

ORIGINAL ARTICLE**Knowledge, Attitude and Practice of Trained Traditional Birth Attendants on HIV/AIDS Prevention in Jimma Town, Southwest Ethiopia**

Asheti Negassa, BSc¹, Kifle W/Michael, MD, MPH^{2*}, Ashenafi Negash, MD, MPH²

ABSTRACT

Background: *HIV/AIDS is a global pandemic with cases being reported from virtually every country in the world. There is a growing awareness in many African countries that trained traditional birth attendants have a major role to play in HIV/AIDS prevention. However, information on their knowledge, attitude and practice concerning prevention of the disease is scarce. Therefore, this study was designed to assess their knowledge, attitude and practice and document baseline data for the study area.*

Methods: *A cross-sectional survey was conducted from October 25 to 30, 1999 on all the 30 trained traditional birth attendants serving in Jimma town in order to assess their knowledge, attitude and practice in the prevention of HIV/AIDS. A pre-tested, structured questionnaire was used to collect the data. Attitude was measured using a Likert scale.*

Results: *All the 30 trained traditional birth attendants responded making a response rate of 100%. The study revealed that the majority, 17/30 (56.7%) were above the ages 50 years (mean \pm SD = 54 \pm 10), Christians, 19/30(63.3%), oromo, 11/36 (36.7%) and illiterate, 21/30(70%). It also showed that 70%, 80% and 70% of the study population had “good knowledge”, “favorable attitude” and “safe practice”, respectively. However, 26.7% and 60% responded that shaking hands with AIDS patients and insect bite respectively were considered to be risky to transmit HIV infection by of the study population. Moreover, majority (60%) feels that AIDS patients should be isolated and 23.3 % reported to assist delivery bare handed. Health institutions and radio were reported to be the main sources of information on HIV/AIDS.*

Conclusion: *Although majority of the study population does have good knowledge, favorable attitude and safe practice, there are some misconceptions on the modes of transmission of HIV/AIDS. Moreover, the majority is in favor of isolation of AIDS patients and some are practicing unsafely. Therefore, series of refreshment courses on the ways and means of HIV/AIDS transmission and prevention and safe delivery practices are recommended. Further large-scale study is also recommended.*

Key words: *HIV/AIDS, Trained Traditional Birth Attendants, knowledge, attitude, practice.*

¹Dembi- Dollo Health centre, P.O. Box 38, Dembi-Dollo, Ethiopia.

²Jimma University, Community Health Programme, P.O. Box 378, Jimma Ethiopia

*Corresponding author

INTRODUCTION

Human immunodeficiency virus (HIV) infection has become a global pandemic. The current estimate of the number of HIV infection cases among adults worldwide is approximately 36.1 million; 70% of which are in the Sub-Saharan Africa. Ninety-five percent of the 15,000 new infections that occur each day are found in developing countries, among which 13,000 are in persons in the age group of 15-49 years of whom 47% are women. Human immunodeficiency virus/ Acquired immunodeficiency syndrome (HIV/AIDS) is the major cause of morbidity & mortality in women and children in the world (1-3).

The prevalence of AIDS in Ethiopia is increasing very rapidly. The majority of the infections occur in adults aged 20-49 years (4,5). According to serological surveys done in Jimma hospital on pregnant mothers attending ante-natal clinic, the prevalence of HIV infection was 8.6% (6).

In many African countries, there is a growing awareness of trained traditional birth attendants to play a major role in the prevention of HIV/AIDS. Trained traditional birth attendants (TTBAs) have major role in the prevention of HIV infection in the community. Since they attend deliveries in their respective communities, the precaution they take is very important to prevent HIV transmission through blood contact. However, some of the TTBAs use bare hands and handle sharp instruments that risk themselves and mothers to HIV infection (7).

Trained traditional birth attendants (TTBAs) are used to transmit messages on HIV/AIDS to the community, which was found to be effective and accepted by community members (8,9).

In Jimma area, there is no published report on the knowledge, attitude and preventive practices on HIV/AIDS of TTBAs. Therefore, this study was

conducted to assess the knowledge, attitude and practice (KAP) of TTBAs on HIV/AIDS in relation to the service they render to the community.

MATERIALS AND METHODS

A cross-sectional study design was employed to assess knowledge, attitude and preventive practices of TTBAs on HIV/AIDS in Jimma town, in Oct 1999. Out of 36 TTBAs in Jimma town, 2 of them died and four abandoned the area. Therefore, 30 TTBAs were included in the study and all of them responded. A pre-tested, structured questionnaire was used to interview the TTBAs. The questionnaire contained knowledge questions related to modes of transmission of HIV, risk of transmission related to the service they render to the community and whether there is or there is no cure to infections due to HIV/AIDS. The attitudes of the TTBAs towards the preventive measures, HIV infected persons and AIDS patients and the preventive practices of TTBAs during delivery attendance were also assessed. The score of one or zero was given based on the correct or wrong answer to individual knowledge questions and Likert scaling was used to measure the responses to each attitude statement (10).

Three final year health officer students were recruited and appropriately trained for data collection. The purpose of the study was explained to the study subjects and informed verbal consent secured prior to the initiation of the interview. Data collection was supervised by one of the principal investigators. Completeness and consistency of the data were checked on daily basis. The knowledge score of 75.0% or above was graded as good knowledge and below this cut-off point as poor knowledge. The score of 60.0% and below was graded as unfavorable attitude and above this cut-off point as favorable attitude. The presence of at least one risky

practice was graded as unsafe while its absence as safe practice. The data were analyzed using scientific calculator and presented using tables, rates, ratios and proportions.

RESULTS

A total of 30 (100%) of TTBA's living in Jimma town were interviewed. The minimum age of respondents was 32 and maximum 72 years. The mean age of the respondents was 54 with SD of ± 10 , the majority (56.7%) being above the age of 50 years. Most of the respondents were Christians (63.3%), Oromo (36.7%), and illiterate (70.0%) [Table 1].

All of the respondents knew that HIV is transmissible from person to person, by having injection with needles used by AIDS patients, by using unboiled/uncooked materials during delivery attendance, and multiple sexual partner is the risk to acquire HIV. All of them knew that HIV/AIDS can not be cured. Hand shaking with AIDS patients and insect bite were considered to transmit HIV infection by 26.7 % and 60.0 % of the respondents. About 23 % did not know that conducting deliveries without gloves is risky (Table 2).

Table 1. Socio-demographic Characteristics of Respondents in Jimma town, Oct. 1999.

Characteristics	Number	Percent
Age in years		
30-39	4	13.3
40-49	9	30.0
50-59	8	26.7
≥ 60	9	30.0
Religion		
Christian	19	63.3
Muslim	11	36.7
Ethnicity		
Oromo	11	36.7
Amhara	9	30.0
Keffa	6	20.0
Others*	4	13.3
Literacy status		
Illiterate	21	70.0
Read & write	6	20.0
Grade 1-4	1	3.3
Grade 5-8	2	6.7

*Dawro, Worji and Gurage were included.

Table 2. Knowledge of TTBA's on HIV/AIDS in Jimma town, October 1999.

Statements of knowledge	Correct response	
	No	Percent
Is HIV transmitted from person to person?	30	100.0
Is HIV transmitted by shaking hands with AIDS patients?	22	73.3
Is HIV transmitted by having injection with needles, which were used by AIDS patients?	30	100.0
Is HIV transmitted by receiving HIV infected blood transfusion	29	96.7
Is HIV transmitted by conducting delivery with ungloved hand?	23	79.7
Is HIV transmitted by having sexual intercourse with HIV-infected person?	30	100.0
Is HIV transmitted by using unboiled instruments to conduct delivery?	30	100.0
Is having sex with multiple partners a risk to have HIV?	30	100.0
Can HIV be transmitted from mother to fetus?	24	80.0
Is HIV present in body secretion?	28	93.3
Is HIV transmitted by contact with body secretion of AIDS patients	28	93.3
Is HIV transmitted by breast milk?	16	53.3
Can AIDS be cured?	30	100.0
Is HIV/AIDS transmitted by insect bite	12	40.0

Seventy percent of the respondents were found to have good knowledge while 30% have poor knowledge on HIV/AIDS. All of the TTBA's reported their willingness to provide information on HIV/AIDS to their friends and community. Majority (60.0%)

feels that AIDS patients should be isolated from the community. Fifty percent of the TTBA's support condom utilization. High proportion (86.7%) was afraid to be infected with HIV while attending delivery (Table 3, 4).

Table 3. Attitudes of TTBA's towards HIV/AIDS in Jimma town, October 1999.

Statements of attitude	Strongly agree	Agree	Uncertain	Disagree	Strongly Disagree
	No (%)	No (%)	No (%)	No (%)	No (%)
AIDS patients should be isolated.	15 (50.0)	3 (10.0)	2 (6.7)	7(23.3)	3(10.0)
Condom utilization should be promoted to prevent the transmission of HIV.	3 (10.0)	12(40.0)	3(10.0)	9(30.0)	3(10.0)
I would like to teach my friends about HIV/AIDS	30(100.0)	-	-	-	-
I am afraid of getting infected by HIV.	26(86.7)	-	-	3(10.0)	1(3.3)
I wouldn't conduct delivery to known HIV infected mothers.	15(50.0)	6(20.0)	-	2(6.7)	7(23.3)

Thirteen percent was willing to help known HIV infected laboring mothers provided that they get gloves (Data not

tabulated). In general 80.0% had favorable attitude towards HIV/AIDS prevention. All of them used boiled blade to cut umbilical

cord, 70.0% used gloves but 30.0% of them assist delivery with their bare hands. Safe practice was reported by 70.0% of the TTBA's (Table 4).

Table 4. TTBA's Knowledge, Attitude and Practice on HIV/AIDS Prevention by their Socio-Demographic Characteristics in Jimma Town, October 1999.

Socio demographic Characteristics	Knowledge		Attitude		Practice	
	Good No (%)	Poor No (%)	Favorable No (%)	Unfavorable No (%)	Safe No (%)	Unsafe No (%)
Age						
< 50 years	9 (30.0)	4 (13.3)	9 (30.0)	4 (13.3)	11(36.7)	2 (6.7)
≥ 50 years	12 (40.0)	5 (16.7)	15 (50.0)	2 (6.7)	10 (33.3)	7 (21.3)
Religion						
Christian	16 (53.3)	3 (10.0)	14 (46.7)	5 (16.7)	14 (46.7)	5 (16.7)
Muslim	5 (16.7)	6 (20.0)	10 (33.3)	1(3.3)	7 (23.3)	4 (13.3)
Literacy status						
Illiterate	14 (46.7)	7 (23.3)	16 (53.3)	5 (16.7)	13 (43.3)	8 (26.7)
Literate	7 (23.3)	2 (6.7)	8 (26.7)	1(3.3)	8 (26.7)	1(3.3)
Ethnicity						
Oromo	6 (20.0)	5 (16.7)	9 (30.0)	2 (6.7)	8 (26.7)	3 (3.3)
Amara	7 (23.3)	2 (6.7)	8 (26.7)	1(3.3)	7 (23.3)	2 (6.7)
Others	8 (26.7)	2 (6.7)	7 (23.3)	3 (10.0)	6 (20.0)	4 (13.3)

The common sources of information on HIV/AIDS are health institution and radio. News papers and television were also used by few of the respondents (Table 5).

Table 5. Sources of Information to TTBA's On HIV/AIDS, Jimma Town, October 1999.

Sources of information	No	Percent
Health institution	30	100.0
Radio	30	100.0
Friends	14	46.7
News paper	9	30.0
Television (TV)	7	23.3

Note: Some had more than one sources of information.

DISCUSSION

The knowledge, attitude and practices of trained traditional birth attendants on HIV/AIDS were not well studied. This

study has attempted to assess the KAP of TTBA's on HIV/AIDS in Jimma town.

The level of knowledge of TTBA's on modes of transmission of HIV is comparable to other studies (3, 11). A few of the study population had misconceptions on the modes of transmission of HIV. These are shaking hands and mosquito bite, which were also observed in other study (11). All TTBA's knew that HIV/AIDS can be transmitted through sexual contact and using not boiled sharp objects like needle and blade. Similarly, all were aware of the risk of having multiple sexual partners. However, the risk of assisted delivery with the bare hands and the danger or hazards of contaminated blood were not understood by 23.3% and 3.3% of the study population. Although this observation is lower than those reported in the studies conducted elsewhere (7,8), the seriousness of the problem should be duly considered and appropriate measure taken as TTBA's frequently come into contact with blood while assisting delivery. The fact that a

third of the study population reported to have conducted deliveries barehanded further magnifies the extent of the problem and the urgency for intervention.

The attitude of TTBA's in this study was generally favorable. However, the fact that 60% of the respondents favored the isolation of AIDS patients is discouraging and could lead to social discrimination of the patients. This was also observed in rural community of Gondar (11). It is encouraging that all of them would like to teach others about HIV/AIDS and could be used as HIV/AIDS educators in endeavors to control HIV infection and this observation is consistent with what had been reported elsewhere (9,12).

The main sources of information about HIV/AIDS were health institution and radio similar to the report from Maputo and Botswana (7,8).

The population studied is small in size. Nevertheless it was a coverage study and the response rate was 100%. To ensure the quality of the data, final year health officer students were recruited and appropriately trained for data collection and field supervision was conducted on daily basis by one of the principal investigators.

In conclusion, although majority of the study population does have good knowledge, favorable attitude and safe practice, there are some misconceptions on the modes of transmission of HIV/AIDS. These misconceptions are shaking hands with HIV/AIDS patients and insect bite understood as risks of transmission for HIV/AIDS. Some did not understand the risk of assisting delivery barehanded and contaminated blood. Moreover, the majority was in favor of isolation of AIDS patients and some were practicing unsafely.

Therefore, series of refreshment courses on the ways and means of HIV/AIDS prevention and safe delivery practices are recommended. In addition, further large-

scale study on the topic is also recommended.

ACKNOWLEDGEMENTS

This study was funded by Jimma University. The authors are grateful to Mrs Aynalem Degife for writing the manuscript.

REFERENCES

1. Ayalew T. Africa in danger. The Eye on *Ethiopia and the Horn of Africa*, 2001; 17(77): 32-34.
2. Kriess JK, Koech D, Plummer FA, *et al.* AIDS virus infection in Nairobi prostitutes: spread of the epidemic to East Africa. *N Engl J Med* 1986; 314:414-418.
3. Reggy A, Simonds RJ, Roggers M. Preventing prenatal HIV transmission. *AIDS*. 1997; 11 (Supplement A): 61-67.
4. Government of the Federal Democratic Republic Ethiopia. Ethiopia multi-sectoral HIV/AIDS project: project implementation manual, Addis Ababa, 2000.
5. Ministry of Health of Ethiopia (MOH). Epidemiology and AIDS control: AIDS in Ethiopia, Addis Ababa, 1996.
6. Eshetu M, Libnedingil T, Ali Y. HIV infection among pregnant mothers attending ANC in Jimma hospital. *Bulletin JIHS*. 1997; 7(2): 87-94.
7. Kirchner GA, Tomas T, Wilson M, Jurg A. Knowledge, attitude and practice (KAP) of traditional healers on AIDS in Maputo, Mozambique. *Int Conf AIDS* (proceedings) 1992; 8 (2): 532.
8. Chipfakacha VG. STD/HIV/AIDS knowledge, beliefs and practice of traditional healers in Botswana. *AIDS care*, 1997; 9(4): 417-25.
9. Tekele H., Mulugeta W. The role of Traditional birth attendants (TBAs) in

- AIDS education, Ethiopia. *Int Conf AIDS* (proceedings). 1994; 10 (1): 424.
10. Daniel J, Mueller A. A handbook for Researchers and Practitioners: Measuring Social attitudes. Indiana University Teachers' College press 1986; 8-17.
 11. Shabir I, Fasil HG, Dereje L, et al. Knowledge, attitude and practice on high risk factors pertaining to HIV/AIDS in a rural community. *Ethiop Med J* 1995; 33(1): 1-6.
 12. Stauguard F. Role of traditional health workers in prevention and control of AIDS in Africa. *Tropical Doctor*. 1991; 21:22-24.