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Knowledge Attitude and Practice towards PMTCT among Male Partner of Pregnant Women

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Abstract

Objective: To assess knowledge, attitude and practice towards prevention of mother to child transmission of HIV among male partner of pregnant women attending in Shegaw Motta Primary Hospital East Gojjam zone, Amahra Ethiopia in 2018.

Results: From the total population 46.2% of the respondents had good knowledge. But, only 16.3 the respondents had poor knowledge. 55.6% of the respondents had positive attitude and 44.4% had negative attitude towards MTCT and PMTCT. 81.5% of the respondents had low level of involvement and 18.5% of the respondents had high level of involvement towards MTCT and PMTCT.

Conclusion: Majority of the respondents had good knowledge and positive attitude towards MTCT and PMTCT. But majority of the respondents had low level involvement towards MTCT and PMTCT.

Keywords: Knowledge; Attitude; Practice; Pregnant Women

Abbreviations

AIDS: Acquired Immunodeficiency Syndrome; ANC: Antenatal Care; ART: Antiretroviral Therapy; ARV: Anti Retro Viral; CDC: Center for Disease Control; FHAPCO: Federal HIV AIDS Prevention and Control Office; HTC: HIV Testing and Counseling ; HIV: Human Immune Virus; MNCH: Maternal and Neonatal Child Health; MTCT: Mother-To-Child Transmission; PMTCT: Prevention of Mother-to-Child Transmission; SRH: Sexual Reproductive Health; SSA: Sub-Saharan African; UNAIDS: Joint United Nations Program on HIV; VCT: Voluntary Counsel and Test; WHO: World Health Organization

Introduction

Ethiopia, is one of sub Saharan African counties, has been facing highest number of Mother to Child Transmission (MTCT) of Human Immune Deficiency Virus (HIV). Prevention of Mother to Child Transmission (PMTCT) of HIV program plays a big role in reducing the Mother-to-Child Transmission of HIV. Nevertheless, its effectiveness depends on involvement of male partners considering the fact that men are decision makers in Ethiopia families. They make important decisions that have major impact on women's health. Male partner involvement has been seen to increase uptake of Prevention of Mother to Child Transmission (PMTCT) services and their involvement underscores their importance in reducing HIV infection in children. But, the program strategy is facing challenge of low male partner involvement in PMTCT services [1].

HIV pandemic created a huge challenge to the survival of humankind worldwide. At the end of 2012, an estimated 35.3 million people were living with HIV globally, including 3.3 million children less than 15 years. There were 2.3 million new HIV infections, including 260,000 among children less than 15 years. More than 90% of the children who acquired HIV infection live in Sub-Saharan Africa. In the same year, in African countries, about 25.0 million people were estimated living with HIV including 2.9 million children. There were 1.6 million new infections and 230,000 million among children less than 15 years and 1.2 million Acquired Immunodeficiency Syndrome (AIDS) related death.

Ethiopia is one of sub Saharan African counties facing high AIDS burden, at the end of 2012; approximately 760,000 people were estimated living with HIV, with 20,000 new HIV infections and estimated AIDS related death were 47,000. There were 9,500 new infections among children. Besides the dominant heterosexual transmission, vertical HIV transmission from mother to child accounts for more than 90% of pediatric AIDS and without any intervention about half of them will die before their second year birth day. The Prevention of Mother to Child Transmission (PMTCT) plays a major role in limiting the number of children being infected by HIV. Without any intervention, 20%-50% of infant would be infected but by implementing effective PMTCT program, the overall risk can be reduced to less than 5% with breast feeding population [2].

As a result, Ethiopia adopted the World Health Organization (WHO) four pronged PMTCT strategies as a key entry point to

reduce risk of HIV transmission from mother to child and care for women, men and families. These include primary prevention of HIV infection, prevention of unintended pregnancies among HIV-infected women, prevention of HIV transmission from HIV-infected women to their child, provision of care and support to women infected with HIV, their infants and families.

PMTCT of HIV, provided integrally with maternal, neonatal and child health MNCH services by the government of Ethiopia to mitigate the impacts of the HIV epidemic in general population and particular in children. The achievement of the National PMTCT program to date is not in parallel to other maternal and child health programs. Very serious gaps remain in terms of utilization of available service by the pregnant mother. The federal Ministry of Health identified some of the challenges; one of the challenges is low male partner involvement. Studies from Eastern and Southern Africa showed that testing rates ranging from 8%-15% of male partners at antenatal clinic [3].

In this regard, the knowledge and awareness of male partner on the PMTCT matters for the active participation play crucial role for the effective implementation of the program because Sexual and Reproductive Health (SRH) programs and services have been focused primarily on women. Men have often lacked information to make informed decisions about healthy behaviors and the roles they might play in promoting overall family health, including accessing HIV prevention, care and treatment services. Much is not known about the extent to which male partners having adequate information about sexual reproductive health in general and PMTCT program in particular. Hence, this study attempts to asses' knowledge, attitude and practice of male partner involvement in PMTCT program.

The Government of Ethiopia undertaking different efforts to mitigate the impacts of HIV epidemic among the whole population in general and among children in particular. One of the strategies is providing PMTCT services integrated with Maternal Neonatal and Child Health (MNCH) services as one strategy. Male involvement has been recognized as a priority for PMTCT programs.

Different scholars documented the impact of men involvement on the various components of PMTCT programs. Men play an important role in terms of women risk of acquiring HIV, prevention in terms of condom use in the couple's relationship and male partners also influence women's utilization of service including testing for HIV and on decision of infant feeding options [4].

Justification

The prevalence of MTCT is high still now. Even if MTCT was decreased from time to time, the deference was not enough to eradicate MTCT. Generally, the prevalence of MTCT in Ethiopia was 9.93. The prevalence of MTCT in Dredwa was 15.7% and in SNNPR was 4.16%. This prevalence indicates that MTCT is high even if PMTCT was given. This indicates that PMTCT program was not effective that was given before. This indicates that PMTCT program was not effective as a result of different influencing factors. One of the factors may be due to the low level of the knowledge; attitude and practice of male partners for the HIV infected pregnant mothers. Therefore, the study was aimed to assess the level of knowledge, attitude and practice of male partners of pregnant women, so that, level of knowledge, and attitude and practice of male partners of pregnant women would be known.

However, little research is done to assess knowledge, attitude and practice toward MTCT/PMTCT program where these studies are limited in their scope, which focus only on pregnant mothers and there is a gap in examining knowledge and attitude of male partners. Assessing the knowledge, attitudes and practice of male partner of pregnant women at ANC and PMTCT program is vital for interventions on men [5].

Materials and Methods

Study area, design and period

The study was conducted in Shegaw Motta primary hospital, which is found in Motta town East Gojjam zone, Amahra Ethiopia. This is one of the nine hospitals that are found in East Gojjam zone, Amahra Ethiopia. This hospital has started providing health service since 1992. In this budget year, generally the hospital gives service for six districts and totally around 904,934 people's. This Hospital is located at 205 km from Debre Markos, 120 km from Bahir Dar and 360 km from Addis Ababa.

Institution based cross sectional study design was conducted from May 10, 2019 to June 12, 2019 every working day [6].

Source population

All male partners who, are either sexual partners or husbands of pregnant women attending in Shegaw Motta primary hospital.

Study population

Male partners who, either sexual partners or husbands of pregnant women attending ANC/PMTCT service in Shegaw Motta primary Hospital and available during data collection.

Sample size determination

The sample size was calculated by using single population proportion formula with estimated proportion of 60.3% of male partners practice from a study conducted at two health centers of Addis Ketema sub city (in Addis Ababa), Marginal error 5%, non-response rate of 10% or possible absenteeism and refusal to participate in the study and confidence interval 95% [7].

Therefore, the sample size was determined using the simple proportional formula and by using

$$n=\frac{Z^2xP\ (1-P)}{d^2}$$

Z=Confidence interval 95% CI/Confidence Interval is 1.96.

P=Estimate population proportion that is for a variable of 60.3% of male partners practice on PMTCT.

D=Margin of error to be tolerated by researcher that is 5%=0.05.

n=(1.96) (1.96) (0.603(1-0.603))/0.05 × 0.05+(10% non-respondents) n=405.

Sampling technique

Simple random sampling technique was used.

Data collection procedure

Data collectors (midwifes that works ANC in Shegaw Motta primary hospital) approached male partners who came with pregnant women to attend ANC clinic and explain the purpose of the study. A place was prepared for the data collectors for interview. Before the interviews, male partners were requested to sign a written consent and only those who consented were enrolled in the study. Women that come alone were appointed to come with her partner for the next day. The data was collected using structured face-to-face interviewer administered questionnaire prepared to address male partners' knowledge, attitude, an d level of th eir involvement in PM TCT service. The data was collected by two data collectors [8].

Data processing and analysis

A ter collecting all the necessary data the data was coded on prearranged coding sheet by the principal investigator. Data were entered in to a SPSS and analysis was made using SPSS version 23 statistical package, errors related to inconsistency of data were checked and corrected during data cleaning [9,10].

Results

A total 405 male partners of pregnant mothers attending ANC in Shegaw Motta primary hospital were interviewed with 100% response rate. Approximately half of the respondents, 214 (52.8%) were found in the age range of 25-35. Majority of the interviewed respondents 132 (32.6%) were diploma and higher in quali ication. Majority of them, 344 (84.9%) were married. Among the study population, 247 (61%) of the respondents had their own businesses, 118 (29.1%) were employed (Table 1) [11].

Table 1: Socio-demographic characteristics of the respondents in Shegaw Motta primary hospital, East Gojjam zone Amahra, Ethiopia, in 2018 (N=405).

Character	Variables	Frequency in no (%)
Gender	Male	405 (100)
Age	≤ 24	36 (8.9)
	25-34	214 (52.8)
	35-44	125 (25.9)
	≥ 45	50 (12.3)
Marital status	Married	344 (84.9)
	Divorced	24 (5.9)
	Cohabitated	37 (9.1)
Educational status	Cannot read and write	98 (24.2)
	Read and write	87 (21.5)
	Complete primary school	28 (6.9)
	Complete secondary school	60 (14.8)
	Diploma and higher	132 (32.6)
Occupational status	Daily labor	21 (5.2)
	Employed	118 (29.1)
	Owen business	247 (61)

	Unemployed	19 (4.7)

The mean of respondents' knowledge, attitude and practice was 13.8, 19 and 1.31 respectively (Table 2).

Table 2: The mean variables of respondents in Shegaw Motta primary hospital in 2018 (N=405).

Variables	Total	Mean
Knowledge	405	13.8
Attitude	405	19
Practice	405	1.31

Knowledge of the respondents about MTCT and PMTCT. The three categories were grouped in to two categories to make the analysis is easy. Don't know and no responses were grouped as one category (Table 3).

Table 3: The level of knowledge of male patterns towards MTCT and PMTCT in Shegaw Motta primary hospital east Gojjam zone Amahra Ethiopia, in 2018 (N=405).

Sr. No	Questiontions		Frequency and percent
1	Would you think a HIV is transmitted from mother to child during pregnancy?	Yes	303 (74.8)
		No	102 (25.2)
2	Would you think HIV is transmitted from mother to child during breast feeding?	Yes	324 (80)
		No	81 (20)
3	Would you think HIV is not transmitted from mother to child by sleeping	Yes	188 (46.4)
		No	217 (53.6)
4	Would you think HIV is transmitted from mother to child during delivery?	Yes	266 (65.6)
		No	139 (34.4)
5	HIV positive mother can prevent MTCT by exclusive breast feeding	Yes	245 (60.5)
		No	160 (39.5)
6	Is HIV positive mother advised to feed her child breast with other foods?	Yes	223 (55.1)
		No	182 (44.9)
7	Giving Anti Retro Viral drugs to the mother and the child reduce the chance of transmission of HIV from mother to her child?	Yes	285 (70.4)
		No	120 (29.6)
8	A mother who is HIV positive delivering the baby by operation (Cesarean section) can reduce the chance of transmission of HIV from a mother to her child?	Yes	245 (60.5)
		No	160 (39.5)
9	Is your wife come to ANC with you is important?	Yes	306 (75.6)
		No	99 (24.5)

As shown in table 3, majority of the respondents were knowing that HIV can be transmitted from mother to child during pregnancy, 303 (74.8%). Majority of the respondents were known HIV can be transmitted from mother to child during breast feeding, 324 (80%). But majority of the respondents didn't know HIV cannot be transmitted from mother to child by sleep together, 217 (53.6%) (Table 4).

Table 4: The level of the knowledge of respondents at Shegaw Motta primary hospital east Gojjam zone, Amhara, Ethiopia in 2018 (N=405).

Categories	Score range (%)	Number	Percent
Good knowledge	≥ 80	187	46.2
Moderate knowledge	50-80	151	37.3
Poor knowledge	<50	67	16.5
Total		405	100

The five categories grouped into two categories to make the analysis are easy. Agree and strongly agree was grouped as one category and undetermined, disagree and strongly disagree was grouped as one category (Table 5).

Table 5: The attitude of male partners of pregnant women to wards MTCT and PMTCT in Shegaw Motta Primary hospital east Gojjam zone, Amhara Ethiopia in 2018 (N=405).

Sr. No	Questionnaires		Frequency in no (%)
1	Is It important that every pregnant woman gets tested for HIV with her partner	Agree	372 (91.8)
		Disagree	33 (8.4)
2	If couples are infected with HIV, then they shouldn't think of having child.	Agree	285 (70.4)
		Disagree	120 (29.7)
3	Using condom during pregnancy and breast feeding reduce MTCT	Agree	301 (74.4)
		Disagree	104 (25.7)
4	Some male don't accompany their wife at ANC clinic since it is women's issues	Agree	219 (78.8)
		Disagree	86 (21.2)
5	Male should support his wife choice of feeding the baby	Agree	313 (77.3)
		Disagree	92 (22,7)
6	Some male partners' don't undergo for HCT to know their HIV status due to fear of disclosure	Agree	289 (83.7)
		Disagree	65 (16.3)
7	An HIV test result of a pregnant woman indirectly confirms HIV status of her partner	Agree	276 (68.2)
		Disagree	129 (31.8)
8	Couples should use condoms at least until they know their HIV status is negative	Agree	319 (78.8)
		Disagree	86 (21.3)

9	It is better to live with unknown HIV status than live depressed with positive HIV status known	Agree	269 (66.4)
		Disagree	136 (33.5)
10	Even if couple believe they are faithful to each other they should be tested for HV together during ANC follow up for the sake of PMTCT	Agree	348 (86)
		Disagree	57 (14)

As shown in the Table 5, 372 (91.8%) of the respondents agreed that every pregnant women gets tested for HIV with her partner. And also 269 (66.4%) of the respondents agreed that it is better to live with unknown HIV status than live depressed with positive HIV status known (Tables 6 and 7).

Table 6: The level of attitude of the respondents Shegaw Motta primary hospital east Gojjam zone, Amahra Ethiopia in 2018 (N=405).

Categories	Score range (%)	Number	Percent
Negative attitude	<60%	180	44.4
Positive attitude	≥ 60%	225	55.6
Total		405	1

Table 7: The level of male involvement towards PMTCT and MTCT in Shegaw Motta primary hospital East Gojjam zone Amahra, Ethiopia in 2018 (N=405).

Sr. No	Questionnaires		Frequency in no (%)
1	When your wife comes to start ANC, have you ever come with her by yourself initiated? if you say yes	Yes	319 (78.9)
		No	86 (21.2)
2	Have you ever ask to enter to enter ANC follow up room with your wife? if say yes	Yes	291 (71.9)
		No	119 (28.1)
3	Have you ever try to listen correctly, that was given an education about PMTCT? If say yes	Yes	304 (75.1)
		No	101 (24.9)
4	Have you ever try to ask questions that are not clear for you	Yes	301 (74.3)
		No	104 (25.8)
5	In your home have you ever self-initiated the discussion on importance of PMTCT service with your partner during this pregnancy?	Yes	296 (73.1)
		No	109 (27.9)
6	Have you ever requested your wife to be tested for HIV during her pregnancy?	Yes	283 (69.9)
		No	122 (30.1)
7	If your partner had ANC follow up, have you ever asked her	Yes	277 (68.4)
		No	128 (31.6)

	what service she got at ANC clinic?		
8	Have you ever remind your partner of her ANC follow up?	Yes	285 (70.5)
		No	120 (39.6)
9	Did you cover medical expenses of your partner in the ANC follow up during her pregnancy	Yes	294 (72.6)
		No	111 (27.8)
11	If your wife/partner are found to be HIV positive when she is pregnant, will you accept that she takes ARVs to protect her fetus?	Yes	303 (74.8)
		No	102 (25.1)
12	If your answer is yes for Q11 have you ever remind your wife to take drugs on time?	Yes	307 (75.8)
		No	98 (24.2)

As shown in the table 7, 319 (78.8%) of the respondents agreed that when their wife come to start ANC, they come with her by their initiatives, and 68.4% of the respondents agreed that, they asked what services had got from ANC clinic (Table 8).

Table 8: Level of involvement of respondents in Shegaw Motta primary hospital East Gojjam zone, Amahra Ethiopia in 2018 (N=405).

Category	Score range (%)	Number	Percent (%)
Low level of involvement	<75%	330	81.5
High level of involvement	≥ 75%	75	18.5
Total	1	405	100

Discussion

The current finding of age of the respondents was approximately half of the respondents 214 (52.8%) found at the age range of 25-34. This finding was contradicted with a study conducted at Addis Ababa that majority of the respondents found at the age group of 25-34 (63.5%). The current finding of marital status of the respondents was 344 (84.9%). This finding was in line with a study conducted at Addis Ababa (89.7%) was married.

The current inding of the level of knowledge 187 (46.2%) had good knowledge, 151 (37.3%) had moderate knowledge and 67 (16.3%) had poor knowledge. These inding is contradict with study conducted at Addis Ababa 76.2% of the respondents had good knowledge (19). But, these indings were higher than a study conducted at Debre Markos that majority of the respondents had moderate knowledge. The current inding of the level of attitude 225 (55.6%) had positive attitude and 180 (44.4%) of the respondents had negative attitude. These inding is in line with a study conducted Addis Ababa that 50% of the respondents had positive attitude.

The current inding the level of respondents involvement 75 (18.5%) had high level of involvement and 330 (81.5%) of the respondents had low level of involvement towards MTCT and PMTCT. These indings were in line with a study conducted at Uganda 99 (26%) the respondents had positive attitude. But contradict with study conducted at Addis Ababa 190 (60.3%) of the respondents had positive attitude and a study conducted at Debre Markos town 198 (72.26%) of the respondents had positive attitude.

Conclusion

Marjory of the respondents had good knowledge and positive attitude. But majority of the respondents had low level of involvement. In conclusion, unlike other finding of many study conducted in Ethiopia on PMTCT of HIV in pregnant women it can be said that the level of knowledge about PMTCT of HIV seems to be high in this study participants. However, there are a lot of knowledge gap and misunderstanding about time of MTCT of HIV/AIDS. It would be important to narrow that knowledge gap through increasing ANC follow up and by avoiding economical dependence of women. Even if most of the participant had favorable attitude towards PMTCT of HIV/AIDS there is also fear of stigmatization and discrimination which affect attitude of the respondent. So, it should be corrected/ addressed by health education and by promoting institutional delivery. Even though all interviewed pregnant women were tested to HIV/AIDS involvement of husband/partner during ANC follow up and testing is still very low therefore it should be improved by creating awareness through health education. In

general, knowledge, attitude and practice of pregnancies mothers towards PMTCT service had a significant association with ANC follow up status of the respondents, occupational status of the respondents, site of delivery of the respondents and male involvement in ANC follow up respectively.

Ethical Consideration

Ethical clearance was attained by letter of permission, which was obtained from Debre Markos University, collage of health science office and Shegaw Motta primary hospital medical director office. Written consent was obtained from each subject and secured after detail explanation of the nature and main purpose of the study. Confidentiality of the information forwarded by subjects was assured by omitting names of the study subjects from the questioner and large effort was made to maintain the privacy of the respondents during interview. The right of the respondents was respected.

References

1. Farquhar C, JN Kiare, BA Richarson, Marjory N, Francis N, et al. (2008) Antenatal couple counselling increases uptake of interventions to prevent HIV-1 transmission. J Acqu Imm Defi Synd 37: 1620.
2. Msuya SE, Mbizvo Em, Hussain A, Uriyo J, Sam NE, et al. (2008) Low male partner participation in antenatal HIV counselling and testing in northern Tanzania: Implications for preventive programs. AIDS Care 20: 700-709.
3. Katz DA, Kiarie JN, John-Stewart GC, Richardson BA, John FN (2009) Male perspectives on incorporating men into antenatal HIV counselling and testing. PLoS One 4: e7602.
4. Family Health International. Male partnership in PMTCT and antenatal services FHI in Tanzania's Dodoma region: Used strategies to involve men in the services and in HIV testing: 2011.
5. Team IT (2007) Guidance on global scale-up of the prevention of mother to child transmission of HIV: Towards universal access for women, infants and young children and eliminating HIV and AIDS among children.
6. Brou H, Djohan G, Becquet R (2007) When do HIV infected women disclose their HIV status to their male partner and why? A study on PMTCT program; Abidjan, Nigeria. Plops Med 4: e342.
7. Farquhar C, Jame N, Kiare B, Richarson A, Marjory N, et al. (1999) Antenatal couple counselling increases uptake of interventions to prevent HIV-1 transmission. J Acqu Imm Defic Syndr 37: 1620.
8. Tijou T, Madina Q, Hermann B, Vale RL, Alice D, et al. (2009) Couples. PMTCT programs and infant feeding decision-making in Ivory Coast. Soc Sci Med 69: 830-837.
9. Tsehay Birhanu (2014) Knowledge, attitude and practices of male partners involvement in reducing antenatal HIV infection and PMTCT, Addis Ababa.
10. Endawoke A, Gebeyaw T, Amanuel AA (2013) Level of male partner involvement and associated factors: Prevention of mother to child transmission of HIV/AIDS services: Debre Markos town, Northwest Ethiopia. Afr J AIDS HIV Res 10: 16-25.
11. Larsson EC (2010) Mistrust in marriage reason why men do not accept couple HIV testing during antenatal care: A qualitative study in eastern Uganda. BMC Public Health 1471-2458.