PMA Ethiopia Cohort Two Baseline Maternal and Newborn Health Technical Report, 2021

PMA ETHIOPIA

PERFORMANCE MONITORING FOR ACTION

JOHNS HOPKINS
BLOOMBERG SCHOOL of PUBLIC HEALTH

William H. Gates Sr. Institute for Population and Reproductive Health
Department of Population, Family and Reproductive Health

ADDIS ABABA UNIVERSITY

PMA Ethiopia Cohort Two Baseline Maternal and Newborn Health Technical Report, 2021

Title: Baseline Data Collected on Women's Experiences Related to Pregnancy and Antenatal Care

Authors: Celia Karp, Selamawit Desta, Ayanaw Amogne, Bedilu Ejigu, Claire Siberg, Yongi Lu, Addisalem Zebene, Shannon Wood, Mahari Yidegho, Solomon Shiferaw, Assefa Seme, Linnea Zimmerman

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Executive Summary

Background and Objective:

Performance Monitoring for Action Ethiopia (PMA Ethiopia) builds upon the previous success of the Performance Monitoring and Accountability 2020 (PMA2020)/Ethiopia survey and the PMA Maternal and Newborn Health (MNH) survey to generate comprehensive, timely, and representative data on reproductive, maternal, and newborn health (RMNH) in Ethiopia.

Conducted in four regions in Ethiopia, the second cohort of the longitudinal survey (2021-2023), similar to the first cohort (2019-2021), enrolls pregnant women and follows them at six-weeks, six-months, and one-year postpartum. The goal of the panel survey is to monitor the use of essential MNH services and assess individual, partner, and community factors associated with service utilization. Each survey is tailored to the relevant period of women's pregnancy and childbirth experiences, covering a range of priority RMNH indicators identified by the Ethiopian Federal Ministry of Health to reduce maternal and newborn mortality.

This report summarizes key findings from the **baseline survey** of PMA Ethiopia's second cohort, referred to as PMA Ethiopia Cohort 2. During the baseline interview conducted during pregnancy, resident enumerators collected information on women's sociodemographic characteristics, pregnancy intention, and antenatal care (ANC) services received by the time of the interview. Data collection for the baseline survey occurred between October 2021 and January 2022, following the completion of a household census and screening. Eligible women who gave oral informed consent were enrolled in the study. Among the 2,306 eligible women interviewed, 2,258 women completed the interview and served as the analytic sample for this report.

Key Findings:

- Background Characteristics: Over half of the women enrolled were between the ages of 20-29 years (52.0%), more than three in four (75.1%) lived in rural areas, three in ten (31.9%) had no education, more than a third (41.4%) had one or two children, and three in ten (31.5%) were in their second trimester.
- Unintended Pregnancy: More than a third (36.0%) of women indicated that the index pregnancy was unintended – either mistimed (30%) or unwanted (6%).
- ANC:
    - Overall, among women at different stages of pregnancy, more than half (54.3%) received at least one ANC contact. Nearly three in four (75.5%) postpartum women received any ANC.
    - One in five (21.6%) women received general counseling on nutrition at ANC visits.
    - Among all women, only a small proportion (2.3%) discussed all birth readiness and pregnancy danger sign topics with their provider, with the place of delivery (19.0% discussed) and arrangement of delivery transport (8.0% discussed) being the most and least commonly discussed topics, respectively.
    - The proportion of women receiving counseling on postpartum family planning was 4.8% overall and 10.8% among postpartum women.

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Introduction and Survey Methodology

Performance Monitoring for Action Ethiopia (PMA Ethiopia) builds upon the previous success of the Performance Monitoring and Accountability 2020 (PMA2020)/Ethiopia survey, conducted between 2014 and 2018, and the PMA Maternal and Newborn Health (MNH) survey, conducted in the SNNP region between 2016 and 2017. PMA Ethiopia features an enhanced topical scope, moving beyond the family planning indicators captured in the PMA2020 surveys to include MNH indicators, expands geographically to provide greater regional representation, and expands its survey methodology to include both cross-sectional and longitudinal data collection.

This report summarizes baseline data collected from women who participated in the second cohort of PMA Ethiopia, summarizing their experiences related to pregnancy and antenatal care (ANC).

Research objective

The PMA Ethiopia study:

- Monitors the use of proven, effective, and cost-effective interventions and the practice of healthy behaviors aimed at reducing maternal and newborn mortality in Ethiopia using priority indicators identified by the Ethiopian Federal Ministry of Health (FMOH) and the Bill and Melinda Gates Foundation (BMGF).
- Identifies factors associated with the use of Reproductive, Maternal and Newborn Health (RMNH) services, including individual, partner, and community influences.
- Develops and validates measures of reproductive empowerment, fertility intentions, and community norms that are hypothesized to be associated with the use of health services.

Methods

PMA Ethiopia features cross-sectional and longitudinal data collection in three large, predominantly agrarian regions (Oromia, Amhara, and SNNP), and one urban region (Addis Ababa) and annual cross-sectional data collection in the remaining regions with the exception of Tigray. Data collection in Tigray was suspended from November 2020 to November 2023 due to security concerns. The three data collection activities featured by PMA Ethiopia include:

- A longitudinal survey that follows eligible women at 6-week, 6-month, and one-year postpartum after screening and enrollment in panel regions.
- A national cross-sectional survey administered to 35 randomly selected households in each enumeration area, annually.
- The Service Delivery Point (SDP), or health facility survey, conducted at selected health facilities annually in both panel and cross-sectional regions.

This report presents results from the second cohort's **baseline survey of the PMA Ethiopia panel**. Findings from the SDP survey and from the 6-week, 6-month, and 1-year surveys will be published in separate reports. Cross-sectional results can be found in various briefs

(https://www.pmadata.org/countries/ethiopia) and on the PMA data visualization platform, DataLab (datalab.pmadata.org).

Sampling

PMA Ethiopia employed multistage stratified cluster sampling, where households were selected in sampled clusters or enumeration areas (EAs). EAs were selected with probability proportional to size within strata. For Amhara, Oromia, and SNNP, strata were defined by both region and urban/rural residence. For the remaining regions, regions served as the strata, without additional urban/rural stratification.

Within panel regions, a census of all households was conducted. From the census, enumerators identified all women who were age 15-49 and regular members of the household. Women were screened and those who reported being pregnant or having given birth in the past six weeks were eligible for the survey. Those who were able and willing to give consent were enrolled into the study.

Original sample size calculations

To arrive at the required sample size, PMA Ethiopia used previous data from PMA2020 surveys to estimate point prevalence of modern Contraceptive Prevalence Rate (mCPR), design effect, and non-response. The 217 EAs required for the panel were sufficient to achieve regional estimates of mCPR with the desired 5% margin-of-error in all panel regions and were distributed across the regions based on the anticipated mCPR. Across the remaining non-panel regions, we estimated that an additional 81 EAs were needed to estimate mCPR with a 5% margin of error. Based on anticipated fertility across the original six panel regions, we estimated that we would enroll approximately 2,800 women into the panel. Additional information on the cross-section and SDP surveys, and additional information on sampling, including sample size calculations, is available from Zimmerman 2020.[1]

Updates in 2021

Data collection was undertaken in the original EAs selected for Cohort 1 in Addis, Amhara, and Oromia. With the creation of the Sidama region in 2020 from within the SNNP region, eight EAs were removed from the panel, as they were located in the new Sidama region. With the removal of Tigray, Afar, and the eight EAs in SNNP, the final EA sample size for the second cohort was 162 EAs.

Adjustments to the samples in Afar, Tigray, and SNNP do not affect regional estimates of the other regions, which are directly comparable across the two cohorts. The Ethiopian Statistical Services (formally Central Statistics Agency) provided updated population counts (measure of size) of the SNNP region to allow for post-estimation adjustment to the design weights,

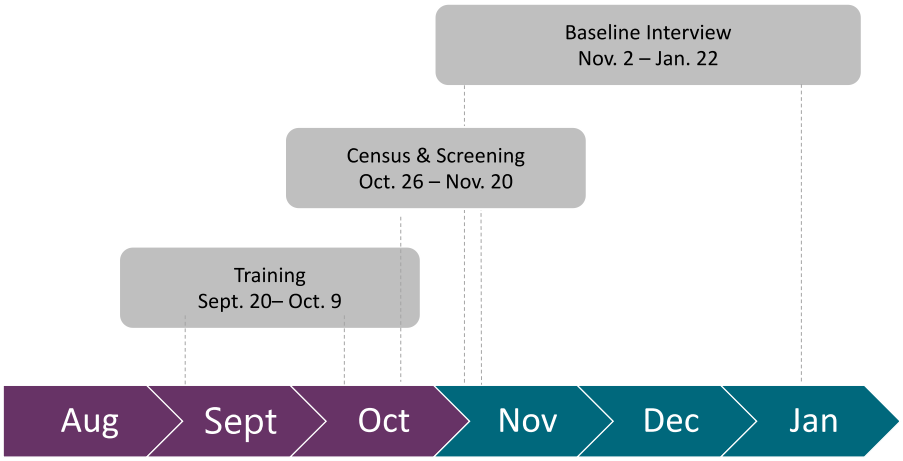
[1] Zimmerman L, Desta S, Yihdego M et al. (2020) "Protocol for PMA-Ethiopia: A new data source for cross-sectional and longitudinal data of reproductive, maternal, and newborn health" [version 1; peer review: awaiting peer review]. Gates Open Research, 4:126 https://doi.org/10.12688/gatesopenres.13161.1

accounting for the reduced size of the SNNPR region and for minor changes to the urban and rural distribution within the region. Due largely to the exclusion of Tigray and Afar, however, national estimates between Cohort 1 and Cohort 2 are not directly comparable. Design weights, however, was used to generate representative estimates of the combined population of Addis, Amhara, Oromia, and the SNNP region as of 2021, which together represent approximately 68.5%[2] of the population of Ethiopia.

Survey implementation

The timeline for survey implementation is presented below in Figure 1. Training for data collection was implemented from September through October 2021 and data collection began with the census and household screenings in late October. Women eligible for the cohort were enrolled into the study and completed baseline interviews from October through November 2021.

Figure 1. Survey implementation timeline



Questionnaire

From the census, enumerators used the female screening form to identify all women who were currently pregnant or who had given birth in the six weeks prior to the survey. These women were eligible for enrollment in the panel survey, which served as the data source of this analysis. The content of the panel surveys is presented below.

Baseline panel survey: For the baseline interview, enumerators administered a survey that collected information on women's sociodemographic characteristics including age, education,

[2] https://www.statsethiopia.gov.et/wp-content/uploads/2023/08/Population-of-Zones-and-Weredas-Projected-as-of-July-2023.pdf

region, parity, residence, marital status, household wealth, migration status, fertility preferences, and birth histories. Among women who were currently pregnant, data were also collected on estimated gestational age, key MNH services received by the date of interview - including receipt, timing, and specific components of antenatal care (ANC) such as nutrition counseling, birth preparedness and complication readiness discussions - family planning counseling, various maternal assessments and STI testing, etc. Among women who were recently postpartum, data were collected on delivery-related information and the receipt of immediate postpartum services.

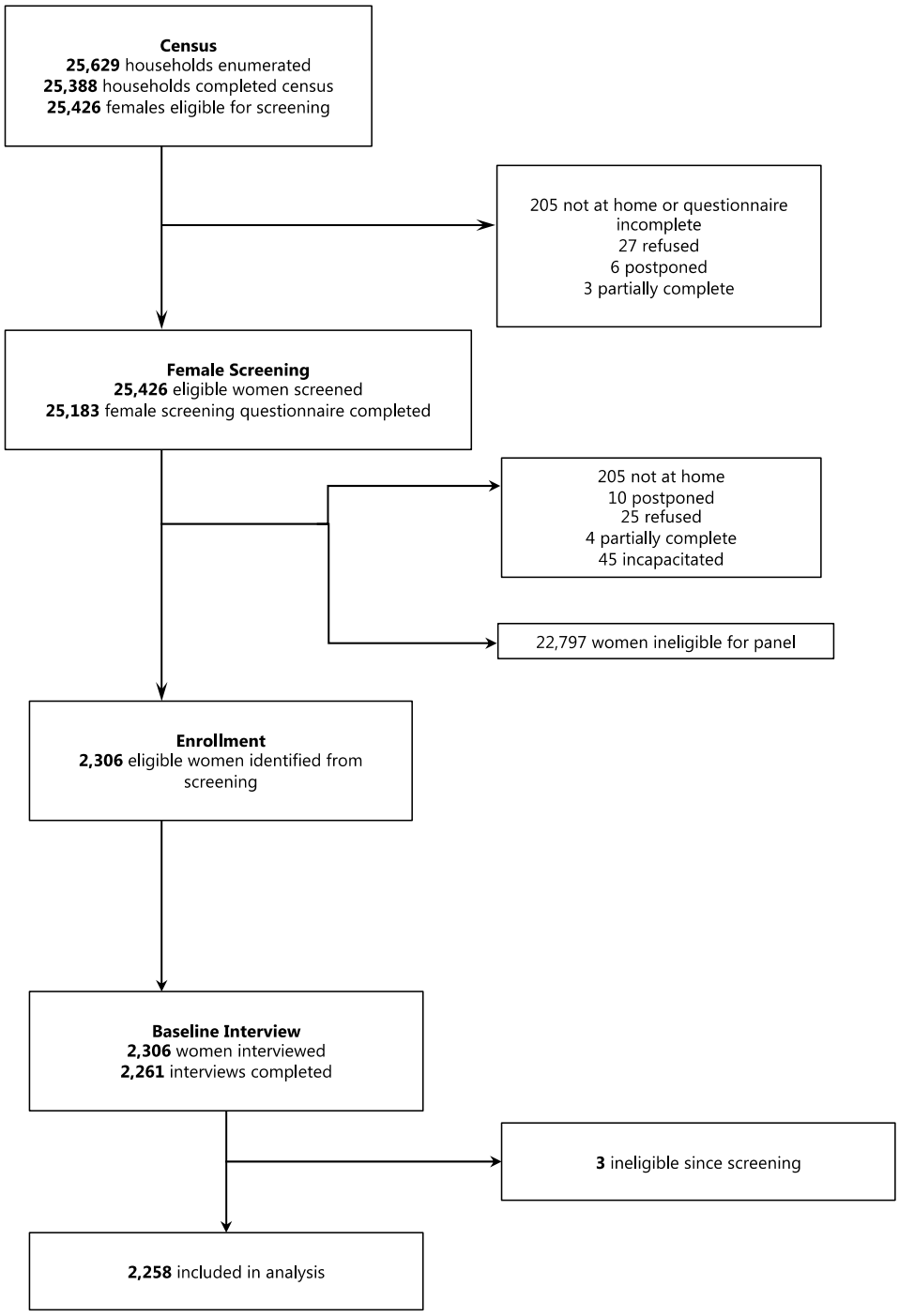
Response rate

Table 1 shows response rates from the baseline interview of the first PMA Ethiopia cohort. From the census, 25,183 screening surveys were completed, from which 2,306 eligible women were identified. Of these 2,306 eligible women, 2,261 completed the interview, yielding a response rate of 98.0%. A total of 3 women (0.13%) were eligible during the screening phase (were approximately 6 weeks postpartum), but no longer eligible at the time of the interview (beyond 8 weeks postpartum), and thus, were excluded from the present analysis. The analytic sample is comprised of 2,258 women aged 15-49 who were currently pregnant or recently postpartum (up to 6 weeks) at the time of enrollment. A flowchart of study enrollment is presented in Figure 2.

Table 1. Household and female response rate

	Total
Household questionnaire	
Household selected	25,629
Household that completed the interview	25,388
Household response rate	99.1%
Female screening questionnaire	
Number of eligible women	25,426
Number of eligible women who completed the interview	25,183
Screening questionnaire response rate	99.0%
Baseline questionnaire	
Number of eligible women	2,306
Number of eligible women who completed the interview	2,258
Baseline interview response rate	98.0%

Figure 2. Enrollment flowchart



Interpretation of sampling weights

In the PMA Ethiopia panel survey, the initial sample (first cohort) was designed to represent all pregnant or recently postpartum women ages 15-49 in the six regions (Addis, Afar, Amhara,

Oromia, SNNP, Tigray) in which the survey was conducted. These six regions cover 75.8% of the Ethiopian population. However, due to security concerns and not to exceed study's budget, the panel survey was restricted to four available regions, reducing the overall number of enumeration areas, for the second cohort. Thus, the interpretation of the weights is slightly different: estimates of Cohort 1 were representative of women across the six regions, while estimates of Cohort 2 are representative of women across the four regions.

To make results meaningful in less populated geographical areas, the sample also needed to be representative at regional levels, which required oversampling of the smaller regions. The rationale for this is that, as the population in Ethiopia is not evenly distributed, drawing random samples across the entire country will result in less-populated regions being less likely to be selected, and therefore not having sufficient sample sizes.

The number of women needed to interview from each region was determined by statisticians at PMA Ethiopia. As illustrated in the **green column (furthest right)** in Table 2, the number of women (unweighted) in each region ranged from 321 for Addis and 795 for Oromia.
Due to different coverage area and population size of the regions, the selection probability of the sample individuals is different. We corrected the disproportionate probability of selection by weighting to improve representativeness of the sample in terms of size, distribution, and characteristics of the study population. For example, after applying sampling weights, the weighted sample in Addis Ababa and Oromia becomes 107 and 1,176, respectively.

To generate statistics that are representative of Ethiopia's population covered in the survey, sample weights were introduced. Sample weights were constructed based on the selection probabilities of the EAs provided by the Ethiopian Statistical Service (ESS). After data collection for the baseline survey was complete, two weights – household and female – were created to adjust for selection probability and non-response at household and female levels, respectively. As noted, post-stratification adjustments were made to the original SNNP probabilities to account for the differential population count between SNNP before and after the creation of the Sidama region.

As all households were included in the census, there was no additional selection probability of households; thus, the household weight was the inverse of the EA selection probability and the response rate to the census within the EA. Female weights for women in the panel were adjusted for non-response within the EA, and follow-up surveys would adjust for loss to follow-up from the baseline panel survey sample. Application of the PMA Ethiopia household and female survey weights for the panel survey would result in a sample that is representative of all households with pregnant or recently postpartum women and all pregnant or recently postpartum women age 15–49 residing in the four regions included in the PMA Ethiopia panel, respectively.

As shown in Table 2, numbers in the **blue column (middle)** represent the weighted sample sizes. Although the weighted values could be bigger or smaller than the unweighted values, the total sample size stayed the same (N=2,258). Finally, values in the **purple column (furthest left)**

are the weighted percent distribution of this study sample, which are similar to the actual population distribution of Ethiopia.

With this sampling and weighting strategy, PMA Ethiopia was able to interview the minimal number of women per EA and achieve a sample that was representative of the four most populated regions and at the regional level. Because of this representativeness, the majority of this report will only present weighted results.

Table 2. Interpreting sampling weights

Weighted percent, weighted N, and unweighted N by region, PMA Ethiopia 2021

	Weighted percent	Weighted N	Unweighted N
Region			
Amhara	20.5	464	479
Oromia	52.1	1,176	795
SNNP	22.6	511	663
Addis	4.8	107	321
Total	**100.0**	**2,258**	**2,258**

Characteristics of Respondents

The sociodemographic characteristics of the overall sample are presented in Table 3.

Gestational age/trimester: More than one in five (24.0%) women were enrolled during the first trimester—or first three months—of their pregnancies. There was roughly an equal distribution of women whose gestational ages were between four and eight months (about 10% each). About six percent of women (5.9%) were enrolled when they were more than nine months pregnant, and one in five (20.6%) were enrolled up to nine weeks postpartum. We show gestational age by month and by trimester in the tables below, as some analyses use trimester groupings due to sample size considerations.

Age: On average, women who enrolled in the cohort were 27 years old. Nearly one-third (27.9%) of respondents were between the ages of 25-29 and 12.7% were aged 15-19 years.

Education: More than thirty percent (31.9%) of women had no education, and almost half of the women attended primary school (45.0%). About one in seven (14.8%) women attended secondary education. Fewer than one in ten (8.3%) women attained any education beyond secondary education (technical & vocational or higher education).

Parity: Nearly one in five (18.7%) women were nulliparous by the baseline interview. More than a third of respondents (41.4%) had 1-2 children; about equal proportions had 3-4 (21.9%) or more than 5 children (17.9%). The average number of previous births among all respondents was 2.6 (SD = ±2.2).

Region: Respondents were enrolled from four regions in Ethiopia. The largest proportion of respondents lived in Oromia (52.1%), followed by SNNP (22.6%) , Amhara (20.5%) regions and Addis (4.8%).

Residence: The vast majority (75.1%) of women lived in rural areas, with fewer than one-quarter (24.9%) of respondents from urban areas.

N:B *Analysis of antenatal care indicators in this report (frequency of ANC, tests and counseling during ANC) was conducted among recently postpartum women and pregnant women enrolled at any stage during pregnancy and does not reflect the full package of services women might have received over the course of their pregnancy.*

Table 3. Background characteristics of respondents

Percent distribution of respondents by selected background characteristics, PMA Ethiopia 2021

Background characteristics	Weighted percent	Weighted N	Unweighted N
Age			
15-19	12.7	288	286
20-24	24.1	544	542
25-29	27.9	630	627
30-34	19.3	435	432
35-39	12.0	270	269
40-49	4.0	91	90
Education[1]			
No education	31.9	720	716
Primary	45.0	1,016	1,011
Secondary	14.8	335	333
More than secondary	8.3	187	186
Parity			
0	18.7	423	421
1-2	41.4	936	931
3-4	21.9	496	493
5+	17.9	403	401
Region			
Amhara	20.5	464	461
Oromia	52.1	1,176	1,170
SNNP	22.6	511	508
Addis	4.8	107	107
Residence			
Rural	75.1	1,696	1,687
Urban	24.9	562	559
Wealth quintile			
Lowest	19.7	446	443
Lower	19.7	445	442
Middle	19.9	450	448
Higher	20.3	457	455
Highest	20.4	460	458
Gestational age			
0-3 months	24.0	542	540
4 months	9.8	221	220
5 months	11.3	256	255
6 months	10.3	233	232
7 months	9.3	209	208
8 months	8.8	199	198
9+ months	5.9	132	132
Postpartum	20.6	464	462
Trimester			
First trimester (0-3m)	24.0	542	540
Second trimester (4-6m)	31.5	710	706
Third trimester (7-9+m)	23.9	541	538
Postpartum	20.6	464	462
Total	**100.0**	**2,258**	**2,245**

Note:
1. Education categories refer to the highest level of education attended. More than secondary education include technical & vocational and higher education.

Characteristics by Region

The sociodemographic characteristics of respondents by region are presented in Table 4.

Gestational age/trimester: Across the four regions, roughly 44% of women were in their first trimester (24%) or postpartum (~20%) at the time of enrollment. The remaining 56% of women were in their second (32%) or third trimester at enrollment (24%).

Age: In all four regions, most women were aged 25-29, with lowest representation of women 40 years and older.

Education: Among the four regions, Addis had the lowest proportion of respondents with no education (6.6%) and nearly one in three (32.4%) women attained higher than secondary education. In Amhara, roughly 40% of women had no education, and very few (8.3%) completed higher than secondary education.

Parity: The proportion of nulliparous women was the highest in Addis (26.4%) and lowest in SNNP (16.8%). Across all regions, most respondents had 1-2 children. The proportions of women with five or more children were approximately one-fifth in all regions, except for Addis where only 0.7% of women had five or more children.

Residence: In all regions except for Addis, more than three-quarters (from 73.7% in Amhara to 82.3% in SNNP) of respondents were from rural areas. All respondents from Addis were from urban areas.

Wealth: The distribution of wealth by region followed the trend observed in parity. In SNNP, where ~23% of women had five or more births, nearly a third of the respondents (31.6%) were in the lowest wealth quintile, and 12.9%% were in the highest quintile. The vast majority of women living in Addis were in the highest quintile (90.1%).

Table 4. Background characteristics of respondents by region

Percent distribution of respondents' selected background characteristics by region (Amhara, Oromia, SNNP, Addis), PMA Ethiopia 2021				
Background characteristics	Amhara	Oromia	SNNP	Addis
Age				
15-19	7.9	15.8	12.0	3.7
20-24	21.1	27.3	19.5	23.5
25-29	27.6	26.4	30.0	36.2
30-34	21.0	18.0	19.6	23.3
35-39	16.4	9.3	14.0	12.7
40-49	5.8	3.2	4.9	0.6
Education				
Never attended	43.5	28.5	34.4	6.6
Primary	34.1	49.8	46.3	33.8
Secondary	14.1	14.5	13.7	27.1
More than secondary	8.3	7.2	5.6	32.4
Parity				
0	20.4	18.2	16.8	26.4
1-2	40.0	41.7	37.3	64.9
3-4	21.7	23.1	22.5	8.0
5+	17.9	17.0	23.4	0.7
Residence				
Rural	73.7	79.4	82.3	0.0
Urban	26.3	20.6	17.7	100.0
Wealth quintile				
Lowest	13.1	19.0	31.6	0.0
Lower	27.0	19.3	18.0	0.0
Middle	25.6	18.7	21.7	0.0
Higher	15.4	25.1	15.7	9.9
Highest	18.8	17.9	12.9	90.1
Gestational age				
0-3 months	22.8	23.9	26.6	18.0
4 months	11.7	10.2	7.5	8.1
5 months	10.1	12.4	10.3	10.2
6 months	9.0	9.7	12.4	13.2
7 months	10.6	9.1	7.8	12.2
8 months	12.9	8.2	6.9	7.8
9+ months	5.4	6.2	5.4	6.4
Postpartum	17.5	20.4	23.0	24.0
Trimester				
First trimester (0-3m)	22.8	23.9	26.6	18.0
Second trimester (4-6m)	30.8	32.3	30.2	31.6
Third trimester (7-9+m)	28.9	23.4	20.1	26.5
Postpartum	17.5	20.4	23.0	24.0
Total	**460**	**1,170**	**508**	**107**
Note: Column percentages presented.				

Characteristics by Residence

The sociodemographic characteristics of respondents by rural and urban residence are presented in Table 5. Table 6 provides additional information on age and parity by region and residence.

Gestational age/trimester: The distribution of gestational age and trimester were comparable between respondents from urban and rural areas.

Age: In both urban and rural areas, very few women enrolled (5% or less) were older than 40. For women younger than 40, the majority was concentrated in the 20-34 age range in both urban (80.8%) and rural areas (68.1%). 14.3% of respondents in rural areas and 8.0% of respondents in urban areas were 15-19 years old.

Education: Approximately four out of ten (38.7%) of respondents in rural areas and 11.3% of women in urban areas had no education. Approximately one in eight (13.9%) women in rural areas completed either secondary, technical and vocational, or higher education, while about half (51.1%) of women in urban areas completed secondary or higher education.

Parity: On average, the mean number of births in rural and urban areas was 2.9 and 1.6, respectively. One in six (15.7%) women in rural areas and one in three (27.9%) women in urban areas were nulliparous. While the majority of women in both rural and urban areas had 1-2 children, fewer than one in twenty (5.3%) women in urban areas and about one-fifth (22.0%) of women in rural areas had 5 or more children.

Wealth: Women in rural areas had a roughly even distribution across the lower four wealth quintiles (from 19.0% to 26.2%), while very few (3.7%) were in the highest quintile. Women in urban areas were heavily concentrated in the highest quintile, with about a third of women (29.4%) in the lower four quintiles combined.

Table 5. Background characteristics of respondents by residence

Percent distribution of respondents' selected background characteristics by urban and rural residence, PMA Ethiopia 2021

Background characteristics	Rural	Urban
Age		
15-19	14.3	8.0
20-24	22.7	28.3
25-29	25.4	35.4
30-34	20.0	17.1
35-39	12.6	10.0
40-49	5.0	1.1
Education		
Never attended	38.7	11.3
Primary	47.5	37.6
Secondary	11.1	26.2
More then secondary	2.8	24.9
Parity		
0	15.7	27.9
1-2	37.3	53.9
3-4	24.9	13.0
5+	22.0	5.3
Region		
Amhara	20.2	21.7
Oromia	55.1	43.2
SNNP	24.8	16.1
Addis	0.0	19.1
Wealth quintile		
Lowest	26.2	0.2
Lower	25.8	1.3
Middle	25.3	3.8
Higher	19.0	24.1
Highest	3.7	70.6
Gestational age		
0-3 months	25.1	20.9
4 months	9.9	9.4
5 months	11.9	9.7
6 months	9.9	11.6
7 months	8.8	10.6
8 months	8.2	10.9
9+ months	5.9	5.6
Postpartum	20.3	21.3
Trimester		
First trimester (0-3m)	25.1	20.9
Second trimester (4-6m)	31.7	30.7
Third trimester (7-9+m)	22.9	27.1
Postpartum	20.3	21.3
Unweighted Total:	**1,299**	**959**

Note: Column percentages presented.

Table 6. Mean age and number of children by region and residence

Mean age and number of children of respondents at enrollment by region and residence, PMA Ethiopia 2021			
	Age Mean (sd)	Parity Mean (sd)	Number of women
Region			
Amhara	28.5 (6.7)	2.6 (2.1)	479
Oromia	26.0 (6.4)	2.5 (2.3)	795
SNNP	27.6 (6.7)	2.9 (2.3)	663
Addis	27.8 (4.8)	1.2 (1.0)	321
Residence			
Rural	27.1 (6.9)	2.9 (2.3)	1,299
Urban	26.5 (5.4)	1.6 (1.5)	959
Total	**26.9 (6.5)**	**2.6 (2.2)**	**2,258**

Unintended Pregnancy

Definition: Respondents were asked to report about their pregnancy intentions at the time they became pregnant. Specifically, women were asked, "At the time you became pregnant, did you want to become pregnant then, did you want to wait until later, or did you not want to have any / any more children at all?" Women who indicated that their pregnancy was either unwanted or mistimed (i.e., those who answered "later" or "not at all") were classified as having an unintended pregnancy.

Key findings: As shown in Table 7, among the 2,257 respondents, nearly two in five (36.0%) women indicated that the index pregnancy was unintended.

Patterns by background characteristics:

- **Gestational age/trimester:** Women in their first trimester had the lowest reported level of unintended pregnancy (33.8%), relative to women who were less than nine weeks postpartum for whom unintended pregnancy was highest (38.5%).
- **Age:** Women in the 40-49 and 20-24 age groups had the highest and lowest levels of unintended pregnancy, respectively. Almost half (47.9%) of women between the ages of 40-49 reported their current or most recent pregnancy was unintended, while this was the case for fewer than one in three (31.8%) women aged 20-24.
- **Education:** Women with no education had the highest rate of unintended pregnancy. More than two in five (40.7%) women reported their current/recent pregnancy as mistimed or unwanted. More than one in four (26.5%) women with more than secondary education had an unintended pregnancy.
- **Parity:** Among nulliparous women, slightly more than one-fifth (22.2%) of current pregnancies were unintended. Among the highest parity group (having 5 or more children), almost half (47.7%) reported having an unintended pregnancy.
- **Region:** The proportion of women reporting their current or most recent pregnancy as unintended by region ranged from one in five (20.1%) in Addis to over two in five (41.2%) in Oromia.
- **Residence:** About one-third of women in urban (31.0%) and rural (37.6%) areas reported their most recent pregnancies as unintended.
- **Wealth:** The lowest proportion of women reporting unintended pregnancy was observed among the wealthiest women (26.3%). Women in the two lower wealth quintile had the highest level of unintended pregnancy (80.3%).

Table 7. Unintended pregnancy

Percent distribution of respondents who reported their pregnancies as being wanted later or not at all, PMA Ethiopia 2021		
Background characteristics	Percent	Weighted N
Age		
15-19	36.7	288
20-24	31.8	544
25-29	35.9	630
30-34	37.0	435
35-39	37.8	270
40-49	47.9	91
Education		
Never attended	40.7	720
Primary	37.3	1,016
Secondary	27.0	335
More than secondary	26.5	187
Parity		
0	22.2	423
1-2	33.8	936
3-4	42.2	496
5+	47.7	403
Region		
Amhara	29.9	464
Oromia	41.2	1,176
SNNP	32.6	511
Addis	20.1	107
Residence		
Rural	37.6	1,696
Urban	31.0	562
Wealth quintile		
Lowest	38.1	446
Lower	42.2	445
Middle	37.1	450
Higher	36.4	457
Highest	26.3	460
Gestational age		
0-3 months	33.8	542
4 months	29.4	221
5 months	42.5	256
6 months	38.7	233
7 months	37.5	209
8 months	30.2	199
9+ months	35.4	132
Postpartum	38.5	464
Trimester		
First trimester (0-3m)	33.8	542
Second trimester (4-6m)	37.2	710
Third trimester (7-9+m)	34.3	541
Postpartum	38.5	464
Total	**36.0**	**2,257**

Note: Row percentages presented.

Antenatal Care (ANC) Coverage

Overall Coverage

Definition: During the baseline interview, respondents were asked various questions about the recent antenatal care (ANC) services received at any point in their pregnancy prior to the interview. Women were asked whether they received antenatal care from a health extension worker (HEW), either at a health post or at home, or care from a professional health care provider other than a HEW. Women who responded "yes" to receiving any ANC from either a HEW or another health care professional were considered to have received ANC.

Note for data use and interpretation: It is important to note that our sample includes women who were very early in their pregnancies and were, therefore, less likely to have received care at the time of enrollment. The overall results presented do not reflect the coverage of ANC across the entire span of women's pregnancies in Ethiopia and should not be compared to estimates of ANC coverage derived from the Demographic and Health (DHS) or Multiple Indicator Cluster Surveys (MICS). Estimates from the six-week survey will be comparable to these sources. Furthermore, to reduce burden on the respondents, for women who were 0-4 weeks postpartum by the baseline interview, we asked ANC-related questions in the six-week follow-up questionnaire rather than at baseline. Therefore, for ANC-related items among women who were postpartum at baseline, the sample only included women who were 5-9 weeks postpartum by the time of the baseline interview.

Key findings: The reported ANC coverage of the study sample is shown in Table 8. Overall, more than half (54.3%) of women enrolled had received at least one ANC contact with either a HEW or a healthcare professional at the time of interview. The proportion who received any ANC was much higher in women at a higher gestational age and among those who were 5-9 weeks postpartum.

Patterns by background characteristics:

- **Gestational age/trimester:** Slightly over one in five women (23.5%) who were in their first trimester and over three-quarters (77.3%) in their third trimester at enrollment received any ANC by the time of interview. Among women who were 5-9 weeks postpartum, three-quarters of women (75.5%) reported receiving any ANC contact during pregnancy.
- **Age:** More than two in five women aged 40-49 (43.2%) received any ANC, while at least half of women in all other age groups had at least one ANC contact (42.2%-60.1%).
- **Education:** Roughly half of women with no education and those with primary education received any ANC (46.1% and 54.6%, respectively). Three in five (60.0%) of women with secondary education and approximately three-quarters (75.4%) of women with more than secondary education received any ANC.

- **Parity:** Among nulliparous or primiparous women, over half (59.7%) received at least one ANC contact by their baseline interview. About two in five (43.3%) women with 5 or more children received any ANC at the time of interview.
- **Region:** The reported ANC coverage in this sample of women ranged from 41.5% in SNNP to 65.3% in Addis.
- **Residence:** Seventy percent of women in urban areas and close to half of women in rural areas (49.1%) reported receiving at least one ANC contact at baseline.
- **Wealth:** Roughly half (42.7%-51.9%) of women in the lower three wealth quintiles received any ANC at the time of interview. The majority of women in the second highest and highest quintiles received any ANC (62.9% and 70.8%, respectively).

Table 8. Antenatal care coverage (all women)[1]

Percent distribution of respondents who received ANC from any provider including a HEW during their current or most recent pregnancy by the time of interview, by background characteristics, PMA Ethiopia 2021		
Background characteristics	Percent	Weighted N
Age		
15-19	49.8	262
20-24	59.4	492
25-29	60.1	560
30-34	52.7	390
35-39	42.2	244
40-49	43.2	82
Education		
Never attended	46.1	651
Primary	54.6	920
Secondary	60.0	299
More than secondary	75.4	160
Parity		
0	59.7	420
1-2	57.8	819
3-4	51.6	439
5+	43.3	352
Region		
Amhara	58.7	421
Oromia	57.1	1,059
SNNP	41.5	455
Addis	65.3	94
Residence		
Rural	49.1	1,535
Urban	70.5	496
Wealth quintile		
Lowest	42.8	400
Lower	42.7	398
Middle	51.9	410
Higher	62.9	418
Highest	70.8	403
Gestational age		
0-3 months	23.5	539
4 months	40.0	219
5 months	55.6	254
6 months	61.9	231
7 months	73.7	207
8 months	76.3	198
9+ months	84.3	131
Postpartum (5-9 weeks)	75.5	249
Trimester		
First trimester (0-3m)	23.5	539
Second trimester (4-6m)	52.8	705
Third trimester (7-9+m)	77.3	537
Postpartum (5-9 weeks)	75.5	249
Total[2]	**54.3**	**2,029**

Note:
1. Row percentages presented.
2. To reduce burden on the respondents, we did not ask ANC-related questions to women who were 0-4 weeks postpartum at enrollment (n=228). Instead, these questions were asked in their 6-week follow up questionnaire. The weighted denominator for ANC indicators is 2,029 (unweighted = 2034).

ANC Provider Type

Definition: Women who reported seeing a professional healthcare provider other than a HEW were asked whom they saw for ANC. Respondents were probed to select all that applied from a listing including doctor, nurse/midwife, health officer, and "other skilled provider (cannot distinguish)". The distribution of ANC provider type among all women is presented in Table 9. Table 16 in the Appendix presents results among the sub-sample of women who received ANC.

Key findings: Overall, one in five women received ANC from a HEW (13.8 %); more than three time as many received care from a health care professional (48.4%). 7.9% of women received ANC from both a HEW and a health care professional.

Patterns by background characteristics:

- **Gestational age/trimester:** Among women who were in their first trimester at baseline interview, one in five (20.6%) received care from a health care professional and 4.3% received care from a HEW. Among women who were 9+ months pregnant at baseline, about eight in ten (79.1%) and one-quarter (26.7%) of them received ANC from a health care professional and a HEW, respectively.
- **Age:** Across all age groups. about one in seven women reported receiving ANC from a HEW by the time of enrollment. The range of women who reported receiving ANC from a professional health care provider was from about 37-54%.
- **Region:** Women living in Addis had the highest proportion of receiving ANC from a professional health care provider (59.2%), followed by Amhara (51.7%) and Oromia (50.9%). The proportion receiving care from both types of providers was the highest in SNNP (9.2%) and lowest in Addis (2.1%).
- **Residence:** Among respondents living in rural areas, 42.1% received ANC from a health professional and 16.5% received care from a HEW. In urban areas, 68.0% of women received ANC contact(s) with a health professional and 5.6% received care from a HEW.
- **Parity:** Over half of nulliparous women (55.2%) and 36.2% of women with 5+ children had ANC contact(s) with a health professional. More than 10% of nulliparous women (11.3%) and between one in eight and one in six (12.7-17.0%) of multiparous women received ANC from a HEW by the time of enrollment.
- **Education:** Three-quarters (74.7%) and over one-third (37.7%) of women with more than secondary education and no education received ANC from a health care professional. The proportion of women receiving care from HEW was higher in the lower education groups.
- **Wealth:** Among women in the highest wealth quintile, 3.9% received ANC from a HEW, while 68.6% received care from a professional health care provider. Among women in the lower two quintiles, roughly one-third received care from a health care professional and less than one-quarter received care from a HEW.

Table 9. ANC provider types (all women)[1]

Percent distribution of respondents who reported receiving ANC from a PHCP only, HEW only, and both during their current or most recent pregnancy by the time of interview, by background characteristics, PMA Ethiopia 2021

Background characteristics	ANC provider			Number of women
	PHCP[2]	HEW	Both	
Age				
15-19	43.1	13.0	6.3	262
20-24	53.8	14.8	9.3	492
25-29	53.7	15.0	8.5	560
30-34	47.1	12.3	6.7	390
35-39	36.6	12.6	6.9	244
40-49	38.2	14.2	9.3	82
Education				
Never attended	37.7	17.7	9.3	651
Primary	49.0	14.4	8.7	920
Secondary	55.9	9.8	5.6	299
More than secondary	74.7	2.6	1.9	160
Parity				
0	55.2	11.3	6.9	420
1-2	52.7	12.7	7.5	819
3-4	43.7	17.0	9.1	439
5+	36.2	15.5	8.5	352
Region				
Amhara	51.7	15.7	8.7	421
Oromia	50.9	13.9	7.6	1,059
SNNP	37.5	13.2	9.2	455
Addis	59.2	8.1	2.1	94
Residence				
Rural	42.1	16.5	9.5	1,535
Urban	68.0	5.6	3.1	496
Wealth quintile				
Lowest	37.3	18.5	12.9	400
Lower	34.3	17.2	8.8	398
Middle	44.0	16.5	8.6	410
Higher	57.4	13.2	7.7	418
Highest	68.6	3.9	1.6	403
Gestational age				
0-3 months	20.6	4.3	1.3	539
4 months	36.6	5.9	2.5	219
5 months	47.5	15.9	7.8	254
6 months	58.0	10.4	6.4	231
7 months	64.3	20.6	11.1	207
8 months	65.7	23.8	13.2	198
9+ months	79.1	26.7	21.6	131
Postpartum (5-9 weeks)	68.0	21.9	14.3	249
Trimester				
First trimester (0-3m)	20.6	4.3	1.3	539
Second trimester (4-6m)	47.5	11.0	5.7	705
Third trimester (7-9+m)	68.5	23.3	14.5	537
Postpartum (5-9 weeks)	68.0	21.9	14.3	249
Total	**48.4**	**13.8**	**7.9**	**2,029**

Note:
1. Row percentages presented. Does not include women 0-4 weeks postpartum.
2. PHCP: professional health care providers include doctors, nurses/midwives, health officers, and other skilled providers (can't distinguish).

Antenatal Care (ANC) Content

Nutrition

The proportions of all pregnant and recently postpartum women who received general nutrition counseling and counseling on taking iron supplements and/or deworming medications at ANC are presented in Table 10. Results among ANC recipients are presented in Table 17 in the Appendix.

Definitions:

- **General nutritional counseling:** Women who reported having at least one ANC visit were asked if a healthcare worker or HEW talked with them about their nutrition or diet during ANC. Women who responded affirmatively were considered to have received nutritional counseling.
- **Iron supplement and deworming medication counseling:** Receipt of counseling on specific components of nutrition, such as food variety, iron supplementation, and deworming medication, was asked among the sub-sample of women who received any nutritional counseling.

Key findings:

- Among all respondents, one in five received nutrition counseling at ANC (21.6%).
- Less than one in ten received counseling on taking iron supplements (8.9%) and deworming medications (3.9%) at ANC.

Patterns by background characteristics:

- **Gestational age/trimester:** More than one third of women in their third trimester at baseline received nutrition counseling at ANC (32.7%), and over one in ten received counseling on taking iron supplementations (12.9%). Far fewer women in their third trimester received deworming medications (3.3%).
- **Age:** Among the majority of respondents aged 20-34, roughly 25% received general nutrition counseling, and 10% received counseling on iron supplementation and deworming medication at ANC.
- **Region:** In Addis, nearly two in five women received nutrition counseling (36.4%) and one in six received counseling on iron (16.0%). In SNNP, one in seven received nutritional counseling (14.4%) and 6.3% received counseling on taking iron. The prevalence of deworming medication counseling was the lowest in SNNP (0.0%) and highest in Addis (6.0%).
- **Residence:** The prevalence of nutritional counseling for women living in urban areas was nearly twice that of women in rural areas (32.6% and 18.0%, respectively). About one in eight women in urban areas (12.3%) and fewer than 10% women in rural areas (7.7%) received counseling on taking iron.
- **Parity:** The proportions of women who received general nutrition counseling were the highest among nulliparous women and women with 1-2 children. The greatest

proportion of women who received counseling on deworming medication (5.1%) had 1-2 children.

- **Education:** Approximately 7.6% of women with no education and 21.0% of women with more than secondary education received counseling on iron supplements. Counseling for deworming medication was the highest among those with more than secondary education (9.1%) and lowest among those with no education (1.1%).
- **Wealth:** Among respondents in the lower three wealth quintiles, 12.3%-20.1% received general nutrition counseling, 4.1%-8.5% received counseling on iron supplementation, and 0.0%-3.6% received counseling on deworming medications. Among the wealthiest women, 35.7% received general nutrition, 16.6% were counseled on iron supplementation, and 5.2% were counseled on deworming medications.

Table 10. Content of ANC - nutrition (all women)

Percent distribution of respondents who received general nutrition counseling and counseling on taking iron supplements and deworming medications, by background characteristics, PMA Ethiopia 2021

Background characteristics	General nutrition counseling	Iron counseling	Deworming medication counseling	Number of women
Age				
15-19	14.3	5.2	2.6	262
20-24	24.4	7.8	5.7	492
25-29	25.0	11.4	5.2	560
30-34	22.4	10.3	1.5	390
35-39	17.4	7.3	1.7	244
40-49	12.8	6.7	0.0	82
Education				
Never attended	18.5	7.6	1.1	651
Primary	17.9	6.7	4.4	920
Secondary	28.2	11.8	2.8	299
More than secondary	42.7	21.0	9.1	160
Parity				
0	25.6	8.8	3.9	420
1-2	23.9	10.3	5.1	819
3-4	17.0	6.6	1.4	439
5+	17.0	8.6	3.3	352
Region				
Amhara	26.0	9.2	4.9	421
Oromia	21.6	9.2	4.3	1,059
SNNP	14.4	6.3	0.0	455
Addis	36.4	16.0	6.0	94
Residence				
Rural	18.0	7.7	3.8	1,535
Urban	32.6	12.3	4.2	496
Wealth quintile				
Lowest	12.3	4.2	0.0	400
Lower	15.5	4.1	0.0	398
Middle	20.1	8.5	3.6	410
Higher	24.1	10.8	6.7	418
Highest	35.7	16.6	5.2	403
Gestational age				
0-3 months	5.1	2.4	0.0	539
4 months	19.1	8.9	4.7	219
5 months	22.1	7.1	4.0	254
6 months	24.1	10.9	3.6	231
7 months	33.3	12.2	2.5	207
8 months	30.6	12.8	5.7	198
9+ months	34.9	14.3	1.3	131
Postpartum (5-9 weeks)	32.6	13.9	6.5	249
Trimester				
First trimester (0-3m)	5.1	2.4	0.0	539
Second trimester (4-6m)	21.8	8.9	4.0	705
Third trimester (7-9+m)	32.7	12.9	3.3	537
Postpartum (5-9 weeks)	32.6	13.9	6.5	249
Total	**21.6**	**8.9**	**3.9**	**2,029**

Note: Row percentages presented.

Birth preparedness and complication readiness discussions

Definition: For women who received ANC, they were asked whether their providers discussed any of the following nine birth preparedness topics:

- Place of delivery
- Delivery by a skilled birth attendant
- Arrangement of delivery transport
- Where to go when experiencing pregnancy danger signs
- Severe headaches with blurred vision as a danger sign
- High blood pressure as a danger sign
- Edema as a danger sign
- Convulsions as a danger sign
- Bleeding before delivery as a danger sign

The proportions of respondents reporting having the various birth preparedness and complication readiness discussions with their ANC providers are presented in Table 11. In addition to using binary a variable to measure the coverage of each birth preparedness and complication readiness topic, a single binary variable was created to assess whether or not providers had counseled women on all nine discussion topics.

Key findings:

- Among all women, only 2.3% of women had all nine birth preparedness and complication readiness discussions with their providers at ANC.
- Place of delivery was most commonly discussed (19.0%) and discussed where to go if experiencing convulsions was least commonly discussed (7.7%).

Patterns by background characteristics:

- **Gestational age/trimester:** Approximately 10% of women who were 8-9+ months pregnant at baseline reported having discussed all nine birth and complication readiness topics at ANC, while less than 1% (0.1%) women in their first trimester discussed all nine topics.
- **Age:** Roughly 10.3%-23.4% women younger than 40 reported discussing place of delivery with their ANC provider. Among women ages 40-49, 16.8% reporting discussing place of delivery at ANC.
- **Region:** Respondents in Amhara reported the highest prevalence of having all nine birth and complication readiness discussions at ANC (5.7%), followed by Addis (3.2%) and Oromia (1.6%).
- **Residence:** About 6.9% and 21.6% of women in rural and urban areas, respectively, discussed high blood pressure as a danger sign during ANC.

- **Parity:** Women with 1-2 children reported the highest proportion of discussing birth readiness topics with their ANC provider, while women with 5+ children had the lowest reported discussions of birth readiness topics.
- **Education:** Nearly a third of women with higher than secondary education (32.5%) and 11.5% of women with no education were told where to go when experiencing danger signs during pregnancy.
- **Wealth:** About one in five women in the highest wealth quintile (17.5%) and 1.8% of women in the lowest wealth quintile reported discussing convulsions as a danger sign with their ANC provider.

Table 11. Content of ANC - birth preparedness discussion (all women)

Percent distribution of respondents who received each birth preparedness discussions at ANC, including place of delivery, delivery by a skilled birth attendant, arrangement of delivery transport, where to go when experiencing pregnancy danger signs, severe headaches with blurred vision, high blood pressure, edema, convulsions, and bleeding before delivery as a danger sign, by background characteristics, PMA Ethiopia 2021

Background character	Place of delivery	Skilled birth attendant	Delivery transport	Where to go when in danger	Severe headaches	High blood pressure	Edema	Convulsions	Bleeding before delivery	All 9 topics	Number of women
Age											
15-19	10.3	8.5	5.4	12.7	6.2	5.1	4.9	2.6	5.6	0.4	262
20-24	17.9	16.5	8.4	16.5	11.7	9.4	10.0	7.0	9.8	1.3	492
25-29	23.4	20.3	8.9	21.6	16.3	14.6	14.8	11.8	18.6	4.8	560
30-34	21.5	19.2	9.3	19.4	13.2	13.4	13.0	8.3	15.6	2.3	390
35-39	16.8	16.3	6.5	15.0	7.7	6.6	6.4	5.3	8.4	1.7	244
40-49	16.8	12.7	6.0	6.6	5.6	3.6	2.5	3.5	3.2	0.0	82
Education											
Never attended	19.1	14.8	5.7	11.5	7.3	6.2	5.9	4.8	8.1	2.3	651
Primary	18.5	15.8	8.8	16.6	11.2	8.9	9.8	6.3	11.1	2.1	920
Secondary	18.5	18.5	10.7	24.5	17.1	16.3	14.8	13.8	18.2	3.2	299
More than seconda	22.2	28.5	7.7	32.5	23.5	26	25.4	16.1	26.1	2.5	160
Parity											
0	15.4	15.1	6.2	18.5	13.6	14.3	12.0	8.8	13.9	2.1	420
1-2	18.7	17.6	9.1	21.2	13.8	11.7	12.7	8.8	14.6	2.7	819
3-4	21.8	17.4	8.9	13.9	10.2	8.5	9.0	7.0	11.0	2.6	439
5+	20.1	16.8	6.5	11.5	7.1	5.7	5.5	4.5	6.9	1.3	352
Region											
Amhara	26.8	25.8	13.1	22.7	16.3	16.6	15.2	12.2	18.5	5.7	421
Oromia	16.3	12.7	6.8	14.8	9.8	8.0	8.9	5.7	9.4	1.6	1,059
SNNP	17.6	17.3	6.3	13.2	8.8	6.6	6.8	5.6	9.6	0.6	455
Addis	20.1	22.2	6.1	42.7	29.3	29.9	25.5	19.8	32.0	3.2	94
Residence											
Rural	17.7	14.6	7.7	12.8	9.0	6.9	7.4	5.5	8.8	2.2	1,535
Urban	22.9	23.8	8.9	31.7	20.6	21.6	20.0	14.3	23.4	2.8	496
Wealth quintile											
Lowest	17.2	14.8	6.0	9.7	5.9	3.1	3.6	1.8	5.2	0.4	400
Lower	16.8	13.5	5.7	11.7	7.5	4.2	6.6	4.8	7.1	2.1	398
Middle	19.1	16.1	9.6	11.7	9.1	6.5	6.5	5.1	8.4	1.8	410
Higher	19.8	17.5	8.8	19.3	12.9	12.6	13.6	9.1	14.6	3.4	418
Highest	21.7	22.4	9.7	34.4	23.6	25.8	22.1	17.5	26.3	3.9	403
Gestational age											
0-3 months	3.1	3.5	1.2	3.8	2.5	2.3	1.8	1.2	2.7	0.1	539
4 months	9.3	6.1	4.8	14.6	13.9	9.8	10.3	6.8	10.9	2.0	219
5 months	10.8	11.4	4.8	12.1	11.1	9.3	9.8	6.4	11.1	1.0	254
6 months	16.1	16.3	3.6	18.3	9.6	12.2	9.8	6.4	11.9	0.5	231
7 months	26.3	26.3	12.1	22.4	15.3	17.3	14.1	14.4	20.7	4.8	207
8 months	33.1	24.1	14.6	26.6	15.7	14.0	14.6	11.8	16.3	3.6	198
9+ months	46.5	35.4	20.3	36.9	24.3	20.0	24.1	15.6	24.4	7.1	131
Postpartum (5-9 we	40.8	37.9	17.6	32.1	20.2	14.9	17.4	11.8	19.8	4.9	249
Trimester											
First trimester (0-3r	3.1	3.5	1.2	3.8	2.5	2.3	1.8	1.2	2.7	0.1	539
Second trimester (4	12.1	11.4	4.4	14.9	11.5	10.4	10.0	6.5	11.3	1.1	705
Third trimester (7-9	33.7	27.7	15.1	27.5	17.7	16.8	16.7	13.7	20.0	4.9	537
Postpartum (5-9 we	40.8	37.9	17.6	32.1	20.2	14.9	17.4	11.8	19.8	4.9	249
Total	19	16.9	8	17.4	11.8	10.4	10.5	7.7	12.4	2.3	2,029

Note: Row percentages presented.

Maternal assessment at ANC

Definition: Women who received ANC were asked whether they had any of the following assessments: weight measurement, blood pressure measurement, urine, blood, and stool sampling. The proportions of respondents who reported receiving various maternal assessment at ANC are presented in Table 12.

Key findings: Overall, blood pressure was the most commonly measured item – about two in five women reported having their blood pressure measured at ANC (42.8%). More than one-third of women had their weight (39.9%) and a blood sample taken at ANC (39.7%); over one-quarter of women gave a urine sample (32.1%); slightly over one in ten gave a stool sample (12.9%).

Patterns by background characteristics:

- **Gestational age/trimester:** Among women 7-9+ months pregnant or 5-9 weeks postpartum at baseline, about three in five reported having their blood pressure measured at ANC (62.8%-69.0%). Among women in their first trimesters, roughly one in eight reported the same experience (14.4%).
- **Age:** Among respondents between 20 and 39 years old, the reported coverage of maternal assessment at ANC was similar to the overall mean. In those 40-49 years old, 29.6% having their weight taken, 38.6% had their blood pressure taken, 28.6% had their urine taken, 27.4% had a blood sample taken, and 13.0% had a stool sample taken.
- **Region:** The overall percentages of women reporting having these assessments taken at ANC was the highest in Amhara, followed by Addis and SNNP, and the lowest in Oromia.
- **Residence:** Over half of women (52.5% - 64.8%) in urban areas received all of the assessments at ANC except for stool samples (22.5%). The proportion of women in rural areas receiving this series of assessments ranged from fewer than one in ten (9.8% for stool sample) to one in three (35.7% for blood pressure measurement).
- **Parity:** Among all women, the proportion receiving maternal assessments at ANC was lower for higher parity women.
- **Education:** Blood pressure measurement at ANC was received by 68.3% of women with more than secondary education and 33.1% of women with no education.
- **Wealth:** Coverage of maternal assessments at ANC was similar in the lower three wealth quintiles. In the highest wealth quintile, more than half of women (55.4%-65.4%) received all assessments except for stool sample (22.0%).

Table 12. Content of ANC - maternal assessment (all women)

Percent distribution of respondents who had their weight, blood pressure, urine, blood, and stool sample taken at ANC, by background characteristics, PMA Ethiopia 2021

Background characteristics	Weight taken	Blood pressure taken	Urine sample taken	Blood sample taken	Stool sample taken	Received all 5	Number of women
Age							
15-19	33.0	36.3	25.1	30.4	9.3	7.2	262
20-24	42.9	47.5	35.7	46.7	12.3	9.2	492
25-29	46.5	48.0	37.6	44.8	15.2	11.6	560
30-34	39.9	42.8	29.7	39.4	13.7	11	390
35-39	29.2	29.7	24.8	28.6	11.2	8.5	244
40-49	29.6	38.6	28.6	27.4	13	11.4	82
Education							
Never attended	28.8	33.1	23.6	28.9	12.5	9.4	651
Primary	40.3	41.5	31.6	38.5	10.3	7.9	920
Secondary	48.3	54.0	39.2	52.5	15.5	11.7	299
More than secondary	66.8	68.3	55.8	66.6	24.4	20.9	160
Parity							
0	45.1	49.3	35.2	45.0	14.0	10.9	420
1-2	43.8	47.0	36.5	45.4	13.3	10.8	819
3-4	36.9	37.1	29.3	33.9	12.7	9.3	439
5+	28.2	32.2	21.7	27.3	10.6	7.6	352
Region							
Amhara	46.9	49.6	38.9	49.0	22.8	18.2	421
Oromia	38.4	42.6	29.8	38.1	10.1	7.2	1,059
SNNP	31.9	32.4	26.1	30.2	9.2	7.7	455
Addis	63.3	64.0	55.9	62.5	17.9	15.0	94
Residence							
Rural	32.7	35.7	25.5	31.8	9.8	7.4	1,535
Urban	62.0	64.8	52.5	64.1	22.5	17.8	496
Wealth quintile							
Lowest	25.5	28.2	21.0	23.0	6.2	4.2	400
Lower	27.3	28.4	19.8	26.9	10.1	6.1	398
Middle	34.9	38.0	23.1	34.9	9.7	7.9	410
Higher	50.3	53.4	41.8	48.3	16.2	13.8	418
Highest	60.6	65.4	54.4	64.9	22.0	17.6	403
Gestational age							
0-3 months	11.9	14.4	15.2	15.1	4.9	2.9	539
4 months	26.2	31.8	24.5	30.1	7.5	5.6	219
5 months	38.3	41.0	31.8	36.3	10.1	9.1	254
6 months	45.2	48.2	37.1	44.0	12.5	10.0	231
7 months	56.1	58.6	42.7	57.2	15.2	10.1	207
8 months	59.2	69.1	40.3	59.3	18.3	15.1	198
9+ months	71.9	69.0	53.5	66.1	31.0	27.7	131
Postpartum (5-9 weeks)	63.3	62.8	44.5	57.1	22.2	16.3	249
Trimester							
First trimester (0-3m)	11.9	14.4	15.2	15.1	4.9	2.9	539
Second trimester (4-6m)	36.8	40.5	31.3	36.9	10.1	8.3	705
Third trimester (7-9+m)	61.1	65.0	44.4	60.1	20.2	16.3	537
Postpartum (5-9 weeks)	63.3	62.8	44.5	57.1	22.2	16.3	249
Total	**39.9**	**42.8**	**32.1**	**39.7**	**12.9**	**10.0**	**2,029**

Note: Row percentages presented.

Postpartum family planning (PPFP) counseling

Definition: Respondents were asked whether any ANC provider talked with them about postpartum family planning during their ANC visits. Respondents were considered having received postpartum family planning counseling if they answered "yes" to this question. Results among all women are shown in Table 13.

Key findings: The overall coverage of postpartum family planning counseling was low. Among all respondents, less than one in twenty (4.8%) reported that their provider discussed postpartum family planning during ANC.

Patterns by background characteristics:

- **Gestational age/trimester:** Approximately 6.3% of women who were eight months pregnant at the time of interview and fewer than one in thirty (1.4%) of women who were 0-3 months pregnant reported receiving PPFP at ANC .
- **Age:** Approximately one in fifteen women reported receiving PPFP counseling at ANC in age groups 30-34 and 25-29 (5.7%-7.5%), women in the 15-24 age groups reported between 2.4%-3.4%. However for women ages 35-39 only 1.8% reported receiving PPFP counseling.
- **Region:** Women in SNNP and Oromia had the highest and lowest reported prevalence of receiving PPFP counseling of one in fifteen (6.6%) and less than one in twenty (4.1%) at the time of interview.
- **Residence:** About 4.9% and 4.1% of women in rural and urban areas, respectively, received counseling on postpartum family planning during their ANC contacts.
- **Parity:** Around 5% of multiparous women and 2.5% of nulliparous women reported receiving PPFP at ANC.
- **Education:** 3.6% of women with no education and 6.6% of women with more than secondary education were counseled on family planning at ANC.
- **Wealth:** The proportions of women who reported receiving PPFP counseling at ANC were close to the overall mean across wealth quintiles.

Table 13. Content of ANC - postpartum family planning counseling (all women)

Percent distribution of respondents who received family planning counseling at ANC by the time of interview, by background characteristics, PMA Ethiopia 2021

Background characteristics	Percent	Weighted N
Age		
15-19	2.4	262
20-24	3.4	492
25-29	7.5	560
30-34	5.7	390
35-39	1.8	244
40-49	5.4	82
Education		
Never attended	3.6	651
Primary	4.9	920
Secondary	5.6	299
More than secondary	6.6	160
Parity		
0	2.5	420
1-2	5.9	819
3-4	5.1	439
5+	4.5	352
Region		
Amhara	4.4	421
Oromia	4.1	1,059
SNNP	6.6	455
Addis	4.6	94
Residence		
Rural	4.9	1,535
Urban	4.1	496
Wealth quintile		
Lowest	4.5	400
Lower	3.4	398
Middle	4.5	410
Higher	6.8	418
Highest	4.5	403
Gestational age		
0-3 months	1.4	539
4 months	4.3	219
5 months	1.8	254
6 months	3.4	231
7 months	7.1	207
8 months	6.3	198
9+ months	9.9	131
Postpartum (5-9 weeks)	10.8	249
Trimester		
First trimester (0-3m)	1.4	539
Second trimester (4-6m)	3.1	705
Third trimester (7-9+m)	7.5	537
Postpartum (5-9 weeks)	10.8	249
Total	**4.8**	**2,029**

Note: Row percentages presented.

Testing and Counseling for Sexually Transmitted Infections

Definition: Respondents who received ANC were asked whether they received HIV and syphilis testing as part of ANC. Among those who reported being tested, women were asked whether their provider discussed the result with them and/or provided counseling. The interviewers did not ask about test results. Table 14 provides the proportion of respondents who reported receiving sexually transmitted infections (STIs) testing and/or counseling at the time of interview.

Key findings:

- Over one quarter (29.5%) of respondents overall received HIV testing; a smaller proportion (9.0%) received syphilis testing.
- The majority of women who were tested reported receiving their results and discussing the results with their providers.

Patterns by background characteristics:

- **Gestational age/trimester:** Fewer than one in 10 women in their first trimester (9.9%) and 43.5% of women 5-9 weeks postpartum reported receiving HIV testing.
- **Age:** Women between the age of 20-29 had the highest proportion of receiving STI testing and/or counseling, as compared to other age groups.
- **Region:** The overall reported prevalence of STI testing and/or counseling was the highest among women living in Addis and the lowest among women from SNNP.
- **Residence:** Nearly 60% and 20% of women in urban and rural areas, respectively, received HIV at ANC. Syphilis testing at ANC was reported by approximately 20% and 6% of women living in urban and rural areas, respectively.
- **Parity:** The prevalence of both HIV and syphilis testing the highest among nulliparous women: 35.1% of whom received HIV testing and 12.2% of whom received syphilis testing at ANC.
- **Education:** While two-thirds (61.6%) and approximately one in six (17.9%) of women with more than secondary education received HIV and syphilis testing respectively, only one in six women with no education received HIV testing (18.2%); slightly over one in ten received syphilis testing (4.5%).
- **Wealth:** The proportions of women who reported receiving HIV and syphilis testing and/or counseling were the highest among women in the highest wealth quintile, with 60.4% of women receiving HIV testing and 16.9% receiving syphilis testing at ANC.

Table 14. Content of ANC - HIV and Syphilis testing (all women)

Percent distribution of respondents who received HIV and Syphilis testing, test results, and test counseling at ANC, by background characteristics, PMA Ethiopia 2021

Background characteristics	HIV testing	HIV result	HIV counseling	Syphilis testing	Syphilis result	Syphilis counseling	Number of women
Age							
15-19	19.7	11.9	12.3	7.1	4.9	5.4	262
20-24	31.9	23.0	22.0	9.3	8.2	7.3	492
25-29	36.3	28.4	25.3	11.7	9.3	8.8	560
30-34	27.7	20.4	19.9	7.6	6.0	6.8	390
35-39	22.3	17.5	13.0	6.2	5.2	4.8	244
40-49	29.6	19.7	14.8	8.9	3.7	3.9	82
Education							
Never attended	18.2	14.2	10.9	4.5	3.4	3.7	651
Primary	28.0	20.3	19.0	9.6	7.9	7.5	920
Secondary	41.5	32.6	29.5	11.9	9.3	9.5	299
More than secondary	61.6	41.2	43.6	17.9	13.4	12.2	160
Parity							
0	35.1	23.9	24.6	12.2	9.3	8.3	420
1-2	34.1	25.1	24.2	9.8	8.5	8.5	819
3-4	22.8	18.7	14.4	6.4	4.9	4.5	439
5+	20.4	15.4	11.1	6.3	4.0	4.7	352
Region							
Amhara	41.3	33.8	26.9	12.7	11.2	9.8	421
Oromia	26.4	17.9	19.1	8.8	6.8	6.7	1,059
SNNP	19.3	15.2	9.3	3.7	2.7	2.6	455
Addis	60.9	42.8	48.6	19.6	13.8	17.4	94
Residence							
Rural	20.3	14.4	12.9	6.3	4.8	4.9	1,535
Urban	58.1	44.7	41.5	17.2	14.2	13.3	496
Wealth quintile							
Lowest	12.0	7.7	6.7	3.7	2.3	2.8	400
Lower	18.6	14.3	12.0	4.8	2.9	3.3	398
Middle	19.8	14.3	11.0	5.4	4.7	4.4	410
Higher	36.4	27.1	25.6	13.7	11.5	11.2	418
Highest	60.4	45.1	43.8	16.9	13.8	12.8	403
Gestational age							
0-3 months	9.9	6.7	7.0	2.8	2.4	2.7	539
4 months	22.8	18.2	16.1	6.9	5.7	5.8	219
5 months	23.7	18.1	19.5	8.9	6.9	6.9	254
6 months	34.1	24.7	22.1	9.5	5.9	5.3	231
7 months	44.3	31.5	27.3	13.9	11.8	11.2	207
8 months	44.8	34.8	31.2	12.8	9.1	8.9	198
9+ months	50.9	38.3	32.6	20.7	19.0	17.8	131
Postpartum (5-9 weeks)	43.5	31.4	27.6	10.2	7.8	7.9	249
Trimester							
First trimester (0-3m)	9.9	6.7	7.0	2.8	2.4	2.7	539
Second trimester (4-6m)	26.9	20.3	19.3	8.5	6.2	6.0	705
Third trimester (7-9+m)	46.1	34.4	30.0	15.2	12.6	12.0	537
Postpartum (5-9 weeks)	43.5	31.4	27.6	10.2	7.8	7.9	249
Total	**29.5**	**21.8**	**19.9**	**9.0**	**7.1**	**6.9**	**2,029**

Note: Row percentages presented.

References

1. Zimmerman L, Desta S, Yihdego M et al. (2020) "Protocol for PMA-Ethiopia: A new data source for cross-sectional and longitudinal data of reproductive, maternal, and newborn health" [version 1; peer review: awaiting peer review]. Gates Open Research, 4:126 https://doi.org/10.12688/gatesopenres.13161.1

2. Ethiopian Statistical Service (ESS) [Ethiopia] and ICF. 2016. *Ethiopia Demographic and Health Survey 2016.* Addis Ababa, Ethiopia, and Rockville, Maryland, USA: CSA and ICF.

Appendix

Table 15. ANC provider type (ANC recipients only)

Among ANC recipients, the percent distribution of respondents who reported receiving ANC from a PHCP only, HEW only, and both during their current or most recent pregnancy by the time of interview, by background characteristics, PMA Ethiopia 2021

Background characteristics	ANC provider			Number of women
	PHCP[2]	HEW	Both	
Age				
15-19	86.6	26.1	12.7	136
20-24	90.7	24.9	15.6	305
25-29	89.3	24.9	14.2	351
30-34	89.4	23.3	12.7	214
35-39	86.7	29.7	16.5	107
40-49	88.6	33.0	21.6	37
Education				
Never attended	81.8	38.4	20.2	313
Primary	89.6	26.3	15.9	523
Secondary	93.1	16.3	9.4	187
More than secondary	99.1	3.5	2.6	126
Parity				
0	92.5	19.0	11.5	261
1-2	91.1	21.9	13.0	493
3-4	84.7	33.0	17.7	236
5+	83.8	35.9	19.7	159
Region				
Amhara	88.1	26.7	14.8	258
Oromia	89.0	24.3	13.3	631
SNNP	90.3	31.9	22.3	197
Addis	90.7	12.4	3.2	64
Residence				
Rural	85.7	33.6	19.3	785
Urban	96.4	8.0	4.4	364
Wealth quintile				
Lowest	87.0	43.1	30.1	179
Lower	80.2	40.4	20.6	177
Middle	84.9	31.7	16.6	222
Higher	91.3	20.9	12.2	274
Highest	96.8	5.5	2.3	298
Gestational age				
0-3 months	87.5	27.8	5.7	132
4 months	91.6	34.0	6.4	91
5 months	85.4	38.9	13.9	147
6 months	93.6	39.1	10.4	149
7 months	87.2	46.1	15.1	159
8 months	86.1	38.1	17.3	157
9+ months	93.9	37.9	25.6	115
Postpartum (5-9 weeks)	90.0	45.9	19.0	196
Trimester				
First trimester (0-3m)	87.5	27.8	5.7	132
Second trimester (4-6m)	90.0	37.8	10.8	388
Third trimester (7-9+m)	88.6	40.9	18.7	432
Postpartum (5-9 weeks)	90.0	45.9	19.0	196
Total	**89.2**	**39.3**	**14.6**	**1,149**

Note:
1. Row percentages presented.
2. PHCP: professional health care providers include doctors, nurses/midwives, health officers, and other skilled providers (can't distinguish).

Table 16. Nutritional counseling at ANC (ANC recipients only)

Percent distribution of ANC recipients who received general nutrition counseling and counseling on taking iron supplements and deworming medications, by background characteristics, PMA Ethiopia 2021

Background characteristics	General nutrition counseling	Iron counseling	Deworming medication counseling	Number of women
Age				
15-19	28.6	10.5	0.7	136
20-24	41.1	13.1	2.4	305
25-29	41.7	19	2.2	351
30-34	42.6	19.6	0.7	214
35-39	41.3	17.4	0.7	107
40-49	29.7	15.6	0.0	37
Education				
Never attended	40.2	16.4	0.4	313
Primary	32.8	12.3	1.5	523
Secondary	47.0	19.6	1.3	187
More than secondary	56.7	27.9	5.1	126
Parity				
0	43.0	14.7	1.7	261
1-2	41.4	17.8	2.1	493
3-4	33.0	12.7	0.5	236
5+	39.2	19.8	1.3	159
Region				
Amhara	44.4	15.7	2.2	258
Oromia	37.8	16.0	1.6	631
SNNP	34.7	15.2	0.0	197
Addis	55.7	24.4	3.4	64
Residence				
Rural	36.7	15.8	1.4	785
Urban	46.2	17.5	1.9	364
Wealth quintile				
Lowest	28.7	9.8	0.0	179
Lower	36.2	9.6	0.0	177
Middle	38.8	16.3	1.4	222
Higher	38.3	17.1	2.6	274
Highest	50.4	23.5	2.6	298
Gestational age				
0-3 months	21.8	10.1	0.0	132
4 months	47.7	22.4	2.2	91
5 months	39.8	12.8	1.6	147
6 months	38.9	17.6	1.4	149
7 months	45.2	16.5	1.1	159
8 months	40.1	16.8	2.3	157
9+ months	41.4	17.0	0.5	115
Postpartum (5-9 weeks)	43.1	18.4	2.8	196
Trimester				
First trimester (0-3m)	21.8	10.1	0.0	132
Second trimester (4-6m)	41.3	16.9	1.7	388
Third trimester (7-9+m)	42.3	16.7	1.4	432
Postpartum (5-9 weeks)	43.1	18.4	2.8	196
Total	**39.8**	**16.3**	**1.6**	**1,149**

Note: Row percentages presented.

Table 17. Content of ANC - birth preparedness discussions (ANC recipients only)

Percent distribution of respondents with at least one ANC who received each birth readiness discussions at ANC, including place of delivery, delivery by a skilled birth attendant, arrangement of delivery transport, where to go when experiencing pregnancy danger signs, severe headaches with blurred vision, high blood pressure, edema, convulsions, and bleeding before delivery as a danger sign, by background characteristics, PMA Ethiopia 2021

Background characteristics	Place of delivery	Skilled birth attendant	Delivery transport	Where to go when in danger	Severe headaches	High blood pressure	Edema	Convulsions	Bleeding before delivery	All 9 topics	Number of women
Age											
15-19	20.6	17.1	10.9	25.5	12.5	10.3	9.9	5.1	11.2	0.8	136
20-24	30.1	27.8	14.1	27.7	19.7	15.9	16.8	11.9	16.5	2.2	305
25-29	39.0	33.8	14.8	35.9	27.1	24.3	24.7	19.7	30.9	7.9	351
30-34	40.8	36.5	17.6	36.8	25.0	25.5	24.7	15.8	29.7	4.3	214
35-39	39.8	38.7	15.4	35.6	18.2	15.6	15.1	12.4	19.8	4.0	107
40-49	39.0	29.4	13.8	15.2	13.0	8.4	5.9	8.1	7.5	0.0	37
Education											
Never attended	41.4	32.1	12.3	24.9	15.8	13.5	12.8	10.3	17.5	5.0	313
Primary	33.8	28.9	16.1	30.4	20.6	16.3	17.9	11.5	20.3	3.8	523
Secondary	30.7	30.8	17.8	40.8	28.5	27.2	24.6	22.9	30.3	5.3	187
More than secondary	29.4	37.8	10.3	43.1	31.2	34.5	33.7	21.3	34.6	3.3	126
Parity											
0	25.8	25.3	10.3	31.0	22.8	24.0	20.1	14.8	23.3	3.5	261
1-2	32.4	30.4	15.7	36.6	23.8	20.2	22.0	15.2	25.3	4.7	493
3-4	42.3	33.6	17.3	27.0	19.7	16.5	17.4	13.6	21.4	5.1	236
5+	46.5	38.8	15.1	26.7	16.5	13.1	12.6	10.4	15.9	3.0	159
Region											
Amhara	45.6	44.0	22.3	38.8	27.8	28.3	25.9	20.8	31.5	9.8	258
Oromiya	28.5	22.2	12.0	25.9	17.1	14.0	15.6	10.0	16.4	2.8	631
SNNP	42.5	41.7	15.3	31.8	21.1	16.0	16.5	13.4	23.1	1.5	197
Addis	30.8	34.0	9.4	65.4	44.9	45.9	39.0	30.3	49.0	5.0	64
Residence											
Rural	36.0	29.8	15.7	26.0	18.3	14.1	15.2	11.3	17.9	4.4	785
Urban	32.5	33.8	12.6	44.9	29.2	30.7	28.4	20.3	33.1	4.0	364
Wealth quintile											
Lowest	40.1	34.5	14.1	22.6	13.7	7.3	8.5	4.2	12.1	0.8	179
Lower	39.4	31.7	13.2	27.4	17.5	9.9	15.5	11.1	16.7	5.0	177
Middle	36.9	31.1	18.6	22.6	17.6	12.5	12.5	9.9	16.3	3.5	222
Higher	31.6	27.8	14.0	30.7	20.5	20.1	21.6	14.5	23.2	5.4	274
Highest	30.6	31.6	13.7	48.5	33.2	36.5	31.1	24.7	37.1	5.5	298
Gestational age											
0-3 months	13.3	15.1	5.1	16.0	10.8	9.9	7.8	5.2	11.4	0.6	132
4 months	23.3	15.3	11.9	36.6	34.8	24.6	25.8	17.0	27.2	4.9	91
5 months	19.4	20.6	8.6	21.7	19.9	16.7	17.6	11.4	20.0	1.7	147
6 months	26.0	26.4	5.9	29.5	15.5	19.6	15.9	10.4	19.3	0.8	149
7 months	35.6	35.6	16.5	30.4	20.8	23.5	19.1	19.5	28.1	6.5	159
8 months	43.3	31.5	19.2	34.8	20.5	18.4	19.2	15.5	21.3	4.8	157
9+ months	55.1	42.0	24.1	43.7	28.9	23.8	28.6	18.5	29.0	8.4	115
Postpartum (5-9 weeks)	54.1	50.2	23.3	42.5	26.8	19.7	23.1	15.7	26.2	6.4	196
Trimester											
First trimester (0-3m)	13.3	15.1	5.1	16.0	10.8	9.9	7.8	5.2	11.4	0.6	132
Second trimester (4-6m)	22.9	21.6	8.3	28.2	21.7	19.7	18.9	12.4	21.4	2.1	388
Third trimester (7-9+m)	43.6	35.8	19.5	35.6	22.9	21.7	21.7	17.8	25.9	6.4	432
Postpartum (5-9 weeks)	54.1	50.2	23.3	42.5	26.8	19.7	23.1	15.7	26.2	6.4	196
Total	34.9	31.1	14.7	32	21.8	19.3	19.4	14.1	22.8	4.3	1,149

Note: Row percentages presented.

Table 18. Content of ANC - maternal assessment (ANC recipients only)

Percent distribution of ANC recipients who had their weight, blood pressure, urine, blood, and stool sample taken at ANC, by background characteristics, PMA Ethiopia 2021

Background characteristics	Weight taken	Blood pressure taken	Urine sample taken	Blood sample taken	Stool sample taken	Received all 5	Number of women
Age							
15-19	66.2	72.8	50.3	61.0	18.7	14.4	136
20-24	72.2	79.9	60.1	78.6	20.6	15.5	305
25-29	77.4	79.9	62.5	74.6	25.3	19.4	351
30-34	75.8	81.3	56.4	74.9	26.0	21.0	214
35-39	69.2	70.3	58.7	67.7	26.6	20.0	107
40-49	68.5	89.4	66.2	63.6	30.1	26.4	37
Education							
Never attended	62.4	71.9	51.2	62.7	27.1	20.4	313
Primary	73.7	76.0	57.9	70.5	18.8	14.5	523
Secondary	80.5	89.9	65.3	87.4	25.8	19.5	187
More than secondary	88.6	90.6	74.1	88.3	32.3	27.7	126
Parity							
0	75.5	82.7	59.0	75.5	23.5	18.4	261
1-2	75.7	81.4	63.1	78.6	23.0	18.7	493
3-4	71.5	71.9	56.7	65.7	24.6	18.0	236
5+	65.2	74.4	50.1	63.2	24.5	17.7	159
Region							
Amhara	79.9	84.6	66.3	83.6	38.8	31.1	258
Oromia	67.2	74.6	52.2	66.6	17.6	12.6	631
SNNP	76.9	78.2	62.8	72.9	22.2	18.5	197
Addis	96.9	98.0	85.7	95.7	27.5	23.0	64
Residence							
Rural	66.6	72.6	51.9	64.8	19.9	15.1	785
Urban	87.9	91.9	74.4	91.0	31.9	25.3	364
Wealth quintile							
Lowest	59.6	65.7	48.9	53.8	14.4	9.8	179
Lower	63.9	66.5	46.3	63.1	23.6	14.2	177
Middle	67.3	73.2	44.4	67.3	18.7	15.2	222
Higher	80.1	84.9	66.5	76.8	25.8	22.0	274
Highest	85.6	92.3	76.8	91.6	31.0	24.9	298
Gestational age							
0-3 months	50.4	61.2	64.5	64.3	20.9	12.4	132
4 months	65.4	79.5	61.3	75.3	18.9	13.9	91
5 months	68.9	73.8	57.1	65.2	18.1	16.3	147
6 months	73.0	77.8	59.9	71.0	20.1	16.2	149
7 months	76.1	79.4	57.9	77.5	20.6	13.7	159
8 months	77.5	90.6	52.8	77.7	24.0	19.8	157
9+ months	85.3	81.8	63.4	78.4	36.8	32.9	115
Postpartum (5-9 weeks)	83.9	83.1	58.9	75.6	29.4	21.6	196
Trimester							
First trimester (0-3m)	50.4	61.2	64.5	64.3	20.9	12.4	132
Second trimester (4-6m)	69.6	76.7	59.2	69.8	19.1	15.7	388
Third trimester (7-9+m)	79.1	84.1	57.5	77.8	26.2	21.1	432
Postpartum (5-9 weeks)	83.9	83.1	58.9	75.6	29.4	21.6	196
Total	**73.4**	**78.8**	**59.1**	**73.2**	**23.7**	**18.4**	**1,149**

Note: Row percentages presented.

Table 19. Content of ANC - postpartum family planning counseling (ANC recipients only)

Percent distribution of ANC recipients who received family planning counseling at ANC by the time of interview, by background characteristics, PMA Ethiopia 2021

Background characteristics	Percent	Number of women
Age		
15-19	4.8	136
20-24	5.7	305
25-29	12.5	351
30-34	10.9	214
35-39	4.3	107
40-49	12.6	37
Education		
Never attended	7.9	313
Primary	9.0	523
Secondary	9.4	187
More than secondary	8.7	126
Parity		
0	4.1	261
1-2	10.1	493
3-4	9.8	236
5+	10.4	159
Region		
Amhara	7.6	258
Oromia	7.2	631
SNNP	16.0	197
Addis	7.0	64
Residence		
Rural	10.1	785
Urban	5.9	364
Wealth quintile		
Lowest	10.5	179
Lower	7.9	177
Middle	8.6	222
Higher	10.8	274
Highest	6.4	298
Gestational age		
0-3 months	6.0	132
4 months	10.8	91
5 months	3.2	147
6 months	5.5	149
7 months	9.7	159
8 months	8.2	157
9+ months	11.8	115
Postpartum (5-9 weeks)	14.3	196
Trimester		
First trimester (0-3m)	6.0	132
Second trimester (4-6m)	5.9	388
Third trimester (7-9+m)	9.7	432
Postpartum (5-9 weeks)	14.3	196
Total	**8.8**	**1,149**

Note: Row percentages presented.

Table 20. Content of ANC - HIV and Syphilis testing (ANC recipients only)

Percent distribution of ANC recipients who received HIV and Syphilis testing, test results, and test counseling at ANC, by background characteristics, PMA Ethiopia 2021

Background characteristics	HIV testing	HIV result	HIV counseling	Syphilis testing	Syphilis result	Syphilis counseling	Number of women
Age							
15-19	39.6	24	24.6	14.2	9.8	10.8	136
20-24	53.7	38.8	37.0	15.6	13.8	12.3	305
25-29	60.4	47.2	42.2	19.4	15.5	14.7	351
30-34	52.6	38.8	37.9	14.5	11.3	13.0	214
35-39	52.8	41.4	30.9	14.7	12.2	11.3	107
40-49	68.7	45.7	34.3	20.7	8.5	9.0	37
Education							
Never attended	39.6	30.8	23.7	9.7	7.4	8.1	313
Primary	51.2	37.1	34.8	17.6	14.4	13.7	523
Secondary	69.1	54.2	49.2	19.8	15.4	15.7	187
More than secondary	81.7	54.6	57.9	23.8	17.8	16.1	126
Parity							
0	58.8	40.1	41.2	20.5	15.6	13.9	261
1-2	59.0	43.4	41.9	16.9	14.6	14.7	493
3-4	44.2	36.2	27.8	12.4	9.5	8.8	236
5+	47.1	35.6	25.7	14.6	9.3	10.9	159
Region							
Amhara	70.5	57.6	45.8	21.6	19.0	16.7	258
Oromia	46.1	31.4	33.4	15.4	11.8	11.8	631
SNNP	46.5	36.6	22.4	8.8	6.6	6.3	197
Addis	93.3	65.5	74.4	30.0	21.1	26.6	64
Residence							
Rural	41.3	29.3	26.3	12.8	9.8	10.0	785
Urban	82.3	63.4	58.9	24.4	20.1	18.9	364
Wealth quintile							
Lowest	27.9	18.1	15.7	8.7	5.5	6.5	179
Lower	43.5	33.5	28.1	11.4	6.8	7.8	177
Middle	38.2	27.6	21.2	10.3	9.1	8.5	222
Higher	57.9	43.1	40.7	21.9	18.2	17.8	274
Highest	85.2	63.7	61.9	23.8	19.5	18.1	298
Gestational age							
0-3 months	42.2	28.5	29.9	11.9	10.3	11.4	132
4 months	57.0	45.6	40.3	17.2	14.2	14.5	91
5 months	42.7	32.6	35.0	16.0	12.5	12.4	147
6 months	55.1	39.8	35.7	15.3	9.6	8.5	149
7 months	60.0	42.8	37.0	18.9	16.0	15.2	159
8 months	58.7	45.6	40.9	16.8	12.0	11.6	157
9+ months	60.4	45.5	38.7	24.6	22.6	21.2	115
Postpartum (5-9 weeks)	57.6	41.6	36.5	13.5	10.4	10.5	196
Trimester							
First trimester (0-3m)	42.2	28.5	29.9	11.9	10.3	11.4	132
Second trimester (4-6m)	50.8	38.4	36.5	16	11.8	11.4	388
Third trimester (7-9+m)	59.7	44.5	38.8	19.6	16.3	15.5	432
Postpartum (5-9 weeks)	57.6	41.6	36.5	13.5	10.4	10.5	196
Total	**54.3**	**40.1**	**36.6**	**16.5**	**13.1**	**12.8**	**1,149**

Note: Row percentages presented.