufficient compared with the recommended minimum of three postnatal checkups during the first 10-day period. Only 18% of the respondents reported the postnatal checkup of three or more, with marked regional variations. Interestingly, about 30% of the respondents who reported postnatal checkups gave no responses on the number of postnatal checkups.

Table 4-22: Distribution of receiving a health check from a health worker after delivery of the most recent birth by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Received a health checkup from a health worker after the most recent birth								
Yes	99 (68.8)	102 (70.3)	104 (74.8)	54 (79.4)	40 (53.3)	33 (54.1)	16 (88.9)	448 (68.9)
No	43 (29.9)	40 (27.6)	35 (25.2)	13 (19.1)	35 (46.7)	28 (45.9)	2 (11.1)	196 (30.2)
Didn't remember	2 (1.4)	3 (2.1)	0 (0.0)	1 (1.5)	0 (0.0)	0 (0.0)	0 (0.0)	6 (0.9)
Total, n (%)	**144 (22.2)**	**145(22.3)**	**139(21.4)**	**68 (10.5)**	**75 (11.5)**	**61 (9.4)**	**18 (2.8)**	**650(100)**
The time between the most recent delivery and the 1st postnatal checkup								
2-3 days	18 (18.2)	7 (6.9)	18 (17.3)	3 (5.6)	2 (5.0)	6 (18.2)	9 (18.2)	63 (14.1)
4-5 days	7 (7.1)	3 (2.9)	3 (2.9)	3 (5.6)	1 (2.5)	2 (6.1)	0 (0.0)	19 (4.2)
6-7 days	19 (19.2)	12 (11.8)	11 (10.6)	8 (14.8)	7 (17.5)	6 (18.2)	2 (12.5)	65 (14.5)
At 6 weeks	41 (41.4)	63 (61.8)	66 (63.5)	23 (42.6)	28 (70.0)	18 (54.5)	4 (25.0)	243 (54.2)
Other	4 (4.0)	11 (10.8)	2 (1.9)	8 (14.8)	2 (5.0)	0 (0.0)	0 (0.0)	27 (6.0)
Didn't remember	10 (10.1)	6 (5.9)	4 (3.8)	9 (16.7)	0 (0.0)	1 (3.0)	1 (6.3)	31 (6.9)
Number of postnatal checkups during the 1st 6 weeks of the most recent delivery								
Once	25 (25.3)	36 (35.3)	62 (59.6)	8 (14.2)	17 (42.5)	12 (36.4)	5 (31.3)	165 (36.8)
Twice	17 (17.2)	16 (15.7)	6 (5.8)	9 (16.7)	1 (2.5)	13 (39.4)	4 (25.0)	66 (14.7)
Three	7 (7.1)	7 (6.9)	4 (3.8)	5 (9.3)	3 (7.5)	5 (15.2)	1 (6.3)	32 (7.1)
Four or more	10 (10.1)	6 (5.9)	12 (11.5)	7 (13.0)	13 (32.5)	0 (0.0)	1 (6.3)	49 (10.9)
Other (DK/DR/NR)	40 (4.4)	37 (36.3)	20 (19.2)	25 (46.3)	6 (15.0)	3 (9.1)	5 (31.3)	136 (30.4)
Total, n (%)	**99 (22.1)**	**102 (22.8)**	**104 (23.2)**	**54 (12.1)**	**40 (8.9)**	**33 (7.4)**	**16 (3.6)**	**448 (100)**

The mothers and fathers who participated in the IDIs and FGDs recognized the importance of PNC. Most noted that women usually visit the health facilities after delivery, although other women who do not visit the health facility for PNC service, mainly due to lack of knowledge.

> "I did not spend long time there. I left the hospital after three days. They checked me whether I recovered from my scar. I did not get any service after delivery. Thus, I know nothing about it. They just gave vaccination to my child. I did not get medicine or any other injection."
>
> Dire Dawa mother IDI

As indicated in Table 4-23, respondents who completed higher educational levels attended postnatal care for their most recent birth from a health worker (87.2%). The study also reported that the majority of respondents with a household income of 5501-7000 and above 7001 had postnatal care during their recent birth, 87.5% and 90.9% respectively. In addition, the majority of the respondents with 1-2 children (76.6%) had received postnatal care from a health worker for their most recent birth. There is significant association between postnatal care received for the most recent birth from a health worker and educational level, household income, and number of children.

Table 4-23: Postnatal care received after the delivery of most recent birth from health workers by background characteristics

Variables		Health check-up received after the delivery of most recent birth from a health worker, postnatal care, n (%)			*p*-value
		Yes	No	Total	
Educational level					
	No education	64 (51.6)	60 (48.4)	124 (100.0)	.000
	Only writing and reading	10 (52.6)	9 (47.4)	19 (100.0)	
	Primary	145 (75.9)	46 (24.1)	191 (100.0)	
	Secondary	137 (75.7)	44 (24.3)	181 (100.0)	
	Technical/vocational	24 (82.8)	5 (17.2)	29 (100.0)	
	Higher	68 (87.2)	10 (12.8)	78 (100.0)	
Household income					
	Less than 500 Birr	42 (56.8)	32 (43.2)	74 (100.0)	.008
	501 – 1,500 Birr	139 (69.5)	61 (30.5)	200 (100.0)	
	1,501 - 2,500Birr	103 (72.0)	40 (28.0)	143 (100.0)	
	2,501 – 4,000 Birr	73 (83.0)	15 (17.0)	88 (100.0)	
	4,001 – 5,500 Birr	21 (72.4)	8 (27.6)	29 (100.0)	
	5,501 – 7,000 Birr	14 (87.5)	2 (12.5)	16 (100.0)	
	Above 7,001	20 (90.9)	2 (9.1)	22 (100.0)	
Number of children					
	1-2	279 (76.6)	85 (23.4)	364 (100.0)	.000
	3-4	116 (70.7)	48 (29.3)	164 (100.0)	
	5+	53 (56.4)	41 (43.6)	94 (100.0)	

4.6. Knowledge, attitude, and practice about child immunization

Immunization against the six killer diseases including BCG, polio, DPT, and measles, greatly contributes to reduction in infant and child morbidity and mortality. According to WHO estimates, one-in-four children's lives can be saved through the full series of vaccines. This study also assessed respondent's knowledge related to commonly used vaccinations, barriers to vaccination, source of information on vaccination, and experience of vaccination for the most recent birth. Table 4-24 shows that most respondents frequently cited polio (86.6%), measles (63.9%), BCG (48.4%), and DPT (46.8%) for the question "What type of immunization do you know are being given to children?"The overwhelming majority of the respondents knew about polio vaccination, associated with polio immunization campaign and social mobilization over the last decade. A few respondents reported tetanus, vitamin A, meningitis, and mumps as well. Some respondents (7.5%) didn't know about the vaccinations given to children.

Respondents were also asked about the main barriers to vaccination among children, also captured on Table 4-24. About 40% of the respondents replied that there is no barrier at all to vaccination among children, while 47.6% reported lack of knowledge about the importance of vaccinating children as the barrier to child's immunization. Overall, very few respondents reported fear of side effects, the distance of the health facility, cultural and religious beliefs, mother's lack of time, and negligence. This study also probed for source of information on child vaccination. Health workers at health centers (88.5%) were identified as the principal source of information on child vaccination. Health workers at private health facilities, UHE-ps, and family/friends were other sources of information about child vaccination for a few respondents across all the study areas. Table 4-25 also describes the immunization coverage by respondent recall for the most recent birth. Overall, the coverage of the specific antigens was overwhelmingly very high across all the study areas as follows: BCG (92.3%), polio (95.7%), DPT (94.3%), and measles (89.5%).

The participants of the IDIs and FGDs were highly knowledgeable about the importance of child immunization as well as the types of the immunization administered for each child. They acknowledged that immunization is essential to prevent childhood illnesses such as polio, measles, and TB. They emphasized that a mother should make sure her child has received complete immunization and obtain a certificate, which might also be important later when the child begins school. Most of the participants mentioned that child immunization has become a routine practice and it was very difficult to find a mother or parent who did not vaccinate his/her children.

Table 4-24: Respondent knowledge and practice about child immunization by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Respondent knew the following vaccinations given to children								
BCG	113 (47.4)	91 (38.1)	136 (65.1)	41 (34.2)	69 (57.5)	45 (50.0)	12 (40.0)	507 (48.4)
Polio	210 (87.9)	208 (87.0)	193 (92.3)	82 (68.3)	109 (90.8)	80 (88.9)	25 (83.3)	907 (86.6)
DPT	100 (41.8)	91 (38.1)	128 (61.2)	41 (34.2)	73 (60.8)	40 (44.4)	17 (56.7)	490 (46.8)
Measles	159 (66.5)	130 (54.4)	156 (74.6)	62 (51.7)	88 (73.3)	55 (61.1)	19 (63.3)	669 (63.9)
Tetanus	2 (0.8)	0 (0.0)	0 (0.0)	2 (1.7)	0 (0.0)	0 (0.0)	0 (0.0)	4 (0.4)
Vitamin A	8 (3.3)	7 (2.9)	8 (3.8)	3 (2.5)	1 (0.8)	5 (5.6)	3 (10.0)	35 (3.3)
Meningitis	8 (3.3)	7 (2.9)	1 (0.5)	0 (0.0)	0 (0.0)	1 (1.1)	0 (0.0)	17 (1.6)
Mumps	3 (1.3)	3 (1.3)	2 (1.0)	0 (0.0)	0 (0.0)	2 (2.2)	1 (3.3)	11 (1.1)
Didn't know	12 (5.0)	18 (7.5)	9 (4.3)	28 (23.3)	7 (5.8)	3 (3.3)	2 (6.7)	79 (7.5)
Barriers to vaccination for children								
No barrier at all	99 (41.4)	113 (47.3)	41 (19.6)	109 (90.8)	5 (4.2)	38 (42.2)	13 (43.3)	418 (39.9)
Lack of knowledge	113 (47.3)	92 (38.5)	137 (65.6)	3 (2.5)	108 (90.0)	33 (36.7)	12 (40.0)	498 (47.6)
Fear of side effects	1 (0.4)	10 (4.2)	3 (1.4)	0 (0.0)	1 (0.8)	0 (0.0)	0 (0.0)	15 (1.4)
Distance of health facilities	3 (1.3)	5 (2.1)	8 (3.8)	1 (0.8)	4 (3.3)	1 (1.1)	0 (0.0)	22 (2.1)
Cultural & religious beliefs	5 (2.1)	5 (2.1)	8 (3.8)	0 (0.0)	5 (4.2)	2 (2.2)	0 (0.0)	25 (2.4)
Lack of time	17 (7.1)	9 (3.8)	18 (8.6)	0 (0.0)	2 (1.7)	3 (3.3)	0 (0.0)	49 (4.7)
Negligence	2 (0.8)	7 (2.9)	11 (5.3)	0 (0.0)	1 (0.8)	8 (8.9)	4 (13.3)	33 (3.2)
Lack of information	3 (1.3)	3 (1.3)	0 (0.0)	1 (0.8)	1 (0.8)	0 (0.0)	0 (0.0)	8 (0.8)
Source of information about child vaccination								
HWs at health center	210 (22.7)	206 (22.2)	192 (20.7)	106 (11.4)	104 (11.2)	82 (8.8)	27 (2.9)	926 (88.5)
HWs at private facility	46 (34.3)	28 (20.9)	18 (13.4)	16 (11.9)	6 (4.5)	12 (9)	8 (6.0)	133 (12.8)
UHE-ps	9 (10.5)	17 (19.8)	14 (16.3)	8 (9.3)	19 (22.1)	16 (18.6)	3 (3.5)	86 (8.2)
Family/friends	32 (32.7)	30(30.6)	10(10.2)	4(4.1)	8(8.2)	12(12.2)	2 (2.0)	80 (9.4)
The most recent birth received the following vaccines:								
BCG	136 (94.4)	134 (92.4)	127 (91.4)	66 (97.1)	67 (89.3)	57 (93.4)	17 (94.4)	604 (92.9)
Polio	140 (97.2)	137 (94.5)	136 (97.8)	66 (97.1)	68 (90.7)	58 (95.1)	17 (94.4)	622 (95.7)
DPT	136 (94.4)	134 (92.4)	135 (97.1)	64 (94.1)	69 (92.0)	58 (95.1)	17 (94.4)	613 (94.3)
Measles	134 (93.1)	128 (88.3)	125 (89.9)	58 (85.3)	64 (85.3)	56 (91.8)	17 (94.4)	582 (89.5)
Total, n (%)	**144 (22.2)**	**145(22.3)**	**139(21.4)**	**68 (10.5)**	**75 (11.5)**	**61 (9.4)**	**18 (2.8)**	**650 (100)**

4.7. HIV and AIDS-related knowledge, attitude, and practice

Community knowledge, attitude, and practice (KAP) about HIV and AIDS prevention and control methods largely determine people's response toward the disease. This study assessed various aspects of respondent's HIV and AIDS-related KAP, particularly HIV infection prevention, PMTCT, HCT, and ART. Facts about HIV and AIDS prevention methods were known to the majority of the study participants. Table 4-25 shows that about 72% of the respondents mentioned condom use as an effective means of avoiding HIV infection, followed by faithfulness (64.9%), and abstinence from sex (60.8%). A high percentage of participants (65.5%) knew that HIV transmission can be prevented by avoiding sharing of sharp objects like needle and razorblades. Table 4-25 also shows 81.1% of the respondents said that a pregnant woman infected with HIV can transmit the virus to her unborn baby. About 12% of the participants said that HIV could not be transmitted from mother to child, while 7% gave a "didn't know" response. The level of knowledge of the respondents about mother to child transmission is notably lower in Tigray region (68.3) than other study areas. With regard to the knowledge of the measures for reducing the risk of HIV transmission from HIV+ woman to her unborn baby, 76.1% of the respondents cited the use of ART, followed by delivery in a health facility (45.3%), and avoiding breast feeding (19%). It should also be noted that there was no major regional differences in terms of the reported knowledge of the participants about HIV-preventive measures and PMTCT.

Table 4-25: Respondent knowledge about HIV prevention and transmission by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
HIV infection prevention methods								
Using condom	182 (76.2)	202 (84.5)	132 (63.2)	105 (87.5)	62 (51.7)	49(54.4)	21 (70.0)	753 (71.9)
Faithfulness	166 (69.5)	158 (66.1)	126 (60.3)	91 (75.8)	69 (57.5)	55(61.1)	15 (50.0)	680 (64.9)
Abstaining from sex	140 (58.6)	148 (61.9)	125 (59.8)	79 (65.8)	68 (56.7)	55(61.1)	22 (73.3)	637 (60.8)
Avoidance of sharing sharp materials	147 (61.5)	164 (68.6)	145 (69.4)	62 (51.7)	88 (73.3)	56(62.2)	24 (80.0)	686 (65.5)
Other (open discussion)	3 (1.3)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.7)	0 (0.0)	1 (3.3)	6 (0.6)
A pregnant woman infected with HIV can transmit the virus to her unborn baby								
Yes	193 (80.8)	197(82.4)	175 (83.7)	82 (68.3)	101(84.2)	73(81.1)	28 (93.3)	849 (81.1)
No	31 (13.0)	19 (7.9)	21 (10.0)	29 (24.2)	13 (10.8)	11(12.2)	1 (3.3)	125 (11.9)
Didn't know	15 (6.3)	23 (9.6)	13 (6.2)	9 (7.5)	6 (5.0)	6 (6.7)	1 (3.3)	73 (7.0)
Total, n (%)	**239 (22.8)**	**239(22.8)**	**209 (20.0)**	**120 (11.5)**	**120(11.5)**	**90(8.6)**	**30 (2.9)**	**1047 (100)**
Measures for reducing the risk of HIV transmission from HIV+ woman to her unborn baby								
Take medication (ART)	138 (71.5)	127(64.5)	144 (82.3)	76 (92.7)	78 (77.2)	61(83.6)	22 (78.6)	646 (76.1)
Avoid breast feeding	50 (25,9)	37 (18.8)	35 (20.0)	3 (3.7)	16 (15.8)	14(19.2)	6 (21.4)	161 (19.0)
Deliver at health facility	95 (49.2)	90 (45.7)	97 (55.4)	4 (4.9)	30 (29.7)	50(68.5)	19 (67.9)	385 (45.3)
Other (open discussion)	2 (1.0)	1 (0.5)	0 (0.0)	1 (1.2)	0 (0.0)	0 (0.0)	0 (0.0)	4 (0.5)
Didn't know	7 (3.6)	10 (5.1)	1 (0.6)	1 (1.2)	1 (1.2)	3 (4.1)	0 (0.0)	23 (2.7)
Total, n (%)	**193 (22.7)**	**197(23.2)**	**175 (20.6)**	**82 (9.7)**	**101(11.9)**	**73(8.6)**	**28 (3.3)**	**849 (100)**

The fathers in the FGDs said that the health workers at the health centers provided good services on HIV and AIDS, especially treatment, education, and care. The participants believed that the service and education offered by the health facility meets their quality expectation. Some of the participants also indicated the availability of ART and TB services in the health centers. However, they didn't know the availability of counselors (or psychologists) at the health centers. Some participants indicated the availability of condoms at the health centers and also noted the integration of HIV and AIDS services with other services.

> "When we go to the health center for other reasons, health workers provide HIV counseling in Semen and Begtera health centers."
>
> Addis Ababa-Arada fathers FGD

HCT services are the main components of the national HIV prevention and control program. Consequently, voluntary counseling and testing (VCT) services are available throughout Ethiopia, with the objective of providing access to services for all individuals. Participants in this study were asked whether they had ever been tested for HIV. If yes, they were asked the time since the most recent HIV test. If no, they were asked reasons for not being tested. Due to the sensitivity of the issue and in order to maximize response rate, HIV status was not asked. Table 4-26 provides the distribution of HCT practice based on respondent's self-reported data. Overall, 86.1% (n=901) of the respondents reported that they had been tested for HIV and about 14% (n=146) did not take any HIV test. The coverage of HCT was universally high and above 85% among respondents from all regions except Addis Ababa, where it was 81.6%. About 32% of the ever-tested respondents were tested within the past three months, 36.5% within the last one year, and the rest one or more years ago. Among untested participants (n=146), feeling healthy (51.4%) and absence of HIV risk of infection (40.4%) were the main reasons cited for not being tested.

The PLHIV participants in the FGDs mentioned the availability of HCT services in the health centers, and some also stated the provision of mobile HCT services by Family Guidance Association of Ethiopia (FGAE) as well as the availability of HCT services in private health facilities. They also noted that health workers in the health centers trace and follow-up clients who default on ART. Some of the participants of the IDIs also stated that it is the people that don't visit the health center for ART services, which was explained by the fact that some people don't go to the nearby health center to obtain HIV and AIDS services, including ARV medication.

The majority of respondents acknowledged that there is an increasing awareness and about HIV and AIDS transmission, prevention, and treatment. They also stated that most people are currently aware of the benefits of HCT and many people have been tested. The participants also reported the many HIV and AIDS-related services provided by the health facilities including IEC/BCC, HCT, PMTCT, and ART services free of charge. Some also mentioned the mobile VCT services.

Table 4-26: HIV testing status and reasons for not being tested by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Ever had an HIV test								
Yes	195(81.6)	205(85.8)	181(86.6)	110(91.7)	102(85.0)	81 (90.0)	27 (90.0)	901(86.1)
No	44 (18.4)	34 (14.2)	28 (13.4)	10 (8.3)	18 (15.0)	9 (10.0)	3 (10.0)	146(13.9)
Total, n (%)	**239 (22.8)**	**239 (22.8)**	**209 (20.0)**	**120 (11.5)**	**120 (11.5)**	**90 (8.6)**	**30 (2.9)**	**1047 (100)**
Time since the most recent HIV test								
Within the past 3 ms	49 (25.1)	65 (31.7)	64 (35.4)	41 (37.3)	31 (30.4)	31 (38.3)	4 (14.8)	285(31.6)
Within the past 1 yr	71 (36.4)	69 (33.7)	76 (42.0)	34 (30.9)	41 (40.2)	23 (28.4)	15 (55.6)	329(36.5)
Between 1-2 yrs	24 (12.3)	21 (10.2)	6 (3.3)	13 (11.8)	4 (3.9)	5 (6.2)	0 (0.0)	73 (8.1)
Between 3-4 yrs	24 (12.3)	28 (13.7)	15 (8.3)	7 (6.4)	14 (13.7)	17 (21.0)	4 (14.8)	109(12.1)
Four years ago	24 (12.3)	18 (8.8)	17 (9.4)	10 (9.1)	8 (7.8)	4 (4.9)	3 (11.1)	84 (9.3)
Didn't remember	2 (1.0)	2 (1.0)	1 (0.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (0.6)
No response	1 (0.5)	2 (1.0)	2 (1.1)	5 (4.5)	4 (3.9)	1 (1.2)	1 (3.7)	16 (1.8)
Total, n (%)	**195 (21.6)**	**205 (22.8)**	**181 (20.1)**	**110 (12.2)**	**102 (11.3)**	**81 (9.0)**	**37 (3.0)**	**901 (100)**
Reasons for not being tested for HIV								
Healthy feeling	19 (43.2)	16 (47.1)	20 (71.4)	5 (50.0)	10 (55.6)	3 (33.3)	2 (66.7)	75 (51.4)
No risky situation	22 (50.0)	7 (20.6)	15 (55.6)	4 (40.0)	8 (44.4)	3 (33.3)	0 (0.0)	59 (40.4)
Afraid of the test result	1 (2.3)	5 (14.7)	0 (0.0)	1 (10.0)	1 (5.6)	1 (11.1)	0 (0.0)	9 (6.2)
Didn't have reason	1 (2.3)	0 (0.0)	0 (0.0)	1 (10.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (2.7)
Not concerned about it	2 (4.5)	2 (5.9)	1 (3.6)	0 (0.0)	0 (0.0)	1 (11.1)	0 (0.0)	6 (4.1)
Never thought	2 (4.5)	1 (2.9)	0 (0.0)	1 (10.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (2.7)
No response	1 (2.3)	1 (2.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.4)
Total, n (%)	**44 (30.1)**	**34 (23.3)**	**28 (19.2)**	**10 (6.8)**	**18 (12.3)**	**9 (6.2)**	**3 (2.1)**	**146(100)**

Almost all (99.2%, n=1,039) participants were aware of a place for HIV testing (Table 4-27). Among those who replied "yes," the majority (88.7%) cited public health centers, followed by government hospitals (62.5%), and private health facilities (40.2%). The overall knowledge about the provision of HCT by NGO clinics was also encouraging (15.9%). Mobile VCT service delivery of counseling and testing is being implemented in many parts of the country, and 2.2% of the respondents in the current study mentioned mobile counseling and testing services. According to this assessment, the contribution of UHE-ps in the provision of VCT services was found to be very low (1.5%).

Table 4-27: Respondents' knowledge about the place of HIV testing by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Knew the place where people can get HIV testing								
Yes	236 (98.7)	237(99.2)	209 (100)	118(98.3)	119(99.2)	90 (100)	30 (100)	1039 (99.2)
No	3 (1.3)	2 (0.8)	0 (0.0)	2 (1.7)	1 (0.8)	0 (0.0)	0 (0.0)	8 (0.8)
Total, n (%)	**239 (22.8)**	**239(22.8)**	**209(20.0)**	**120(11.5)**	**120(11.5)**	**90 (8.6)**	**30 (2.9)**	**1,047 (100)**
Type of place cited for HIV testing								
Government hospital	136 (57.6)	145(61.2)	143(68.4)	81 (68.6)	75 (63.0)	52 (57.8)	22 (73.3)	654 (62.5)
Health center	214 (90.7)	199(84.0)	199(95.2)	97 (82.2)	99 (83.2)	87 (96.7)	27 (90.0)	922 (88.7)
UHEWs	5 (2.1)	2 (0.8)	2 (1.0)	0 (0.0)	1 (0.8)	4 (4.4)	2 (6.7)	16 (1.5)
NGO clinic	36 (15.3)	10 (4.2)	64 (30.6)	9 (7.6)	11 (9.2)	23 (25.6)	12 (40.0)	165 (15.9)
Pharmacy/drug shop	3 (1.3)	1 (0.4)	1 (0.5)	0 (0.0)	0 (0.0)	3 (3.3)	2 (6.7)	10 (1.0)
Private clinic/hospital	118 (50.0)	106(44.7)	82 (39.2)	31 (26.3)	32 (26.9)	37 (41.1)	12 (40.0)	418 (40.2)
Mobile counseling service	8 (3.4)	7 (3.0)	5 (2.4)	3 (2.5)	0 (0.0)	0 (0.0)	0 (0.0)	23 (2.2)
Youth center	1 (0.4)	5 (2.1)	0 (0.0)	1 (0.9)	0 (0.0)	0 (0.0)	1 (3.4)	8 (0.8)

Generally speaking, the respondents in all study areas are well informed about HIV and AIDS. The overwhelming majority (88.6%) of the respondents agreed that "A healthy looking person could be infected with HIV," although this figure was only 69.2% for SNNP region. This study also assessed the perceptions and attitudes of the study population about HIV and AIDS stigma and discrimination. Consistent with this, almost all people (96.8%) agreed that "If someone from your family had AIDS, would you like to take care of him/her?"However, 2.3% would not like to care for a family member who becomes sick of HIV and AIDS. About 11% of the study population reported that they would want to remain secretive if they were HIV infected, while more than half (54.7%) of the participants would tell their parents if they were found to be HIV infected, followed by sharing this information to spouse (34.1%), and doctor (18.7%). In SNNP and Tigray regions, the proportion of respondents who wanted to remain secretive if they became HIV positive was considerably high (16.7% and 15%, respectively) compared to the results of other regions. It has been recognized that many PLHIV are reluctant to disclose their HIV status due to perceptions of negative consequences including stigma and discrimination associated with the disease.

Table 4-28: Respondent perception about HIV and AIDS by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
A health looking person could be infected with HIV								
Yes	220 (92.1)	226(94.6)	178(85.2)	105(87.5)	83 (69.2)	86 (95.6)	30 (100)	928 (88.6)
No	12 (5.0)	2 (0.8)	24 (11.5)	2 (1.7)	31 (25.8)	3 (3.3)	0 (0.0)	74 (7.1)
Didn't know	7 (2.9)	11 (4.6)	7 (3.3)	13 (10.8)	6 (5.0)	1 (1.1)	0 (0.0)	45 (4.3)
Would like to take care of for a family member with AIDS								
Yes	233 (97.5)	233(97.5)	206(98.6)	110(91.7)	116(96.7)	87 (96.7)	29 (96.7)	1014 (96.8)
No	1 (0.4)	1 (0.4)	1 (0.5)	2 (1.7)	2 (1.7)	1 (1.1)	1 (3.3)	9 (0.9)
Didn't know	5 (2.1)	5 (2.1)	2 (1.0)	8 (6.7)	2 (1.7)	2 (2.2)	0 (0.0)	24 (2.3)
Total, n (%)	**239 (22.8)**	**239(22.8)**	**209(20.0)**	**120(11.5)**	**120(11.5)**	**90 (8.6)**	**30 (2.9)**	**1047 (100)**
If you were HIV infected, whom would you tell?								
Not tell anybody	27 (11.3)	29 (12.1)	15 (7.2)	18 (15.0)	20 (16.7)	4 (4.4)	1 (3.3)	114 (10.9)
Spouse	81 (33.9)	79 (33.1)	84 (44.2)	27 (22.5)	47 (39.2)	29 (32.2)	10 (33.3)	357 (34.1)
Co-worker	1 (0.4)	2 (0.8)	11 (5.3)	0 (0.0)	1 (0.8)	3 (3.3)	1 (3.3)	19 (1.8)
Friend	28 (11.7)	16 (6.7)	23 (11.0)	11 (9.2)	5 (4.2)	15 (16.7)	7 (23.3)	105 (10.0)
Parents	139 (58.2)	121(50.6)	131(62.7)	52 (43.3)	50 (41.7)	61 (67.8)	19 (63.3)	573 (54.7)
Doctor	47 (19.7)	59 (24.7)	35 (16.7)	20 (16.7)	13 (10.8)	13 (14.4)	9 (30.0)	196 (18.7)
Tell everybody	6 (2.5)	9 (3.8)	3 (1.4)	1 (0.8)	2 (1.7)	2 (2.2)	0 (0.0)	23 (2.2)
Tell only my sister	2 (0.8)	2 (0.8)	0 (0.0)	1 (0.8)	0 (0.0)	1 (1.1)	0 (0.0)	6 (0.6)

HIV and AIDS stigma and discrimination used to be a major public health problem. The seriousness of this problem in the past was acknowledged by the majority of the qualitative participants. However, the IDIs and FGDs participants indicated that this has been declining and PLHIV are not facing these challenges anymore.

> "In the past people used to discriminate and exclude HIV+ people from Idir, considering them as already dead; people even did not take food/injera for someone who was HIV+, but now everyone prepares food and eats together."
>
> Amhara-Dessie PLHIVFGD

Other participants also indicated that people living with HIV used to take ART medication secretly, but now it has become like any other medication. However, in other discussions, the participants of the IDIs and FGDs mentioned that the problem(stigma and discrimination against people living with HIV) still persists despite the progress that has been made..

> "Still there is discrimination against HIV+ people, and the HIV+ people's behaviour has not been totally changed. I am saying this because I know one person who used to take ART every month secretly."
>
> Dire Dawa PLHIV FGD

Respondents in this study were asked if they heard about PMTCT services, and the majority (81.4%) replied "yes" (Table 4-29). However, a considerable proportion (18.6%) of the respondents never heard about PMTCT, of these the proportions in Tigray (31.7%) and AA (21.3%) were relatively higher. When respondents who had heard about PMTCT were asked from where they had received their information on PMTCT services, the three most frequently answers in all study areas were television (57.2%); radio (33.7%); and health workers (44.2%). In addition to the mass media sources and health professionals such as doctors and nurses, some respondents reported learning about PMTCT from non-health professionals such as family or friends. In this study, a considerable proportion (23.9%) of the respondents also cited family, friends, neighbors, or colleagues as sources of information on PMTCT services. Printed media such as newspapers, brochures, and posters were infrequently mentioned. UHE-ps as sources of information for PMTCT services were only mentioned by 11.2% of the respondents, ranging from 4.8% in AA to 19.7% in DD and 21.8% in SNNPR.

The PMTCT knowledge of PLHIV in the FGDs was high. They mentioned the possibility of an HIV+ woman having a healthy child if she takes medicines properly and avoids breastfeeding. They mentioned the availability of PMTCT services for HIV+ pregnant women to immediately start medication. Participants noted that health workers advise HIV+ mothers to deliver in the health facilities.

Table 4-29: Respondent knowledge about sources of information for PMTCT services by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Ever heard about PMTCT services								
Yes	188 (78.7)	200(83.7)	181(86.6)	82 (68.3)	101(84.2)	76 (84.4)	24 (80.0)	852 (81.4)
No	51 (21.3)	39 (16.3)	28 (13.4)	38 (31.7)	19 (15.8)	14 (15.6)	6 (20.0)	195 (18.6)
Total, n (%)	239 (22.8)	239(22.8)	209(20.0)	120(11.5)	120(11.5)	90 (8.6)	30 (2.9)	1047 (100)
Source of information on PMTCT services								
Newspaper/magazine	20 (10.6)	10 (5.0)	6 (3.3)	3 (3.7)	11 (10.9)	3 (3.9)	2 (8.3)	55 (6.5)
Radio	79 (42)	62 (31.0)	59 (32.6)	24 (29.3)	43 (42.6)	13 (17.1)	7 (29.2)	287 (33.7)
Television	131 (69.7)	134(67.0)	101(55.8)	37 (45.7)	45 (44.6)	26 (34.2)	13 (54.2)	487 (57.2)
Billboards	13 (6.9)	0 (0.0)	4 (2.2)	0 (0.0)	3 (3.0)	0 (0.0)	0 (0.0)	20 (2.3)
Brochure, poster,or other printed materials	20 (10.6)	18 (9.0)	5 (2.8)	5 (6.1)	7 (6.9)	5 (6.6)	3 (12.5)	63 (7.4)
Health worker	76 (40.4)	80 (40.0)	93 (51.4)	41 (50.0)	38 (37.6)	39 (51.3)	10 (41.7)	372 (44.2)
UHE-p	9 (4.8)	20 (10.0)	15 (8.3)	11 (13.4)	22 (21.8)	15 (19.7)	3 (12.5)	95 (11.2)
Family, friend, neighbor, colleague	39 (20.7)	49 (24.5)	41 (22.7)	28 (34.1)	16 (15.6)	24 (31.6)	7 (29.2)	204 (23.9)
Anti-AIDSclub	3 (1.6)	0 (0.0)	3 (1.7)	2 (2.5)	0 (0.0)	0 (0.0)	0 (0.0)	8 (1.0)

Most participants expressed the importance of HIV testing for women who are pregnant or who plan to be. Some of the participants expressed the view that HIV+ woman should not become pregnant. Almost all of the qualitative respondents supported the idea of giving prophylaxis to ARV prophylaxis for a newborn baby of a HIV+ mother. There were differing opinions about breastfeeding by HIV+ mothers.

Many FGD and IDI participants stated that HIV+ mothers used to think that HIV could be transmitted from mother to child through breastfeeding. However, currently more and more mothers believe that the virus cannot be transmitted through breast milk if exclusively breastfed and if the mother properly take the ARVs prescribed by health professionals. In contrast, some respondents opposed breastfeeding by HIV+ mothers.

This study also asked if participants had heard about ART and if so, they were asked questions on sources of information and knowledge about ART and if they were concerned about TB. About 83% of the respondents had heard of ART before the survey interview (Table 4-30). Among them, 58.2% and 39.1% heard from television and health workers, respectively. Furthermore, 34.9% and 34.5% received the information from radio, and family/friend/colleagues, respectively. Only 9% of the respondents mentioned UHE-ps as a source of information on ART services, with marked variations between regions (ranging from 3.5% in AA to 21.3% in DD). About 54% of the respondents knew ART is used to prolong life (ranging from 45.2% in Amhara to 67.5% in DD), followed by the reduction of the virus in the blood (24.7%).

One of the discussion points was partner involvement in PMTCT services. The study participants stressed the importance of the partner/husband encouraging expectant mothers to use PMTCT services. The findings indicate that most husbands favor the service. On the contrary, they mentioned that there were husbands who oppose the use of PMTCT services by their wives, mainly due to lack of understanding. As a result, these pregnant women are discouraged to use continue treatment or secretly continue without the knowledge of their husbands.

Table 4-30 also displays sources of PMTCT and ART services for HIV+ mothers and PLHIV. The majority of the respondents cited health centers (77.1%) and government hospitals (72.4%), with private health facilities mentioned only by 11.7%. A significant proportion (76.5%) of the respondents who had heard about ART reported that HIV+ people should be concerned about TB; 8.3% did not feel that PLHIV should be concerned about TB; and 15.2% of respondents didn't know whether PLHIV should be concerned about TB. Of those who said that PLHIV to be concerned about TB, 4.4% didn't know why PLHIV should be concerned about the disease, but a universally high percentage (90.3%) said that HIV+ people are more likely to develop TB. The participants of the IDIs stated that TB and HIV are related because people who have HIV are more susceptible to TB.

Table 4-30: Respondent knowledge about sources of information on ART by regional state/city administration

Characteristics	Regional State/City Administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Ever heard about ART								
Yes	199 (83.3)	208(87.0)	180(86.1)	85 (70.8)	90 (75.0)	80 (88.9)	24 (80.0)	866 (82.7)
No	40 (16.7)	31 (13.1)	29 (13.9)	35 (29.2)	30 (25.0)	10 (11.1)	6 (20.0)	181 (17.3)
Total, n (%)	**239 (22.8)**	**239(22.8)**	**209(20.0)**	**120(11.5)**	**120(11.5)**	**90 (8.6)**	**30 (2.9)**	**1047 (100)**
Sources of information for ART services								
Newspaper/magazine	24 (12.1)	11 (5.3)	6 (3.3)	6 (7.1)	10 (11.1)	1 (1.3)	3 (12.5)	61 (7.0)
Radio	78 (39.2)	69 (33.2)	56 (31.1)	31 (36.5)	40 (44.4)	17 (21.3)	11 (45.8)	302 (34.9)
Television	129 (64.8)	125(60.1)	104(57.8)	44 (51.8)	52 (57.8)	35 (43.8)	15 (62.5)	504 (58.2)
Billboards	12 (6.0)	1 (0.5)	3 (1.7)	1 (1.2)	0 (0.0)	0 (0.0)	2 (8.3)	21 (2.4)
Brochure, poster and other printed materials	25 (12.6)	18 (8.7)	4 (2.2)	5 (5.9)	4 (4.4)	5 (6.3)	2 (8.3)	63 (7.3)
Health workers	68 (34.2)	66 (31.7)	88 (48.9)	36 (42.4)	27 (30.0)	41 (51.3)	13 (54.2)	339 (39.1)
UHE-ps	7 (3.5)	11 (5.3)	13 (7.2)	10 (11.8)	17 (18.9)	17 (21.3)	3 (12.5)	78 (9.0)
Family, friends, neighbor, colleagues	58 (29.1)	80 (38.5)	60 (33.3)	37 (43.5)	22 (24.4)	33 (41.3)	9 (37.5)	299 (34.5)
School	4 (2.0)	4 (1.9)	4 (2.2)	3 (3.5)	3 (3.3)	5 (6.3)	2 (8.3)	25 (2.9)
Knowledge about ART								
Prolongs life	98 (49.2)	94 (45.2)	108(60.0)	42 (49.4)	59 (65.6)	54 (67.5)	12 (50.0)	467 (53.9)
Decreases the virus in the blood	58 (29.1)	67 (32.2)	33 (18.3)	15 (17.6)	16 (17.8)	17 (21.3)	8 (33.3)	214 (24.7)
Taken by PLHIV	4 (2.0)	7 (3.4)	3 (1.7)	14 (16.5)	1 (1.1)	0 (0.0)	0 (0.0)	29 (3.3)
Prevents MTCT	12 (6.0)	2 (1.0)	5 (2.8)	0 (0.0)	0 (0.0)	1 (1.3)	0 (0.0)	20 (2.3)
Didn't know	6 (3.0)	21 (10.1)	15 (8.3)	7 (8.2)	10 (11.1)	1 (1.3)	0 (0.0)	60 (6.9)
Sources of PMTCT and ART services for HIV+ mothers and PLHIV								
Government hospital	120 (60.3)	167(80.3)	140(77.8)	62 (72.9)	65 (72.2)	53 (66.3)	20 (83.3)	627 (72.4)
Health center	161 (80.9)	150(72.1)	144(80.0)	61 (71.8)	59 (65.6)	74 (92.5)	19 (79.2)	668 (77.1)
Health post (UHEWs)	10 (5.0)	1 (0.5)	7 (3.9)	0 (0.0)	0 (0.0)	9 (11.3)	4 (16.7)	31 (3.6)
NGO clinic	20 (10.1)	7 (3.4)	19 (10.6)	1 (1.2)	3 (3.3)	7 (8.8)	3 (12.5)	60 (6.9)
Pharmacy/drug shop	2 (1.0)	4 (1.9)	2 (1.1)	1 (1.2)	0 (0.0)	3 (3.8)	1 (4.2)	13 (1.5)
Private clinic/hospital	41 (20.6)	15 (7.2)	24 (13.3)	4 (4.7)	2 (2.2)	13 (16.3)	2 (8.3)	101 (11.7)
Didn't know	9 (4.5)	10 (4.8)	6 (6.3)	8 (9.4)	5 (5.6)	3 (3.8)	0 (0.0)	41 (4.7)
HIV+ people should be concerned about TB								
Yes	189 (79.1)	184(77.0)	173(82.8)	79 (65.8)	87 (72.5)	65 (72.2)	24 (80.0)	801 (76.5)
No	22 (9.2)	13 (5.4)	10 (4.8)	12 (10.0)	12 (10.0)	15 (16.7)	3 (10.0)	87 (8.3)
Didn't know	28 (11.2)	42 (17.6)	26 (12.4)	29 (24.2)	21 (17.5)	10 (11.1)	3 (10)	159 (15.2)
Total, n (%)	**199 (23.0)**	**208(24.0)**	**180(20.8)**	**85 (9.8)**	**90 (10.4)**	**80 (9.2)**	**24 (2.8)**	**866 (100)**
Reasons for HIV+ people to be concerned about TB								
HIV+ people more likely to develop TB	174 (92.1)	156(84.8)	165(84.8)	73 (92.4)	78 (89.7)	56 (86.2)	21 (87.5)	723 (90.3)
HIV+ people are exposed to other diseases	11 (5.8)	15 (8.2)	3 (1.7)	2 (2.5)	8 (9.2)	3 (4.6)	1 (4.2)	43 (5.4)
Didn't know	4 (2.1)	13 (7.1)	5 (2.9)	4 (5.1)	1 (1.1)	6 (9.2)	2 (8.3)	35 (4.4)
Total, n (%)	**189 (23.6)**	**184(23.0)**	**173(21.6)**	**79 (9.9)**	**87 (10.9)**	**65 (8.1)**	**24 (3.0)**	**801 (100)**

Participants in the qualitative research stated the importance of ART and its availability in the health facilities. They acknowledged that it has saved the lives of many HIV+ people. Most participants noted that the ART service provided at hospitals or health centers was highly acceptable despite some infrequent problems. They also stated that the local community used ART and PMTCT services at the health facilities.

While both positive and negative comments were made by the participants of the IDIs and FGDs, they noted that the commitment and behavior of health professionals was critical in encouraging the use of ART and PMTCT services. A frequently mentioned problem was carelessness of some health professionals. Another problem frequently mentioned by PLHIV participants was the absence of medication and services for HIV+ people needing treatment for other illnesses. Some of the services were unavailable in the public health facilities so PLHIV spend much of their money to buy drugs from the private facilities.

> "The problem is on the general health service provision, for example, if I am sick and have common cold I have to go to private clinic to be treated and get X-ray examination."
>
> Addis Ababa-Yeka PLHIV FGD

Some of the participants of the IDIs indicated that PLHIV were mostly referred to hospitals, but long waiting time at the hospitals compelled the health centers to refer PLHIV to private health facilities. But private services are expensive and may be unaffordable for many of the AIDS patients, and many participants agreed that this was compromised PLHIV health.

> "They [private health facilities] give you more care but the price is high."
>
> Addis Ababa-Yeka PLHIV FGD

4.8. Knowledge, attitude, and practice about TB

Appropriate TB KAP is a prerequisite for TB control program success. This study investigated respondent's source of information on TB signs and symptoms, methods of prevention, treatment-seeking behavior, and knowledge about risks associated with incomplete TB treatment. The majority of the respondents were aware of TB and its signs, symptoms and means of prevention (Table 4-31).Respondents identified television (59.8%), radio (37.1%) and health workers (36.8%) as the principal source of TB information. Friends, colleagues, and relatives (33.6%) were also major sources of information, trailed by school (11%), and UHE-ps(6.3%). Printed materials including brochures and posters were also mentioned as a source of information on TB quite by a few respondents.

The IDIs conducted with TB patients from AA revealed that they were aware of the disease by indicating that it is a communicable disease with symptoms such as cough and tiredness. However, some patients did not know the cause of the disease and had misconceptions about it. Some associated TB with lack of hygiene, poor diet, food poisoning, and a draught of wind. With regard to the prevention, they also indicated the importance of covering mouth and nose while coughing or sneezing. This study showed that most of the TB patients knew about the cause and preventive methods of the disease from health workers after they fell sick, as illustrated below.

> "TB can be transmitted to another person by the air which he/she exhales. When a person breathes out the air which has the bacteria and when another person inhales it, he/she will get the bacteria. Therefore, we have to open windows to get fresh air".
>
> Addis Ababa-Akaki Kaliti TB patient exit interview

Some IDIs respondents mentioned prevention of TB by taking proper medication and avoiding the sputum not to be disposed anywhere. Some suggested not drinking raw milk as TB preventive measure. They also said that discontinuing TB treatment or taking incomplete medication for the disease might lead the patient to take the treatment for longer times and even could lead to death. Some mentioned the possibility of developing TB drug resistance if a patient discontinues the medication.

In all the study areas, cough (70.1%) was the main TB symptom reported majority of the respondents of the quantitative household survey (Table 4-31). A substantial proportion also mentioned a cough of three or more weeks (33%), coughing up blood (35.5%), and weight loss (35.5%), indicating the graveness of the symptoms. Other symptoms, such as severe headache, nausea, fever, night sweats, chest pain, tiredness, and loss of appetite were mentioned by many of the respondents. The three most oft-cited means of prevention included covering mouth and nose when coughing or sneezing (66.2%); use of separate dishes rather than sharing utensils (50%); and opening windows at home (37.7%). It should also be noted that very few respondents (5.4%) knew about the importance of good housing in TB prevention, and 8% didn't know any precautions needed to prevent TB transmission. None of the respondents mentioned avoiding to spit anywhere as one of the TB prevention.

Table 4-31: Respondents' sources of information on TB, knowledge of its symptoms and prevention by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Where did you learn about TB?								
Newspaper/magazine	16 (6.7)	10 (4.2)	8 (3.8)	3 (2.5)	9 (7.5)	2 (2.2)	1 (3.3)	49 (4.7)
Radio	95 (39.7)	78 (32.6)	79 (37.8)	31 (25.8)	64 (53.3)	27 (30.0)	14 (46.7)	388(37.1)
Television	158(66.1)	145(60.7)	137(65.6)	59 (49.2)	70 (58.3)	41 (45.6)	16 (53.3)	626(59.8)
Billboards	14 (5.9)	2 (0.8)	4 (1.9)	1 (0.8)	4 (3.3)	2 (2.2)	2 (6.7)	29 (2.8)
Brochure, poster and other printed materials	20 (8.4)	14 (5.9)	6 (2.9)	6 (5.0)	6 (5.0)	1 (1.1)	2 (6.7)	55 (5.3)
Health worker	81 (33.9)	72 (30.1)	92 (44.0)	47 (39.2)	34 (28.3)	43 (47.8)	16 (53.3)	385(36.8)
UHE-p	7 (2.9)	9 (3.8)	8 (3.8)	12 (10.0)	16 (13.3)	11 (12.2)	3 (10.0)	66 (6.3)
Family, friend, neighbor, colleague	74 (31.0)	92 (38.5)	61 (29.2)	50 (41.7)	20 (16.7)	43 (47.8)	12 (40.0)	352(33.6)
School	36 (15.1)	18 (7.5)	17 (8.1)	19 (15.8)	11 (9.2)	10 (11.1)	4 (13.3)	115(11.0)
Signs and symptoms of TB								
Cough	176(73.6)	146(61.1)	157(75.1)	84 (70.0)	86 (71.7)	62 (68.9)	23 (76.7)	734(70.1)
Cough that lasts longer than 3 weeks	84 (35.1)	103(43.1)	55 (26.3)	36 (30.0)	38 (31.7)	19 (21.1)	10 (33.3)	345(33.0)
Coughing up blood	81 (33.9)	106(44.4)	68 (32.5)	34 (28.3)	41 (34.2)	24 (26.7)	13 (43.3)	367(35.1)
Severe headache	26 (10.9)	21 (8.8)	41 (19.6)	12 (10.0)	22 (18.3)	9 (10.0)	5 (16.7)	136(13.0)
Nausea	9 (3.8)	7 (2.9)	18 (8.6)	6 (5.0)	11 (9.2)	5 (5.6)	3 (10.0)	59 (5.6)
Weight loss	88 (36.8)	84 (35.1)	80 (38.3)	43 (35.8)	37 (30.8)	32 (35.6)	8 (26.7)	372(35.5)
Fever	55 (23.0)	49 (20.5)	45 (21.5)	24 (20.0)	21 (17.5)	11 (12.2)	16 (53.3)	221(21.1)
Sweating at nights	29 (12.1)	35 (14.6)	17 (8.1)	8 (6.7)	8 (6.7)	15 (16.7)	9 (30.0)	121(11.6)
Chest pain	8 (3.3)	10 (4.2)	8 (3.8)	3 (2.5)	2 (1.7)	9 (10.0)	4 (13.3)	44 (4.2)
Shortness of breath	13 (5.4)	11 (4.6)	28 (13.4)	24 (20.0)	17 (14.2)	7 (7.8)	3 (10.0)	103 (9.8)
Loss of appetite	5 (2.1)	12 (5.0)	8 (3.8)	4 (3.3)	1 (0.8)	4 (4.4)	3 (10.0)	37 (3.5)
Body weakness	2 (0.8)	3 (1.3)	4 (1.9)	3 (2.5)	0 (0.0)	4 (4.4)	1 (3.3)	17 (1.6)
Change in face/hair color	1 (0.4)	3 (1.3)	2 (1.0)	1 (0.8)	2 (1.7)	4 (4.4)	1 (3.3)	14 (1.3)
Vomiting	3 (1.3)	8 (3.3)	3 (1.4)	4 (3.3)	2 (1.7)	3 (3.3)	0 (0.0)	23 (2.2)
Didn't know	10 (4.2)	5 (2.1)	8 (3.8)	9 (7.5)	4 (3.3)	9 (10.0)	0 (0.0)	45 (4.3)
Methods of TB prevention								
Avoid shaking hands	4 (1.7)	3 (1.3)	5 (2.4)	3 (2.5)	0 (0.0)	4 (4.4)	1 (3.3)	20 (1.9)
Cover mouth and nose when coughing or sneezing	145(60.7)	165(69.0)	146(69.9)	74 (61.7)	82 (68.3)	58 (64.4)	23 (76.7)	693(66.2)
Avoid sharing dishes	93 (38.9)	139(58.2)	121(57.9)	40 (33.3)	72 (60.0)	41 (45.6)	17 (56.7)	523(50.0)
Wash hands after touching items in public places	23 (9.6)	11 (4.6)	8 (3.8)	13 (10.8)	10 (8.3)	3 (3.3)	2 (6.7)	70 (6.7)
Opening windows	121(50.6)	88 (36.8)	68 (32.5)	38 (31.7)	35 (29.2)	29 (32.2)	16 (53.3)	395(37.7)
Good housing	7 (2.9)	6 (2.5)	15 (7.2)	12 (10.0)	6 (5.0)	8 (8.9)	3 (10.0)	57 (5.4)
Good nutrition	39 (16.3)	25 (10.5)	12 (5.7)	14 (11.7)	3 (2.5)	11 (12.2)	5 (16.7)	109(10.4)
Protection from cold	10 (4.2)	4 (1.7)	6 (2.9)	2 (1.7)	1 (0.8)	5 (5.6)	0 (0.0)	28 (2.7)
Medical check-up	6 (2.5)	6 (2.5)	6 (2.9)	6 (5.0)	5 (4.2)	3 (3.3)	0 (0.0)	32 (3.1)
Didn't know	16 (6.7)	16 (6.7)	16 (7.7)	19 (15.8)	5 (4.2)	10 (11.1)	2 (6.7)	84 (8.0)
Total, n (%)	**239 (22.8)**	**239 (22.8)**	**209 (20.0)**	**120 (11.5)**	**120 (11.5)**	**90 (8.6)**	**30 (2.9)**	**1047 (100)**

Table 4-32 indicates that the overwhelming majority of the respondents believed that "TB patients should disclose their illness to others," while 3.7% opposed the idea of the disclosure of TB patients by themselves. About 12% of the respondents reported that they or anyone in the family had been diagnosed with TB, with minor variations in prevalence across the study areas. The majority of respondents reported that they or their family member with TB preferred government health institutions (hospital and health center) in the initial treatment-seeking for the illness (diagnosis as well as treatment), followed by consultation at private health facilities (8.5%). About 45% of the respondents received information about TB in the six months prior to diagnosis, mainly from health providers (or health facility) (34.5%) and media (50%) such as radio, television, and magazine. More than half (52.3%) of the respondents reported more than six months for the statement "standard duration of treatment for a new TB case, "followed by 5-6 months duration of treatment (23.8%). The respondents were also quite aware of worsening and prolonged treatment (64.6%) and death (60.8%) as risks associated with incomplete TB treatment, with marked variations across the study areas. A substantial proportion of respondents reported development of TB drug resistance for incomplete treatment.

The IDIs with TB patients revealed several issues related to the disease. Most participants stated the seriousness and transmissibility of TB makes people isolate patients. They noted that people are usually afraid of it and have negative attitudes toward patients, especially at the beginning when they first learn about TB status. Participants also said that people generally believe that TB is directly linked to AIDS. This stigma was seen as a major barrier for TB patients getting proper care and support when necessary. One of the problems facing TB patients was the confinement to isolated houses or rooms due to the fear that it would be transmitted to other family members or relatives. They also noted encouragement provided through advice, hope, and financial support. Some of the TB patients also revealed the difficulty of hiding their status and not communicating with other people due to the fear that people might distance themselves. As one patient said,

> "I usually sit outside my home and chat with my neighbors. However, after I have been diagnosed with TB, my neighbors tried to cover their mouth and nose with their scarf when they get close to me."
>
> Addis Ababa-AradaTB patient exit interview

Table 4-32: Respondent knowledge and practice about TB treatment by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
TB patients should disclose their illness to other								
Yes	227 (95.0)	227(95.0)	200(95.7)	101(84.2)	116(96.7)	84 (93.3)	30 (100)	985 (94.1)
No	9 (3.8)	8 (3.3)	5 (2.4)	8 (6.7)	3 (2.5)	6 (6.7)	0 (0.0)	39 (3.7)
Didn't know	3 (1.3)	4 (1.7)	4 (1.9)	11 (9.2)	1 (0.8)	0 (0.0)	0 (0.0)	23 (2.2)
Have you or any one in your family ever been diagnosed with TB?								
Yes	33 (13.8)	26 (10.9)	27 (12.9)	18 (15.0)	13 (10.8)	9 (10.0)	4 (13.3)	130 (12.4)
No	188 (78.7)	204(85.7)	179(85.6)	101(84.2)	97 (80.8)	79 (87.8)	24 (80.0)	872 (83.3)
No response	18 (7.5)	9 (3.8)	3 (1.4)	1 (0.8)	10 (8.3)	2 (2.2)	2 (6.7)	45 (4.3)
Total, n (%)	**239 (22.8)**	**239(22.8)**	**209(20.0)**	**120(11.5)**	**120(11.5)**	**90 (8.6)**	**30 (2.9)**	**1,047 (100)**
Initial treatment seeking for you or your family member with TB								
Government hospital or health center	27 (81.8)	23 (88.5)	21 (77.8)	14 (77.8)	11 (84.6)	7 (77.8)	4 (100)	107 (82.3)
Private clinic/hospital	4 (12.1)	0 (0.0)	2 (7.4)	3 (16.7)	0 (0.0)	2 (22.2)	0 (0.0)	11 (8.5)
Other	2 (6.1)	3 (11.5)	4 (14.8)	1 (5.6)	2 (15.4)	0 (0.0)	0 (0.0)	12 (9.2)
Received information about TB in the 6 months before diagnosis?								
Yes	14 (42.4)	14 (53.8)	10 (37.0)	8 (44.4)	5 (38.5)	6 (66.7)	1 (25.0)	58 (44.6)
No	19 (57.6)	12 (46.2)	17 (63.0)	10 (55.6)	8 (61.5)	3 (33.3)	3 (75.0)	72 (55.4)
Total, n (%)	**33 (25.4)**	**26 (20.0)**	**27 (20.8)**	**18 (13.8)**	**13 (10)**	**9 (6.9)**	**4 (3.1)**	**130 (100)**
Main sources of TB messages								
Health provider/facility	6 (42.9)	4 (28.6)	2 (20.0)	3 (37.5)	3 (60)	1 (16.7)	1 (100)	20 (34.5)
Media (radio/TV/magazine)	5 (35.7)	7 (50.0)	6 (60.0)	5 (62.5)	2 (40.0)	4 (66.7)	0 (0.0)	29 (50.0)
Other	3 (21.4)	3 (21.4)	2 (20.0)	0 (0.0)	0 (0.0)	1 (16.7)	0 (0.0)	9 (15.5)
Total, n (%)	**14 (24.1)**	**14 (24.1)**	**10(17.28)**	**8 (13.8)**	**5 (8.6)**	**6 (10.3)**	**1 (1.7)**	**58 (100)**
Standard duration of treatment for new TB cases								
<1 month	1 (3.0)	1 (3.8)	3 (11.1)	0 (0.0)	1 (7.7)	1 (11.1)	0 (0.0)	7 (5.4)
1-2 months	2 (6.1)	2 (7.7)	1 (3.7)	1 (5.6)	3 (23.1)	0 (0.0)	0 (0.0)	9 (6.9)
3-4 months	3 (9.1)	0 (0.0)	1 (3.7)	0 (0.0)	0 (0.0)	2 (22.2)	0 (0.0)	6 (4.6)
5-6 months	9 (27.3)	8 (30.8)	6 (22.2)	4 (22.2)	2 (15.4)	2 (22.2)	0 (0.0)	31 (23.8)
>6 months	16 (48.5)	14 (53.8)	11 (40.7)	12 (66.7)	7 (53.8)	4 (44.4)	4 (100.0)	68 (52.3)
Didn't know	2 (6.1)	1 (3.8)	5 (18.5)	1 (5.6)	0 (0.0)	0 (0.0)	0 (0.0)	9 (6.9)
Risks associated with incomplete TB treatment								
Worsening condition and prolonged treatment	19 (57.6)	13 (50.0)	21 (77.8)	13 (72.2)	7 (53.8)	7 (77.8)	4 (100)	84 (64.6)
Development of drug resistance	9 (27.3)	12 (46.2)	10 (37.0)	7 (38.9)	4 (30.8)	4 (44.4)	2 (50.0)	48 (36.9)
Death	16 (48.5)	18 (69.2)	18 (66.7)	10 (55.6)	11 (84.6)	4 (44.4)	2 (50.0)	79 (60.8)

TB patients were also asked about their experience of health-seeking behavior for TB; the majority got the services mainly from the health centers, including counseling, treatment for other illnesses, and education about the link between TB and HIV. At the time they were told that they had TB, most of them felt sad and worried for their family. The encouragement and support provided to the patients by the health workers appeared to reinforce the confidence of the patients and, in turn, improved adherence.

"The health professionals strictly told me to follow their instruction and finish the anti-TB medication. They also said that even if I felt better I shouldn't stop the medication and also advised me to eat supplementary foods such as milk and egg".

Addis Ababa-Akaki Kaliti TB patient exit interview

Some respondents acknowledged visiting traditional healers or using traditional remedies such as holy water for TB treatment. Some, assuming the illness was due to evil eye, went to witches.

"Believing the healing power of the traditional healer from the community, I went to this person. Then I did not get better and I decided that it is just a waste of money and then went to the health center. I am now feeling better. I am following my medication properly."

Amhara-Bahir Dar-TB patient exit interview

4.9. Knowledge, attitude, and practice about non-communicable disease

Respondents in this study were asked if they had heard about non-communicable disease. The majority, 78.9%, replied "yes" (Table 4-33). There was a marked variation in the responses among the study areas, ranging from 59.3% in Tigray to 94.3% in Oromia regions. Among the respondents who had heard of NCDs, the majority cited high blood pressure (74%), diabetes (73.4%), heart problem (44.1%), and cancer (35.5%). A substantial proportion of the respondents also reported mental illness, kidney problem, gastritis, asthma, and alcoholism. In contrast to expectations, respondents misunderstood the differences between communicable and non-communicable disease, as demonstrated by the 7% who thought that malaria and diarrhea are NCDs.

The participants of FGDs and IDIs in AA were well aware of NCDs, giving examples of hypertension, asthma, diabetes, cancer, and heart attack. They acknowledged NCDs as widespread and important health problems. They said that these diseases are incurable, but can be controlled through regular physical exercise and losing body weight. At the same time, some of the mother IDIs reported that NCDs are caused by eating fatty foods, lack of physical activity, or sitting for a long time.

"What I know about NCDs is that diseases like diabetes, hypertension, kidney, and gastric diseases are non-communicable."

Addis Ababa-Arada pregnant woman IDI

Some of the qualitative participants associated some NCDs with a curse from God.

"Diabetes is caused due to lack of appropriate care. I think diabetes is caused by eating beyond normal. However, cancer is caused by a curse of God. You do not know what causes cancer. I do not know really about the cause of cancer and I did not learn about it. So, the cause of cancer is not clearly known."

Tigray-Mekele pregnant woman IDI

Focus group discussions conducted with the UHE-ps revealed poor knowledge of the community about NCDs, including causes and prevention. The UHE-ps also thought that people usually neglect the issue of NCDs.

This study also collected data on respondent knowledge of risk factors associated with NCDs; Most reported lack of balanced diet (49.9%), overweight and obesity (40.4%), insufficient physical exercise (32.4%), substance abuse including alcohol and tobacco (30.5%), and lack of regular general health checkups (18.3%) (Table 4-33). A substantial proportion of the respondents mentioned heredity, stress and anger as factors associated with NCDs. Only 9.1% of the respondents said that they didn't know any risk factor associated with NCDs. The participants of the IDIs also highlighted factors associated with some NCDs.

> "I know that diabetes is caused by taking high protein nutrients like fat and oil, high blood pressure is caused by alcoholic drinks and eating meat. Asthma is triggered by bad smell and dumps."
>
> Amhara-Gondar pregnant woman IDI

Table 4-33 also presents information on respondent knowledge of precautionary measures to reduce risks and prevent NCDs. Overall the knowledge of the respondents on the precautionary measures to prevent NCDs is encouraging. The frequently cited measures include eating balanced diet (49.6%) consuming healthy foods), physical exercise (36.8%), controlling weight (35.1%), reducing or avoiding alcohol use (27.7%), and avoiding tobacco use (23.6%).Other measures mentioned by a few respondents include regular health checkups and minimizing salt intake. The table below indicates variations in the distribution of the responses of the respondents on the type of NCDs and their risk factors reported, and precautionary measures to reducing risks and preventing disease.

Table 4-33: Respondent knowledge about NCDs and associated factors by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Ever heard of NCD								
Yes	170 (71.1)	193(80.8)	197(94.3)	71 (59.2)	112(93.3)	63 (70.0)	20 (66.7)	826 (78.9)
No	69 (28.9)	46 (19.2)	12 (5.7)	49 (40.8)	8 (6.7)	27 (30.0)	10 (33.3)	221 (21.1)
Total, n (%)	**239 (22.8)**	**239(22.8)**	**209(20.0)**	**120(11.5)**	**120(11.5)**	**90 (8.6)**	**30 (2.9)**	**1047 (100)**
Type of NCD reported								
Diabetes	132 (77.6)	149(77.2)	148(75.1)	43 (60.6)	73 (65.2)	52 (82.5)	13 (65.0)	610 (73.8)
Heart problem	71 (41.8)	61 (31.6)	111(56.3)	13 (18.3)	73 (65.2)	25 (39.7)	10 (50.0)	364 (44.1)
High blood pressure	117 (68.8)	139 (72)	167(84.8)	40 (56.3)	86 (76.8)	49 (77.8)	13 (65.0)	611 (74.0)
Cancer	60 (35.3)	63 (32.6)	77 (39.1)	25 (35.2)	52 (46.4)	8 (12.7)	5 (25.0)	290 (35.5)
Mental health	19 (11.2)	15 (7.8)	52 (26.4)	0 (0.0)	33 (29.5)	8 (12.7)	2 (10.0)	129 (15.6)
Alcoholism	5 (2.9)	8 (4.1)	8 (4.1)	0 (0.0)	3 (2.7)	3 (4.8)	2 (10.0)	29 (3.5)
Epilepsy	3 (1.8)	7 (3.6)	0 (0.0)	3 (4.2)	0 (0.0)	0 (0.0)	0 (0.0)	13 (1.6)
Kidney disease	17 (10.0)	22 (11.4)	22 (11.2)	16 (22.5)	11 (9.8)	14 (22.2)	6 (30.0)	108 (13.1)
Kurtimat	2 (1.2)	9 (4.7)	2 (1.0)	4 (5.6)	4 (3.6)	0 (0.0)	0 (0.0)	21 (2.5)
Gastritis	14 (8.2)	18 (9.3)	8 (4.1)	11 (15.5)	6 (5.4)	3 (4.8)	2 (10.0)	62 (7.5)
Asthma	5 (2.9)	17 (8.9)	10 (5.1)	7 (10.6)	0 (0.0)	3 (4.8)	2 (10.0)	44 (5.4)
Malaria	3 (1.8)	8 (4.1)	11 (5.6)	3 (4.2)	28 (25.0)	0 (0.0)	0 (0.0)	53 (6.4)
Diarrhea	3 (1.8)	8 (4.1)	1 (0.5)	2 (2.8)	3 (2.7)	0 (0.0)	1 (5.0)	18 (2.2)
Reported NCD risk factors								
Substance abuse	60 (35.3)	42 (21.8)	76 (38.6)	19 (26.8)	38 (33.9)	12 (19.0)	5 (25.0)	252 (30.5)
Overweight/obesity	67 (39.4)	78 (40.4)	93 (47.2)	16 (22.5)	51 (45.5)	22 (34.9)	7 (35.0)	334 (40.4)
Insufficient physical exercise	63 (37.1)	71 (36.8)	58 (29.4)	16 (22.5)	36 (32.1)	18 (28.6)	6 (30.0)	268 (32.4)
Lack of balanced diet	79 (46.5)	104(53.9)	103(52.3)	21 (29.6)	54 (48.2)	35 (55.6)	16 (80.0)	412 (49.9)
Lack of regular general health checkups	35 (20.6)	50 (25.9)	30 (15.2)	8 (11.3)	17 (15.2)	7 (11.1)	4 (20.0)	151 (18.3)
Annoyance	11 (6.5)	11 (5.7)	15 (7.6)	7 (9.9)	8 (7.1)	4 (6.3)	3 (15.0)	59 (7.1)
Stress	9 (5.3)	5(2.6)	13(6.6)	8 (11.3)	2 (1.8)	9 (14.3)	2 (10.0)	48 (5.8)
Heredity	16 (9.4)	33 (17.1)	14 (7.1)	9 (12.7)	0 (0.0)	8 (12.7)	2 (10.0)	82 (9.9)
Didn't know	10 (5.9)	22 (11.4)	16 (8.1)	15 (21.1)	7 (6.3)	4 (6.3)	1 (5.0)	75 (9.1)
Precautionary measures to prevent NCD								
Avoiding smoking	49 ((28.8)	34 (17.6)	62 (31.5)	9 (12.7)	28 (25.0)	10 (15.9)	3 (15.0)	195 (23.6)
Free from alcoholism	50 (29.4)	45 (23.3)	66 (33.5)	20 (28.2)	32 (28.6)	11 (17.5)	5 (25.0)	229 (27.7)
Controlling overweight	52 (30.6)	75 (38.9)	84 (42.6)	14 (19.7)	36 (32.1)	19 (30.2)	10 (50.0)	290 (35.1)
Doing physical exercise	76 (44.7)	82 (42.5)	60 (30.5)	19 (26.8)	36 (32.1)	26 (41.3)	5 (25.0)	304 (36.8)
Eating balanced diet	88 (51.8)	109(56.5)	86 (43.7)	29 (40.8)	55 (49.1)	29 (46.3)	14 (70.0)	410 (49.6)
Regular health checkups	49 (28.8)	62 (32.1)	28 (14.2)	12 (16.9)	18 (16.1)	14 (22.2)	5 (25.0)	188 (22.8)
Minimizing salty foods	6 (3.5)	9 (4.7)	4 (2.0)	8 (11.3)	3 (2.7)	1 (1.6)	0 (0.0)	31 (3.8)
Happy life	7 (4.1)	8 (4.1)	17 (8.6)	6 (8.5)	6 (5.4)	9 (14.2)	2 (10.0)	55 (6.7)
Total, n (%)	**170 (20.6)**	**193(23.4)**	**197(23.8)**	**71 (8.6)**	**112(13.6)**	**63 (7.6)**	**20 (2.4)**	**826 (100)**

The IDIs and FGDs also mentioned risk factors of NCDs, especially the lack of physical activity and the consumption of salt, fat, and sugar. Some participants associated NCDs with stress and anger as well as too much consumption of coffee and tea. Other participants mentioned the harmful effects of cigarette smoking and alcohol as causing NCDs. In addition to the correct knowledge of people about the risk factors associated with NCDs, misconceptions such as the association between environmental sanitation and hygiene with NCDs were identified by some.

> "In order to protect themselves from NCDs, people have to be hygienic, have to change eating habits and adopt healthy lifestyle such as physical exercise, avoid taking too much sugar and eating fatty foods, and encourage their children to do physical exercise. Keeping personal hygiene can help to prevent NCDs. One can prevent having NCDs by cleaning the environment, controlling salt in foods, etc."
>
> SNNPR-Hawassa health care worker (HIV and AIDS)IDI

Some respondents considered NCD sa burden of old people, as illustrated below.

> "It is believed that hypertension was a disease of old people. After I saw that my younger sister has developed the disease, I realized that it is not only the disease of aged people."
>
> SNNPR-Sodo father FGD

The study asked those respondents who had heard of NCDs if they had been checked for NCD in the last six months. Only 25.1% replied "yes" (Table 4-34); about 75% had not been checked for NCDs. Among those who had checkups in the past six months, private health facilities (clinics or hospitals) were consulted by about 40% of the respondents (Fig. 4.4), followed by government health center (27.5%) and hospital (26.6%), with marked regional variations in the proportion of the respondents who sought checkup from the different sources.

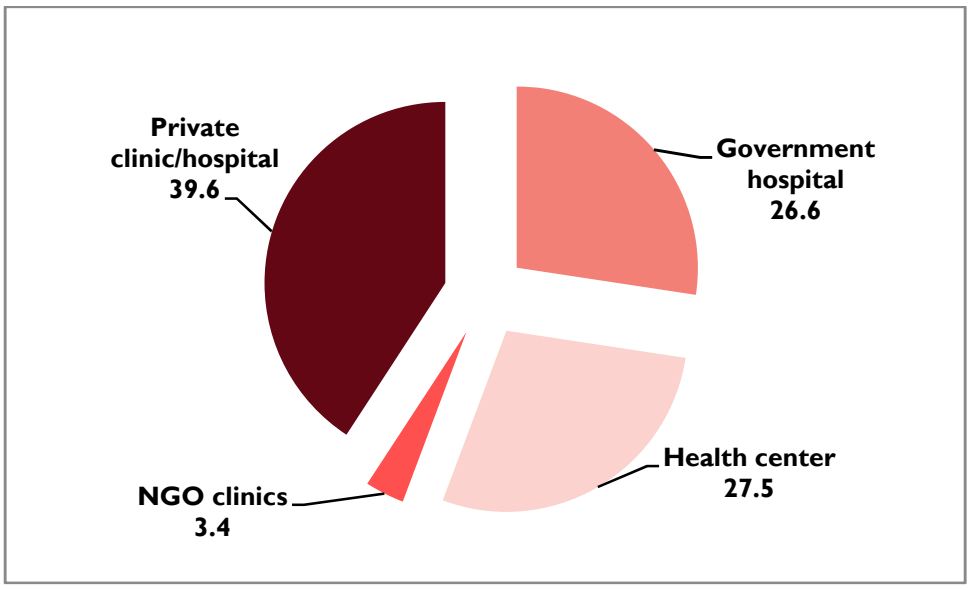

Fig. 4:4: Percentage of place for check-up for NCDs

Respondents who sought checkup were also asked detailed questions on the motivating factors for the checkups, the types of NCDs of concern, and satisfaction level with the services received during the checkups. The most frequent motivating factor was having symptoms of disease (69.1%). About a quarter (25.6%) of the respondents mentioned other factors such as inherited disease.

Table 4-34: Respondent practice of medical check-up for NCDs by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Ever checked for NCD in the last six months								
Yes	44 (25.9)	48 (24.9)	46 (23.4)	8 (11.3)	33 (29.5)	19 (30.2)	9 (45.0)	207 (25.1)
No	126 (74.1)	145(75.1)	151(76.6)	63 (88.7)	79 (70.5)	44 (69.8)	11 (55.0)	619 (74.9)
Total, n (%)	**170 (20.6)**	**193(23.4)**	**197(23.8)**	**71 (8.6)**	**112(13.6)**	**63 (7.6)**	**20 (2.4)**	**826 (100)**
Place for check-up								
Government hospital	7 (15.9)	14 (29.2)	15 (32.6)	1 (12.5)	12 (36.4)	1 (5.3)	5 (55.6)	55 (26.6)
Health center	13 (29.5)	12 (25.0)	11 (23.9)	3 (37.5)	11 (33.3)	5 (26.3)	2 (22.2)	57 (27.5)
NGO clinics	2 (4.5)	2 (4.2)	2 (4.3)	0 (0.0)	0 (0.0)	1 (5.3)	0 (0.0)	7 (3.4)
Private clinic/hospital	20 (45.5)	18 (37.5)	17 (37.0)	4 (50.0)	9 (22.3)	12 (63.2)	2 (22.2)	82 (39.6)
Other	2 (4.5)	2 (4.2)	1 (2.2)	0 (0.0)	1 (3.0)	0 (0.0)	0 (0.0)	6 (2.9)
Motivating factors for the check-ups								
Had some symptoms of disease	27 (61.4)	29 (60.4)	35 (76.1)	3 (37.5)	33 (100.0)	9 (47.4)	7 (77.8)	143 (69.1)
Didn't have any precautions for disease	4 (9.1)	0 (0.0)	1 (2.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (2.4)
History of disease in family	4 (9.1)	2 (4.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	6 (2.9)
Other	9 (20.5)	17 (35.4)	10 (21.7)	5 (62.5)	0 (0.0)	10 (52.6)	2 (22.2)	53 (25.6)
Type of check for								
Hypertension	27 (61.4)	25 (52.1)	30 (65.2)	6 (75.0)	18 (54.5)	17 (89.5)	7 (77.8)	130 (62.8)
Diabetes	20 (45.5)	28 (58.3)	14 (30.4)	4 (50.0)	3 (9.1)	14 (73.7)	3 (33.3)	86 (41.5)
Cancer	7 (15.9)	4 (8.3)	4 (8.7)	0 (0.0)	2 (6.1)	4 (21.1)	1 (11.1)	22 (10.6)
Cardiac problem	9 (20.5)	8 (16.7)	8 (17.4)	3 (37.5)	1 (3.0)	6 (31.6)	2 (22.2)	37 (17.9)
Satisfaction level with the service received								
Dissatisfied	5 (11.4)	2 (4.2)	2 (4.3)	1 (12.5)	1 (3.0)	0 (0.0)	2 (22.2)	13 (6.3)
Neither satisfied nor dissatisfied	4 (9.1)	2 (4.2)	2 (4.3)	0 (0.0)	2 (6.1)	0 (0.0)	0 (0.0)	10 (4.8)
Satisfied	34 (77.3)	43 (89.6)	38 (82.6)	7 (87.5)	28 (84.8)	18 (94.7)	6 (66.7)	174 (84.1)
Didn't know	1 (2.3)	1 (2.1)	4 (8.7)	0 (0.0)	2 (6,1)	1 (5.3)	1 (11.1)	10 (4.8)
Total, n (%)	**44 (21.3)**	**48 (23.2)**	**46 (22.2)**	**8 (3.9)**	**33 (15.9)**	**19 (9.2)**	**9 (4.3)**	**207 (100)**

The most commonly cited NCDs for which the respondents sought checkup in the previous six months included raised blood pressure (62.8%) and diabetes (41.5%) (Table 4-34). It should also be noted that about 18% and 11% of the respondents sought cardiac problem and cancer checkups. The proportion of respondents who sought checkups for diabetes in SNNP region was relatively low (6.1%), compared to 73.7% who sought checkups in DD. The majority (84.1%) of the respondents who received checkups for the NCDs were satisfied with the services they received, although about 11% of the reported dissatisfaction or neither satisfied nor dissatisfied.

The participants of the IDIs and FGDs perceived general awareness in their communities about NCDs. They reported that there was no regular checkup for NCDs; and people usually seek treatment after they become ill. They also reported that health workers usually diagnose and treat NCDs without clear guidelines for managing such diseases. They stated that health workers focus on educating people about the prevention of NCDs. One of the problems identified by the qualitative participants was the chronic nature of the NCDs and how they may occur insidiously without with clear signs or symptoms, thus not noticed by people. As a result, health-seeking behavior for NCDs is poor since they don't visit health facilities unless they are sick. In addition, the participants stressed the shortage of appropriate drugs for treating the NCDs, and that even when available the drugs are very expensive.

As it is indicated in Table 4-35, respondents who were divorced were checked up for NCDs during the last six months of the study period (34.9%). Among the never-married respondents, 15.4% were checked for NCDs. Respondents who had been checked for NCDs within six months prior to the study period were those who had higher educational level (29.6%) and household income of above 7001 (33.3%). There is significant association between checked for NCDs in the last six months and marital status [in statistically significant tests, the association is between married and never married; and divorced and never married].

Table 4-35: Respondents who had ever checked for NCDs in the last six months by their background characteristics

Variables		Ever checked for NCDs in the last 6 months; n (%)			*p*-value
		Yes	No	Total	
Marital status					
	Married	134 (30.0)	313 (70.0)	447 (100.0)	<0.001
	Divorced	15 (34.9)	28 (65.1)	43 (100.0)	
	Widowed	15 (25.0)	45 (75.0)	60 (100.0)	
	Separated	5 (23.8)	16 (76.2)	21 (100.0)	
	Never married	41 (15.4)	225 (84.6)	226 (100.0)	
Educational level					
	No education	23 (25.0)	69 (75.0)	92 (100.0)	0.681*
	Only writing & reading	3 (17.6)	14 (82.4)	17 (100.0)	
	Primary	45 (23.2)	149 (76.8)	194 (100.0)	
	Secondary	67 (23.7)	216 (76.3)	283 (100.0)	
	Technical/vocational	22 (26.8)	60 (73.2)	82 (100.0)	
	Higher	50 (29.6)	119 (70.4)	169 (100.0)	
Household income					
	Less than 500 Birr	21 (25.9)	60 (74.1)	81 (100.0)	0.337*
	501 – 1500 Birr	49 (21.0)	184 (79.0)	233 (100.0)	
	1501 - 2500Birr	57 (25.1)	170 (74.9)	227 (100.0)	
	2501 – 4000 Birr	44 (32.8)	90 (67.2)	134 (100.0)	
	4001 – 5500 Birr	6 (17.1)	29 (82.9)	35 (100.0)	
	5501 – 7000 Birr	7 (29.2)	17 (70.8)	24 (100.0)	
	Above 7001	9 (33.3)	18 (66.7)	27 (100.0)	
**** There is no significant association at p-value<0.05***					

4.10. Exposure to Urban Health Extension Program services

Respondents in this study were asked if they had been visited by the UHE-ps at home within the past six months leading up to the interview. About 31% of the overall respondents replied "yes;" the majority (66.8%) reported that they were not visited by UHE-ps at home. Only 2.3% of the respondents didn't know. Home visit by UHE-ps was generally low, particularly in AA and Harari (15.1% and 13.5%, respectively), while home visits in DD (51.1%), SNNPR (48.3%), and Tigray (42.5%) were relatively higher.

Those who responded "yes" were asked a series of questions about the frequency of visits, type of information received, and the satisfaction with the services of UHE-ps (Table 4-36).About 13% and 32% responded that they were visited at home by UHE-ps weekly or quarterly, respectively. About a quarter (26.1%) the respondents reported quarterly home visits. However, 15.5% of the respondents didn't know or remember about the frequency of home visits by UHE-ps.

Overall, the majority of the respondents were sure about the type of information they received from UHE-ps, which included immunization (58.7%), HIV and AIDS (53.2%), hygiene (82.1%), latrine construction (80.2%) latrine use (80.5%), use of safe water (69%), and family planning methods (55%), with similar coverage across the study areas. On the overall service provided by UHE-ps, about 82% of the respondents were satisfied with the services of the UHE-ps while 11.2% were either indifferent or dissatisfied with the services of the UHE-ps.

Table 4-36: Respondent exposure to UHEP services by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Ever visited by UHEWs at home in the last six months								
Yes	36 (15.1)	86 (36.0)	48 (23.0)	51 (42.5)	58 (48.3)	46 (51.1)	4 (13.5)	329 (31.4)
No	197 (82.4)	144(60.3)	159(76.1)	66 (48.3)	58 (48.3)	44 (48.9)	26 (86.7)	694 (66.8)
Didn't know	6 (2.5)	9 (3.8)	2 (1.0)	3 (2.5)	4 (3.3)	0 (0.0)	0 (0.0)	24 (2.3)
Total, n (%)	**239 (22.8)**	**239(22.8)**	**209(20.0)**	**120(11.5)**	**120(11.5)**	**90 (8.6)**	**30 (2.9)**	**1047 (100)**
Frequency of visit								
Weekly	5 (13.9)	14 (16.3)	1 (2.1)	11 (21.6)	8 (13.8)	3 (6.5)	0 (0.0)	42 (12.8)
Monthly	8 (22.2)	25 (29.1)	16 (33.3)	16 (31.4)	22 (37.9)	16 (34.8)	1 (25.0)	104 (31.6)
Quarterly	10 (27.8)	18 (20.9)	12 (25.0)	10 (19.6)	18 (31.1)	16 (34.8)	2 (50.0)	86 (26.1)
Semiannually	7 (19.4)	14 (16.3)	8 (16.7)	3 (5.9)	4 (6.9)	2 (4.3)	1 (25.0)	39 (11.9)
Annually	1 (2.8)	1 (1.2)	0 (0.0)	4 (7.8)	1 (1.7)	0 (0.0)	0 (0.0)	7 (2.1)
Didn't know/remember	5 (13.9)	14 (16.3)	11 (22.9)	7 (13.7)	5 (8.6)	9 (19.6)	0 (0.0)	51 (15.5)
Ever received information from UHEWs on								
Immunization	21 (58.3)	51 (59.3)	27 (56.3)	44 (86.3)	13 (22.4)	34 (73.9)	3 (75.0)	193 (58.7)
Child nutrition	13 (36.1)	32 (37.1)	18 (37.5)	37 (72.5)	13 (22.4)	11 (23.9)	1 (25.0)	125 (38.0)
Diarrheal treatment	14 (38.9)	23 (26.7)	16 (33.3)	29 (56.9)	9 (15.5)	9 (19.6)	1 (25.0)	101 (30.7)
Pregnancy care	16 (44.4)	29 (33.7)	20 (41.7)	40 (78.4)	14 (24.1)	10 (21.7)	1 (25.0)	130 (39.5)
HIV and AIDS	23 (63.9)	48 (55.8)	26 (54.2)	42 (82.4)	16 (27.6)	18 (39.1)	2 (50.0)	175 (53.2)
Hygiene	26 (72.2)	79 (91.9)	41 (85.4)	42 (82.4)	48 (82.8)	31 (67.4)	3 (75.0)	270 (82.1)
Pit latrine construc.	28 (77.8)	69 (80.2)	45 (93.8)	37 (75.2)	49 (84.5)	33 (71.7)	3 (75.0)	264 (80.2)
Latrine use	30 (83.3)	70 (81.4)	44 (91.7)	42 (82.4)	44 (75.9)	32 (69.6)	3 (75.0)	265 (80.5)
Safe water use	23 (63.9)	69 (80.2)	38 (79.2)	40 (78.4)	29 (50.0)	25 (54.3)	3 (75.0)	227 (69.0)
Family planning	17 (47.2)	55 (64.0)	32 (66.7)	33 (64.7)	22 (37.9)	20 (43.5)	2 (50.0)	181 (55.0)
Satisfaction level with the services of UHEWs								
Dissatisfied	1 (2.8)	11 (12.8)	1 (2.1)	1 (2.0)	1 (1.7)	3 (6.5)	0 (0.0)	18 (5.5)
Neither satisfied nor dissatisfied	2 (5.6)	8 (9.3)	5 (10.4)	2 (3.9)	0 (0.0)	1 (2.2)	1 (25.0)	19 (5.8)
Satisfied	26 (72.2)	65 (75.6)	37 (77.1)	46 (90.2)	52 (89.7)	39 (84.8)	3 (75.0)	268 (81.5)
Didn't know	7 (19.4)	2 (2.3)	5 (10.4)	2 (3.9)	5 (8.6)	3 (6.5)	0 (0.0)	24 (7.3)
Total, n (%)	**36 (10.9)**	**86 (26.1)**	**48 (14.6)**	**51 (15.5)**	**58 (17.6)**	**46 (14.0)**	**4 (1.2)**	**329 (100)**

This study also investigated respondent experience with the nearest health center. Those who visited the nearest health center in the last six months from the time of the interview were asked a series of questions concerning the reason for the visit, whether they received any printed information during the visit, and their satisfaction level with the services of the health center (Table 4-37). Overall, 43.7% of the respondents responded that they visited a health center during the last six months, ranging from 40% in Tigray to 53.3% in Harari Regions. Reasons for visit included family planning (25.8%), NCD (27.3%), and child immunization (16.8%). Only 11.6% and 7.9% of the respondents visited the health center for reasons such as ANC and PNC, respectively; those seeking medical treatment constituted 10.3%.

Table 4-37: Respondent visit and satisfaction level with health centers by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Visited nearest health center in the last six months								
Yes	100 (41.8)	108(45.2)	85 (40.7)	48 (40.0)	59 (49.2)	42 (46.7)	16 (53.3)	458 (43.7)
No	136 (56.9)	129(54.0)	123(58.9)	71 (59.2)	59 (49.2)	48 (53.3)	14 (46.7)	580 (55.4)
No response/DK	3 (1.3)	2 (0.8)	1 (0.5))	1 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)	9 (0.9)
Total, n (%)	**239 (22.8)**	**239(22.8)**	**209(20.0)**	**120(11.5)**	**120(11.5)**	**90 (8.6)**	**30 (2.9)**	**1047 (100)**
Reason for visiting health center								
Family planning	27 (27.0)	29 (26.9)	21 (24.7)	13 (27.1)	8 (13.6)	13 (31.0)	7 (43.8)	118 (25.8)
Child immunization	20 (20.0)	15 (13.9)	13 (15.3)	10 (20.8)	6 (10.2)	9 (21.4)	4 (25.0)	77 (16.8)
ANC	13 (13.0)	7 (6.5)	9 (10.6)	7 (14.6)	7 (11.9)	8 (19.0)	2 (12.5)	53 (11.6)
PNC	9 (9.0)	3 (2.8)	7 (8.2)	3 (6.3)	6 (10.2)	5 (11.9)	3 (18.8)	36 (7.9)
Health education	11 (11.0)	2 (1.9)	13 (15.3)	5 (10.4)	12 (20.3)	4 (9.5)	1 (6.3)	48 (10.5)
Growth monitoring	8 (8.0)	2 (1.9)	4 (4.7)	2 (4.2)	2 (3.4)	4 (9.5)	1 (6.3)	23 (5.0)
Referral of sick child	10 (10.0)	3 (2.8)	7 (8.2)	4 (8.3)	2 (3.4)	11 (26.2)	1 (6.3)	38 (8.3)
Diarrhea treatment	7 (7.0)	0 (0.0)	5 (5.9)	2 (4.2)	9 (15.3)	5 (11.9)	0 (0.0)	28 (6.1)
Malaria treatment	0 (0.0)	1 (0.9)	1 (1.2)	0 (0.0)	5 (8.5)	3 (7.1)	0 (0.0)	10 (2.2)
Pneumonia treatment	2 (2.0)	0 (0.0)	4 (4.7)	0 (0.0)	1 (1.7)	3 (7.1)	2 (12.5)	12 (2.6)
NCD	18 (18.0)	32 (29.6)	28 (32.9)	2 (4.2)	31 (52.5)	10 (23.8)	4 (25.0)	125 (27.3)
Delivery care	5 (5.0)	3 (2.8)	3 (3.5)	2 (4.2)	0 (0.0)	1 (2.4)	1 (6.3)	15 (3.3)
Neonatal care	10 (10.0)	4 (3.7)	6 (7.1)	2 (4.2)	3 (5.1)	2 (4.8)	1 (6.3)	28 (6.1)
Checkup for sick child	7 (7.0)	5 (4.6)	0 (0.0)	3 (6.3)	1 (1.7)	1 (2.4)	0 (0.0)	17 (3.7)
Medical treatment	13 (13.0)	11 (10.2)	7 (8.2)	5 (10.4)	0 (0.0)	7 (16.7)	4 (25.0)	47 (10.3)
HIV checkup	5 (5.0)	17 (15.7)	3 (3.5)	6 (12.5)	0 (0.0)	3 (7.1)	0 (0.0)	34 (7.4)
Received printed information from health center								
Yes	60 (60.0)	65 (60.2)	49 (57.6)	22 (45.8)	39 (66.1)	21 (50.0)	5 (31.3)	261 (57.0)
No	33 (33.0)	20 (18.5)	28 (32.9)	21 (43.8)	13 (22.0)	14 (13.3)	5 (31.3)	134 (19.3)
Can't read	4 (4.0)	10 (9.3)	7 (8.2)	2 (4.2)	2 (3.4)	6 (14.3)	5 (31.3)	36 (7.9)
No response/DK	3 (3.0)	13 (12.0)	1 (1.2)	3 (6.3)	5 (8.5)	1 (2.4)	1 (6.1)	27 (5.9)
Satisfaction level with the services of health centers								
Dissatisfied	9 (9.0)	11 (10.2)	12 (14.1)	3 (6.3)	7 (11.9)	1 (2.4)	2 (12.5)	45 (9.8)
Neither satisfied nor dissatisfied	15 (15.0)	5 (4.6)	6 (7.1)	2 (4.2)	2 (3.4)	3 (7.1)	3 (18.8)	36 (7.9)
Satisfied	75 (75.0)	90 (83.3)	67 (78.8)	42 (87.5)	47 (79.7)	38 (90.5)	11 (68.8)	370 (80.8)
No response/DK	1 (1.0)	2 (1.9)	0 (0.0)	1 (2.1)	3 (5.1)	0 (0.0)	0 (0.0)	7 (1.5)
Total, n (%)	**100(21.8)**	**108(23.6)**	**85 (18.6)**	**48 (10.5)**	**59 (12.9)**	**42 (9.2)**	**16 (3.5)**	**458 (100)**
Main reason for dissatisfaction								
Long waiting time	2 (22.2)	2 (18.2)	2 (16.7)	0 (0.0)	0 (0.0)	0 (0.0)	1 (50.0)	7 (15.6)
Unsatisfactory treatment	3 (33.3)	6 (54.5)	9 (75.0)	3 (100.0)	7 (100.0)	1 (100)	1 (50.0)	30 (66.7)
Other	4 (44.4)	3 (27.3)	1 (8.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	8 (17.8)
Total, n (%)	**9 (20.0)**	**11 (24.4)**	**12 (26.7)**	**3 (6.7)**	**7 (15.6)**	**1 (2.2)**	**2 (4.4)**	**45 (100)**

More than half (57%) of the respondents reported that they received any printed information from the health center during their visit, ranging from 31.3% in Harari to 66.1% in SNNPR (Table 4-37). The findings also indicate that 9.8% of the respondents revealed that they were unhappy with the services of the health centers, mainly due to unsatisfactory treatment (66.7%) and long waiting times (15.6%). Almost all of the respondents in Tigray (100%), SNNPR (100%), and Oromia (75%) attributed their dissatisfaction with the services of the health centers to unsatisfactory treatment.

4.11. Sources of information for behavior change communication

Public health education and communication are important means of raising awareness, increasing knowledge, changing attitudes and social norms, and changing behavior of the community to create demand for and utilization of available public health services. Furthermore, public health education motivates and helps the community to adopt and maintain healthy practices and life skill. An effective way to deliver health education and communication is through well planned and designed behavior change communications (BCC) interventions, which can achieve remarkable results in increasing knowledge and changing behavior of the community.

This study investigated respondent's main sources of information on MCH, TB, HIV and AIDS, immunization, and NCDs. Respondents were asked about their main sources of information and a detailed series of questions on each type of information source (Table 4-38). Television (78%), radio (52%), and health workers at health centers (43.5%) were identified as the main sources of information for the issues listed above. Radio as the main source of information was least in DD (33.3%) and highest in Tigray (65.8%). Similarly, television was least in DD (58.9%) and highest in AA (86.7%). UHE-ps(17.1%), health professionals at hospitals (9.5%), community meetings at village levels (9.3%), and schools (9.2%) were also mentioned as sources.

Table 4-38: Respondents' main sources of information on MCH, TB, HIV and AIDS, immunization, and NCD by regional state/city administration

Sources of information	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Radio	141 (59.0)	115(48.1)	102(48.8)	79 (65.8)	70 (58.3)	30 (33.3)	16 (53.3)	553 (52.8)
TV	207 (86.7)	196(82.0)	159(76.1)	95 (79.2)	85 (70.8)	53 (58.9)	22 (73.3)	817 (78.0)
Newspaper	36 (15.1)	19 (7.9)	11 (5.3)	3 (2.5)	6 (5.0)	2 (2.2)	3 (10.0)	80 (7.6)
Health center	93 (38.9)	86 (36.0)	101(48.3)	66 (55.0)	48 (40.0)	45 (50.0)	16 (53.3)	455 (43.5)
Hospital	26 (10.9)	15 (6.3)	27 (12.9)	15 (12.5)	9 (7.5)	5 (5.6)	2 (6.7)	99 (9.5)
UHE-p	17 (7.1)	53 (22.2)	22 (10.5)	24 (20.0)	38 (31.7)	23 (25.6)	2 (6.7)	179 (17.1)
NGO	5 (2.1)	5 (2.1)	4 (1.9)	0 (0.0)	0 (0.0)	2 (2.2)	1 (3.3)	17 (1.6)
Peer educator	2 (0.8)	6 (2.5)	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	9 (0.9)
Church/mosque	2 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (2.2)	1 (3.3)	5 (0.5)
Community meeting	14 (5.9)	24 (10.0)	14 (6.7)	20 (16.7)	9 (7.5)	14 (15.6)	2 (6.7)	97 (9.3)
School	23 (9.6)	16 (6.7)	17 (8.1)	10 (8.3)	13 (10.8)	12 (13.3)	5 (16.7)	96 (9.2)
Family	7 (2.9)	14 (5.9)	2 (1.0)	7 (5.8)	6 (5.0)	2 (2.2)	1 (3.3)	39 (3.7)
Billboard	4 (1.7)	3 (1.3)	0 (0.0)	2 (1.7)	0 (0.0)	0 (0.0)	1 (3.3)	10 (1.0)
People	0 (0.0)	6 (2.5)	3 (1.4)	6 (5.0)	3 (2.5)	0 (0.0)	0 (0.0)	18 (1.7)
Friend/family	9 (3.8)	8 (3.3)	7 (3.3)	13 (10.8)	5 (4.2)	1 (1.1)	0 (0.0)	43 (4.1)

Respondents who responded that radio was the main source of information were further questioned about the days of the week, time, and station they usually listen to (Table 4-39). Many responded that they usually listened to radio every day of the week (57.7%), especially from 6 am -12 pm (44.3%) and from 8 pm – 10 pm (14.8%). Some respondents listened to radio from 2 pm – 5 pm (19.9%). The three frequently mentioned radio stations the respondents listened to include Ethiopia radio (34%), Fana FM (31.3%), and FM 97.1 (25.5%). Ethiopia radio was reported as the preferred radio station by the majority of the

respondents across all the study areas, with variations from one region to another, while FM 97.1 radio station usually listened in AA and Oromia Region.

Table 4-39: Respondent frequency of listening to radio by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Days of the week usually listening to radio								
Weekdays	37 (26.2)	22 (19.1)	12 (11.8)	9 (11.4)	10 (14.3)	4 (13.3)	0 (0.0)	94 (17.0)
Saturday	25 (17.7)	16 (13.9)	13 (12.7)	12 (15.2)	9 (12.9)	5 (16.7)	5 (31.3)	85 (15.4)
Sunday	11 (7.8)	9 (7.8)	11 (10.8)	16 (20.3)	6 (8.6)	2 (6.7)	0 (0.0)	55 (9.9)
All the days in a week	68 (48.2)	68 (59.1)	66 (64.7)	42 (53.2)	45 (64.3)	19 (63.3)	11 (68.8)	319 (57.7)
Time of the day usually listening to radio								
6 am -8 am in the morning	21 (14.9)	18 (15.7)	25 (24.5)	7 (8.9)	21 (30.0)	9 (30.0)	3 (18.3)	104 (18.8)
8 am-12 pm in the morning	38 (27.0)	33 (28.7)	25 (24.5)	21 (26.6)	12 (17.1)	8 (26.7)	4 (25.0)	141 (25.5)
12 pm-2 pm at mid-day	12 (8.5)	6 (5.2)	9 (8.8)	9 (11.4)	3 (4.3)	1 (3.3)	2 (12.5)	42 (7.6)
2 pm -5 pm afternoon	29 (20.6)	30 (26.1)	11 (10.8)	22 (27.8)	12 (17.1)	2 (6.7)	4 (25.0)	110 (19.9)
5 pm-8 pm in the evening	17 (12.1)	18 (15.7)	8 (7.8)	6 (7.6)	6 (8.6)	3 (10.0)	2 (12.5)	60 (10.8)
8pm-10 pm in the evening	22 (15.6)	10 (8.7)	20 (19.6)	11 (13.9)	14 (20.0)	5 (16.7)	0 (0.0)	82 (14.8)
Other	2 (1.4)	0 (0.0)	4 (3.9)	3 (3.8)	2 (2.9)	2 (6.7)	1 (6.3)	14 (2.5)
Type of radio station usually listening to								
Ethiopia radio	23 (16.3)	37 (32.2)	49 (48.0)	30 (38.0)	22 (31.4)	19 (63.3)	8 (50.0)	188 (34.0)
FM 97.1	73 (51.8)	5 (4.3)	41 (40.2)	4 (5.1)	11 (15.7)	0 (0.0)	7 (43.8)	141 (25.5)
FM 96.3	24 (17.0)	0 (0.0)	9 (8.8)	0 (0.0)	1 (1.4)	0 (0.0)	0 (0.0)	34 (6.1)
Sheger FM 102.1	78 (55.3)	0 (0.0)	15 (14.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	93 (16.8)
Fana FM	41 (29.1)	53 (46.1)	18 (17.6)	42 (53.2)	11 (15.7)	6 (20.0)	2 (12.5)	173 (31.3)
Amhara FM	0 (0.0)	19 (16.5)	0 (0.0)	1 (1.3)	0 (0.0)	0 (0.0)	0 (0.0)	20 (3.6)
Debub FM	0 (0.0)	1 (0.9)	4 (3.9)	0 (0.0)	42 (60.0)	0 (0.0)	0 (0.0)	47 (8.5)
Tigray FM	0 (0.0)	0 (0.0)	0 (0.0)	35 (44.3)	0 (0.0)	0 (0.0)	0 (0.0)	35 (6.3)
Oromia FM	1 (0.7)	0 (0.0)	15 (14.7)	0 (0.0)	1 (1.4)	6 (20.0)	1 (6.3)	24 (4.3)
Total, n (%)	**141(25.5)**	**115(20.8)**	**102(18.4)**	**79 (14.3)**	**70 (12.7)**	**30 (5.4)**	**16 (2.9)**	**553 (100)**

Table 4-40 presents data on the days of the week and time slot for watching television. About 66% of respondents usually watched television every day of the week and the time slot for majority of the respondents (63.4%) was late evening (8 pm – 10 pm), followed by late afternoon (2 pm – 5 pm) (16.2%). Ethiopia television (recently renamed Ethiopia Broadcasting Corporation, EBC), was the most preferred television channel (92.4%) universally across all the study areas.

Table 4-40: Respondent frequency of watching television by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Days of the week usually watching TV								
Weekdays	24 (11.6)	15 (7.7)	7 (4.4)	12 (12.6)	3 (3.5)	1 (1.9)	0 (0.0)	62 (7.6)
Saturday	29 (14.0)	15 (7.7)	18 (11.3)	3 (3.2)	26 (30.6)	5 (9.4)	2 (9.1)	98 (12.0)
Sunday	27 (13.0)	30 (15.3)	27 (17.0)	18 (18.9)	11 (12.9)	6 (11.3)	0 (0.0)	119 (14.6)
All the days in a week	127 (61.7)	136(69.4)	107(67.3)	62 (65.3)	45 (52.9)	41 (77.4)	20 (90.9)	538 (65.9)
Time of the day usually watching TV								
6 am -8 am morning	9 (4.3)	0 (0.0)	7 (4.4)	2 (2.1)	2 (2.4)	4 (7.5)	2 (9.1)	26 (3.2)
8 am-12 pm morning	8 (3.9)	9 (4.6)	8 (5.0)	1 (1.1)	1 (1.2)	6 (11.3)	3 (13.6)	36 (4.4)
12 pm-2 pm at mid-day	7 (3.4)	8 (4.1)	15 (9.4)	3 (3.2)	0 (0.0)	5 (9.4)	0 (0.0)	38 (4.7)
2 pm -5 pm afternoon	24 (11.6)	30 (15.3)	28 (17.6)	12 (12.6)	31 (36.5)	6 (11.3)	1 (4.5)	132 (16.2)
5 pm-8 pm evening	17 (8.2)	16 (8.2)	7 (4.4)	3 (3.2)	3 (3.5)	3 (5.7)	1 (4.5)	50 (6.1)
8pm-10 pm evening	142 (68.6)	132(67.3)	87 (54.7)	70 (73.7)	46 (54.1)	26 (49.1)	15 (68.2)	518 (63.4)
Other	0 (0.0)	1 (0.5)	7 (4.4)	4 (4.2)	2 (2.4)	3 (5.7)	0 (0.0)	17 (2.1)
Type of TV channel usually watching								
Ethiopia TV	192 (92.8)	187(95.4)	148(93.1)	85 (89.5)	81 (95.3)	42 (79.2)	20 (90.9)	755 (92.4)
EBS	11 (5.3)	2 (1.0)	1 (0.6)	0 (0.0)	3 (3.5)	3 (5.7)	2 (9.1)	22 (2.7)
Oromia TV	2 (1.0)	1 (0.5)	5 (3.1)	0 (0.0)	0 (0.0)	7 (13.2)	2 (9.1)	15 (1.8)
Tigray TV	0 (0.0)	0 (0.0)	0 (0.0)	9 (9.5)	0 (0.0)	0 (0.0)	0 (0.0)	9 (1.1)
Amhara TV	0 (0.0)	5 (2.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (0.6)
Total, n (%)	**207 (25.3)**	**196(24.0)**	**159(19.5)**	**95 (11.6)**	**85 (10.4)**	**53 (6.5)**	**22 (2.7)**	**817 (100)**

Table 4-41shows the frequency and the percentages of respondents from who they received information about health priorities (MCH, TB, HIV and AIDS, immunization, and NCDs) in the past 12 months. Health workers (47.3%), UHE-ps(31.4%), friends (41.6%) and families/relatives (38.1%) constitute the three main source of information on health priorities during the past one year before the survey. Friends/neighbors were the main source of information when considering friends/family members. The results of this study also indicate that respondents obtained the most important health information in the past 12 months mainly through personal counseling (41.5%), group discussion (32.9%) and training/teaching (28.9%). Almost all of the respondents (92.3%) wanted to know more about important health topics such as MCH, TB, HIV and AIDS, immunization and NCDs. However, about 27% of the respondents from Harari reported they wanted no more information on the topics stated above.

Table 4-41: Respondent sources of information on MCH, TB, HIV and AIDS, immunization, and NCD in the past 12 months by regional state/city administration

Characteristics	Regional state/city administration, n (%)							Total, n (%)
	AA	Amhara	Oromia	Tigray	SNNPR	DD	Harari	
Sources of information in the past 12 months								
Health workers	106 (44.4)	116(48.5)	106(50.7)	57 (47.5)	53 (44.2)	44 (48.9)	13 (43.3)	495 (47.3)
UHE-ps	36 (15.1)	87 (36.4)	51 (24.4)	51 (42.5)	59 (49.2)	40 (44.4)	5 (16.7)	329 (31.4)
School teachers	21 (8.8)	15 (6.3)	13 (6.2)	17 (14.2)	20 (16.7)	6 (6.7)	3 (10.0)	95 (9.1)
NGO workers	5 (2.1)	20 (8.4)	21 (10.0)	3 (2.5)	1 (0.8)	5 (5.6)	3 (10.0)	58 (5.5)
Volunteers	11 (4.6)	14 (5.9)	9 (4.3)	2 (1.7)	1 (0.8)	7 (7.8)	3 (10.0)	47 (4.5)
Friends	103 (43.1)	103(43.1)	81 (38.6)	65 (54.2)	48 (40.0)	26 (28.9)	10 (33.3)	436 (41.6)
Families/relatives	95 (39.7)	96 (40.2)	66 (31.6)	67 (55.8)	35 (29.2)	28 (31.1)	12 (40.0)	399 (38.1)
From training	1 (0.4)	2 (0.8)	2 (1.0)	2 (1.7)	1 (0.8)	0 (0.0)	1 (3.3)	9 (0.9)
Total, n (%)	**239(22.8)**	**239(22.8)**	**209(20.0)**	**120(11.5)**	**120(11.5)**	**90 (8.6)**	**30 (2.9)**	**1047 (100)**
Main source of information from friends or family members								
Friends/neighbors	91 (69.5)	93 (76.2)	80 (76.2)	39 (54.2)	41 (67.2)	26 (74.3)	7 (50.0)	377 (69.8)
Relatives	45 (34.4)	47 (38.5)	32 (30.5)	22 (30.6)	17 (27.9)	18 (51.4)	7 (50.0)	188 (34.8)
Spouse/partner	28 (21.4)	21 (17.2)	22 (21.0)	10 (13.9)	7 (11.5)	10 (28.6)	4 (28.6)	102 (18.9)
Parents	21 (16.0)	6 (4.9)	22 (21.0)	12 (16.7)	11 (18.0)	8 (22.9)	2 (14.3)	82 (15.2)
In-laws	4 (3.1)	1 (0.8)	5 (4.8)	0 (0.0)	1 (1.6)	2 (5.7)	1 (7.1)	14 (2.6)
Total, n (%)	**131 (24.3)**	**122(22.6)**	**105(19.4)**	**72 (13.3)**	**61 (11.3)**	**35 (6.5)**	**14 (2.6)**	**540 (100)**
Means through which important health information was obtained in the past 12 months								
Training/teaching	51 (21.3)	60 (25.1)	62 (29.7)	49 (40.8)	50 (41.7)	20 (22.2)	11 (36.7)	303 (28.9)
Group discussion	68 (28.5)	112(46.9)	57 (27.3)	30 (25.0)	43 (35.8)	27 (30.0)	7 (23.3)	344 (32.9)
Personal counseling	87 (36.4)	113(47.3)	88 (42.1)	58 (48.3)	52 (43.3)	27 (30.0)	10 (33.3)	435 (41.5)
Campaign	4 (1.7)	9 (3.8)	10 (4.8)	3 (2.5)	7 (5.8)	2 (2.2)	2 (6.7)	37 (3.5)
Drama	56 (23.4)	21 (8.8)	35 (16.7)	19 (15.8)	32 (26.7)	16 (17.8)	9 (30.0)	188 (18.0)
Advertisement	4 (1.7)	5 (2.1)	3 (1.4)	4 (3.3)	0 (0.0)	1 (1.1)	0 (0.0)	17 (1.6)
Discussion with friends	7 (2.9)	3 (1.3)	2 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (3.3)	13 91.2)
Want to know more about important health topics								
Yes	212 (88.7)	234(97.9)	199(95.2)	108(90.0)	114(95.0)	77 (85.6)	22 (73.3)	966 (92.3)
No	27 (11.3)	5 (2.1)	10 (4.8)	12 (10.0)	6 (5.0)	13 (14.4)	8 (26.7)	81 (7.7)
Total, n (%)	**239 (22.8)**	**239(22.8)**	**209(20.0)**	**120(11.5)**	**120(11.5)**	**90 (8.6)**	**30 (2.9)**	**1,047 (100)**

4.12. Barriers and motivators for health service utilization

One of the objectives of this formative assessment was to understand barriers to and motivators of health service use to design appropriate IEC/BCC interventions. Using qualitative research methods (IDIs and FGDs) administered to different target groups, questions about general health service utilization and specific health programs (MCH, HIV and AIDS, TB, and NCDs)were asked. The qualitative component of this formative assessment complements the quantitative survey by making an in-depth assessment of the predisposing and enabling factors that facilitate or hamper project implementation. This qualitative research revealed numerous barriers within each of the health programs and identified various motivators of service utilization, as presented in Table 4-42.

4.12.1. Barriers to health service utilization

Participants of IDIs and FGDs mentioned distance, transportation problems, poor economic conditions, inadequate number of health professionals, lack of motivation by health workers, shortage of drug supply, perceived low quality of services, high patient load, low awareness and understanding by the community, and misconduct by some health professionals as primary barriers to health service utilization. The facility health workers who participated in the FGDs revealed that people are aware of the importance of health service utilization, but said that they are usually discouraged to come by the overcrowding at the health facilities. Patient load at the health centers was another factor hindering proper health service utilization by the community.

4.12.2. Motivators for health service utilization

The most salient facilitators of health service utilization discussed among the qualitative participants were health education and promotion, expansion of health facilities, government commitment to improve accessibility and quality of health services, the deployment of UHE-ps to teach the community through door-to-door visit, involvement of NGOs in health sector, growing number of private health facilities, high media coverage of health, proximity of health facilities, and measures taken against misconduct of some health professionals.

4.12.3. Barriers and motivators of health service utilization amenable to behaviour change

The contents of Table 4-42 portray whole factors (barriers and motivators) that operate at individual, social, population, local, and distant levels, and may not be amenable to BCC. It is understandable that behavior change interventions targeting individual-level attributes have limited success since social, population, and environmental factors influence behavior change and improvements in health outcomes. However, it is difficult to indiscriminately implement interventions to create behavior change at all levels because scarce resources limit feasibility. As a result, BCC should be prioritized by availability of resources including cost, relative importance, and the desired impact. Efforts that build on existing motivators should be introduced.

Table 4-42: Commonly reported barriers and motivators of health service utilization by health program

No.	Health service	Barrier	Motivator
1	General health service utilization	• Lack of access and transportation problems • Poor economic condition of mother • Inadequate number of health centers • Inadequate number of health workers • Lack of motivation or interest by health professionals • Shortage of drug supply in the health facilities • Perceived low quality of service at health centers • High patient load, long waiting hours • Poor health facility management (health centers and hospitals) • Poor knowledge and skill of UHE-ps • Lack of interest among the community to use UHE-ps • Dissatisfaction by the health services • Low level of awareness and knowledge of the community • Misconduct of some health professionals • Belief that traditional medicine is better than modern • High workload or shortage of time to visit health facilities	• Provision of health education • Expansion of health facilities • Government commitment and striving for better quality of health services • Door-to-door visit and teaching • Involvement of aid organizations and other partners to improve quality of health services • Close proximity of health facilities • Cheaper service fees at public health facilities • Mass media (TV and radio) advertisements • Availability of UHE-ps and committed health professionals • Growing number of private health facilities providing FP services • Measures taken against misconduct of health professionals
2	Family planning	• Misperception that FP methods cause irregular and excessive bleeding, infertility, weight gain or loss, serious headache, face discoloration • Poor knowledge about the use and benefits of FP methods • Lack of privacy at health facilities due to shortage of rooms • Religious concerns • Fear of husbands • Poor interest to use long-acting FP methods • Low male involvement • Poor spousal communication about FP methods • Long waiting hours at health facilities • Belief that having many children is a blessing from God • Belief in having as many children as possible given by God	• Awareness creation efforts of health workers • Media, UHE-p, and knowledgeable people in the community • Lessons gained from self and others • Promotional works on FP methods • High awareness of the community about FP methods • Involvement of religious leaders • Easy accessibility of FP methods • Availability of knowledgeable and skilled health professionals to provide FP services • Social mobilization • Advice of friends and relatives • Ability to limit family size through fertility control • Pressure of economic problems to use FP methods • Male involvement • Consequences of having many children • Availability of mix of FP methods

Table 4-42: Continued

No.	Health service	Barrier	Motivator
3	ANC	• Lack of knowledge about the use and benefits of ANC • Lack of support by partners • Financial problems • Lack of detailed medical procedures for screening • High patient load at health facilities • Mistreatment by health professionals • Lack of time by mothers and belief that ANC visit has no benefit • Poor quality of health service • Long waiting time to get ANC service • Weak and poor counseling service • Lack of medical and lab supplies • Low motivation and interest of health professionals • Far health facilities • Transportation problems • Inadequate rooms with poor couches	• Availability of delivery and immunization services • Free counseling and screening service • Curiosity to know health of the mother and fetus • Advice and encouragement of health professionals • Easy accessibility of health facility • Benefits of getting immunization • Early detection and treatment of pregnancy related illnesses and complications • Benefits of ANC
4	Health facility delivery	• Transportation problem • Shortage or lack of free ambulance (charge fees) • Shortage or lack of delivery beds • Referral of mother with labor to other health facilities • Preference of home delivery over institutional delivery • Lack of knowledge about the benefits of health facility delivery • Mistreatment by health professionals • Belief that delivery by TBA is more useful • Distance of health facility • Financial problems • Lack of equipment and inadequate medical supplies • Absence or shortage of qualified professionals • Presence of unqualified health workers • Belief that the subsequent deliveries will be normal if the 1st delivery at home turns out to be normal • Inadequate support from health workers during delivery and negligence, lack of interest	• Increased community awareness and understanding about facility delivery • Free delivery service • Availability of medical care in case of complications during delivery • Availability of ambulances for health facility delivery • Presence of UHE-p • Decreased maternal mortality due to health facility delivery • Awareness creation by mass media • Availability of skilled health professionals • Community support for facility delivery • Discouragement of home delivery by health professionals and the community • Provision of child immunization and vitamin A supplementation following delivery • Provision of gifts such as blanketsand towels after delivery in health facility

No.	Health service	Barrier	Motivator
		• Forced home delivery due to sudden and fast labor • Pressure and support of TBAs for home delivery • Pressure from elders in support of home delivery • Lack of support from husbands for facility delivery • Bad experience during the previous delivery at health facility • Inadequate rooms for delivery and maternity care • Traditional belief and religious thoughts such as St. Mary's help • Traditional belief that woman who stays at home gets help from God, while the one who goes to health facility may not get divine help • Influence of husbands and mother-in-law in support of home delivery • Belief that baby would be exposed to cold if delivered in health facility	
5	PNC	• Perception of being healthy • Lack of transport and financial problems • Dissatisfaction with health services • Lack of adequate counseling • Belief that mother should stay at home for 40 days after delivery • Lack of awareness and knowledge about the benefit of PNC • Long waiting time	• Regular house-to-house visit by UHE-p • Benefits of PNC
6	Child immunization	• Lack of knowledge about the benefits of immunization • Belief that immunization has no benefit • High client load • Problem of power cuts for vaccines • Negligence of mothers • Shortage of some vaccines • Irritation, fever, burning sensations, and pain caused during vaccination • Distance of vaccination sites • Mobility of parents to other areas • Long waiting time and lack of time by mothers • Absence or unavailability of health workers	• Better understanding about the benefits of immunization • Door-to-door service vitamin A supplementation • Free service • Visits and encouragement by UHE-p

No.	Health service	Barrier	Motivator
7	PMTCT	• Lack of knowledge and understanding about the benefits of PMTCT • HIV+ mother fear of disclosure • Confidentiality issues • Fear of stigma and discrimination • Poor counseling by health professionals • Shortage of ART medication • Long waiting time and shortage of time • Lack of partner/husband support • Shortage of trained and skilled health workers • Transportation problems • Dissatisfaction with the health services • Shortage of rooms for privacy issues	• Counseling service • Availability of ART and ARV prophylaxis • Need to deliver healthy child even if the mother is HIV+ • Quality of service
8	HIV and AIDS (HCT/PLHIV/ART)	• Lack of knowledge and understanding • Concerns about lack of confidentiality • Shortage of space for VCT services • Fear of stigma and discrimination • Lack of partner notification • Shortage of ART medication • Shortage of medicine for opportunistic infections • Fear of being positive after HCT • Belief that holy water is superior than ART • Belief that ART and holy water can't be taken simultaneously (i.e., choose only one) • Lack of interest to undergo HCT • Long waiting time • Poor quality of service • Misconduct by health workers • Belief that AIDS can be cured by faith • Shortage of testing kits • Health workers lack of motivation • Fear of side effects of ART • Lack of confidentiality in taking ART • Lack of ART in the health centers	• Availability of mobile VCT services • Promotional works on HIV and AIDS • Better awareness and understanding of the people • Availability of free service and ART • Possibility of living with AIDS • Knowledge about HIV transmission and prevention methods • Better understanding of the benefits of VCT • Involvement of religious leaders • Decline in deaths from AIDS and opportunistic infections • Availability of youth anti-HIV clubs • Availability of PLHIV associations • Free supply of items such as soaps, detergents, etc. • Rapid test results • Discussion among PLHIV • Availability of NGOs working with PLHIV • Employment opportunities for PLHIV

No.	Health service	Barrier	Motivator
		• Religious concerns in using condom and ART • Fear of parents, family and community members in using ART • Lifelong medication is monotonous • Fear of discontinuation of ART after starting it due to shortage • Distance and transportation problems • Purchase of drugs from private facilities due to absence • Financial problems for medication and transportation • Seeking ART services from far away health facilities due to fear of stigma and discrimination in the nearest health facility	
9	TB	• Lack of knowledge and understanding • Fear of stigma • Poor adherence of treatment • Perception that anti-TB needs better diet • Financial problems related to food • Diagnostic problems • Difficulty of taking the medication • Misconduct of health professionals • Inappropriate service hours of daily laborer TB patients • Transportation problem • Long waiting time • Difficulty of getting medicine • Poor counselling • Poor communication between family members about TB • Lack of punctuality of health workers	• Promotional works on TB prevention and control • Provision of free service and medication • Eager to recover from the disease • Family encouragement • UHE-p referral of people with prolonged cough
10	NCDs	• Lack of knowledge and understanding • Expensive services and drugs • Drugs are mainly available at specialized hospitals • Financial problems • Lack of habit for regular checkups • Poor emphasis from media and government • Government emphasis on communicable diseases and MCH problems over NCDs • Insidious nature of NCDs	• Teaching and advice by health professionals • Awareness creation by UHE-p • Lose weight to feel better and healthy • Media increase for health promotion and education

No.	Health service	Barrier	Motivator
		• Shortage of medical equipment • Transportation problems • Inadequate or lack of physical exercise • Belief that NCDs are caused by hereditary and aging • Perception that traditional remedies are better than modern medicine for NCDs • Distance problems • Poor quality services • Need for specialized care at hospitals • Lack of early diagnosis and prompt treatment • Concern about the side effects of the drugs	

5. SUMMARY OF THE MAIN FINDINGS

This formative assessment gathered information about what respondents know about family planning methods, ANC, health facility delivery, PNC, child immunization, TB, NCDs, and HIV and AIDS including PMTCT and HCT. It asked what respondents think about people with HIV and AIDS and TB and about health service utilization for each health service program, and what they actually did. This assessment also identified knowledge and, attitudes patterns that facilitate or hinder people's service and health seeking behavior. To some extent, the assessment also identified reasons for attitudes and factors influencing behavior. Finally, the assessment identified needs, facilitators, and barriers of health service program delivery to help alleviate the problems.

In this study, health behaviors are influenced by several factors operating at individual, household, community, and health facility levels. The levels of knowledge and attitudes about the different health services included in this formative assessment were high. However, the indicators that measured the practice suggested lower percentages compared to the knowledge and attitude indicators. As a result, there is still much to be done to improve the health-seeking behavior for different health programs. The following subsections summarize the main findings of the formative assessment separately by knowledge, attitude, and practice, and to some extent, by barriers and motivators generally categorized under the different health programs studied in this assessment. It is hoped that these findings will assist in designing appropriate IEC/BCC strategies.

5.1. Family planning methods

Knowledge

The majority of the respondents were able to mention the commonly used family planning methods, namely; pill (86.8%); injectable (79.7%); intrauterine device (IUD) (67.1%); implant (53.0%); and condom (46.1%). The majority of the study participants were knowledgeable about the benefits of contraceptive methods including delaying/spacing children (73.0%); economic/financial benefit (45.9%);and reducing unplanned pregnancies and births (37.0%). Infertility, weight gain, skin discoloration (particularly face), and menstrual disorders were mentioned as side effects of using contraceptives. The public health facilities, consisting of health centers (91.8%) and hospitals (49.7%), were the major sources of contraception known by the respondents. About 39% of the respondents reported that had been told about family planning at a health facility within the past 12 months preceding the survey, while 61.2% had not.

Attitude

The findings indicate that some women in the community still don't use family planning methods so they can have more children; other women fear hypertension and the widespread rumors about the side effects of the contraceptives such as infertility, skin discoloration, weight gain, loss of appetite, pain, and

anemia. Among the current non-users of contraceptives (n=218), about one-third reported intention to use them in the future. The majority of the respondents (90.2%) had a favorable attitude toward involving men in family planning endeavors, while the rest disfavored the participation of men. The findings also indicate that some women don't use the contraceptive methods, stating that its use is against their religion.

Practice

About 64% (n=645) of the respondents reported that they or their partners ever used any contraceptive methods, of which injectables and pills constituted 58.8% and 41.2%, respectively. No male or female sterilization method was reported by the respondents. The current contraceptive use rate was about 66% among the ever-users. Health centers (55.3%), government hospitals (12.9%), and private health facilities (10.3%) were the major sources of contraception for the current users. Among the current non-users of contraceptives (n=218), the most commonly mentioned reasons for not using any method were being unmarried and the desire to have more children. The findings identified media such as television and radio as the primary source of information on family planning methods, followed by health workers at health centers. Only one-third of the respondents reported that UHE-ps discussed family planning with them in the past 12 months.

Barriers

The main barriers to family planning constituted misperception that family planning methods cause irregular and excessive menstrual bleeding, infertility, weight gain or loss, serious headache, face discoloration; poor knowledge about the use and benefits of the methods; lack of privacy at health facilities due to shortage of rooms; religious concerns; fear of husbands; low male involvement; poor spousal communication about family planning methods; long waiting hours at health facilities; and belief that having many children is a blessing from God.

Motivators

The main facilitators/motivators of the utilization of contraceptive methods identified include high awareness and knowledge about the methods, easy accessibility of family planning methods, economic problems associated with having many children and ability to limit family size through fertility control, involvement of religious leaders, and the continued concerted social mobilization efforts.

5.2. Antenatal care

Knowledge

The study findings indicate that the majority (75%) of the respondents knew about the timing of the first antenatal contact within the first three months immediately after conception. Public health centers (94.9%), government hospitals (54.1%) and private clinics/hospitals (28.8%) were the most commonly cited place for a pregnant woman to get ANC services. About 86% of the study participants stated that a pregnant woman should change or improve her daily diets, by eating diversified foods such as vegetables, milk, and iron- and protein-rich foods.

Attitude

The majority of the respondents (86.3%) said that a pregnant woman should consult health workers for early check-up for herself and the fetus, followed by check-up for early detection of complications and screening for anemia, STIs, and HIV.

Practice

ANC coverage in the study population was relatively high. Among those who reported pregnancy within the past two years (n=228), almost all reported that they attended ANC, about 72% four or more times. The majority of the ANC seeking was done at health centers (54.4%), government hospitals (19.9%), and private health facilities (18.1%). In fact, about two-thirds attended ANC within the first three months of conception. Nearly one-third (31.9%) of them sought ANC after their fourth month of pregnancy. About 31% of the respondents/partners were visited by the UHE-ps during the most recent pregnancy, mainly at home. With regard to the components of services provided to the pregnant women by the UHE-ps, the majority (81.4%) were advised about health facility delivery, vaccination, and HCT, followed by advice on proper nutrition and personal hygiene (18.6%).About 24% of the respondents reported that pregnant women should avoid alcohol and cigarettes. While general indications are that there are no food prohibitions, coffee, salty, and fatty foods were mentioned as foods that are avoided.

Barriers

This formative assessment identified several barriers against the utilization of ANC services by pregnant women. The most notable include lack of knowledge about the use and benefits of ANC by some pregnant women, financial problems related to transportation, misconduct by some health professionals, long waiting time at the health facilities, low motivation among some health workers, and distant health facilitates.

Motivators

The respondents indicated that health facilities are safe for a woman to check for her fetus in addition to the availability of qualified staff and proximity of the facilities. The overwhelming majority of the

respondents replied that they were satisfied with the quality of the services provided during the ANC visits at the health facilities, which motivates them to make more visits to the health facilities. The qualitative findings revealed several motivating factors such as availability of delivery and immunization services, free ANC counseling and screening services, easy accessibility of health facility, benefits of immunization.

5.3. Health facility delivery

Knowledge

Both quantitative and qualitative study participants indicated the superiority of health facility delivery in contrast to home delivery. The respondent's knowledge about the advantages of health facility delivery was high and included expert help, prevention of too much blood loss, and special care for the baby and mother. A larger percentage of the respondents (79%) stated lack of knowledge about the benefit of facility delivery as the main reason that encourages home delivery. The participants also identified too much blood loss, use of unsafe delivery materials, and the possibility of death during delivery at home.

Attitude

The majority of the respondents (93.4%) said that pregnant woman should deliver in the health facilities. However, about 5% still had the opinion that delivery should be done at home using TBAs.

Practice

About 79% of the recent births were reported to be delivered in the health facilities (health centers, hospitals, and private health facilities). Almost two-third of the deliveries took place in public health facilities, while a small proportion of mothers used private hospitals for the delivery. However, 21% were delivered at home, mainly due to high transportation cost and the sudden onset of labor.

Barriers

The main barriers to health facility delivery constituted transportation problem; shortage or lack of free ambulance; shortage or lack of delivery beds at health facilities; referral of mother with labor to other health facilities due to shortage of beds; preference of home delivery over institutional delivery by some women; lack of knowledge about the benefits of health facility delivery; distance to the health facility; financial problems; lack of equipment and inadequate medical supplies; forced home delivery due to sudden and fast labor; pressure from and support for TBAs for home delivery; pressure from elders in support of home delivery; bad experience during previous delivery at health facility; traditional belief that women who stays at home get help from God; and belief that baby would be exposed to cold if delivered in health facility.

Motivators

Health facility delivery was considered best since it is clean and the scissors/razors used for cutting the placenta are sterile. The majority of the participants believed that newborn gets appropriate care and services at the health facilities. The following factors were cited by the qualitative participants as motivators of health facility delivery: availability of medical care in case of complications during delivery, availability of ambulances for health for transport to facilities, support services from health professionals, UHE-ps, and the community including husbands and relatives, and policy support and health professionals encouragement for health facility delivery over home delivery.

5.4. Postnatal care

Knowledge

More than half of the respondents reported the main benefits of PNC as to reduce maternal and neonatal mortality. The majority of the respondents were knowledgeable about the basic PNC services which include counseling on EBF, advice on subsequent postnatal contacts, family and social support, and counseling on nutrition, hygiene, and the use of family planning methods.

Attitude

Some women still belief in the traditional 40 days of confinement period after delivery and don't favor the use of postnatal check-ups.

Practice

Among 650 respondents who reported delivery, a larger percentage of respondents/partners (68.9%, n=448) received a postnatal checkup from a health worker after the most recent birth, while about 30% received no PNC service. Only a few (14%) received the first postnatal check-up within 2-3 days after delivery, as per the recommendation. Overall, only 24% received PNC services within the first seven days of postpartum. More than half (54.2%) of the respondents reported that the first postnatal check-up was six weeks after delivery. With regard to the frequency of PNC checkups, 36.8% made it once and very few (14.7%) made it twice.

Barriers

The main barriers to PNC identified through this study included perception of being healthy, lack of transport and financial problems, dissatisfaction with health services, lack of adequate counseling, belief that mother should stay at home for 40 days after delivery, lack of awareness and knowledge about the benefit of PNC, and long waiting time at health facilities.

Motivators

The following were considered as the motivators of PNC service utilization: regular house-to-house visit by UHE-ps, availability of the health facilities, and high knowledge about the benefits of PNC.

5.5. Child immunization

Knowledge

Almost all respondents were aware of immunization services. Polio, measles, BCG, and DPT were the most commonly cited vaccine-preventable childhood diseases. Health professionals were identified as the principal source of information on child vaccination. Health workers at private health facilities, UHE-ps, and family/friends were other sources of information on child vaccination. The qualitative participants also acknowledged the importance of child immunization to prevent childhood illnesses such as polio, measles, and TB. Very few respondents mentioned short-term side effects of vaccines, such as fever after vaccination, likely because they were not aware of them.

Attitude

The majority of the study participants viewed immunization as being important for the health of their children.

Practice

With regard to immunization coverage by respondent's recall for the most recent birth, the coverage of specific antigens was high: BCG (92.3%), polio (95.7%), DPT (94.3%), and measles (89.5%). However, there were considerable variations between the regional states and city administrations. Despite the availability of vaccines, there are still unvaccinated and partially vaccinated children in the community.

Barriers

Lack of knowledge about the importance of vaccinating children and fear of side effects were identified as the main barriers to child immunization.

Motivators

The following motivating factors for child immunization services were identified in the qualitative findings: better understanding about the benefits of immunization by the community, , free and door-to-door vaccination services, and supportive visits and encouragement by UHE-ps.

5.6. PMTCT

Knowledge

The majority (81.4%) of the respondents had heard about PMTCT; while 18.6% reported that they had never heard about it. About 81% of the respondents knew that a pregnant woman infected with HIV can transmit the virus to her unborn baby. A high percentage of the respondents (76.1%) knew that an HIV+ pregnant woman can reduce the risk of transmission of the virus to her fetus by taking a medication such as ARV. Delivery in the health facility and avoiding breastfeeding were also cited as ways to reduce the risk of HIV transmission from an HIV+ woman to her unborn baby. Health centers, government hospitals, and private health facilities were cited as the main sources of PMTCT and ART services for HIV+ mothers and PLHIV. The main sources of information about PMTCT were facility based health professionals, television, and radio. The knowledge of the participants about the UHE-ps as a source of information on PMTCT was insignificant.

Attitudes

Most respondents indicated the positive attitude of husbands in encouraging pregnant women to seek PMTCT services. Nevertheless, a few participants revealed that husbands oppose the use of PMTCT services by their wives, mainly due to lack of knowledge and understanding about its benefits

Barriers

The main barriers to PMTCT services include lack of knowledge and understanding about the benefits of PMTCT; HIV+ mother's fear of disclosure; confidentiality issues; fear of stigma and discrimination; poor counseling by health professionals; long waiting and shortage of time; lack of partner/husband support; transportation problems; dissatisfaction with the health services; and shortage of rooms at health facilities meaning no privacy.

Motivators

The main motivators for the utilization of the PMTCT services include free of counseling, ART, and ARV prophylaxis, and the ability to deliver a healthy child even if the mother is HIV+.

5.7. HIV and AIDS

Knowledge

The findings indicate high knowledge about HIV and AIDS prevention and control. About 72% of the respondents mentioned condom use as an effective means of avoiding HIV infection, followed by faithfulness (64.9%), and abstaining from sex (60.8%). The majority (88.6%) of the respondents agreed that "A healthy looking person could be infected with HIV" and a high percentage of participants (65.5%) knew that HIV can be prevented by avoiding sharing of sharp objects like needle and razorblades. About 83% of the respondents had heard of ART, of which 58.2% and 39.1% heard from television and health workers, respectively. Furthermore, 34.9% and 34.5% received such information from radio and family/friend/colleagues, respectively. The knowledge of the participants about UHE-ps as a source of information on ART services was mentioned only by 9% of the respondents.

Attitude

More than 95% of the respondents were willing to take care for a family member with HIV. About 55% and 34% of the respondents were willing to disclose their results to parents or spouse, respectively, if they were HIV infected. However, about 11% did not want to disclose their results to anybody.

Practices

More than 86% of the respondents reported that they had been tested for HIV; 36.5% of whom had been tested within the last one year. Only 14% had never been tested.

Barriers

The main barriers to HIV and AIDS service utilization include lack of knowledge and understanding; concern about confidentiality; fear of stigma and discrimination; lack of partner notification; shortage of medicine for opportunistic infections; fear of being positive after HCT; belief that holy water is superior to ART; belief that ART and holy water should not be used simultaneously; lack of interest in HCT; long waiting time and poor-quality service at health facilities; misconduct by health workers; belief that AIDS can be cured by faith; fear of side effects of ART; lack of confidentiality in taking ART; religious concerns about using condoms and ART; fear of parents, family, and community members in using ART; lifelong medication that is monotonous; fear of discontinuation of ART after starting it due to shortage; and distance and transportation problems.

Motivators

The following were cited by the qualitative study participants as motivators of HIV and AIDS service utilization: availability of mobile voluntary counseling and testing (VCT) services and rapid test results; TV and radio promotional works on HIV and AIDS; knowledge about the availability of free ART services; better awareness and understanding about HIV and AIDS in the community; knowledge about the confidentiality of HCT services; and existence of youth anti-AIDS clubs and PLHIV associations.

5.8. Tuberculosis

Knowledge

Knowledge of TB was generally high. The majority of the respondents were aware ofits signs and symptoms, source of information, and means of prevention. Cough (70%), cough of three or more weeks (33%), coughing up blood (35.5%), and weight loss (35.5%) were the main symptoms reported by majority of the respondents. The three most commonly cited means of prevention include covering mouth and nose when coughing or sneezing (66.2%), use of separate dishes rather than sharing utensils (50%), and opening windows at home (37.7%). The respondents were quite aware of worsening and prolonged treatment and also death with incomplete anti-TB treatment. A higher percentage of respondents (37%) also reported development of anti-TB drug resistance for its incomplete treatment. Television (59.8%), radio (37.1%), and health professionals (36.8%) constituted the principal source of information on TB.

Attitude

Stigma about TB was found to be high. Most of the participants stated the people are usually scared of TB and had negative attitude toward people with it. Some participants also believed that TB is directly linked to AIDS. Social isolation and rejection as well as misconceptions about TB were prevalent. Some of the TB patients also said they hide their status and do not tell other people due to the fear that people might isolate themselves from them.

Practice

About 12% of the respondents reported that they or anyone in the family had been diagnosed with TB, and preferred government health institution (hospital and health center) in the initial treatment seeking for the illness (diagnosis as well as treatment), followed by consultation at private health facilities (8.5%).

Barriers

The fear of stigma was seen as a major barrier for TB patients in getting proper care and support. One of the problems facing TB patients was their confinement to isolated houses or rooms due to the fear that it would be transmitted to other family members or relatives

Motivators

Promotional works on TB prevention and control, provision of free service and medication, desire to recover from the disease, family encouragement, and UHE-p referral of people with prolonged cough were cited as motivating factors of TB service utilization.

5.9. Non-communicable diseases

Knowledge

Both quantitative and qualitative findings show that the awareness about NCDs was very high. About 79% of the respondents had heard about NCDs. The most commonly cited NCDs constituted hypertension (74%), diabetes (73.4%), and cancer (35.5%). A larger percentage of the respondents also mentioned mental illness, kidney problems, gastritis, asthma, and alcoholism. The main reported risk factors associated with NCDs included dietary problems (49.9%), overweight and obesity (40.4%), physical inactivity (32.4%), and substance abuse including alcohol and tobacco (30.5%). The frequently cited risk factors of NCDs by the participants of the qualitative study included lack of physical activity and the consumption of salt, fat, and sugar. Some participants associated NCDs with stress and anger as well as over-consumption of coffee and tea. The frequently cited measures to prevent NCDs included consumption of healthy diets, physical exercise, controlling weight gain, and reducing or avoiding alcohol and tobacco use.

Attitude

Some respondents associated NCDs with a curse from God because they don't know what causes them; others believed that NCDs are hereditary and/or a result of aging.

Practice

Only 25% of the respondents who heard about NCDs received medical checkup with the last six months. Overall, the health-seeking behavior of people for NCDs is poor because they don't visit health facilities unless they are sick.

Barriers

Lack of good knowledge and understanding about NCDs; expensive medications that are often in short supply; lack of habit of regular checkups; insidious nature of NCDs; the perception that traditional remedies are better than modern medicine; need for specialized care at hospitals; lack of early diagnosis and prompt treatment; and concern about the side effects of the drugs to be taken long-term or for a lifetime keep respondents from seeking NCD services.

Motivators

There were very few motivating factors identified regarding use of NCD services, which include teaching and advice by health professionals, awareness creation by UHE-ps, losing weight to feel better and healthy, and the recent media increase in health promotion and education on NCDs.

5.10. Exposure to Urban Health Extension Program activities

The exposure of the study participants to the UHEP activities seemed to be low as this initiative is relatively new in urban areas. About 31% of the respondents reported that they had been visited by the UHE-ps at home within the past six months; 66.8% had not. Home visit by UHE-ps was generally low, particularly in Addis Ababa and Harari. About 13% and 32% of the respondents responded that they were visited at home by UHE-ps weekly or quarterly, respectively. The majority of the respondents were sure about the type of information they received from UHE-ps, which included child immunization (58.7%);HIV and AIDS (53.2%); hygiene (82.1%); pit latrine construction and use (80.2%); use of safe water (69%); and family planning methods (55%).

5.11. Sources of information for behavior change communication

This study also investigated respondent's main sources of information on maternal and child health (MCH), TB, HIV and AIDS, immunization, and NCDs to design appropriate BCC strategies. Television (78%), radio (52%), and health professionals at public and private health facilities (43.5%) were identified as the main sources of information. The three frequently mentioned radio stations the respondents listened to include Ethiopia radio, Fana Frequency Modulation (FM), and FM 97.1. Ethiopia radio was reported as the preferred radio station among majority of the respondents across all the study areas. UHE-ps and community meetings at village levels and schools were also mentioned as the sources of information for BCC.

6. RECOMMENDATIONS

This study has yielded grater insight in the KAP of the people and associated factors to stimulate health service utilization in the urban setting, which is useful for designing appropriate IEC/BCC strategies to improve utilization of available services. The findings of this study suggest the importance of disseminating relevant information to influence the attitudes and behaviors of the people to effective utilization of the different health services at their disposal. In addition, effective interventions should dispel misconceptions and myths about the different health services, especially family planning, health facility delivery, HIV and AIDS, PMTCT, and ART. Specific recommendations on the different thematic areas are outlined below.

6.1. General health service utilization

The formative assessment revealed various factors affecting the utilization of different health services. Some of the factors are related to individuals, some are institution-related, and others are related to the cultural beliefs in the community. The community should be aware of the advantages and benefits of early health service utilization using relevant IEC/BCC interventions. The current strategic approach of using UHE-ps to focus on demand creation from the community perspective on utilization of health services seems encouraging, but support and follow-up of UHE-ps must be strengthened. Effort to improve acceptance of the UHE-ps by the community is needed. Collaboration between the UHE-ps and health centers should be reinforced, and home visits by the UHE-ps scaled up with supportive supervision.

6.2. Family planning

Knowledge and attitude about contraceptive methods plays a key role in their use. Among the study participants, the knowledge of family planning methods was widespread, and the majority of women had favorable attitudes about family planning. Pills and injectables were the most commonly ever-used contraceptive methods. However, there is a gap between the knowledge and the practice of contraception among the participants, due to several barriers. The community should be continually educated about the importance and benefits of family planning methods. UHE-ps should be more involved in explaining the importance and benefits of family planning methods. Health facilities should offer a mix of family planning options to address the preferences of the clients, and the quality of the family planning services should be improved and user-friendly. The BCC activities should dispel misconceptions of long-term and permanent methods of family planning.

6.3. Antenatal care

The formative assessment revealed widespread use of ANC, but short of the recommended timing of the first contact within the first three months following conception. The majority of the ANC services are provided at the public health facilities. The number of the visits and the content of the advice are equally important. For example, knowledge about components of ANC was low and respondents had inaccurate information about foods—including bananas and milk—that pregnant women should avoid

(they should *not* avoid bananas and milk). Despite the high ANC coverage reported in this study, there are still women who don't seek ANC services due to several factors that could be amended by strong individual and community-level IEC/BCC interventions. Door-to-door UHE-p counseling for pregnant women should be strengthened and supported by different IEC/BCC materials. Capacity-building interventions are needed to first assure that UHE-ps are well-informed about all the ANC packages.

6.4. Health facility delivery

There appears to be a strong positive association between the number of ANC visits and health facility delivery. However, the coverage of ANC is higher than the rate of institutional delivery, indicating that there are women who don't deliver at health facility even though they had prenatal visits.

About 21% of the most recent deliveries occurred at home. This calls for a strong and continuous community health education program about the importance of institutional delivery to overcome the traditional beliefs that encourage home delivery. Of the respondents who delivered their most recent child, 31.1% of them said that sudden birth was the reason for home delivery, indicating the need for community awareness raising activities on health facility delivery planning, including transportation.

6.5. Postnatal care

Although the ANC coverage among the study population was relatively high, less attention was given to the postnatal period. About 69% of those who reported recent delivery had PNC visits but the timing of those visits were delayed far beyond the recommended time. Continuous education about the importance of PNC, particularly during the first week after delivery, should be given to the mothers and the community. The UHE-ps should be involved in teaching and convincing mothers to visit the health facilities after delivery. IEC/BCC interventions should focus on societal and cultural factors that facilitate or hinder the health-seeking behavior after delivery.

6.6. Child immunization

Effective strategies to promote immunization uptake should be in place while addressing the child, maternal, and household factors that hinder full immunization of children. Outreach programs should be strengthened for child immunization in the community accompanied by continuous appropriate IEC/BCC interventions addressing the mothers and the community on the importance and benefits of child immunization.

6.7. PMTCT

This study highlights the importance of health professionals to convince pregnant mothers about the importance of VCT and the benefits of medication if the mother is HIV+. In addition, it highlights the importance of husband's attitudes when designing interventions to raise the use of PMTCT services by pregnant women. This may result in increased maternal health service utilization during pregnancies.

6.8. HIV and AIDS

Despite concerted efforts to improve access to HCT and ART medication, the continuous availability and uptake of HIV testing should be scaled up. Activities should be accompanied by relevant IEC/BCC interventions that improve the KAPs for HIV and AIDS services. Efforts should decrease negative attitudes toward PLHIV.

6.9. Tuberculosis

In the present study, knowledge about TB was relatively high. In addition, the study population was aware of the close links between TB and HIV. However, social stigma attached to the disease is widespread. To reduce stigma and negative attitudes toward people who have TB, facility- and community-based education should be given provided to improve knowledge and attitudes about TB prevention and control. Extensive health education is needed to inform the public about the disease, and should emphasize that TB is a curable disease. In order to eliminate social stigma against TB patients, joint efforts of media, health professionals, community, and TB patients are required. The study also highlights the importance of availability of TB services at low-level health facilities to improve accessibility of anti-TB drugs.

6.10. Non-communicable diseases

Most respondents knew about NCDs, but the practice particularly of going for health check-ups was reported to be poor. Among respondents who had ever been checked for NCDs during the last six months, 69% had gone because they had symptoms. A community-based health education program would be a practical way to increase the level of NCD knowledge within the communities. Television and radio should increase promotion of NCD prevention and control and focus on the benefits of healthy diet, physical exercises, and regular health check-ups, and the harmful effects of alcohol, cigarette smoking, and use of addictive substances. This would increase community's level of NCD knowledge, and could lead to improved health behaviors.

7. ANNEX

Annex I: List of kebeles included in the formative assessment by region and city/town

Regions	Quantitative		Qualitative sample distribution (towns or kebeles)
	Towns	Kebeles	
Amhara	Bahir Dar-town	Fasilo	Belay Zeleke
		Belay Zeleke	
	Debere Markos-town	Kebele 04	
	Debre Birhan	Kebele 04	Kebele 07
	Dessie-town	Kebele 07	
	Gonder-town	Deresige Mariyam Debi	Azezo ayer Marefiya
		Azezo ayer Marefiya	
	Debretabor-town	Hiruyina Abaaregay	
Oromia	Nekemte-town	Bake Jama	Hermata Mentina
	Jimma-town	Hermata Mentina	
	Sebeta-town	Korke	
	Adama-town	Kebele 05	Bole
		Kebele 12	
	Assela-town	Bole Arada	
	Shashemene-town	Abosto	
SNNP	Arbaminch-town	Nech sar	Merkato
	Sodo-town	Merkato	
	Hosaena-town	Sacho Duna	Misrak
	Hawassa-town	Misrak	
Tigray	Adigrat-town	Kebele 04	Dedebit
	Shire Enidasilase-town	Dedebit	
	Mekele-town	Adihaki	Kedamy Weyane
		Kedamy Weyane	
Harari	Harar-town	Kebele 17	Kebele 17
Dire Dawa	Dire Dawa-town	Kebele 01	Kebele 01
		Kebele 03	
		Kebele 07	
Addis Ababa	Akaki kality-sub city	Kebele 07/08/09	Kebele 12/13
		Kebele 12/13	
	Arada-sub city	Kebele 07/08	Kebele 06
		Kebele 06	
	Yeka-sub city	Kebele 03/04	Kebele 09/10
		Kebele 16/17/18	
		Kebele 20/21	
		Kebele 09/10	
Total	**22**	**35**	**14**

Annex II: Quantitative data collection tool

Behavior Change Communication (BCC) Formative Assessment
Household Survey Questionnaire

Introduction

Hello. My name is _____, and I am from Sub Saharan Africa Research and Training Center. This questionnaire is prepared by Sub Saharan Africa Research and Training Center in collaboration with John Snow, Inc. (JSI) the Strengthening Ethiopia's Urban Health Program (SEUHP). I am here to learn about issues related to availability, accessibility quality and utilization of essential health services in health centers in your area. Specifically, we will talk about your experience and perception related to services on family planning, antenatal care, delivery, post natal care, immunization and NCD. We will also discuss the various socio cultural, traditional and infrastructural issues related to utilization of maternal and child health services in your community. The main purpose of this discussion is to gather important information that will help in the design and development of effective behavioral change strategies to address the challenges related to utilization of essential health services in health facilities in Ethiopia. The findings will also help in informing JSI Ethiopia's Strengthening Ethiopia's Urban Health Program (SEUHP) as well as other partners and stakeholders to make appropriate and effective programmatic decisions to increase essential health service utilization in this community.

We would like to thank you for your time and willingness to participate in this discussion. Your participation is voluntary, and you are not obliged to answer any questions you do not want to. Everything that you say will be confidential. Could you help me answer some questions? Our discussion might take up to 1 hour.

Are you willing to take part in the study? (Circle)

1. Yes 2. No

I read the aforementioned information and procedures to the study participant. I asked if the study participant has any questions and tried to address all of them to the best of my capacity. The person is willing to take part in the study.

Name of data collector

Date

Start time hh/mm_____ End time hh/mm_____

Signature _____

General: Only for data collectors and supervisor		
Questionnaire ID Number		
Region		
Address	Zone	
	Woreda	
	Kebele	
Name of supervisor		
Date data checked		
Signature of supervisor		
Questionnaire Status		1. Completed 2. Partially completed 3. Interrupted

Section 1: Socio - Demographic information

No.	Questions and filters	Coding categories	Skip to
100	Record sex of the respondent	1. Male 2. Female	
101	How old are you?(In completed years)	1. _____Age of respondent in year's 99. Don't know	
102	Marital status	1. Married 2. Divorced 3. Widowed 4. Separated 5. Never married →	*To Q. 104*
103	How old were you when you first married?	1. _____Age at first marriage in year's 99. Don't know	
104	What is the highest level of school you have completed?	1. No education 2. Only writing and reading 3. Primary 4. Secondary 5. Technical/vocational 6. Higher Education 7. Others specify	

No.	Questions and filters	Coding categories	Skip to
105	What is your religion?	1. Orthodox 2. Muslim 3. Protestant 4. Catholic 5. Other (specify)_____	
106	Have you ever given birth?	1. Yes 2. No →	To Q108
107	How many (living) children do you have?	Number of children _____ 99 None	
108.	What is your occupation?	1. Professionals 2. Business man 3. Housewife 4. Student 5. Daily laborer 6. Unemployed 7. Other (specify)_____	
109	What is the average monthly income of your family/household?	1.>500 Birr 2.501-1500 Birr 3. 1501- 2500 birr 4. 2501-4000 birr 5. 4001-5500 birr 6. 5501-7000 7. 7001 above 98. I don't want to answer 99. Don't know	

Section 2: Family Planning Method

No.	Questions and filters	Coding categories	Skip to
200	Have you ever heard of any family planning method?	1. Yes 2. No →	*To Q. 300*
201	What methods of family planning (ways to prevent pregnancy) do you know about? (Multiple response: Do not read responses: Probe for other)	1. Pill 2. IUD 3. Injectables 4. Condom 5. Implants 6. Diaphragm 7. Emergency pill 8. Lactational amenorrhea (LAM) 9. Rhythm 10. Withdrawal 11. Sexual abstinence 12. Other please specify 99. Don't know 98. No response	
202	Do you know where family planning methods can be obtained?	1. Yes 2. No →	*To Q. 204*
203	If yes, where is that?	1. Governmental hospitals 2. Health Centers 3. Health posts 4. NGO clinics 5. Pharmacy/Drug shop 6. Private clinics/hospitals 7. Others (specify)_____	
204	What are the benefits of family planning? (Multiple response: Do not read responses: Probe for other)	1. Delaying or spacing children 2. Reduce unplanned pregnancies and birth 3. To have enough children 4. Improved health 5. Economic/financial benefits 6. Others (specify)_____ 99. Don't know	
205	What are the disadvantages you have known about family planning?	State: _____ _____ _____	
206	Do you think men should be involved in family planning?	1. Yes 2. No →	To Q. 208
207	If yes, to Q206, what do you think prevents men from participating in family planning? (Multiple response: Do not read	1. They do not have enough information about family planning 2. They do not know the methods 3. They do not have time for family planning activities 4. They do not have access to where the	

No.	Questions and filters	Coding categories	Skip to
	responses: Probe for other)	modern contraceptives are supplied 5. It is not their concern 6. Nothing prevent them 7. Others (specify)_____	
208	Have you/your partner ever used any family planning methods?	1. Yes 2. No →	To Q 214
209	Which method of family planning you/your partner ever use? (Multiple responses)	1. Pill 2. IUD 3. Injectables 4. Condom 5. Implants 6. Diaphragm 7. Emergency pill 8. Lactationalamenorrhoea (LAM) 9. Female sterilization 10. Male sterilization 11. Withdrawal 12. Sexual abstinence 13. Other (specify) 98. No response	
210	Are you/your partner currently using any contraception method?	1.Yes 2.No →	*To Q. 214*
211	Would you tell me the family planning methods that you/your partner are using currently? (Multiple response: Do not read responses: Probe for other)	1. Pill 2. IUD 3. Injectables 4. Condom 5. Implants 6. Diaphragm 7. Emergency pill 8. Lactationalamenorrhoea (LAM) 9. Female sterilization 10. Male sterilization 11. Withdrawal 12. Sexual abstinence 13. Other (specify) 98. No response_____	
212	Would you tell me where you obtained the family planning method last time? (Most recent source of method)	1. Governmental hospitals 2. Health Centers 3. NGO clinics 4. Pharmacy/ 5. Private clinics 6. Friends/Relatives 7. Others (specify)_____	
213	(Ask if code 6 is not answered in Q212) If family planning method obtained from health facility, how satisfied were you with the service you received?	1. Dissatisfied 2. Neither satisfied nor dissatisfied 3. Satisfied 99. Don't know	
214	If 'no', Q210 If his partner/she is not using any family planning methods currently,	1. Not married	

No.	Questions and filters	Coding categories	Skip to
	why? (Only one answer)	2. Partner does not want 3. Religion does not allow 4. Does not know methods 5. Wants more children 6. Service not available 7. Others (specify)_____	
215	If 'no', Q210, do you have the intention of using family planning in the future?	1. Yes, his partner/she intends to use 2. Not sure → 3. No, his partner/she does not intend to use	*To Q 217*
216	If "yes" or "no" to Q 215, ask why?	_____ _____	
217	What are the most common sources of information regarding family planning for you? (Circle all the sources mentioned)	1. Radio 2. Television 3. Newspaper/magazine/ brochure 4. UHE-p 5. Friends &family 6. Health centers 7. None 8. No response 9. Others (specify)_____	
218	Did the urban health extension worker visited you and discussed family planning, during the last 12 months?	1. Yes 2. No	
219	Have you ever been told about family planning at a health facility, during the last 12 months	1. Yes 2. No	

Section 3: Antenatal care

No.	Questions and filters	Coding categories	Skip to
300	Why do you think a pregnant woman should consult health workers during her pregnancy? (Multiple response: Do not read responses: Probe for other)	1. No need to consult a health worker 2. Surveillance of the pregnant woman and her expected child 3. To check for complications 4. Screening for conditions and diseases such as anemia, STIs, HIV etc. 5. Preventive measures, including tetanus toxoid immunization, de-worming, iron and folic acid, 6. Counseling on healthy lifestyles and diet 7. Other (specify)_____ 99. Don't know	*To Q 303*
301	Where can a pregnant woman get antenatal care (ANC)? (Multiple response: Do not read responses: Probe for other)	1. Governmental hospitals 2. Health centers 3. UHEWs 4. NGO clinics 5. Pharmacy/drug shop 6. Private clinics/hospitals 7. Others (specify)_____ 99. Don't know	
302	How soon after a woman knows she is pregnant should she go for a pregnancy consultation?	1. Immediately/within 1-3 months/ 2. In the middle of her pregnancy/ within 4-6 months/ 3. At the end of her pregnancy/ within 7-9 months/ 4. At the beginning of labour or delivery 99. Don't know	
303	How should a pregnant woman change/ improve what she eats? (Do not read responses: Probe for other)	1. Eat better food (more vegetables, milk, protein, iron) 2. Eat more food 3. Eat less food 4. Other (specify):_____ 99. Don't know	
304	Are there any specific food types that are prevented for pregnant women in your community? If 'yes', please state type of foods:	1. Yes 2. No 99. Don't know If 'Yes' State: _____ _____ _____	
305	Are there any specific foods which the community promotes for pregnant women to	1. Yes 2. No	

No.	Questions and filters	Coding categories	Skip to
	eat? If 'yes' please state type of foods:	99. Don't know If 'Yes' state: _____ _____ _____	
306	Do you know about ANC? If yes, where did you learn about antenatal care (ANC)? (Do not read out responses: Probe for other)	1. Newspapers and magazines 2. Radio 3. TV 4. Billboards 5. Brochures, posters and other printed materials 6. Health workers/facility 7. UHE-ps 8. Family, friends, neighbors, and colleagues 9. Never heard of ANC 10. Other (specify)_____	
307	Have you/your wife been pregnant within the past 2 years?	1. Yes 2. No →	To Q 400
308	Have you/your wife attended ANC during your most recent birth?	1. Yes 2. No →	To Q 315
309	During your/your wife's last pregnancy where did you/she attend your/her antenatal care?	1. Governmental hospitals 2. Health centers 3. NGO clinics 4. Pharmacy/drug shop 5. Private clinics 6. Others (specify)_____	
310	How many times did you/she visit the health facility for ANC?	1. Once 2. Twice 3. Three times 4. Four times and more 5. Don't remember 98. No response	
311	If attended, which month of pregnancy you/she first made ANC visit?	1. Within the first 3 months 2. Between 3 and 6 months 3. Within the last 3 months 4. Don't remember 98. No response	
312	What motivated you to go to antenatal care (ANC)?	1. The health facility is not far from our home 2. The health facility has adequate qualified staff	

No.	Questions and filters	Coding categories	Skip to
		3. The health facility has all the medicines 4. The health facility is safe for a woman to check her fetus 5. The fees charged are afford- able 6. Other (specify) _____	
313	How satisfied were you/your partner with the service you received?	1. Dissatisfied 2. Neither satisfied nor dissatisfied 3. Satisfied 99. Don't know	
314	If "dissatisfied" ask why	State: _____ _____ _____ _____	
315	If "No" to Q 308, What made you not to seek antenatal care? (Multiple response: Do not read out responses: Probe for other)	1. Not important in pregnancy 2. Lack of transport/long distance 3. High cost of care 4. I was okay all through the pregnancy 5. Service providers are not receptive 6. I don't get appropriate service at the health facility 7. No reason 8. Other (specify)_____	
316	Did the UHE-p visit you during your most recent pregnancy?	1. Yes 2. No →	To Q400
317	Where did UHE-p visit you?	1. Home 2. Health center 3. Other (specify)_____	
318	What services did UHE-p provided you about your pregnancy?	State: _____ _____	

Section 4: Health facility delivery and postnatal care

No.	Questions and filters	Coding categories	Skip to
400	What do you think are the advantage of health facility delivery compared to home delivery?	State:_____	
401	Where do women in your community want to delivery their baby?	1. At home with traditional birth attendance 2. At home with skilled birth attendance 3. Health facility 4. Other (specify) _____	
402	What do you think are the disadvantages of health facility delivery compared to home delivery?	State:_____	
403	Why do you think women don't deliver their babies in health facilities? (Multiple response)	1. Lack of awareness 2. Cost of delivery 3. Distance of facility 4. Poor service quality at facility (specify) _____ 5. Other (specify)_____	
404	After normal delivery of a mother in a health facility, how long should mothers and newborns receive care in the facility?	1. Should leave immediately after delivery 2. 24 hours after birth 3. A week 4. Other (specify)_____ 99. Don't know	
405	What is/are the basic postnatal care service(s) provided for mothers? (Multiple response: Do not read out responses: Probe for other)	1. Counseling on exclusive breast feeding 2. Advice on subsequent postnatal contacts 3. Family and social support 4. Counseling on nutrition 5. Counseling on hygiene 6. Counseling on family planning 7. Other (specify) _____ 99.Don't know	
406	Where did you/your wife give birth for your last child? (Those who have child in Q106)	1. Home 2. Health center 3. Public hospital 4. Private health facility 5. Other (specify)_____	

407	If delivered at health facility, For what reasons did you/your wife prefer to deliver in health facility? (Multiple response)	1. Safer to the mother 2. Safer to the child 3. Skilled care from health workers 4. Health facility is near 5. Recommended by relative 6. Other (specify)_____	
408	During delivery to your (most recent birth) last baby, who assisted you?	1. Health workers (doctor, nurse, or midwife) 2. UHE-ps 3. Traditional birth attendant 4. A relative or some other person 5. No assistance at all 6. Don't remember 7. Other (specify)_____	
409	(Ask if Q 406 is answered 1) If delivered at home, for what reason did you/your wife prefer to deliver at home? (Multiple response)	1. No fees charged/ cheaper 2. High transport costs 3. Do not trust/like health facility 4. Better care at home 5. Recommended by relative 6. Not satisfied by the service at health facility Specify: _____ 7. Other (specify)_____	
410	Have you received a health check after the delivery for your most recent birth from a health worker?	1. Yes 2. No → To Q. 413 3. Don't remember → To Q. 413	
411	What was the time after delivery you have the first postnatal checkup?	1. 2-3 days 2. 4-5 days 3. 6-7 days 4. at 6 weeks 5. other (specify)_____ 6. Don't remember	
412	How many times did you receive a postnatal check up during the first six weeks of your most recent delivery?	_____times 99 .Don't remember	
413	What are the advantages of postnatal care? (Multiple response: Do not read out responses: Probe for other)	1. Reduce maternal mortality 2. Reduce neonatal death 3. Emotional and psychosocial support 4. Provision of PMTCT service for HIV positive mothers 5. Provision of family planning services 6. Counseling on exclusive breast feeding 7. Other (specify)_____ 99. Don't know	

Section 5: HIV and AIDS

No.	Questions and filters	Coding categories	Skip to
500	How can people protect themselves from HIV infection? (Multiple response: Do not read responses: Probe for other)	1. Using condom 2. By being faithful for one sex partner 3. Abstaining from sex 4. Avoid sharing sharp materials 5. Other (specify)_____	
501	Can a pregnant woman infected with HIV or AIDS transmit the virus to her unborn child?	1. Yes 2. No → To Q 503 99. Don't know → To Q503	
502	What can a pregnant woman do to reduce the risk of transmission of HIV to her unborn child? (Multiple response: Do not read out responses: Probe for other)	1. Take medication (antiretroviral) 2. Avoid breast feeding 3. Deliver at health facility 4. Other (specify) _____ 99. Don't know	
503	I don't want to know the result, but have you ever had an HIV test?	1. Yes 2. No → To Q 505 98. No response	
504	When did you have your most recent HIV test?	1. Within the past 3 months 2. Within the past one year 3. Between 1-2 years 4. Between 2-4 years 5. More than 4 years ago 6. Don't remember 98. No response	
505	If 'no' Q503, why didn't you take HIV test?	1. I think I am healthy 2. I did not have risk situations 3. I am afraid I will be discriminated 4. I am afraid of the test results 5. I am afraid that the health workers will not keep confidentiality 6. Other (specify)_____ 98. No response	
506	Do you know of a place where people can go to get tested for the AIDS virus?	1. Yes 2. No → Q508	
507	If 'yes' to Q 506 where? (Multiple response: Do not read out responses: Probe for other)	1. Governmental hospitals 2. Health Centers 3. UHEWs 4. NGO clinics 5. Pharmacy/drug shop 6. Private clinics/hospitals 7. Others (specify)_____ 99. Don't know	
508	Do you think a person that looks absolutely healthy could be infected with HIV?	1. Yes 2. No 98. Don't know	

No.	Questions and filters	Coding categories	Skip to
509	If someone from your family had AIDS, would you take care of him/her?	1. Yes 2. No 99. Don't know 98.No response	
510	If you were HIV infected, whom would you tell about this? (Multiple response: Do not read out responses: Probe for other)	1. I would not tell anybody 2. Spouse 3. Co worker 4. Friend 5. Parents 6. Doctor 7. Other (specify)_____	
511	Have you ever heard about PMTCT services?	1. Yes 2. No →	To Q 513
512	From where did you hear about PMTCT? (Multiple response: Do not read out responses: Probe for other)	1. Newspapers and magazines 2. Radio 3. TV 4. Billboards 5. Brochures, posters and other printed materials 6. Health workers/facility 7. UHE-ps 8. Family, friends, neighbors and colleagues 9. Other (specify)_____	
513	Have you ever heard about a drug called antiretroviral treatment (ART)? (i.e. drug that reduces opportunity for HIV-infected person to develop AIDS disease, drug that can stop symptom in AIDS patient)	1. Yes 2. No →	To Q517
514	What do you know about antiretroviral treatment?	State: _____ _____ _____ _____	
515	From where did you hear about this drug? (Multiple response: Do not read out responses: Probe for other)	1. Newspapers and magazines 2. Radio 3. TV 4. Billboards 5. Brochures, posters and other printed materials 6. Health workers/facility 7. UHE-ps 8. Family, friends, neighbors and colleagues 9. Other (specify)_____	
516	Where do HIV positive mothers and PLHIV access PMTCT and ART services? (Multiple response: Do not read out responses:	1. Governmental hospitals	

No.	Questions and filters	Coding categories	Skip to
	Probe for other)	2. Health centers 3. Health posts/UHEWs 4. NGO clinics 5. Pharmacy/drug shop 6. Private clinics/hospitals 7. Others (specify)_____ 99. Don't know	
517	Do you think that HIV positive people should be concerned about TB?	1.Yes 2. No → To Q600 99.Don't know → To Q600	
518	If 'yes' to Q 517, why?	1. Person with HIV is more likely to develop TB 2. Other (specify) 99. Don't know	

Section 6: TB

No.	Questions and filters	Coding categories	Skip to
600	Where did you learn about tuberculosis or TB? (Multiple response: Do not read out responses: Probe for other)	1. Newspapers and magazines 2. Radio 3. TV 4. Billboards 5. Brochures, posters and other printed materials 6. Health workers/facility 7. UHE-p 8. Family, friends, neighbors and colleagues 9. school 10. Other (specify)_____	
601	What are the signs and symptoms of TB? (Multiple response: Do not read responses: Probe for other)	1. Cough 2. Cough that lasts longer than 3 weeks 3. Coughing up blood 4. Severe headache 5. Nausea 6. Weight loss 7. Fever 8. Sweating at nights 9. Chest pain 10. Shortness of breath 11. Other (specify) _____ 99. Don't know	
602	How can a person prevent getting TB? (Multiple response: Do not read responses: Probe for other)	1. Avoid shaking hands 2. Covering mouth and nose when coughing or sneezing 3. Avoid sharing dishes 4. Washing hands after touching items in	

No.	Questions and filters	Coding categories	Skip to
		public places 5. Opening windows at home 6. Good housing 7. Through good nutrition 8. Other (specify)_____ 99. Don't know	
603	Should people with TB disclose their illness to other people?	1. Yes 2. No 99.Don't know	
604	Have you or anyone in your family ever been diagnosed with TB?	1. Yes 2. No → 99.No response →	To Q 606 To Q 700
605	Where did you/your family member first seek treatment when you/he/she became ill?	1. Self-treated 2. Traditional healer 3. Government hospital/healthcenter 4. Private practitioner 5. Pharmacist/vendor 6. Other (specify)_____	
606	Did you or your family member receive information about TB in the 6 months before you were diagnosed?	1. Yes 2. No →	To Q609
607	Where do you receive most of TB messages?	1. Health provider/facility 2. UHE-p 3. Pharmacist 4. Friend/family 5. Media (what type) 6. School 7. Other (specify)	
608	If TB messages are received from UHE-ps, what are the messages that you/your family ever heard of?	State: _____ _____ _____	
609	What is the standard length of treatment for a newly diagnosed case of TB?	1.<1 month 2.1 – 2 months 3 – 4 months 4.5 – 6 months 5. >6 months 99. Don't know	
610	What do you consider to be the main risk to the patient associated with incomplete or interrupted treatment course for TB? (Please select only one answer)	1. Worsening of symptoms and prolonged treatment course 2. Development of drug-resistance 3. Death 4. There is no serious risk 5. Others (specify) 99. Don't know	

Section 7: Immunization

No.	Questions and filters	Coding categories	Skip to
700	What type of immunization do you know are being given to children? (Multiple response: Do not read out responses: Probe for other)	1. BCG 2. Polio 3. DPT 4. Measles 5. Other (specify)_____ 99. Don't Know	
701	At what age do you think a child should complete his/her vaccinations?	1._____Age 99. Don't know	
702	What do you think are the barriers of completing immunization for children in your area? (Multiple response: Do not read responses: Probe for other)	1. No barrier at all 2. Lack of knowledge 3. Fear of side effects 4. Distance of healht facilites 5. Distrust of heatlh workers 6. Cultural and religious beliefs 7. lack of time 8. Cost 9. Other (specify)_____	
703	Where do you get relevant information about child immunization (Multiple response: Do not read responses: Probe for other)	1. Health workers at the health center 2. Health worker at private health facility 3. UHE-p 4. Pharmacy 5. Family members/friends 6. Other (specify)_____	
704	Did the child that you gave birth at last take vaccination? (For those who have children Q106 and Q107)		
	Did your last birth received any of the following vaccinations:		
	BCG vaccination against TB, that is, an injection in the arm or shoulder that usually causes a scar?	1. Yes 2. No 99.Don't know	
	Polio vaccine, that is, drops in the mouth?	1. Yes 2. No 99.Don't know	
	A DPT vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as polio drops?	1. Yes 2. No 99.Don't know	

No.	Questions and filters	Coding categories	Skip to
	A measles injection or an MMR injection- that is, a shot in the arm at the age of 9 months or older- to prevent him/her from getting measles?	1. Yes 2. No 99.Don't know	
705	If 'don't receive any of the above vaccinations', what was the reason that your child couldn't complete his/her immunization?	State:_____ _____ _____	

Section 8: NCDs

No.	Questions and filters	Coding categories	Skip to
800	Have you ever heard of NCD?	1. Yes 2. No →	To Q900
801	If 'yes' what kind of NCD do you know? Multiple response	1. Diabetes 2. Heart problem 3. High blood pressure 4. Cancer 5. Mental health 6. Alcoholism 7. Other (specify)_____	
802	What are the factors that might expose people to non-communicable disease? (Multiple response: Do not read responses: Probe for other)	1. Substance abuse (smoking, chewing 'khat' etc.) 2. Overweight or obesity 3. Lack of physical exercise 4. Lack of balanced diet 5. Lack of regular general health checkups 6. Other (specify) 99. Don't know	
803	What are the precautions that you take in order to prevent NCD? (Multiple response: Do not read out responses: Probe for other)	1. Avoiding smoking 2. Being free from alcoholism 3. By controlling overweight 4. By doing physical exercise 5. By eating balanced diet 6. By making general health checkups regularly 7. Other (specify) _____	
804	Have you ever checked yourself for NCD in the last six months?	1. Yes 2. No →	To Q900
805	Where did you checked?	1. Governmental hospitals 2. Health centers 3. NGO clinics 4. Pharmacy/drug shop	

No.	Questions and filters	Coding categories	Skip to
		5. Private clinics/hospitals 6. Others (specify)_____	
806	What motivated you/initiated you to do the checkups?	1. I had some symptoms of disease 2. I didn't have any precautions for prevention of diseases 3. We have inherited disease in my family 4. Other (specify)	
807	What did you check for? (multiple response)	1. Hypertension 2. Diabetes 3. Cancer 4. Cardiac problem 5. Other (specify) _____	
808	How satisfied were you with the service you received?	1. Dissatisfied 2. Neither satisfied nor dissatisfied 3. Satisfied 99. Don't know	

Section 9: Urban Health Extension Program Activities

No.	Questions and filters	Coding categories			Skip to
900	Have you ever been visited/contacted by UHE-ps at home (in last 6 months)?	1. Yes ⟶ 2. No 99. Don't Know			To Q 907
901	How often did the UHE-p visit your home to provide you health information and services?	1. Weekly 2. Monthly 3. Quarterly 4. Semi-annually 5. Annually 6. Other: (specify)_____ 98. Don't remember 99 Don't know			
902	Where do you usually get the services from UHE-ps? (Read out all responses)	1. She make home visit 2. At health center 3. On the community meeting (churches, mosques, Idir, etc) 4. Other specify)_____			
903	Have you ever received information from a UHE-p regarding …		**Yes**	**No**	
		1. Immunization			

No.	Questions and filters	Coding categories	Skip to
		2. Child nutrition 3. Diarrhea treatment 4. Pregnancy care 5. HIV and AIDS 6. Hygiene 7. Pit latrine construction 8. Latrine use 9. Safe water use 10. Family planning 11. Other (specify)_____	
904	Are you satisfied with the services that UHE-ps provide?	1. Dissatisfied 2. Neither satisfied nor dissatisfied 3. Satisfied 99. Don't know	
905	If dissatisfied, Why were you dissatisfied with UHE-ps visit to your home? (explain)	State: _____ _____ _____	
906	Have you ever visited your nearest health center in the last six months?	1 Yes 2 No	If No go to Q.1000
907	Why did you visit the health center?	**Yes** **No** 1. Family planning 2. Child immunization 3. Antenatal care 4. Postnatal care 5. Health education 6. Growth monitoring 7. Referral of sick child 8. Diarrhea treatment	

No.	Questions and filters	Coding categories	Skip to
		9. Malaria treatment	
		10. Pneumonia treatment	
		11. Receive or buy bed nets	
		12. NCD	
		13. Delivery care	
		14. Neonatal care	
		15. Other (specify)_____	
908	Were you given printed information e.g. leaflet and other type of IEC materials at the facility?	1 Yes 2 No 3 Can't read 4 Don't remember	
909	How satisfied were you with the health services you received at the health facility during your recent visit?	1. Dissatisfied 2. Neither satisfied nor dissatisfied 3. Satisfied 99.Don't know	
910	If 'satisfied' what did you like about the services?	State: _____ _____ _____	
911	If 'unsatisfied', what didn't you like about the services??	State: _____ _____ _____	

Section 10: Behavior Change Communication

No.	Questions and filters	Coding categories	Skip to
1000	What are your main sources of information for receiving information on maternal and child health, TB, HIV and AIDS, immunization, NCD, etc.? (Probe: all source of information. Multiple response)	1. Radio 2. TV 3. Newspapers 4. Health center 5. Hospital 6. UHE-ps 7. NGOs 8. Peer educators	

No.	Questions and filters	Coding categories	Skip to
		9. FBOs/church/mosques 10. Community meetings 11. Schools 12 Others (specify)	
1001	If radio, Q1000, on which days of the week do you usually listen?	1. Week days from Monday to Friday 2. Saturday 3. Sunday 4. All the days in a week	
1002	If radio, Q1000, at what time of the day do you usually listen to radio?	1. 6 am -8 am in the morning 2. 8 am-12 pm in the morning 3. 12 pm-2 pm at mid-day (noon) 4. 2 pm -5 pm in the afternoon 5. 5 pm-8 pm in the evening 6. 8pm-10 pm in the evening **7.** Other (specify)	
1003	If radio, Q1000, which radio station do you usually listen to? (Multiple response: Do not read responses: Probe for other)	1. Ethiopian radio 2. FM 97.1 3. FM 96.3 4. Sheger FM 102.1 5. AfroFM 105.3 6. Fana FM 7. Amhara FM 8. Debub FM 9. Tigray FM 10. Dimtsewoyane 11. Oromiya FM **12.** Other (specify)_____	

No.	Questions and filters	Coding categories	Skip to	
1004	If TV Q1000, at what time of the day do you usually watch TV?	1. 6 am -8 am in the morning 2. 8 am-12 pm in the morning 3. 12 pm-2 pm at mid-day(noon) 4. 2 pm -5 pm in the afternoon 5. 5 pm-8 pm in the evening 6. 8pm-10 pm in the evening 7. Other (specify)		
1005	If TV Q1000, on which days of the week do you usually watch TV	1. Week days from Monday to Friday 2. Saturday 3. Sunday 4. All days in a week		
1006	If TV Q1000, which television channel do you usually watch?	1. Ethiopian Television 2. EBS Television 3. Oromiya Television 4. Amhara Television 5. Tigray Television 6. Debub/south television 7. Afar television 8. Other (specify)_____		
1007	In the past 12 months, from whom did you get information about health priorities (maternal and child health, TB, HIV, immunization, NCD, etc.)? (Multiple response: Do not read responses: Probe for other)		yes	no
		1. Health workers at the health facility		
		2. (Physician, nurse, midwife etc)		
		3. UHE-ps		
		4. School teachers		
		5. NGO workers		
		6. Volunteers		
		7. Friends		
		8. Families/relative		

No.	Questions and filters	Coding categories	Skip to
		9. Other (specify)	
1008	From your friends or family members who is your main source of information for receiving messages on health priorities (maternal and child health, TB, HIV and AIDS, immunization, NCD, etc.)? (Multiple response: Do not read responses: Probe for other)	1. Parents 2. In-laws 3. Spouse/partner 4. Friends/neighbors 5. Relatives 6. Others (specify)	
1009	In the past 12 months, by what means did you get important health information on maternal and child health, TB, HIV, immunization, NCD, etc.? (Multiple response: Do not read responses: Probe for other)	1. Training, teaching 2. Group discussion 3. Personal counseling 4. Campaign 5. Drama 6. Other (specify)	
1010	Do you want to know more about important health topics (maternal and child health, TB, HIV, immunization, NCD, etc/?	1. Yes 2. No	To Q 1013
1011	If yes Q1010, can you please tell us specific issues that you would like more information on?	State:_____ _____	
1012	How would you like the information that you need to be made available to you?	State:_____ _____	
1013	If no Q1010, why not?	State: _____ _____ _____	

Annex IV: Qualitative data collection tools (English version)

In-Depth Interview Guide: Mothers with child less than two years and pregnant women

Section 1: General/ Ice Breakers (for mothers and pregnant women)

Let's start our discussion by talking about the main health problems in this community.

1. In your opinion, what are the main health problems that mothers face in this community during and/or after pregnancy?
   What are the problems that mothers face during and after pregnancy?

Section 2: Family Planning Services (for mothers and pregnant women)

Now, let's talk about issues related to availability, accessibility, quality and utilization of family planning services in your community

2. What do you know about family planning? Probe: About options, benefits, possible side effects?
3. How did you come to know this? What was your source of information about it?
4. Have you ever received FP related education? If yes from where? Have you ever been visited by UHE-ps? Were there others who told and advised you to seek FP service? If yes who were they?
5. Where can you get family planning related services? Have you ever used any family planning methods? If yes, are you satisfied with the service you received? Why? Why not?
6. Were there specific factors that made it difficult for you to visiting health facility for family planning services? What were the factors?
7. Did you and your spouse discuss about utilizing FP service? Is he involved in your decision as to whether you utilize FP service? Probe: supporting or discouraging Why? What is his opinion about FP and the service provided at the health center and by UHE-ps?
8. Do you feel he is knowledgeable about FP and where to access the service?
9. What do you think can be done to improve accessibility of family planning services? Probe: health providers, community, family members/friends, How?
10. What are the factors that motivate women to use family planning methods in your community? How do they get motivated? What about factors that inhibit women from using family planning methods? How?
11. According to the culture in your society, how is family planning perceived? Probe: favored or disfavored? What about the modern family planning methods? Do you think these beliefs and practices influence your decision to visit or not visit health facilities for family planning services? How?
12. What do you think is the most preferred communication modes that best inform women in the community about family planning services? Why?

Section 3: Antenatal Care (for pregnant women)

Now I would like to talk to about care during pregnancy (ANC)

13. What do you know about antenatal care? (If needed explain what ANC services refers to) Are you aware about the availability of free ANC service in government health facilities? If yes, where did you learn about this? What are some of the benefits of care during pregnancy? For the mother? For the fetus?
14. What was your source information about ANC? Probe: community, service providers, family members Have you ever received health education about ANC, its benefits and where to access the service? What else have you learnt?
15. When you knew that you were pregnant, whom did you go to seek care/advise about what to do - how to care for yourself and the fetus? Why did you choose the mentioned person/care providing point/center for care/advise seeking? How did you learn about the care provider/providing point? When did you go ?(how long after the pregnancy)
16. If you have ever attended ANC, what were the services you received during your visit(s)? Probe: nutrition, HIV testing, planning for delivery, monitoring vital signs). Did you continue

receiving the services after the first visit? If no, what were the barriers you faced to continue the service? If yes, what were your reasons to visit the health facility again?

17. In your opinion what are some of the things that make it difficult for mothers to utilize from antenatal care services in the community? Probe for (1) Service quality; (2) Service availability; (3) Distance of the health facility; (4) Health workers attitude; (5) Waiting time at the facility

    - What do you recommend/suggest to overcome the challenges?

18. Mostly, who plays an influential role in deciding when and where a woman needs to go for ANC services in your community? Who was it in your case?
19. What are the main cultural and traditional beliefs and practices related to antenatal care in your community? In what ways do you think these cultural beliefs and practices affect women's decision to utilize ANC services in your community? Did you practice any or all of these traditional recommendations during your recent pregnancy? How?

Section 4: Facility Level Delivery (for mothers)

Now we are going to talk about your delivery experience

20. Where did you give birth to your most recent child? Who assisted you during delivery?
21. If delivered at home, why did you prefer home delivery to facility delivery? Probe: Distance/Transport, Service quality (Health workers attitude) ,Financial problem, , Cultural/traditional (placenta management, position of delivery, etc),Earlier history of safe delivery at home

22. Do you think delivering at home has benefits? If yes, what are the benefits? What do you think are disadvantages of giving birth at home? Probe: For the mother? For the baby?

23. If delivered at health facility, what was your experience in: was it helpful/beneficial or was it unpleasant experiences? Why? Did you face transportation problem to get to the health facility?
24. What are the advantages and disadvantages of giving birth at health facility? Probe: for you? For the baby?
25. In your community/culture are mothers encouraged to deliver at facility or home? Why? Do you think these beliefs and practices influence your decision to deliver at health facilities/home? How?
26. Who decides where you should delivery your baby? Why? Is your spouse involved in this decision? If yes, how much does he influence as to where you deliver? Who are the other people who influence your decision? How?
27. What do you think is needed to encourage more pregnant women to deliver in health facilities in the community? Who should be involved from the community to encourage women on facility delivery? Why? What do you think are the other barriers to deliver in a health facility assisted by a health professional?

Section 5: Postnatal Care Visits (for mothers)

Let's now talk to what happened to you and the newborn after your last delivery

28. What do you know about care after delivery (postnatal care)? What are some of the services provided during PNC? What are the benefits of postnatal care? What was your source of information about PNC? Have you ever use PNC services after your delivery? If yes, what was the reason for your utilization of PNC? When after delivery and by who was the PNC services provided to you?
29. Tell me what kind of services you have received right after your last delivery?
    - What kind of services were you given? Who took care of you?

- What kind of services was given to the new newborn? Who took care of the newborn?

30. How often did you visit the nearest health facility during the first six weeks (45 days) after your most recent delivery? What services did you receive during this visit/s?
31. Let us suppose that the UHE-p came to your home after delivery, examined the baby and told you that the baby was sick and you should take him/her to the health facility. How would you respond to this? Why? Probe: who makes the decision about taking sick baby to the health facility?
32. What are the main cultural and traditional beliefs and practices related to postnatal care in your community? Did you practice any or all of these traditional recommendations during your delivery? How?

Section 6: Child Immunization (for mothers)

33. What are some of the benefits of complete immunization for children? What was your source of information about child immunization?
34. What are the main reasons for mothers not completing immunization for their children in your community?
35. Who is responsible for making sure children get their immunizations? Why? Probe: others
36. Did you get all the immunization for your child? If yes, where did you get the service? How was the service at the health facility? Probe: did the health worker treat you well? If no, why were you not able to complete your child's immunization? Probe: cost, distance of health facility, other. What do you think about immunizations give to children at home?
37. In your opinion what should be done by government/health facility/UHEP to increase the rate of children completing immunization in your area?

Section 7: Non Communicable Disease (NCD) (for mothers and pregnant women)

Now let's talk about health services for Non communicable diseases in your community.

(Interviewer: please describe Non communicable diseases to the respondent)

38. What do you know about non-communicable diseases? What do you think causes some of the NCDs?
39. What can be done to prevent NCDs? Do you know how one person can prevent himself/herself from NCDs? Do you practice some of the prevention methods? How?
40. If experienced any NCD, where would you get services from? Please tell me your experience in seeking and getting treatments for NCD, if you had?
41. What are the main factors that discourage/prevent/inhibit people from utilizing the health services for non-communicable diseases like diabetes, heart attack, blood pressure, etc? Probe: service provider, accessibility, socio cultural
42. What do you think should be done to make NCD services accessible and improve service quality both at health facilities and by UHE-ps? (Probe: Responsible body)?

Section 8: Source of Information

Now I would like to ask you about SOURCE OF INFORMATION (where you usually get information from)

43. What are the main sources of information regarding where to seek help when someone gets ill or when pregnant in your community? (Probe for radio, TV, other print and electronic channels, social and traditional communication strategies, etc) which ones are the most preferred communication channels/sources of information in your community? Probe: by fathers, mothers other family members? Why?
44. Do you have anything else to add that we did not discuss that are important to you and to your family/community?

THANK YOU SO MUCH FOR YOUR TIME AND FOR GIVING US THIS USEFUL INFORMATION

In-Depth Interview Guide-Health Care Workers at Health Center

Note: There are four main section of the guide

Section 1: General/Ice breaker, which will be asked for all type of health workers
Section 2: MCH, which will be asked for health workers responsible/working on MCH
Section 3: HIV and AIDS, which will be asked for health workers responsible/working on HIV and AIDS
Section 4: NDC, which will be asked forhealth workers responsible/working on NCD (OPD)

Section 1: General/Ice breaking (to be asked for all the three type of health workers)

Let's start our discussion by talking about the main health problems in this community.

1. What are the main health problems in this community?
2. Where do people mostly go for health care services? Probe for MCH, HIV and AIDS and NCD
3. What do you think are the barriers to health service utilization in your area? Probe for service delivery, accessibility and socio cultural factors

What about factors motivate for utilization of health services in your area?

4. What do you think can be done to improve quality and coverage of health services in the catchment of your facility?

Section 2: MCH (Health workers responsible/working on MCH)

Now, let's talk about issues related to availability, accessibility, quality and utilization of family planning services in your community

2.1 Family Planning

5. What is your view on the knowledge, attitudes and practice of the communities in your area on family planning? Probe: coverage, method (short, long and permanent methods), male involvement
6. What are some of the factors that promote/motivate couples to use modern family planning methods? Probe service provision, accessibility, cultural and traditional beliefs and practices
   What about factors that hinder couples from using modern type of family planning methods?
7. What FP methods are available at this facility? Prob. Male condom, Female condom, Oral contraceptive, Injectable, Implant, Intrauterine device (IUD), Male sterilization, Female sterilization, Fertility awareness/standard days method (SDM), Education on the lactational amenorrhea method (LAM). What method is most commonly selected for use? Why is that method so commonly chosen? Do you consistently counsel clients on a broad range of FP methods? (whether you provide it here or not)
8. In your opinion, what are the biggest constraints to offering FP services at this facility? Probe: Infrastructure (e.g., storage, privacy, utilities) Lack of job descriptions; poor understanding of individual and/or team roles/responsibilities Lack of resources for needed functions or materials (e.g., training, supervision, salaries, supplies), Low staff satisfaction, Printed materials (e.g., BCC materials, job aids) References and resources (e.g., protocols, guidelines), Client access (e.g., hours, wait times), Client load, Socio-cultural issues (e.g., myths, biases, staff gender)
9. In your opinion, what do clients see as their biggest constraints to accessing FP services at this facility? Probe: Distance and/or access (e.g., hours, waiting times, provider availability or

attitude), Infrastructure (e.g., privacy, utilities) Lack of information, including lack of (appropriate) printed materials, Socio-cultural issues (e.g., myths, biases, sex of staff

10. Who are the key players for family planning demand creation through social mobilization/behavior change communication? What strategies do they use?
11. In your opinion, have the social mobilization/behavior change communications on family planning been effective? How do they capture the perceived issues, concerns, attitudes, and practices that can facilitate behavior change?
12. In your opinion what would be the most useful means of communication (e.g., radio, TV, newspapers, posters, billboards) for generating demand, combating FP myths/ misconceptions, and educating the community? Why?

2.2 Antenatal Care

13. In your opinion, what should elements of antenatal care consist of? Probe: counseling on pregnancy danger signs and postpartum family planning, administration of tetanus toxoid injection and prescription for or provision of iron and folic acid, birth preparation counseling, postpartum family planning, knowledge of HIV status
14. What is your view on the knowledge, attitudes and practice of the communities in your area on ANC attendance? Probe: first visit of ANC, number of visits for ANC, essential elements of ANC
15. What are some of the factors that promote/motivate mothers for using ANC? Probe quality of service provision, accessibility, traditional and cultural belief
    What about factors that hinder mothers from using ANC?
16. In your ANC service provision, what are the main challenges that you encounter? Probe: client flow, lack of medicine, shortage of time for counseling,
17. Who are the key players for ANC demand creation through social mobilization/behavior change communication? What strategies do they use?
18. In your opinion, have the social mobilization/behavior change communications on ANC been effective? Do they capture the perceived issues, concerns, attitudes, and practices that can facilitate behavior change?

2.3 Institutional Delivery

19. What is your view on the knowledge, attitudes and practice of the communities in your area on institutional delivery? What are some of the factors that promote or hinder pregnant women from delivering at health facility? Probe quality of service provision, accessibility, traditional and cultural belief
20. What are the main challenges that you face to provide skilled delivery services? Probe: client flow, lack of medicine, lack of physical adaptability, lack of skills and training, choice of delivery position, cultural adaptation of health facility
21. Who are the key players for institutional delivery demand creation through social mobilization/behavior change communication? What strategies do they use?
22. In your opinion, have the social mobilization/behavior change communications on institutional delivery been effective? If not why not? Do they capture the perceived issues, concerns, attitudes, and practices that can facilitate behavior change?

2.4 Postnatal care

23. What is your view on the knowledge, attitudes and practice of the communities in your area on PNC? What are some of the factors that promote or hinder mothers in accessing PNC? Probe quality of service provision, accessibility, traditional and cultural belief
24. What are the main challenges that you face to provide PNC services? Probe: client flow, lack of medicine,
25. Who are the key players for PNC demand creation through social mobilization/behavior change communication? What strategies do they use?
26. In your opinion, have the social mobilization/behavior change communications on PNC been effective? If not why not? Do they capture the perceived issues, concerns, attitudes, and practices that can facilitate behavior change?

2.5 Child Immunization

27. What are the major health problems for children in this area? Are any of the diseases being preventable by immunization? How would you describe the coverage of immunizations in your area?
28. What are the main challenges that you face to provide EPI and immunization services? Probe: client flow, lack of vaccines, shortage of staff, functionality of cold chain,
29. What health promotion and behavior change activities does the health center undertaking to encourage mothers to complete immunization for their children?
30. What are the main reasons for mothers not immunizing their children in the community? Probe: service provision, accessibility and socio cultural factors
31. How do you feel about the immunization services at this facility? In your own mind, should the health care workers needs to share EPI/immunization messages new born mothers who come for vaccines or other services? Why or why not?

Section 3: HIV and AIDS (Health workers responsible/working on HIV and AIDS)

3.1 HIV Testing and Counseling

32. Please tell me about your background and preparation for HTC work in health care. Probe: education, training programs completed, work experience as counselor,
33. What is your view on the knowledge, attitudes and practice of the communities in your area on HTC?
34. In your HTC service provision, what are the main challenges that you encounter? Probe: commodity stock-out, client flow, client refusal, shortage of time for counseling
35. Do you/ your facility conduct communication/ educational activities on HIV and AIDS and on HIV counseling and testing for all clients receiving services? What are the most important health topics that you cover during your communication and education? Are educational aids related to HIV and AIDS, HIV counseling and testing (e.g., pamphlets, posters, videos, anatomical models, and condom samples) available?
36. Who are the key players for VCT demand creation through social mobilization/behavior change communication? What strategies do they use?
37. In your opinion, have the social mobilization/behavior change communications on VCT been effective? Do they capture the perceived issues, concerns, attitudes, and practices that can facilitate behavior change?

38. In your opinion, what are the main barriers that need to address through behavior change communication efforts to increase utilization of VCT services? Which communication approach (e.g., counseling, mass media, and peer education) needs to be used? Why?
39. In your opinion what would be the most useful means of communication (e.g., radio, TV, newspapers, posters, billboards) for generating demand, combating VCT myths/ misconceptions, and educating the following populations: (Youth, Married/unmarried couples, Men, Communities Leaders (e.g., religious, community)? why ?

3.2 PMTCT

40. What are your views about the current HIV testing practices in the health care settings in general and in your health center in particular? Probe: Availability of HIV test, availability of kits, and waiting time for HIV test
41. How does your facility/do you encourage HIV testing among the general population and patients suspected to be HIV infected?
42. Are HIV-, VCT-, and PMTCT-related educational aids, such as pamphlets, posters, anatomical models, and condom samples, available?
43. What are some of the barriers in providing HIV related services to patients in this facility? Probe: HTC, PMTCT and ART (service provision, accessibility, socio cultural)
    What about factors motivate provision of HIV related services to patients in this facility?
44. What strategies do you use at the health center to combat stigma and misinformation about ART, ART treatment for PMTCT and other HIV related services?
45. What challenges have you seen in knowledge and attitude towards the following: VCT, PMTCT, ARV and treatment seeking? What challenges do you face in disseminating the PMTCT messages to target community?

3.3 ART

46. What is your view on the knowledge, attitudes and practice of HIV positives in your area on ART? Probe: coverage, adherence **(Both for service provider and community)**
47. Are ART commodities, equipment, and supplies consistently available? Do you consistently have everything you need to provide the ART services sought by your clients? What do you lack most often?
48. What do you think should be done to increase ART adherence discourage such behaviors/lifestyle? Is there anything your health facility id doing to address these problems?
49. Who are the key players for community mobilization/BCC to change behaviors to enhance ART adherence? In your opinion, have the social mobilization/behavior change communications been effective? Do they capture the perceived issues, concerns, attitudes, and practices that can facilitate behavior change?
50. In your opinion what would be useful means of communication (e.g., radio, TV, newspapers, posters, billboards) for educating the following populations on ART Probe: (Youth, Married/unmarried couples, women, men, communities Leaders (e.g., religious, community)? why?

Section 4: Non-communicable Disease (Health workers responsible/working on NCD (OPD))

51. What do you think are the main non-communicable health problems facing the community? What are the behaviors or lifestyle of the community that you think caused the spread of these diseases?
52. What do you think should be done to discourage such behaviors/lifestyle? Is there anything your health facility is doing to address these problems?
53. What strategies do you use at the health center to combat NCDs and related services? What challenges have you seen in knowledge and attitude towards NCDs, their causes and treatment seeking? What challenges do you face in disseminating the messages on NCDs to the community?
54. Who are the key players for community mobilization/BCC to change behaviors/lifestyle that exposed the community to NCDs? In your opinion, have the social mobilization/behavior change communications on NCD been effective? Do they capture the perceived issues, concerns, attitudes, and practices that can facilitate behavior change?
55. In your opinion what would be the most useful means of communication (e.g., radio, TV, newspapers, posters, billboards) for prevention mechanisms for NCD? Why? What about for combating behavior and lifestyle exposing to NCDs and educating the different types of the community like men, women, youth, married/unmarried couples, communities Leaders (e.g. religious, community)? why?

In-Depth Interview Guide - Federal Ministry of Health, Regional and C/THOs

Introduction

Hello. My name is _____, and I am from Sub Saharan Africa Research and Training Center. Today I would like to discuss some issues related with Urban Health Extension Programme (UHEP) and Behavioral Change Communication (BCC). We will also discuss the various socio cultural, traditional and infrastructural issues related to health service utilization in urban areas. The main purpose of this discussion is to gather important information that will help in the design and development of effective behavioral change strategies to address the challenges related to utilization of essential health services in public health facilities in Ethiopia. The findings will also help in informing JSI Ethiopia's Strengthening Ethiopia's Urban Health Program (SEUHP) as well as other partners and stakeholders to make appropriate and effective programmatic decisions to increase essential health service utilization in this community.

We would like to thank you for your time and willingness to participate in this discussion and please be informed that all the information you provide will be confidential and will not be shared to anyone else except the research team. Your participation is voluntary, and you are not obliged to answer any questions you do not want to. Audio recording will be taking place during the interview. It will be used just to remember our discussion since it will be difficult to take all notes or to remember all points of our discussion. The discussion is expected to last for about 1 hour.

Are you willing to take part in the study? (Circle)

1. Yes 2. No

I read the aforementioned information and procedures to the study participant. I asked if the study participant has any questions and tried to address all of them to the best of my capacity. The person is willing to take part in the study.

Do you have any question before we start our discussion?

Name of Interviewer			
Date			
Start time	hh/mm_____	End Time	hh/mm_____
Signature	_____		

Region		Town	
		Kebele	
Name of the Office	_____		
Position of the interviewee:_____			

Involvement of stakeholders

1. Can you tell us, what the main health problems/issues in urban communities are? Probe: MCH, HIV and AIDS and NCD. What are the common health care needs of urban community? Probe; specifically to their area
2. What do you think are the key health care behaviors that need to occur to improve the health service utilization in urban community? What should be done to improve health seeking practice of urban community in regard to important health issues? Probe: by the community, government and health facilities
3. What kind of behavior change communication approaches and methods do you recommend to be effective to promote utilization of health care services in urban community? Probe: means of communications, channels
4. What are the factors that inhibit the utilization of health care services among urban communities? service provision, accessibility, traditional beliefs and practices

   What about factors that motivate the utilization of health care services among urban communities?
5. How is the acceptability and utilization of services provided by UHE-ps among urban communities? Probe: MCH, HIV and AIDS and NCD
6. Could you please comment on the effort of the UHE-ps in providing health services to the community? What has been achieved in expanding urban health care services as a result of UHE-ps?
7. How do you think the UHE-ps at the community level, and the Health Center at facility level collaborate among each other?

THANK YOU SO MUCH FOR YOUR TIME AND FOR GIVING US THIS USEFUL INFORMATION

In-Depth Interview-Exit Interview (PMTCT)

Section 1: Knowledge

1. What are the PMTCT services offered at this health facility? Probe: information/education on HIV prevention, care and treatment, counseling and provision of drugs etc.
2. How did you come to know about this service? Probe: What is your source of information about PMTCT services?
3. What are the benefits of PMTCT service for HIV positive pregnant women and her child?
4. In what ways can HIV be transmitted from an infected mother to her unborn child? What ways do you know about prevention of HIV transmission from mother to baby?
5. Do other pregnant women that you know in your community know about PMTCT? Do they utilize PMTCT service? Are they informed about PMTCT service? Who informs them about it? Are their husbands informed about PMTCT etc?)

Section 3: Attitude towards PMTCT

6. In your opinion, do you think it is important to know your HIV status when pregnant? Why? Why not?
7. Do you think it is important for an HIV positive woman to discuss about PMTCT with her partner? Probe: HIV test, ANC, adherence etc. Why? Why not?
8. When your baby is born, would you allow your baby to take the medicine for HIV and AIDS if provided? If yes why? If no, why not?
9. In your opinion, should a mother with HIV breastfeed her child? If yes why? If no why not? Probe for infant feeding options or exclusive breastfeeding
10. Is there anything you liked or did not like during the provision of PMTCT services? If yes, what is it?

Section 4: Health Seeking Behavior/Practice

11. What are the factors that inhibit you from coming to the health center for the PMTCT service? Probe: Accessibility of health services, service quality, UHE-ps, community support, media, spouse. What are the factors that motivate you to come to the health center for PMTCT services?
12. In what ways does your partner support you on issues related to PMTCT services? Probe: ANC, adherence , nutrition etc
13. Upon your arrival at the health center for PMTCT service, what kind of information and service did you receive a? Probe: HIV prevention and transmission, counseling and drugs etc
14. What do you think can be done to improve the PMTCT services at this health care facility? Probe: health provider, supply, accessibility

    - Is the health center easy to reach for you (distance)?
    - During your visits, how does the health provider treat you?
    - Where there any health education and/or Information materials (like job aids) in the health center about PMTCT?

Section 5: Source of Information

15. Were you aware of the PMTCT services for pregnant women before coming to the health center today? If yes, what was the information you received?
16. Where do you get most of your health information? Probe: PMTCT What do you think is the best channel for communicating mothers about ANC and PMTCT and other health related message? Why?

In-Depth Interview-Exit Interview (TB Patients)

Section 1: Knowledge

1. Do you know how a person can get tuberculosis or TB? Probe: ways of transmission
2. What service did you receive from the health worker during your visit to the health center? Probe: TB related information / education, duration of the TB treatment, adherence, linkage to other services (HIV testing) etc
3. What did the health worker tell you about prevention of TB transmission? What should be done to reduce the rate of TB infection in the community?
4. What do you consider to be the main risk to the patient associated with incomplete or interrupted treatment for TB?

Section 2: Attitude

5. What was your reaction when you first found out that you had TB? Why?
6. Did you inform your friends/ family that you had TB? Why and why not? What was their reaction when you first tell them?
7. Have your relationships with your friends/ family changed since finding out you have TB? How? What do they feel about you seeking and utilizing service from the health center? Why?
8. What can be done by UHE-ps, service providers and the UHEP, to make family and community members more supportive?
9. Is there anything you like or did not like during the provision of TB services? If yes, please what is it?
10. How do you assess the health care workers attitude towards TB clients? Please explain why you say this.

Section 3: Health Seeking Behavior/Practice

11. How long after you noticed the symptoms did you seek for treatment? Where did you first seek treatment when you became ill?
12. If you receive service from the health facility, how did you first find out about the availability of TB treatment service? What made you seek treatment services from the health facility?
13. Did you try to get remedy for your illness from sources other than a health facility? Why? Why not? If yes, where did you get these services? Who advised you to seek this alternative treatment?
14. What factors motivated you to go to the health facility for service? Probe: accessibility, media, community support, free service provision, risk of alternative treatment Were there issues/ factors that discourage/inhibited you from going to the health facility for service as early as possible? If yes, what were these factors?
15. What kind of information did you receive about the link between TB and HIV from the service provider today or in your earlier visit/s? If no, have you received information on TB/HIV in the past? If so, describe.
16. Where there any challenges that affected your adherence to treatment? Probe: Adhere to medication, attend follow up visit. How did you overcome these obstacles?

17. What do you think can be done to make TB services easily accessible for you and others and to encourage TB patients adhere to treatment and support? Probe: distance to health facility, medical administration, availability of Information and education at the health center about TB

Section 4: Source of Information

18. Did you receive any health information about the cause, sign, symptoms, transmission and prevention of TB? Where did you get this information? Probe: UHE-ps, health facility, community sources, other media etc
19. Where do you receive most of your health information especially to TB? What do you think is the best channel for communicating people about TB? Why?

THANK YOU SO MUCH FOR YOUR TIME AND FOR GIVING US THIS USEFUL INFORMATION

Behavior Change Communication (BCC) Formative Assessment
Focus Group Discussion Guide -Fathers with child less than two years

Section 1: General/ Ice Breakers

Let's start our discussion by talking about the main health problems in this community.

1. How do you see the availability health services in your community comparing it to what it was like five years ago, two years ago? What has been the trend like in utilization of health services in your community comparing it to what it was like five years ago, two years ago?

   Probe for
   - Maternal and child health services
   - HIV and AIDS and TB Services
   - Non-communicable diseases like diabetes, heart attack, blood pressure etc

Section 2: MCH Services

Now, let's talk about issues related to MCH services in your community

2. What do you know about MCH services? Probe: family planning, ANC, institutional delivery, PNC and immunization. What are the MCH services which are available in health facilities in your area?
3. How do you get information about these services?
4. What are the factors that inhibit the community from/for visiting health facility for MCH services? Probe service provision, accessibility, traditional beliefs and practices
   What about factors that motivate the community to use MCH services from health facilities?
5. How can men get involved in the decision of utilization of MCH services? Could you give suggestion to help men participate in MCH?
6. How do you explain the level of satisfaction of this community towards MCH service provision at the health center? Why? Why not? What can be done to improve utilization rates of MCH services in your area?

Section 3: HIV and AIDS

Now, let's talk about issues related to HIV and AIDS services in your community

7. What are the HIV and AIDS related services available in health facilities in your community? Probe: prevention, care and treatment
   What about TB prevention and treatment services?
8. How did you know about availability of these services? What was your main source of information?
9. What are the factors that inhibit the community from visiting health facility for HIV and AIDS related services? Probe service provision, accessibility, traditional beliefs and practices,

What about factors that motivate the community for visiting health facility for HIV and AIDS related services?

Section 4: Non Communicable Disease (NCD)

Now let's talk about health services for Non communicable diseases in your community. (Moderator: please describe Non communicable diseases to the respondent)

10. How do you look after your general health? Probe: Avoiding smoking, by controlling weight others.
11. What are the main factors that inhibit people from utilizing the health services for non-communicable diseases like diabetes, heart attack, blood pressure, etc Probe service provision, traditional beliefs and practices, and accessibility
    What about factors that motivate the community for visiting health facility for non-communicable diseases?
12. How do you think that utilization of health services for non-communicable diseases like diabetes, heart attack, blood pressure etc can be improved?

Section 5: Source of Information

Now I would like to ask you about SOURCE OF INFORMATION (where you usually get information from)

13. What are the main communication channels/sources of information available in your community? (Probe for radio, TV, other print and electronic channels, social and traditional communication strategies, etc)
14. Among those available sources of information, which ones are the most preferred communication channels/sources of information on health issues? Why? Probe: Fathers, mothers and other family members
15. Do you have anything else to add that we did not discuss for example about access to health care services, service provided by UHE-ps, etc that are important to you and to your family/community?

THANK YOU SO MUCH FOR YOUR TIME AND FOR GIVING US THIS USEFUL INFORMATION

Focus Group Discussion Guide- Members of PLHIV Associations

Section 1: General/ Ice Breakers

Let's start our discussion by talking about the main health problems in this community.

1. Do you think HIV and AIDS is still the main health problems in your community? Please explain why?

Section 2: HIV and AIDS prevention, care and treatment

Now, let's talk about specific issues about HIV and AIDS prevention, care and treatment services in your community

2. What HIV and AIDS-related services are available in health facilities of your community? Probe: prevention, care and treatment
3. What was your main source of information? Can you tell us some of services for PLHIV provided in health facilities in your community?
4. How do you see the PMTCT service for HIV-positive mothers in health facilities? Please also describe the current trend of service utilization by PLHIV mothers? Probe: during pregnancy, for delivery, during postnatal care
5. What is your assessment of the current ART services at the health facility? Probe: service provider, accessibility, counseling
6. What are the factors that inhibit PLHIV from visiting health facility for HIV and AIDS treatment and prevention services? Probe: service provision, accessibility, stigma and fear of discrimination etc.
   What about factors motivate PLHIV to utilize HIV and AIDS treatment and care services in your community?
7. What are the main cultural and traditional beliefs and practices that influence utilization of HIV and AIDS prevention, care and treatment services in your community? In what ways do these beliefs and practices affect the decision to utilize the services in your community?

Section 3: Source of Information

Now I would like to ask you about SOURCE OF INFORMATION (where you usually get information from)

8. What are the main communication channels/sources of information available in your community? Probe for radio, TV, other print and electronic channels, social and traditional communication strategies, campaigns etc
9. Among these available sources of information, which ones are the most preferred communication channels/sources of information in your community? Probe: fathers, mothers, other family members. Why? Which ones are the most preferable by PLHIV in your community?
10. Do you have anything to add on utilization of HIV and AIDS related services by PLHIV in your community?

THANK YOU SO MUCH FOR YOUR TIME AND FOR GIVING US THIS USEFUL INFORMATION

Focus Group Discussion Guide-Urban Health Extension Professionals (UHE-ps)

Section 1: General/ Ice Breakers

Let's start our discussion by talking about the main health problems in this community.

1. Can you describe to us your everyday activities related with health care services? Probe: at community level: at household level?
2. Can you describe to us how you see the community's acceptance to your activities as UHE-p?

3. How does the community get information about health services?
   Probe:
   - Maternal and child health services
   - TB, HIV,
   - Services for non-communicable diseases like diabetes, heart attack, blood pressure etc
4. What kind of technical support you need to enhance service utilization in your catchment areas? Probe: skill building, material support

Section 2: MCH Services

Now, let's talk about issues related MCH (Family planning, ANC, Institutional delivery, PNC and immunization) services in this community

5. How do you see the trend in utilizing MCH services by the community from health facilities? What about UHEP Probe: is it increasing or decreasing?

6. What are the factors that inhibit the community from visiting health facilities for MCH services? Probe: service provision, cultural and traditional beliefs and practices, , accessibility
   What about factors that motivate the community to utilize MCH services?

7. How do women get information about MCH services in health facilities? In your opinion, how do you find the level of male involvement in the process of MCH services utilizing? What is your recommendation in increasing male involvement?
8. What is your recommendation to increase MCH service utilization in this community? Probe: at government level, community level Probe: family planning, ANC, Institutional delivery, PNC and immunization

Section 3: HIV and AIDS

9. What are the HIV and AIDS related services that you provide for the community? Probe: Prevention and care and treatment. What about TB prevention and treatment services?

10. What is your opinion in the acceptance of HIV/AIDs related services that you provide for the PLHIV community? How did the community perceive your services?

Section 4: Non Communicable Disease (NCD)

Now let's talk about health services for Non communicable diseases in your community. (Moderator: please describe Non communicable diseases to the respondent)

11. How do people get information about on non-communicable diseases in your community? Where they get the health services for NCD? What roles do you play in increasing utilization of NCD services at the health center?
12. What are the main factors that inhibit people from utilizing the health services for non-communicable diseases like diabetes, heart attack, blood pressure, etc. Probe: availability, access and misconception about the diseases
13. How do you think the utilization and provision of health services for non-communicable diseases like diabetes, heart attack, blood pressure etc can be improved?

Section 5: Source of Information

Now I would like to ask you about SOURCE OF INFORMATION (where you usually get information from)

14. What are the main communication channels/sources of information available in the community? (Probe for radio, TV, other print and electronic channels, social and traditional communication strategies, etc) which ones are the most preferred communication channels/sources of information? Probe: Fathers, mothers and other family members Why?
15. Do you have anything else to add that we did not discuss that are important to you and to your community?

THANK YOU SO MUCH FOR YOUR TIME AND FOR GIVING US THIS USEFUL INFORMATION