



# Assessment of Service Utilization of Mother to Child Transmission of HIV among Pregnant Mothers Attending ANC Clinic in Assosa Town

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## Abstract

**Background:** Mother-to-child transmission [MTCT] of human immune virus [HIV] refers to the transmission of HIV from an HIV positive woman to her child during pregnancy, labor, delivery or breastfeeding. Globally, an estimated 36.7 million [30.8-42.9 million] people were living with HIV in 2016, of which 17.8 million [15.4-20.3 million] were women and 2.1 million [1.7-2.6 million] children under 15 years of age.

**Method:** Facility based cross-sectional study was conducted in Assosa Hospital ANC clinic from February 15, 2011 to April 15, 2011. ANC attending pregnant women were interviewed and the result was presented by tables, graphs and descriptive methods.

**Results:** A total of 312 pregnant women attending antenatal care in Assosa General Hospital were approached and participated in the data collection interviews. They were between 15 to 46 years and above. 170 [54.5%] fall in the age range between 20 - 35 years. As to their occupation 84 [26.9%] were house wives, 127 [40.7%] were government employee. Most of them 237 [76%] were unmarried [single]. Only 45 [14.4%] of pregnant mothers were aware of the interventions that can prevent MTCT of HIV and 125 [40.1%] were not aware.

**Conclusion:** This study revealed that PMTCT of HIV service utilization is better among ANC attendees in Assosa General Hospital. Awareness rising on intervention ways of PMTCT services for pregnant mothers should be done strongly. Male partners' HIV counseling and testing during mothers pregnancy were reported to be low. There were different factors that might hinder the effective utilization of PMTCT services and all these factors have implications in limiting the PMTCT service utilization. Thus efforts are needed to address barriers that the pregnant women may face in accessing and using PMTCT services. Starting time of ANC by some mothers was late at 2nd and 3rd Trimesters.

## Introduction

Mother-to-child transmission [MTCT] of human immune virus [HIV] refers to the transmission of HIV from an HIV positive woman to her child during pregnancy, labor, delivery or breastfeeding. Globally, an estimated 36.7 million [30.8-42.9 million] people were living with HIV in 2016, of which 17.8 million [15.4-20.3 million] were women and 2.1 million [1.7-2.6 million] children under 15 years of age. An estimated 1.0 million [830,000-1.2 million] AIDS related deaths occurred globally in 2016, of which 120,000 [79,000-160,000] were children under 15 years of age. The burden of the epidemic continues to vary considerably among regions with 25.6 million people living with HIV in 2016 living in Africa alone, which accounts for nearly 70% of the overall global burden [1]. The vast majority of this number occurring in Sub-Saharan Africa, low- and middle- income countries [2].

According to the Federal HIV/AIDS Prevention and Control Office [FHAPCO], 741,478 people are living with HIV, with 16,865 AIDS related deaths in Ethiopia in the year 2015 [3]. The pediatric HIV population in Ethiopia are mostly those vertically infected in earlier years when MTCT rates were high but the coverage and effectiveness of PMTCT in the country was low [3,4]. Mother-to-child HIV transmission [MTCT] accounts for the vast majority of more than 700,000 estimated new HIV infections in children worldwide annually [4]. In 2015, there were roughly 2.1 million new HIV infections, 150,000 of which were among children most of these children live in sub-Saharan Africa [4,5].

In the absence of prevention of mother-to-child transmission [PMTCT] services, 30 to 40% of pregnant women with HIV will pass the disease to their infants during pregnancy, delivery, or breastfeeding [5]. Effective interventions of PMTCT can reduce the risk to below 5%, and effective PMTCT programmer require women and their infants to receive a cascade of interventions including uptake of antenatal services and HIV testing during pregnancy, use of antiretroviral treatment [ART], safe childbirth practices and appropriate infant feeding, uptake of infant HIV testing and other post-natal healthcare services [5,6].

Despite there has been an increase in the number of health facilities providing prevention of mother-to-child transmission [PMTCT] services in Ethiopia, the proportion of women who receive HIV test during pregnancy as well as HIV-positive pregnant women who receive antiretroviral drugs [ARVs] for PMTCT remains low [6].

Most recently, a revised strategy for accelerated implementation of the PMTCT programmer was endorsed, with

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an “opt out” strategy recommended by international PMTCT guidelines. In the opt-out” strategy, HIV counseling and testing is offered to all women during pregnancy, delivery and postnatal [7]. Despite remarkable achievements on HIV prevention and control, there is a wide concern all over the country and efforts for PMTCT have been lagging behind [7-10].

## Objectives of the Study

### General objective

To assess service utilization of mother to child transmission of HIV among pregnant mothers attending ANC clinic in Assosa Town

#### Specific objectives:

1. To determine service utilization of mother to child transmission of HIV
2. To identify service utilization of prevention of mother to child transmission of HIV/AIDS.
3. To determine knowledge, perception and attitude towards HIV/PMTCT

## Methodology

### Study area

Benishangul Gumuz regional state is one of the nine regional states of federal democratic republic of Ethiopia. Assosa, the capital of the region, is located in the North western part of the country about 661 kms away from Addis Ababa. As per the 2007 census, the projected total population of the region is 936,549. The estimated total population of Assosa town is 64,172, of which 32,279 [50.3%] are female and 31,893[49.7%] are male. The town constitutes 10 kebeles. Regarding the health facilities there is one General Hospitals, one Health center and different privet health facilities that are providing health care services for the community. The potential Health service coverage of the town is 85%. Assosa Hospital is the regional Hospital found in the capital city of Benishangul Gumuz regional state. It is the Government owned Hospital with Medical Director, manager, Matron and other specialized staff. The Hospital has four [10-14] wards, made up of Medical, Surgical, Obstetrics and Gynecology and Pediatrics wards. There is also HIV testing and counseling clinic serving the ANC visiting mothers and other out patients. There are a total of 100 beds in the whole wards of the Hospital.

### Study design and period

Facility based cross-sectional study was conducted in Assosa Hospital ANC clinic from February 15, 2011 to April 14

### Source population

The source population was pregnant women living in Assosa town.

### Study population

The study populations were all pregnant women attending ANC in Assosa General Hospital during the study period.

### Inclusion criteria

All pregnant women attending ANC services at Assosa General Hospital

### Exclusion criteria

Pregnant women with severe illness and unable to participate, and those who have been suffering from known psychiatric problem were not participated in the study.

### Sample size determination

The sample size determined based on single population proportion formula with the following assumption.

By taking the value of  $p=0.5$ , Confidence level= $95\%$  [ $Z=1.96$ ], and  $d=0.05$

Sample size determination formula

$$n = \frac{Z^2 p [1-p]}{d^2} = \frac{[1.96]^2 \times 0.5 [1-0.5]}{[0.05]^2}$$
$$= \frac{3.84 \times 0.5 [0.5]}{0.0025} = \frac{3.84 \times 0.25}{0.0025} = \frac{0.96}{0.0025} = 38$$

=**1651**- total pregnant women of Assosa town resident [2017 health bureau report]

By population correction formula

$$n = \frac{n}{1 + \left[ \frac{n}{N} \right]}$$

Which  $n=384$ ,  $N=1651$

$$\text{Therefore, } = \frac{384}{1 + \left[ \frac{384}{1651} \right]} = \frac{384}{1.23} = 312$$

Therefore, our sample size is 312

### Sampling technique

Simple random sampling method was used in the study.

### Variables

#### Independent variables:

- Availability of health institutions
- Accessibility of health facility
- Health education service

**Dependent variables:** Service utilization of PMTCT.

### Operational definition of terms

PMTCT—it is mechanism to prevent the child not to be infected by HIV/AIDS by screening the pregnant mother blood for



HIV during ANC visit, labor and delivery and starting Niverapine prophylaxis immediately after birth for infants born from mothers who are HIV positive

Option B<sup>+</sup>-ART regimen which given to positive pregnant women as soon as detected as positive for HIV test regardless of CD4 count and WHO clinical staging[TDF/3TC/EFV].

Counseling—supporting someone minds through discussion to adhere to ART treatment.

Adherence to treatment—close follows up of ART treatment according to time and dose.

Partner testing—it is testing of both husband and wife for HIV.

### Data collection and measurement

Data was collected by interviewing clients using structured questionnaire prepared in English and translated to Amharic. This was again translated back to English for its consistency and to make it simple during entry and analysis. Matching was made on the exact fitness of the two languages. The data was collected by a face to face interview.

### Data quality control and assurance

The questionnaires were pretested before the actual study from the targeted sample respondents. All the questionnaires were checked daily for completeness, clarity and its consistency and the necessary corrections were made on a daily basis.

### Data processing and analysis

After collecting data, it was important to check the questionnaires whether they were completely answered or not, and then processing was performed by preparing and using tally sheet and calculating the frequency, the total and percentage. Finally the data were presented using tables, figures, graphs and text forms.

### Ethical consideration

Ethical clearance letter was taken from Assosa city Administration and Participants were informed about the objectives of the study and they were assured of the confidentiality of the data collected. Informed consent were obtained from all participants prior to data collection.

### Challenges of the study

- Shortage of sufficient references
- Weak internet connection in Assosa city

## Results

### Socioeconomic characteristics

A total of 312 pregnant women attending antenatal care in Assosa General Hospital were approached and participated in the data collection interviews. They were between 15 to 46 years and above. More than half of them 170 [54.5%] fall in the age range between 20 - 35 years. As to their occupation 84 [26.9%]

were house wives, 127[40.7%] were government employee, 73[23.4%] were jobless [15-19]. Their level of education was found that 164[52.5%] illiterate, 23[7.3%] primary education, 65[21%] Diploma and 45[14.4%] Degree graduates. Religion wise 128[41%] of the women were Orthodox, 107[34.3%] Muslim, 65[20.8%] Protestant and 12[3.9%] Catholic. Most of the women 237[76%] were unmarried [single], 46[14.7%] married, 19[6.1%] divorced and 10[3.2%] were widowed (Table 1).

### Knowledge, perception and Attitude towards HIV/ PMTCT

The result showed that 290 [93%] of the women heard about PMTCT and only 22 [7%] did not hear about PMTCT. Most of them, 120 [41.4%] heard from Health facility and the others heard from friends, relatives, radio, TV, school and reading magazines. Most of them have the understanding of HIV transmission from mother to baby through different ways. In this regard 243 [77.9%] knew HIV transmission from Mother to Baby during pregnancy, 240[76.9%] during delivery/labor and 221 [70.8%] by breastfeeding. 221 [70.8%] of them knew that every pregnant woman should be screened for HIV, 47 [15.1%] responded should not be screened and 44 [14.4%] they do not know whether a pregnant woman should be screened for HIV or not. Concerning the awareness of pregnant mothers on the interventions that can

**Table 1:** Socioeconomic Characteristics.

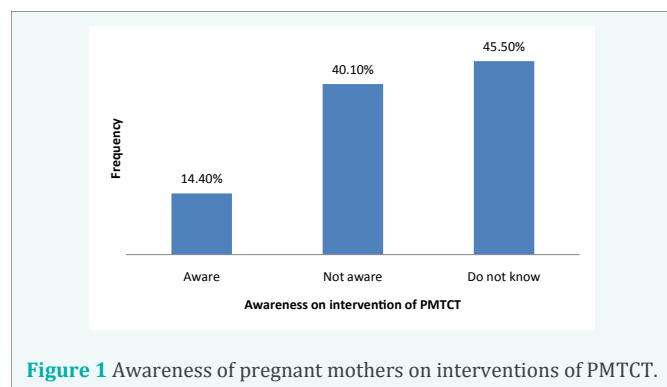
Variables	Item	No	%
Age group	15- 20	32	10.3
	20 – 35	170	54.5
	36 - 45	82	26.3
	46 & above	28	8.9
Occupation	House wife	84	26.9
	Gov employee	127	40.7
	Daily laborer	6	2
	Job less	73	23.4
	Others	22	7
	Illiterate	164	52.5
Level of Education	Primary	23	7.3
	Secondary	9	2.8
	11-12 grade	6	2
	Diploma	65	21
	Degree	45	14.4
Religion	Orthodox	128	41
	Muslim	107	34.3
	Protestant	65	20.8
	Catholic	12	3.9
Marital status	Single	237	76
	Married	46	14.7
	Divorced	19	6.1
	Widowed	10	3.2



prevent MTCT of HIV only 45 [14.4%] of them were aware of it but 125 [40.1%] were not aware and 142 [45.5%] do not know about it at all (Figure 1). Those who were aware of the interventions responded that the intervention mechanisms are Implementing Health workers advice, not sharing sharp materials; follow up on every 3 months, Exclusive breast feeding, Drug utilization and Delivery at Health facility (Table 2).

### Barriers to utilization PMTCT service

The whole participants of the survey were asked for their continuation on utilization of PMTCT services and only 35 [11.2%] replied to continue, 120[38.5%] replied not to continue and the remaining 157[50.3%] do not know whether to continue or not. 274[87.8%] of the respondents need permission from their spouse to do HCT and only very few 38[12.2%] do need permission from their spouses. Most of them 300[96.2%] did disclose their test result to their partner and 12[3.8%] did not disclose since they were afraid of being abandoned/ divorced by husband and family, physical abuse by husband and separation



from their children. They have also mentioned that far health facility, fear of confidentiality, lack of knowledge, fear of stigma and fear of coming to Health institution is the factors that limit utilization of PMTCT services. Their relatives reaction based on knowing their HIV status was responded that being thrown out of home by 42[13.5%], physical violence/abuse by 24[7.7%] and care for them by 246[78.8%] of the respondents [20-25]. Mothers were asked whether cost of transportation is an issue or not and 130[41.7%] replied that it is an issue for them and for 182[58.3%] it is not an issue. Assosa Hospital, where they are attending PMTCT services, is easily accessible for 259[83%] of the mothers and not easily accessible for 53[17%] of the respondents. All the study participants responded that they have received one to one type of pretest and posttest counseling and 231[74%] of the found the counseling good and the remaining 81[26%] found it poor as they respond it. Follow up counseling was done for 283[90.7%] of them and not done for 29[9.3%]. Couple counseling was done for 85[27.2%] of the mothers but for large number of the couples 227[72.8%] counseling was not done [26]. This is because 48 mothers were afraid of disclosing to partner, 142 were not encouraged to do it and 37 were not married/ have no couple (Figure 2).

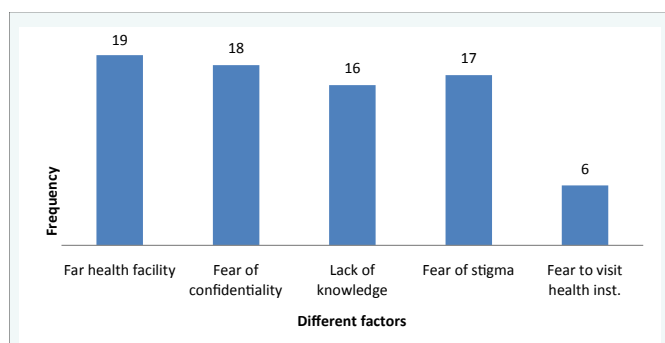
Regarding their starting time of ANC 175[56.1%] mothers started at their 1<sup>st</sup> trimester, 91[29.2%] at 2<sup>nd</sup> trimester and 46[14.7%] at 3<sup>rd</sup> Trimester and all of them intend to give birth at Health facility/Assosa Hospital. All the participants are not interested in the attitude of the health workers as they responded it discouraging to continue accessing PMTCT Services (Figure 3).

### Discussion

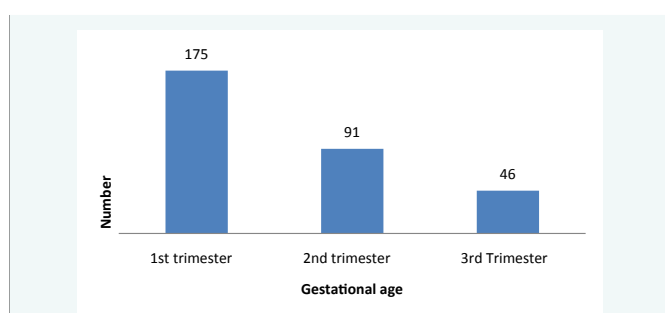
According to this study findings most of the respondents, 93%, have the knowledge of PMTCT and they heard about PMTCT from

**Table 2:** Barriers to utilization of PMTCT services.

Variables	Response	Frequency	percentage
Attitude of health workers discouraging to continue PMTCT Services	Yes	312	100
	No	0	0
Satisfaction with the quality of current PMTCT services you are receiving?	Yes	227	72.8
	No	3	0.9
	Don't know	82	26.3
In your own opinion, what do you think prevents other HIV Pregnant mothers from accessing service	Distance from health facility	19	6.0
	Fear of confidentiality	18	5.8
	Lack of knowledge	16	5.1
	Fear of stigma	17	5.4
	Fear to come to Health facility	6	2.0
	Not volunteer for counseling & testing	57	18.3
	Fear of exposing self	45	14.4
	Fear of marriage separation if the problem is found in one self	44	14.2
	Inadequate nutrition during pregnancy	55	17.6
	Shortage of Health workers	17	5.4
	Lack of counseling on transmission of the disease	18	5.8



**Figure 2** Factors preventing pregnant mothers from accessing PMTCT service.



**Figure 3** Gestational age at which ANC is started.

different sources such as Health facility, friends, relatives, radio, TV, school and reading magazines. This finding is supported by EDHS 2016, that indicated increasing general knowledge about prevention of HIV from mother to child and reducing the risk of transmission using antiretroviral drugs are critical in reducing mother-to-child transmission [PMTCT], [27]. This finding is also similar with the study conducted in Addis Ababa, Tikur Anbessa and Zewuditu memorial Hospitals that indicated 90% of the mothers knew that HIV can be transmitted from an infected mother to her child. This high level of knowledge may be attributed to various health education programs conducted both at health facility and community levels and a broadcast through mass media in this urban setting [28]. Most of the mothers know the mechanisms of HIV transmission from mother to baby through different ways such as during pregnancy, during delivery/labor and by breast feeding. The awareness of pregnant mothers on the interventions that can prevent MTCT of HIV 45 [14.4%] of them were aware but 125 [40.1%] were not aware and 142 [45.5%] did not know about it at all. Those who were aware of the interventions are less and education on the issue is very essential so that mothers become aware of it and utilize the service more appropriately. Though PMTCT service is known to reduce the transmission of HIV from mother to child, its use has been limited because of various reasons/barriers. The present study had revealed different factors that might hinder the success of the PMTCT services. 274 (87.8%) of the respondents need permission from their spouse to do HCT. Similar to the present findings study done in Addis Ababa indicated that percentage of

partners tested for HIV decreased from 6.4% in 2004 to 5.8% in 2009 [29].

There are mothers who do not disclose their test result to their partner since they were afraid of being abandoned/ divorced by husband and family, physical abuse by husband and separation from their children. They have also mentioned that far health facility, fear of confidentiality, lack of knowledge, fear of stigma and fear of coming to Health institution are the factors that limit utilization of PMTCT services. For 130[41.7%] of the mothers cost of transportation is an issue to go to health facility. 81 [26%] of the respondents explained/found the counseling poor. Couple counseling was not done for large number 227[72.8%] of the couples because the mothers are afraid of disclosing to partners and not encouraged to do it. All these factors coming together play great role in limiting the PMTCT service utilization. Starting time of ANC by some mothers was late at 2<sup>nd</sup> and 3<sup>rd</sup> Trimesters.

## Conclusion

In conclusion, this study revealed that PMTCT of HIV service utilization is better among ANC attendees in Assosa General Hospital. Awareness rising on intervention ways of PMTCT services for pregnant mothers should be done strongly. Male partners' HIV counseling and testing during mothers pregnancy were reported to be low. There were different conditions that might hinder the effective utilization of PMTCT services and all these conditions have implications in limiting the PMTCT service utilization. Thus efforts are needed to address barriers that the pregnant women may face in accessing and using PMTCT services. Starting time of ANC by some mothers was late at 2<sup>nd</sup> and 3<sup>rd</sup> Trimesters.

## Recommendations

The awareness of pregnant mothers on the interventions that can prevent MTCT of HIV was very low [14.4%], hence awareness rising on intervention ways of PMTCT services for pregnant mothers should be done by concerned bodies.

The decision to involve male partners in the maternity services plays an important role in the utilization of ANC/ PMTCT services. The strategy to inform the male partners about PMTCT services and inviting them to ANC clinic with their female partners for couple counseling has to be encouraged and partner's involvement has to be strengthened.

Efforts are needed to address barriers that the pregnant women may face in accessing and using PMTCT services.

Similar study has to be conducted covering the large area of Benishangul Gumuz regional state to get a better practice.

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## References

1. WHO (2003c). Strategic Approaches to the Prevention of HIV Infection in Infants. WHO (2004). "UNAIDS/WHO Policy Statement on HIV Testing." WHO (2006).
2. Antiretroviral drugs for treating pregnant women and preceding HIV infections in infants: Towards universal access recommendation for a public health approach.
3. United Nations Programme on HIV/AIDS. Geneva: United Nations Programme on HIV/AIDS; 2013. (Global report: UNAIDS report on the global AIDS epidemic 2013).
4. USAIDS Sub-Saharan Africa regional fact sheet. 2012.
5. World Health Organization. Mother to Child Transmission of HIV. Geneva: World Health Organization; 2011.
6. Volmink JA. HIV: Mother-to-Child Transmission. London: BMJ Publishing Group. 2008.
7. Central Statistical Agency [Ethiopia] ICF International. Ethiopia Demographic and Health Survey 2011. Addis Ababa: Central Statistical Agency. 2012.
8. Federal Ministry of Health: health and health-related indicators report for. Addis Ababa: Federal Ministry of Health; 2009.
9. Deressa W, Seme A, Asefa A, Teshome G, Enqusellassie F. Utilization of PMTCT service and associated factors among pregnant women attending ANC clinic in A.A, Ethiopia. *BMC Pregnancy Childbirth*. 2014.
10. Lynne M, Munderi M, Mofenson P. Safety on anti-retroviral prophylaxis of perinatal transmission of HIV infected pregnant women and their children. *J Acquir Immune Defic Syndr*. 2002; 30: 200-215.
11. Abiodun OM, Ijaiya AM, Aboyeji AP. Awareness and knowledge of mother to child transmission of HIV among pregnant women. *J Natl Med Assoc*. 2007; 99: 758-763.
12. Orne-Gliemann J, Mukotekwa T, Perez F. Improved knowledge and practices among end-users of mother-to-child transmission of HIV prevention services in rural Zimbabwe. *Trop Med Int Health*. 2006; 11: 341-349.
13. ICF International. HIV/AIDS in Ethiopia: data from the 2011 Ethiopian demographic health survey. Addis Ababa: ICF International; 2012.
14. Central Statistics Authority 2007 population and housing census in Ethiopia: administrative report. Addis Ababa: Central Statistics Authority; 2012.
15. MOH. Guidelines for HIV counseling and testing in Ethiopia. Addis Ababa: Federal HIV/AIDS Prevention and Control Office; 2007.
16. Malaju MT, Alene GD. Assessment of utilization of provider-initiated HIV testing and counselling as an intervention for prevention of mother to child transmission of HIV and associated factors among pregnant women in Gondar town, North West Ethiopia. *BMC Public Health*. 2012; 12: 226.
17. Haddis M, Jerene D. Awareness of antenatal care clients on mother-to-child-transmission (MTCT) of HIV infection and its prevention in Arba Minch. *Ethiopian J Health Dev*. 2006; 20.
18. Prevention of mother to child transmission of HIV/AIDS: Service utilization and associated factors among selected public health facilities in Ethiopia, *Academic Journals*. 2017; 8: 1-13.
19. Hasen T. Acceptability of provider initiated HIV counseling and testing in pregnant mothers attending ANC at Nekemte Town government health facilities. *Sci Technol Arts Res J*. 2012; 1: 24-30.
20. Boateng D, Kwapong GD, Agyei-Baffour P. Knowledge, perception about antiretroviral therapy (ART) and prevention of mother-to-child transmission (PMTCT) and adherence to ART among HIV positive women in the Ashanti Region, Ghana: a cross-sectional study. *BMC Women's Health*. 2013; 13.
21. Lamina MA. A survey of awareness and knowledge of mother-to-child transmission of HIV in pregnant women attending Olabisi Onabanjo University Teaching Hospital, Sagamu, Nigeria. *Open J Obstet Gynecol*. 2012; 2: 98-105.
22. Malaju MT, Alene GD. Determinant factors of pregnant mothers' knowledge on mother to child transmission of HIV and its prevention in Gondar town, North West Ethiopia. *BMC Pregnancy Childbirth*. 2012; 12: 73.
23. Wangwe PJ, Nyasinde M, Charles DS. Counselling at primary health facilities and level of knowledge of antenatal attendees and their attitude on prevention of mother to child transmission of HIV in Dar-es salaam, Tanzania. *Afr Health Sci*. 2013; 13: 914-919.
24. Useh U, Keikepe A, Montshiwagae B, Mothoagae R, Senna D. Knowledge and attitude of pregnant women towards mother to child transmission (MTCT) of HIV and AIDS in a local clinic in Mafikeng, South Africa. *Ethno Med*. 2013; 7: 163-169.
25. Solomon J, Tilahun T. Knowledge and attitude towards mother to child transmission of HIV and its prevention among postnatal mothers in Tikur Anbessa and Zewditu Memorial Hospitals Addis Ababa. *Ethiop J Health Dev*. 2005; 19: 211-218.
26. <http://www.academicjournals.org/MPR>
27. Tesfaye Birhane T, Assefa GT, Addis KA, Fekadu AD. Knowledge of pregnant women on mother-to-child transmission of HIV in Meket District, Northeast Ethiopia. *J Pregnancy*. 2015.
28. Deressa W, Seme A, Asefa A, Teshome G, Enqusellassie F. Utilization of PMTCT services and associated factors among pregnant women attending Antenatal clinics in Addis Ababa, Ethiopia. *BMC Pregnancy Childbirth*. 2014; 14: 328.
29. Ethiopia Demographic Health survey. 2016.



## Annexes

### Questionnaire

#### I. Socio-demographic characteristics

1. Age

15--20 ----- 20--35 ----- 35--45 ----- >45 -----

2. Occupation

House wife ----- Governmental employee ----- Daily laborers -----

Commercial sex worker ----- Jobless ----- Others -----

3. Highest level of education Illiterate----- Primary education ----- Secondary education ----- Grade 11-12-----

- Diploma----- Degree-----

4. Religion

Orthodox ----- Muslim ----- Protestant ----- Others -----

5. Marital status

Married ----- Single----- Divorced ----- Widowed -----Others-----

#### Knowledge, Perceptions and Attitudes towards HIV/AIDS/PMTCT

1. Have you ever heard about PMTCT before?

Yes..... No.....

2. Where did you hear about it? From: (Do not read the alternatives. More than one response is possible)

Friends ----- Relatives ----- Health institutions ----- Radio ----- Television ----- Magazines -----

---- Others (specify)-----

3. Can HIV be transmitted from Mother to Baby during pregnancy?

Yes -----No ----- Don't know -----

4. Can HIV be transmitted from Mother to Baby during delivery?

Yes -----No ----- Don't know -----

5. Can HIV be transmitted from Mother to Baby during breastfeeding

Yes -----No ----- Don't know -----

6. Do you think that every pregnant woman should be screened for HIV?

Yes -----No ----- Don't know -----

7. Are you aware of interventions that can prevent MTCT of HIV

Yes -----No ----- Don't know -----

If yes, what are they? -----

#### Barriers to utilization of PMTCT services

8. Are you going to continue utilization of PMTCT Services

Yes -----No ----- Don't know -----

9. Do you need permission from your spouse/partner to do HCT Yes -----No -----

10. Did you disclose your result to your spouse Yes -----No -----

If no, why



Afraid of being abandoned/ divorced by husband and family -----

Physically abused by husband-----Separated from the children----- Others-----

11. What will be your relatives reaction if they know your HIV status

I will be thrown out of home----- I will be physically violated/ abused----- they will start to care for me  
-----others-----

12. Do you think that cost of transportation will be an issue Yes ----- No-----

13. Is this hospital easily accessible to you? Yes----- No-----

14. Which type of pretest counseling did you receive:

Group counseling----- One-on-one ----- Non-----

15. Which type of Post test counseling did you receive:

Group counseling----- One-on-one ----- Non-----

16. How will you rate the counseling you received

Good----- Poor -----Unacceptable-----

17. Was follow up counseling done Yes -----No-----

18 Was couple counseling done: Yes -----No-----

If no why:

Afraid of disclosing to partner----- partner refused to come----- You were not encouraged to do it----- it was  
not necessary----- Not married-----

19. At what month in pregnancy did you register for ANC

First trimester----- Second trimester----- Third Trimester-----

20. Where do you intend to give birth this pregnancy

In this hospital----- In another hospital offering PMTCT----- Deliver at home under supervision of relatives-----

21. Does the attitude of health workers discourage you to continue accessing PMTCT Services

Yes----- No -----Don't know-----

If yes, what are the attitudes? -----  
-----

22. Are you satisfied with the quality of PMTCT services you are currently receiving?

Yes----- No -----Don't know-----

If no, what do you think needs to be done to improve

services-----

23. In your own opinion, what do you think prevents other HIV Pregnant mothers from accessing service

24. Any additional information you would like to mention with respect to underutilization of PMTCT service by pregnant women.

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