WOLKITE UNIVERSITY COLLEGE OF HEALTH SCIENCE AND MEDICENE

DEPARTMENT OF PUBLIC HEALTH

ASSESMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV AMONG PREGNANT WOMEN IN WORABE HOSPITAL

BY: -AYOUB AWOLE

- MIDEGA AHMED

- MESELECH GIRMA

Submitted to Advisors: TIGIST GEBREMARIAM (BSC)

GIRMA ALEMAYEHU (MSC)

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ABSTRACT

BACKROUND: Human Immune-deficiency Virus or Acquired Human Immune- Deficiency syndrome (HIV/AIDS) is currently a major public health problem in Ethiopia and Mother to Child Transmission (MTCT) is by far the largest source of HIV infection in children below the age of 15 years. Moreover, there are nearly 1800 and 1400 children are new HIV infected and die per day in the world respectively. About 90% of those are occurring in developing countries. Hence, this study tried to assess the knowledge, attitude, and practice with prevention of mother to child transmission of HIV AIDS among pregnant mothers.

OBJECTIVE: This study was conducted to assess knowledge, attitude and practice towards prevention of MTCT among pregnant women who visit Worabe Comprehensive Specialized hospital.

METHOD: Institution based descriptive cross-sectional study was conducted to assess Knowledge, Attitude and Practice (KAP) towards Prevention of Mother to Child Transmission (PMTCT) of HIV among pregnant women who visit Worabe hospital from Jul, 2021 to September, 2021. A systematic random sampling technique and a semi structured, pre-tested questionnaire was used for data collection. Data was analyzed using SPSS software (version 25) and finally presented with table and graphs.

RESULT*:* The study assessed the knowledge on PMTCT of HIV/AIDS of the pregnant mothers attending the ANC follow up at Worabe Comprehensive Specialized hospital. There was 100% respond rate. Among the respondents, three hundred twelve (80.3%) informed about PMTCT of HIV all of the respondents heard about HIV/AIDS. Among these, 90.1% of the pregnant mothers knew about transmission of HIV from infected mother to her child and among the study subjects, three hundred (77.4%) had positive attitude toward PMTCT of HIV. Only about half of the respondents new that ART given for sero positive pregnant woman could reduce the risk of transmission. Most of the respondents were tested for HIV and 70.5% of pregnant woman were encouraged breast feeding of HIV positive woman. Among the study subjects two hundred ninety four (75.7%) practiced good.

CONCLUSSION: Most of the respondents knew that mother-to-child transmission of HIV during pregnancy, delivery and breast feeding. And majority of them have good attitude towards it. Only about half of the respondents knew that antiretroviral drugs given for sero-positive pregnant mothers could reduce the risk of HIV transmission.

All most all of mothers have been tested for HIV/AIDS. All of the respondents agree with the term HIV positive pregnant woman must be delivered with skilled person.

RECOMMENDATION: The MOH, Southern Region health bureau, Midwifes, community NGO and other concerned bodies are recommended to address all the information and resources to those target group of the study. The health professionals working at ANC are recommended to address all component of PMTCT through giving health information and initiation of ARVDs for clients who are found to be HIV positive and media have great impact on knowledge so they must continuously give information and update community knowledge on PMTCT. The MCH of Worabe comprehensive specialized hospital should encourage pregnant women attending ANC to have an HIV test for PMTCT of HIV and should encourage EBF up to six month since it is one of important means of PMTCT. Awareness creation on male partners and couple testing should be encouraged by informing its importance for PMTCT. Health institution workers are recommended to encourage HIV positive pregnant women to use safe delivery practice.

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LIST OF ACRONYMS

AIDS = Acquired Human Immune- Deficiency syndrome

ANC = Antenatal Care

ART = Anti-Retroviral Therapy

ARV = Anti-Retroviral

ARVDs = Anti-Retroviral Drugs

BF = Breast Feeding

EBF = Exclusive Breast Feeding

HAART = Highly Active Anti-Retroviral Therapy

HIV = Human Immune-deficiency Virus

KAP = Knowledge, Attitude and Practice

MTCT = Mother to Child Transmission

PMTCT = Prevention of Mother to Child Transmission

VCT = Voluntary Counseling and Testing

CHAPTER ONE

1. INTRODUCTION

1.1 BACKGROUND INFORMATION

The human immune deficiency virus (HIV) infection which causes the acquired immune deficiency syndrome (AIDS) continuous to be a serious global problem. According to UNAIDS, an estimate 34 million people worldwide are infected with HIV, 52% of who are women and more than two-thirds (68%) of the global HIV population live in the sub-Sahara African (SSA). Of these, 3.4 million are children under 15 years of age, 90% of whom live in SSA (WHO/UNAIDS/UNICEF, Worldwide, there are about 7,400 new infections and 5,500 HIV-related deaths daily. Over one thousand children below 15 years of age get infected with HIV daily, 90% of who live in SSA, where HIV has its greatest toll UNAIDS,).

Similarly, the virus continued to spread at a rapid pace, sparing no part of Ethiopia unaffected by the virus. In 2005 alone 90,000 adults and 25,000 children died of AIDS. This makes a cumulative total of 90,000 deaths leaving 539,000 orphans by the end of 2005.

The main route of HIV transmission includes sexual contact, blood contact and MTCT.

PMTCT aims at reducing the risk of a mother infecting her child with HIV and starts with primary prevention of the infection in women of childbearing age those are the main vehicles of pediatric HIV transmission.

Modern PMTCT strategies include testing for HIV during pregnancy, modified obstetric practices, preventive anti-retroviral (ARV) drugs, and modified infant feeding practices. These strategies, which are still limited both in scope and reach in most of Sub-Saharan Africa, where ironically, the heaviest burden of maternal HIV infection and MTCT exist, have the potential of reducing the MTCT risk down to only 2 to 5 percent.

The World Health Organization recommends lifelong highly active antiretroviral therapy (HAART) for HIV-infected women in need of treatment for their own health, which is also safe and effective in reducing MTCT or ARV prophylaxis to prevent MTCT during pregnancy, delivery and breastfeeding for HIV-infected women not in need of treatment for themselves.

In order to optimize the use of PMTCT services, the knowledge of women of child-bearing age is paramount, and potential mothers need to be aware of the risk of MTCT and the possibility of reducing it. They should also translate this knowledge into behavior change.

1.2 STATEMENT OF THE PROBLEM

The global community has committed itself to accelerate progress for the PMTCT initiative to eliminate new pediatric HIV infections by 2015 and improve maternal, newborn and child survival in the context of HIV. PMTCT advocated by UNAIDS entail [1] keeping women of reproductive age and their partners HIV-negative through reproductive health and HIV prevention services, [2] avoiding unwanted pregnancies among HIV-infected women and women at risk of HIV, through family planning and HIV testing and counseling services and [3] ensuring HIV testing of pregnant women and timely access to effective antiretroviral therapy, both for the health of HIV-infected mothers and for PMTCT, during pregnancy, delivery and breastfeeding [9]. Adherence to these practices is highly variable with better results obtained in developed countries than in the developing countries. Not surprisingly, inadequate continuum of care, magnitude of PMTCT and associated services including HIV testing and counseling and ARV prophylaxis are still very low in developing countries [10, 11]. A UNAIDS report estimated only 5% of HIV-infected women accessed PMTCT interventions in a surveillance of 30 African countries with the highest HIV prevalence [9]; a huge shortfall from the UN target of 80% by 2016.

Virtual elimination of HIV MTCT has been achieved in most industrialized countries, with declines of over 80%-90% in the number of cases of prenatally acquired HIV infection, and MTCT rates of under 2%-3% [12-14]. Moreover, MTCT, in the context of antiretroviral prophylaxis is below 1% in Europe and the USA. However, it exceeds 30% in many poorly resourced countries, with sub-Saharan Africa carrying the highest burden [15, 16].

Various factors contribute to the high burden of pediatric HIV infection in Ethiopia and other sub-Saharan African countries. These include the high prevalence of HIV infection amongst women of reproductive age, large populations of women, high birth rates, and lack of access to effective interventions aimed at preventing mother to child transmission of HIV [17].

According to Ethiopian Demographic Health Survey (EDHS) 2016 only 34% of mothers had Antenatal Care (ANC) follow up in Ethiopia [9] thus having a negative contribution on under-utilization of PMTCT services [18].

The research done in Hawassa referral Hospital showed that only about half (48.3%) of the respondents knew that antiretroviral drugs given for sero positive pregnant mothers could reduce the risk of transmission and the rest of (51.7%) not knew about PMTCT services [19]. Therefore, this study is designed to assess knowledge, attitude and practice towards PMTCT of HIV among pregnant women.

CHAPTER TWO

2. LITERATURE REVIEW AND SIGNIFICANCE OF THE STUDY

2.1 LITERATURE REVIEW

2.1.1 LITREYURE ON KNOWLEDGE OF MTCT AND PMTCT SERVICES

A survey was done in 2016 among pregnant women attending a rural ANC clinic in southern India to investigate HIV related KAP towards infant feeding practice & perceived benefit risks of HIV testing. Of the total 202 women, 189 women (94%) had heard of HIV /AIDS &60% of them relatively good knowledge regarding risk factors for HIV transmission however 48% do not know there are means to prevent HIV transmission. If women not to breast feeding her baby negative attitude expected from partners would include 84% thinking that mother is harming baby,78% she is not good mother, 74% thinking that she has HIV 66% she has unfaithful (3, 4).

In a study conducted on ANC clients of primary health centers in Nigeria, 53.1% have heard about PMTCT, 90.7% of respondents agreed on importance of knowing HIV status during pregnancy and 53.3% of respondents have heard about MTCT of HIV could be prevented by giving ART to infected mothers (5).

A study conducted in Ghana, revealed, majority of the mothers agreed that the virus could be transmitted during pregnancy (49%), delivery (91%) and breast feeding (86%). about 40% of participants indicated that MTCT could not be prevented and another 14% didn't know curtail MTCT of HIV (10). Another study in Zimbabwe, among 186women attending ANC, only 23%consented to VCT a similar result was observed in Botswana (6).

In Addis Ababa a study done at somewhere heath center 95.9% of respondents had heard about HIV/AIDS of which about 90.3% mentioned the main routes of transmission and 82.9% knew that MTCT of HIV is preventable while 49.4% did not know. Only 48.7% knew the protective

effect of prophylactic ARV drugs, 41.6% knew that abstinences from breast feeding can prevent MTCT and 5.6% knew elective cesarean section (c/s) as a preventive method. 86.6% of the mothers knew what VCT meant and 79.9% of them have positive attitude towards VCT (7).

Community based cross sectional study done on pregnant mother attending ANC in Araba Minch around 80 % of all mothers were aware of the potential transmission of HIV infection, of these 213 (55%) thought that there is 100% risk of transmission of every conception.

Out of all Mothers interviewed 424 (91%) agreed that HIV is not transmitted by mother to child physical contact and 419(86.5%) have the knowledge that HIV is transmitted through breast feeding, but the use of ARV drugs in PMTCT was not known to 386 (80%) of the mothers (8).

A study conducted in wolaita zone, more than the one third of respondents (37.6%) did not know what measures an HIV positive pregnant mother could take to avoid MTCT of HIV: 37.1% said that she could take ART 53.9 % by avoiding breast-feeding and 5.6 % mentioned safe delivery service as a means of PMTCT (10).

In Gambella town, only 4,555 of the participants did not have heard about HIV/AIDS. The commonly reported mode of transmission where unprotected sex (79.8%) and unsafe blood transmission (64.2%) and less than 1% reported that they know MTCT HIV (11).

2.1.3 LITRETURE ON ATTITUDE OF PMTCT SERVICES

In one study done in Niger, around 99% of women attending ANC were aware of HIV/AIDS, and majorities were (94.2%) aware that HIV infection can co-exist with pregnancy but only 76.9% were aware MTCT. And in one HIV/AIDS KAP study conducted on mothers, only 38.3% and 41.8% of the mothers has sufficient knowledge on MTCT AND PMTCT respectively (12).

In a study conducted in Uganda 58% of the respondents have the view that an HIV positive mother should breast feeding her baby (13).

In one study done in Niger, around 99% of women attending ANC were aware of HIV/AIDS, and majorities were (94.2%) aware that HIV infection can co-exist with pregnancy but only

76.9% were aware MTCT. And in one HIV/AIDS KAP study conducted on mothers, only 38.3% and 41.8% of the mothers has sufficient knowledge on MTCT AND PMTCT respectively (15).

In a study conducted in South Africa 98.5% of the respondents have heard about HIV/AIDS among them 90% were able to mention at least one correct route of transmission. Unsafe sexual practice was the most common mode of transmission mentioned. Most of the respondents believed that a baby can get HIV from an infected mother. Pregnancy was the most frequently mentioned route of MTCT (40%), fewer than (27%) mentioned breast feeding as a means of transmission only fewer (7%) mentioned that transmission could occur during child birth and delivery. When they were asked whether HIV positive women should breast feeding her baby more than half (68%) said NO. 52% of the respondents reported that they had introduced other milk before one month and most (82%) reported that they had stopped breast feeding exclusively before their infants were 3 months of age. (17)

2.1.4 LITRETURE ON PRACTICE OF PMTCT SERVICES

In a study conducted in Hong Kong, China among the pregnant women visiting ANC at regional hospital, 78.5% wanted to have HIV test to protect their partners, 72.8% to protect their child and 77% to know their HIV status (6).

To achieve a reduction in MTCT women need to translate their knowledge regarding MTCT and PMTCT into practice. However, cultural factors and the stigma associated with HIV and AIDS might limit this. Studies suggest that there are generally low levels of knowledge regarding PMTCT among women of child-bearing age which is detrimental to efforts to reduce the risk of MTCT. Varga (2014) found that rural South African adolescents were less likely than their urban Counter parts to successfully implement most PMTCT-related practices. HIV stigma, family decision-making and cultural norms surrounding infant feeding hampered mothers' efforts to implement practices that would decrease the risk for childhood infection. However, Becquet and Leroy (2005) found very high rates of mixed feeding among women of unknown HIV status in Abidjan, Cote d'Ivoire, which practice could increase MTCT rates.

Mbonye, et al (2015) found that there was low utilization and uptake of PMTCT services in Wakiso district in central Uganda and that most women were not empowered to make their own decisions concerning PMTCT.

2.2. SIGNIFICANCE OF THE STUDY

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The findings of this study will be valuable in designing appropriate PMTCT strategies and it can also be used as a baseline data for policy makers and other concerned bodies working on PMTCT to direct resources and specific interventions. An assessment of attitudes, practices and knowledge of pregnant women will help identify gaps in the PMTCT service in Worabe Comprehensive Specialized hospital. This study to assess the knowledge attitudes and practices on PMTCT at Worabe Comprehensive Specialized hospital.

The study will ensure the effectiveness of PMTCT service to entail [1] keeping women of reproductive age and their partners HIV-negative through reproductive health and HIV prevention services, [2] avoiding unwanted pregnancies among HIV-infected women and women at risk of HIV, through family planning and HIV testing and counseling services and [3] ensuring HIV testing of pregnant women and timely access to effective antiretroviral therapy, both for the health of HIV-infected mothers and for PMTCT, during pregnancy, delivery and breastfeeding [9]. Adherence to these practices is highly variable with better results obtained in developed countries than in the developing countries. Not surprisingly, inadequate continuum of care, magnitude of PMTCT and associated services including HIV testing and counseling and ARV prophylaxis are still very low in developing countries.

CHAPTER THREE

3. OBJECTIVES

3.1 General objective

The aim of this study is to assess knowledge, attitude and practice of pregnant women on PMTCT who visit Worabe Comprehensive Specialized hospital, Silte zone, SNNPR, Ethiopia 2021 GC.

3.2 Specific objectives

- To determine knowledge of pregnant women who visit Worabe Comprehensive Specialized hospital about MTCT and PMTCT.
- To determine the attitude towards PMTCT among pregnant women who visit Worabe Comprehensive Specialized hospital.
- To determine practice towards PMTCT among pregnant women who visit Worabe Comprehensive Specialized hospital.

CHAPTER FOUR

METHOD AND MATERIAL

4.1 Study area and period

The study was conducted in Worabe hospital, which is found in SNNPR state south of Ethiopia. It is located in Worabe town, which is 172km of Addis Abeba. There are 4 Kebeles, total population of the town is 58030; out of those 28435 are males and 29711 are females. Worabe town is conditioned by an overall elevation of between 1500 and 1800meters above sea level. The climate is stable, with temperature variation 24 and 30 degree centigrade and 760 mm rain fall. The study was conducted from July to October, 2021 G.C.

4.2 Study design

Institution based descriptive cross-sectional study was conducted to assess knowledge, attitude and practice towards PMTCT of HIV among pregnant women who visit Worabe comprehensive specialized hospital.

4.3 Source population

The source population were all pregnant women who attended ANC at Worabe comprehensive specialized hospital. There were 4400 pregnant women who attended ANC at Worabe Comprehensive Specialized hospital from ANC follow up record of three month (Jul –September 2020 GC).

4.4 Study population.

The study population were selected pregnant women who attended ANC at Worabe compressive specialized hospital during the study period.

4.5 Study unit. Those individual from which data was collected.

4.6 Inclusion and Exclusion criteria

Inclusion criteria: Pregnant women during data collection period.

Exclusion criteria: Those who were too sick to participate in the study.

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4.7 Sample size determination

Single population proportion formula was used to calculate sample size with confidence interval of 95% assuring 5% marginal error and x =5%. proportion of sample size determination was used from Ethiopia Demographic and health survey conducted in 2016 on KAP of pregnant women on MTCT showed than half (57%) of women age 15-49 know that HIV can be transmitted by all the three modes of transmission; during pregnancy (65%), labor and delivery (70%), and breastfeeding (74% . The proportion of women who reported that MTCT of HIV can be reduced by mother taking special drugs is about 51%. About 48% of women thought that children living with HIV should not be able to attend school with children who are HIV negative.

$$n = \frac{(Z_a/2)^2 (p) (1-p)}{W2}$$

Were

n= sample size

z= continence coefficient

Co= marginal error

p= proportions

From the EDHS, we have

Knowledge (p_1) = 57%

Practice (p_2) = 51 % and Attitude (p3) **=** 48**%**

For knowledge

So $n1 = (zx/2) (p_1) (1-p_1) /W^2$

$= (1.96)^2 (0.57) (1-0.57)/ (0.05)^2$

= 376, since the source population less than 10,000 we use correction formula

So n=n/ (1+n/N) =376/ (1+376/4400) =346. Considering 10% non-respondent rate=346+34.6=381.

For practice;

$n2= (zx/2)^2 \quad (p2)\ (1- p2)/ w^2$

$= (1.96)^2\ (0.51)\ (1-0.51)/\ (0.05)^2$

$=384$

Since the source population less than 10,000 we used correction formula.

So n=n/ (1+n/N) =384/ (1+384/4400) =353. Considering 10% non-respondent rate, 353+35.3=388.3∼388

For attitude

By using the same formula as above;

$= (1.96)^2\ (0.48)\ (1-0.48)/\ (0.05)^2$

=383.5 using correction formula as above = 383.5/ (1+383.5/44oo) =352.7 considering 10% non-respondent rate i.e. 352.7+35.27=388.04 ∼388.

For the sake of generalizations, we used the proportion with the largest sample size or proportion which is approximate to 50% i.e. practical (p2) = 51%

: - n2 = 388.

4.9 Sampling procedure (techniques)

Systematic random sampling techniques was used to select sample from 4400 pregnant women who attend ANC follow up at Worabe Comprehensive Specialized hospital with constant value(K=11) after we prepared sampling frame.

4.10 Study variable

- Socio-demographic factors (age, marital status, ethnic group, religion, occupation, educational status, income)

- Attitude towards PMTCT of HIV

- Practice towards PMTCT of HIV.

- Knowledge toward PMTCT of HIV

4.11 DATA COLLECTION METHODS AND TOOLS

A semi structured questionnaire was administered to the respondent to collect the quantitative data and it was collected by face-to-face interview using a semi structured and pre-tested questionnaire. The questionnaire was developed after reviewing relevant literatures to the subject to include all the possible variables that address the objective of the study it was collected by our group members of fourth year public health students in Wolkite University College of medicine and health science. .Data collectors has request first for respondents consent orally and written consent forms are read for each respondent to obtain their agreement before starting interview.

4.12 Data processing and analysis

All the questionnaires were checked for completeness and processed using SPSS software (version 25) then finally summarized and presented in frequencies, percent, tables, and graphs.

4.13 Data quality control

Before actual data collection, the questionnaire were pre-tested for validity and reliability on individuals of the calculated sample size from the sample population, there by possible adjustment or modification was made on the tool. The consistency of filled questionnaire was checked by the investigators at the end of each day. Data collectors were requested first for respondents consent orally and written consent forms were read for each respondent to obtain their agreement before starting interview. Information was recorded anonymously and confidentiality and beneficence has assured throughout the study period.

4.14 Operational definitions

Knowledgeable: those study participants who scored points equal to and more than the mean score out of the 9 knowledge questions.

Not knowledgeable: those study participants who scored less than the mean scores out of the 9 questions on knowledge of PMTCT of HIV

Positive attitude: those study participants who scored point's equal to and more than the mean score out of the 8 attitude questions.

Negative attitude: those study participants who scored points less than the mean score out of 8 attitude questions.

Good practice: those study participants who scored points equal to and more than the mean score out of 8 practice questions.

Poor practice: those study population who scored points less that mean score out of 8practical questions.

Antenatal care: a general and/or medical care given to pregnant women before delivery**.**

Pre-natal transmission: A transmission that occurs during pregnancy, delivery or breast feeding.

Un-protected sex: a sex that is practiced without proper and consistent use of condom**.**

4.15 Ethical consideration

Ethical clearance was obtained from the Wolkite University College of medicine and health science and Permission was obtained from Worabe hospital. Respondents were informed about the purpose of the study then information was collected after obtaining verbal consent from each participant. Respondents were allowed to refuse or discontinue participation at any time they want. Data collectors were requested first for respondents consent orally and written consent forms are read for each respondent to obtain their agreement before starting interview.

4.15 DISSEMINATION OF THE RESULT

The results of the study will be disseminated to Wolkite University College of Medicine and Health science department of public Health, Worabe Comprehensive Specialized Hospital, woreda and zonal health bureau, and other concerned bodies to update information and implementation of the PMTCT

CHAPTER FIVE

RESULT

Socio-demographic and socio-economic characteristics

A total of 388 women responded to the questionnaire, yielding a response rate of 100%. One hundred fifty four (39.7%) of the women were within the age group of 20-24 years followed by ninety (23.3%) within 25-29 years age group. Most of the respondent Three hundred fourteen (82.3%) were Silte in ethnicity followed by Amhara twenty nine (7.5%). The majority, 346 (89.2%), of the respondents were married .Three hundred thirty four (86.3%) of respondent were Muslims and twenty three (6%) respondents were protestant in religion followed by orthodox 19 (4.8%). One hundred fifty two (39.3%), had attended primary, one hundred fifteen (29.7%) secondary, sixty seven (17.1%) above secondary education respectively; however, 54 (13.9%) had no formal education. One hundred ninety two (49.7%) of the study participants were house wives and most one hundred fifty four (39.8%) of husbands were merchants.

Table1: Socio-demographic characteristics of pregnant women who visit Worabe Comprehensive specialized hospital.

Variables		Number	Percent
Age group	15-19	55	14.2
	20-24	154	39.7
	25-29	102	26.3
	30-35	65	16.8
	>35	12	3
	Total	388	100
Ethnic group	Silte	319	82.3
	Guraghe	24	6.3
	Tigrie	12	3.1
	Amhara	29	7.5
	Others	4	0.8
	total	388	100
Religion	Muslim	334	86.3
	Orthodox	19	4.8
	Protestant	23	6

	Catholic	7	1.7
	Others	5	1.2
	Total	388	100
Educational status	No formal education	54	13.9
	Primary	152	39.2
	Secondary	115	29.7
	Tertiary and above	67	17.1
	Total	388	100
Occupation	Housewife	193	49.7
	Government employee	68	17.7
	Student	9	2.3
	Day worker	7	1.9
	Merchant	83	21.2
	Private worker	18	4.6
	Others	10	2.6
	Total	388	100
Husband's occupation	Farmer	73	18.9
	Government employee	91	23.4
	Private worker	51	13.2
	Merchant	154	39.8
	Others	18	4.7
	Total	388	100
Monthly income	<1000ETB	12	3.2
	1001-3000ETB	110	28.4
	3001-5000ETB	142	36.7
	>5001ETB	123	31.7
	Total	388	100
Marital status	Married	346	89.2
	Single	16	4.3
	Divorced	13	3.4
	Widowed	12	3.0
	Total	388	100

Reproductive history of pregnant mothers attending ANC clinic at WCSH, Jul to September 2021.

Reproductive health history concerning the parity status of the women, one hundred sixty five (42.4%) were para I, two hundred three (52.2%) two-four and the rest twenty (5.2%) were above five. Most three hundred twenty seven (84.4%) of the women had ANC follow up during the last pregnancy. About one-third of them (32.7%) had three ANC visits for the current pregnancy followed by two one hundred fifteen (29.7%), four and above one hundred nine (28%) and only one thirty seven (9.6%) visits respectively.

Table 2: reproductive history of pregnant mothers attending ANC clinic at WCSH, Jul to September 2021.

VARIABLES	FREQUENCY	PERCENTAGE
Parity		
One	165	42.4
Two-four	203	52.2
Five and above	20	5.2
Total	388	100
ANC during last pregnancy		
Yes	327	84.4
No	61	15.6
Total	388	100
Current ANC visit		
One	38	9.6
Two	115	29.7
Three	125	32.7
Four and above	109	28
Total	388	100

Knowledge of pregnant mothers attending ANC clinic at WCSH towards PMTCT. (n=388)

The study assessed the knowledge on PMTCT of HIV/AIDS of the pregnant mothers attending the ANC follow up at Worabe Comprehensive Specialized hospital. Among the respondents, three hundred twelve (80.3%) informed about PMTCT of HIV while seventy six (19.7%) were not informed. accordingly, all of the respondents heard about HIV/AIDS. Among these, three hundred fifty (90.1%), of the pregnant mothers attending ANC clinic in Worabe comprehensive specialized hospital were knew MTCT of HIV while the rest thirty eight (9.9%) did not know about it two hundred ninety one (83%) knew about means of transmission and ninety seven

(17%) did not know . As to the temporal relation of transmission of the virus from the infected mother to her child, twenty nine (10%) responded that it could be during antepartum, twenty six (9.1%) intrapartum, forty seven (16.7%) postpartum, one hundred thirty six (46.9%) throughout the pregnancy.

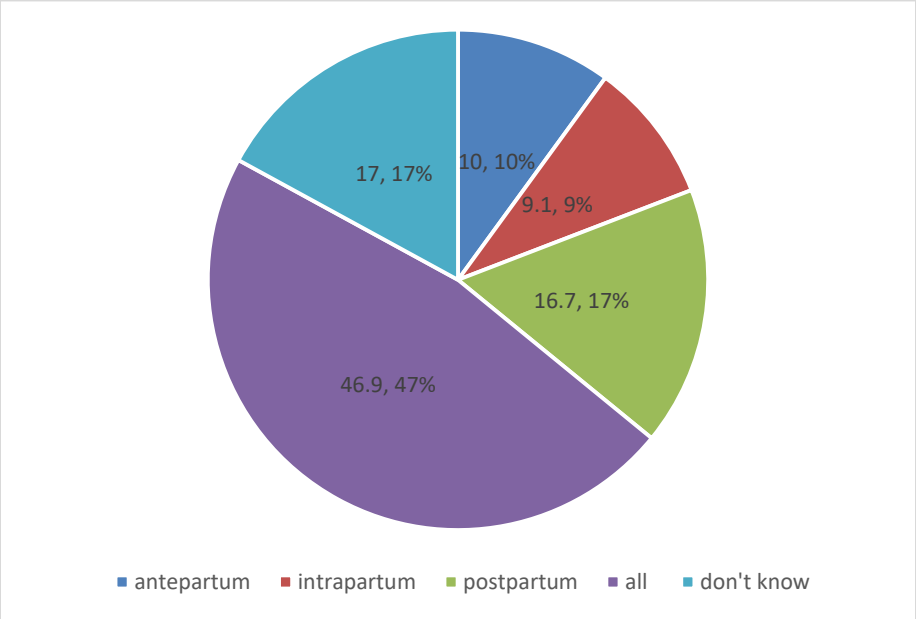

Figure 1: Knowledge of pregnant mothers of Worabe hospital toward means of MTCT HIV in (%).

Of these, one hundred eighty six (58.3%) of the respondents knew ART drugs given for HIV-positive pregnant mothers could reduce the risk of HIV transmission, thirty one (9.7%) by abstaining from BF and forty (12.5%) with save delivery.

Table 3: Knowledge of pregnant mothers of Worabe hospital toward methods of PMTCT.

Variables	Frequency	Percentage (%)
Prevention methods.		
1.By giving prophylactic drugs	186	58.3
2. By abstaining from BF	31	9.7
3.Safe delivery practice	40	12.5

Majority of the respondents, two hundred thirty three (60.1%), knew that reducing the risk of transmission if the infected mother decides to breast feed. Of those respondents, two hundred eight (53.5%), said that by taking ART to treat HIV. Time of ART initiation has its own effect on its effectiveness. Accordingly, fifty five (26.3%) of the respondents described the time of ART prophylaxis initiation for HIV-positive mother to be started at 14 weeks of pregnancy, followed by during early pregnancy by fourteen (6.5%), after delivery by three (1.3%) and one hundred thirty six (65.5%) did not know when to initiate it.

Attitude of pregnant mothers attending ANC clinic at WCSH towards PMTC. (n=388)

Among the study subjects, three hundred (77.4%) had positive attitude toward PMTCT of HIV and the rest eighty eight (22.6%) had negative attitude toward it. Most of the respondents two hundred ninety one (75%) did not agree with the term fear of being identified as HIV positive in the community. Three hundred fifty six (91.7%) of the respondents said that they will support their spouse becomes tested positive. all of the respondents agree with the term HIV positive pregnant woman must be delivered with skilled person. Three hundred fifty five (91.5%) of the respondents had positive response toward PMTCT counseling and MTCT service.

Table 4: Attitude of pregnant mothers attending ANC clinic at WCSH towards Response to PMTCT counseling and MTCT service.

Variable	Frequency	Percentage (%)
Response to PMTCT counseling and MTCT service		
1.Positive	355	91.49
2.Negative	33	8.51

Three hundred forty five (89.1%) of the women were agreed with pregnant women should be tested for HIV voluntarily. 25.2(6.5%) were did not agree the rest were neutral. Majority of the respondent (77.8%) believed that HIV positive pregnant woman should take ART during pregnancy.73.4% of the respondents were agree with HIV positive women should not breast feed her child if there is risk of infection , 3.8% did not agree and the rest were neutral.

Practice of pregnant mothers attending ANC clinic at WCSH towards PMTC. (n=388)

Among the study subjects two hundred ninety four (75.7%) practiced good and ninety four (24.3%) practiced poor. Most of the respondents three hundred eighty three (98.7%) were tested for HIV and the rest five were not tested. Majority of them (86.6%) shared test result with their husband

Table 5: Practice of pregnant mothers attending ANC clinic at WCSH towards PMTC about sharing test result with husband, Jul to September 2021.

Variable	Frequency	Percentage (%)
Sharing test result with husband		
1 Yes	336	86.6
2 No	42	10.8
3 No husband	5	1.3

.

Three hundred thirty two (85.6%) had taken pre counseling's service. From those three hundred eleven (80.2%) had taken post counseling services. Two hundred seventy five (70.5%) of the respondents were encourage breast feeding by HIV positive mother, (9.3%) did not encourage BF by HIV positive lactating mother. Most of the respondent (89.7%) of the respondent willing to accept the result .Three hundred thirty three (87.2%) of pregnant women were not encouraged to use condom with their spouses and 4.9% were encouraged to use condom.

CHAPTER SIX

DISCUSSION

This study shown that majority of the antenatal attendants were responded to the questionnaire. Most one hundred fifty four (39.7%) of the women were within the age group of 20-24 years followed by ninety (23.3%) within 25-29 years age group. Most of the respondent three hundred thirty four (82.3%) were Silte in ethnicity followed by Amhara 29(7.5%). The majority, 346 (89.2%), of the respondents were married .334 (86.3%) of respondent were Muslims and 23 (6%) respondents were protestant in religion followed by orthodox 19 (4.8%). . According to EDHS 2016 national survey, the highest HIV prevalence was found in age group of (29-34 years) directing a focus on this segment of the population that is highly fertile for HIV prevention programmers in Ethiopia .

Among the respondents, three hundred twelve (80.3%) informed about PMTCT of HIV while seventy six (19.7%) were not informed. accordingly all of the respondents heard about HIV/AIDS. Among these, 90.1% of the pregnant mothers knew about transmission of HIV from infected mother to her child and this finding was nearly similar with the study in Addis Ababa at Tikur Anbessa and Zewuditu memorial hospitals which was 89.9% and 76.8% respectively. In Addis Ababa a study done at somewhere heath center 95.9% of respondents had heard about HIV/AIDS of which about 90.3% mentioned the main routes of transmission and 82.9% knew that MTCT of HIV is preventable while 49.4% did not know. Only 48.7% knew the protective effect of prophylactic ARV drugs.

Majority of the respondents, two hundred thirty three (60.1%), knew that reducing the risk of transmission if the infected mother decides to breast feed. In a study conducted in Uganda 58%

of the respondents have the view that an HIV positive mother should breast feeding her baby (13).

Of those respondents, (53.5%), knew that by taking ART to treat HIV. Accordingly, Majority of the respondents, two hundred thirty three (60.1%), knew that reducing the risk of transmission if the infected mother decides to breast feed. Of those respondents, two hundred eight (53.5%), said that by taking ART to treat HIV. Time of ART initiation has its own effect on its effectiveness. Accordingly, fifty five (26.3%) of the respondents described the time of ART prophylaxis initiation for HIV-positive mother to be started at 14 weeks of pregnancy, followed by during early pregnancy by fourteen (6.5%), after delivery by three (1.3%) and one hundred thirty six (65.5%) did not know when to initiate it.

Among the study subjects, three hundred (77.4%) had positive attitude toward PMTCT of HIV and the rest eighty eight (22.6%) had negative attitude toward it.

Among the study subjects two hundred ninety four (75.7%) practiced good and ninety four (24.3%) practiced poor. Most of the respondents (98.7%) were tested for HIV In a study conducted in Hong Kong, China among the pregnant women visiting ANC at regional hospital, 78.5% wanted to have HIV test to protect their partners.

CHAPTER SEVEN

CONCLUSION

Most of the respondents knew that mother-to-child transmission of HIV during pregnancy, delivery and breast feeding. And majority of them have good attitude towards it. Only about half of the respondents knew that antiretroviral drugs given for sero-positive pregnant mothers could reduce the risk of HIV transmission.

All most all of mothers have been tested for HIV/AIDS. All of the respondents agree with the term HIV positive pregnant woman must be delivered with skilled person.

RECOMMENDATION

- The MOH, Southern Region health bureau, Midwifes, community NGO and other concerned bodies are recommended to address all the information and resources to those target group of the study.
- The health professionals working at ANC are recommended to address all component of PMTCT through giving health information and initiation of ARVDs for clients who are found to be HIV positive and media have great impact on knowledge so they must continuously give information and update community knowledge on PMTCT.
- The MCH of Worabe comprehensive specialized hospital should encourage pregnant women attending ANC to have an HIV test for PMTCT of HIV and should encourage EBF up to six month since it is one of important means of PMTCT.
- Awareness creation on male partners and couple testing should be encouraged by informing its importance for PMTCT.
- Health institution workers are recommended to encourage HIV positive pregnant women to use safe delivery practice.

Limitation of the study

-Since it is descriptive cross sectional study it does not show cause and effect relation ship

-Budget

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ANNEXES

Annex 1 Questionnaire

WOLKITE UNIVERSTY COLLEGE OF MEDICINE AND HEALTH SCIENCE

DEPARTMENT OF PUBLIC HEALTH

Questionnaire to assess knowledge, Attitude and practice towards PMTCT among ANC mothers who visit Worabe hospital, South Ethiopia, 2021 G.C.

INTRODUCTION

Students of Wolkite University Health Science College are going to collect data on KAP towards PMTCT of HIV in Worabe hospital ANC clients. The data is going to be collected to prepare graduation paper and to study KAP towards PMTCT of HIV of the Worabe hospital. We assure you that what you are going to tell us will be kept in secret; in addition you are free to respond or not to respond. Your support and willingness in responding the questions will be very important for the success of the study.

Do you agree to participate on the study?

- Yes B. No

If "yes" let us continue the interview, If "No" thank you for your cooperation

- Name of interviewer ……....
- Date of interview …….
- Questionnaire code ……
- Place of interview ……

Part-1 Socio-demographic characteristics

Code	Questions	Answer
1.1	How old are you?	
1.2	Marital status	A. Single C. Divorced E. Separated B. Married D. Widowed
1.3	Ethnic group	A. Silte C. Tigrie E. Others (specify) B. Gurage D.Amhara
1.4	Religion	A. Protestant Muslim B. Orthodox D.Others (Specify)
1.5	Occupation	A. House wife C. Merchant E. Others B. Government employs D. Farmer
1.6	Educational status	

		A. No formal education C. Secondary B. Primary D. Tertiary and above
1.7	What is your Parity?	
1.8	Do you have ANC visit during last pregnancy?	
1.9	How many ANC visit do you have on current pregnancy?	
1.9	Husband's occupation	A. Farmer C. Merchant B. Gov't employs D. Others (specify)
1.10	Family income per month (birr)	

Part 2 Knowledge about MTCT of HIV

Code	Questions	Answer
2.1	Have you ever heard of HIV/AIDS?	1. Yes 2. No
2.2	Do you think HIV can be transmitted from an infected mother to her child?	1. Yes 2. No
2.3	Do you know means of transmission?	
2.4	If "yes" to Q. No 2.3 by what means can it be transmitted?	1. During pregnancy 3. During breast feeding 2. During delivery 4. By physical contact 5. Others (specify)
2.5	Do you think MTCT of HIV is preventable?	1. Yes 2. No

2.6	If "yes" to Q. no 2.5, How?	1. By giving prophylactic ARV drugs 2. By abstaining from breast feeding 3. By using Contraceptives 4. Safe delivery services 5. Others (specify)
2.7	Can HIV infected mother do anything to reduce risk of HIV transmission, if she decides to breast feed her baby?	1. Yes 2. No 3. Do not know
2.8	If "yes" to Q. No 2.7, what are the ways?	1. Exclusive breast feeding 2. Early weaning with formula 3. Take medication to treat HIV 4. Others (specify)
2.9	Have you ever heard of PMTCT?	1. Yes 2. No

Part 3- Attitude towards PMTCT OF HIV

Code	Questions	Answer
3.1	Attitude toward PMTCT	1. Positive 2.Negative
3.2	HIV related behavior and belief. Fear of being identified as HIV positive in the community.	1. Agree 2. Dis agree 3. Neutral
3.3	What will you do if your spouse become tested positive?	1. support 2.Separate 3.Divorce

3.4	Response to PMTCT and MTCT service	1.Positive 2.Negative
3.5	HIV positive pregnant mother must be delivered with skilled person	1. Agree 2. Dis agree 3.Neutral
3.6	Pregnant mother should be screened for HIV on voluntary base	1. Agree 2. Dis agree 3. Neutral
3.7	HIV positive mothers should take ARV during pregnancy	1. Agree 2. Dis agree 3. Neutral
3.8	HIV positive woman should not breast feed her child if there is risk of infection	1.Agree 2. Dis agree 3. Neutral

Practice of pregnant mothers of Worabe hospital towards MTCT and PMTCT.

	Questions	Answer
4.1	Have you ever tested for HIV?	1. Yes 2. No
4.2	Have you taken pre counseling's services?	1. Yes 2. No
4.3	Have you taken post counseling services?	1. Yes 2. No
4.4	Up on recent pregnancy sharing test result with husband	1. Yes 2. No 3. No husband
4.5	Breast feeding by HIV positive lactating mother	1. Encouraged 2.Not encouraged 3.I do not know
4.6	The use of condom with spouse	1. Encouraged if advised 2. Not encouraged 3. I do not know
4.7	Are you willing to accept your result?	1. Yes 2. No
4.8	Are you willing to disclose the result?	1. Yes 2. No

THANK YOU FOR PARTICIPATING

Data collectors	Advisors /Supervisors
Name _____	Name_____
Date _____	Date _____
Signature _____	Signature _____