



Knowledge, Attitude and Practice On HIV/AIDS Prevention Among Batu Terara Preparatory School Students in Goba Town, Bale Zone, Southeast Ethiopia

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Abstract

Introduction: There are 11.8 million HIV infected youth worldwide African youth face growing rates of infection with HIV/AIDS and STI. In this region most new HIV infection occur among people ages 15-24 and are sexually acquired .The highest prevalence of HIV is seen in the group of 15-24 years. The knowledge, attitude and practice study that was done in Ethiopia in 1997 on high school student's show that students have good knowledge about HIV/AIDS prevention.

Objectives: To assess knowledge, attitude and practice on HIV/AIDS prevention among preparatory school students.

Methods: A cross sectional study design was conducted between April 2-5, 2013 in Goba Batu Preparatory school students. Data was collected by using self-administered questionnaire through and analyzed using scientific calculator which was presented by using tables.

Result: Almost all of students in study area had heard at least one HIV prevention method. Knowledge on some aspect of the disease is quite low in the study group. About 53% of respondents had positive attitude toward using condom. 62.1% and 67.8% of respondents had positive attitude towards abstinence and being faithful with friends respectively. About 54.1% of respondents were used condom and 38.5% of them used nothing.

Conclusion: There were low recognition in condom usage & some misconceptions on way of HIV/AIDS transition.

Recommendation: Our investigation call for continued and strengthened health education to bring change in knowledge in regard to misconceptions of HIV/AIDS transmission ways & Promoting condoms as one of the strategies of HIV/AIDS prevention process . We recommend this for the word's health bureau and Madawalabu University College of medicine & health science.

Keywords: HIV virus; AIDS; Preparatory school

Abbreviations: HIV: Human Immunodeficiency syndrome; AIDS: Acquired immunodeficiency syndrome.

Background

Human immunodeficiency virus/Acquired immunodeficiency syndrome is a chronic infections disease caused by HIV virus is characterized by spectrum starting from primary infection with or without the acute syndrome by relatively long period of asymptomatic stage after which in most patients progress to advanced and life threatening disease. The major mode of transmission of HIV/AIDS worldwide is heterosexual contacts particularly in developing countries other routes of transmission include transfusion of infected blood and blood products, occupational transmission, prenatal transfusion and others. The two most important risk of HIV infection are having sexual contact with many partners and having STDS [1-3].

AIDS was 1st recognized in USA in 1981 among homo sexual males: pneumocystic carnie pneumonia was seen among 5(five) homo sexual and Kaposi sarcoma was diagnosed in 26 homosexuals with the virus. HIV virus was isolated from patients with lymphadenopathy in 1983 and on 1984. The virus was clearly demonstrated to be the causative agent for AIDS [1].

There are 11.8 million HIV infected youth worldwide African youth face fast growing rates of infection with HIV and STIS. In this region most new HIV infection occurs among people ages 15-24 and are sexually acquired [1].

In 1983, AIDS was diagnosed for the first time in two patients. In

South Africa, the first recorded death owing to AIDS occurred in 1983. By 1986, there were 46 recorded AIDS diagnosis. Estimates from 2000 indicated that 5% of actual infection and only 1% of actual death due to AIDS among homosexual people were reported prior to 1990. AIDS infection started reaching pandemic proportional around 1995 [2].

In Ethiopia, the first how zero- positive cases were reported in 1984 from Addis Ababa, the capital city and the two AIDS cases were reported a couple of years later. Since then a growing number of cases from different areas of the country was reported. According to MOH, the total number of adults and children living with HIV/AIDS in 2001 was estimated to be 2.2 million of which children comprised 200,000. Both men and women were equally affected [3].

Youth(15-24) is the period between the onset of puberty to the complication of 24 years of age which is characterized by when he/she attains maturity, gets employed , get married, develops financial and psychological autonomy stability , integrity and compassion [4].

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Statement of the Problem:

The HIV/AIDS pandemic is the worst health crisis in history. It is clearly moved beyond being HIV primarily a health and psychosocial issue to economic and developmental crisis. Over 65 million people have been infected with HIV to date and AIDS has killed more than 25 million people since it was first recognized in 1981. Moreover in many region of the world, new infections are highly concentrated among young people (15-24) years of age [5].

According to UN AIDS report at the end of 2000 about 39.5 million people were living with HIV/AIDS, out of which 2.3 million were children and 17.7 million were women. There were 4.3 million new infection out of which 530,000 were children <15 years. There were about 2.9 million death out of which 380,000 were children [3].

Sub- Sahara Africa is by far the worst affected by pandemic with 25.7 million living with HIV/AIDS. Out of which 2.1 million are children <15 years. The overall adult prevalence in this region is 5.9%. There were about 2.1 million deaths due to HIV/AIDS in 2006 [5].

High prevalence countries are experiencing dramatic drops in life expectancy, the ill and the dying are overwhelming. The already strained public health services and millions of children being orphaned often without adequate social safety nets, HIV/AIDS deepens household poverty, threatens development, social cohesion, political stability, food security and life expectancy and imposes devastating economic burden. Without effective reduction of its spread and impact, the epidemic will slash human and economic development on the continent and under the separations expressed in the millennium development goals and by the new partnership for African development (NEPAD) to value Africa forward into a renaissance of development and reduced poverty. In East Africa in 2001, rates were at or over five [5] percent in Uganda, Ethiopia, Tanzania, Congo, Burundi and Rwanda and at fifteen percent in Kenya [6].

Ethiopia has the 16th highest HIV/AIDS prevalence rate and the third largest population living with HIV/AIDS (PLWHA). According to UNAIDS the infection rate rises quickly from an estimate of 2.2 million Ethiopian adults and about 1,200,000 children are orphan due to AIDS and according to MOH, the prevalence rate is estimated to be 6.6% with urban HIV prevalence estimated reaching as high as 13.7% and that of rural as low as 3.7%. The highest prevalence of HIV is seen in group of 15-24 years, Ethiopians effort to decrease poverty is systematically hindered by AIDS. This pandemic is significantly affecting the Ethiopian education sector with doubled face. It affects the demand of education by reducing the number of students attending education and it also affects supply of education due to increased death and sickness of teacher or instructors. A lack of information continues to be a primary stumbling which together with several other factors limits the effectiveness of effort to counter the spread and impact of the disease. This factor includes stigma, discrimination, silence and develop about the disease, poverty, inequality, gender inequality, war, conflict and STDs [5].

The social cost of HIV/AIDS to individual people, to families and to the whole country of Ethiopia cannot be underestimated in Ethiopia AIDS is the leading cause of death in 15-49 age group. This has enormous implications for the encouraging of the region because so many of the working populations are affected by the disease almost 72,000 people in Ethiopia died of AIDS in 2007 [8].

The devastating effect of HIV/AIDS in Ethiopia has become male

and more visible over time and life expectancy is estimated to have fallen from 50 years to 42 years. Today 42 percent of the hospital bed in the country is estimated to be AIDS patients, draining the scarce resource allocated to the health sector [8].

Significance of the Study

The continued spread of HIV/AIDS despite aggressive prevention programs and wide spread public awareness presents a public health issue.

This study has a significance use by identifying knowledge, attitude and practice of HIV/AIDS prevention among preparatory school students, which clearly show the gap and help all concerning body give consideration to reduce the mortality and prevalence of highly active age groups due to HIV/AIDS disease.

Therefore, the study will helpful in providing information about knowledge, attitude and practice of HIV/AIDS prevention among Batu Terara preparatory school students. This in turn will help as baseline data for policy makers and concerned bodies related to health to design strategy.

Literature Review

In the countries of East Africa, HIV prevalence began declining about a decade ago and has remained stable in many countries. The HIV prevalence in Kenya fell from 14% in 1990 to 6% in 2006. Uganda prevalence has remained between 6 percent and 7 percent. Similarly in Ruanda, HIV prevalence has remained the same, however the HIV prevalence in Rwanda is over three times higher in urban areas than rural areas. Prevalence in Kenya, Tanzania and Uganda exceeds 5 percent (6.3 percent, 5.6 percent and 5.4 percent respectively [9].

The study conducted at East Africa Tanzania in 2005 show that 93.7% of students knew how HIV is transmitted and 86.6% knew faithfulness to one partners as best methods for HIV prevention. Despite of the knowledge they have, very few students reported to have use condom in their last sexual contacts [10].

Young people in Malawi become sexually active at an early age. Almost 60% of secondary school student's interview by Band Aiwa and faster in 1996 said that they were sexually active with a mean age of first intercourse being 15 years. While there is little good quality evidence it also seems that adolescents in Malawi are becoming sexually active younger. Male focus group discussion in Malawi indicated that there was strong poor pressure to become sexually active:

The guys who have girlfriends are seen as hero as "However less than one quarter of sexually active adolescents consistently used condom [11].

A number of studies on knowledge attitude and practice of HIV/AIDS were done in our country. According to BSS in 2002, about 98% of the study population were aware of HIV/AIDS. Almost all groups knew at least one prevention method. The study show that significant proportion of the population was at increased risk of HIV infections despite high level of knowledge. Similar observations were found in other studies, Awareness of HIV/AIDS among worker in the informal sectors in Addis Ababa was found to be 96.3%. This study also revealed that there was a 34.1 of misconception rate on the way of transmission of HIV/AIDS [12,13]. The KAP study that was done in 1997 on high school students show that the students have good knowledge about the HIV/AIDS although found to be have risky sexual behavior [14].

The study conducted in Gondar in 2007 show that, the majority (97.5) of the participants responded that HIV/AIDS is an etiologic agent

for AIDS. Unprotected sex, unsafe blood transfusion, contaminated needles and mother to child transmission were reported by 84.6%, 64.2%, 78.8% and 69% of the students respectively as the common ways of HIV transmission [15].

Only 3.6% reported mosquito bite (2.5%), shaking hands (0.7%) and eating and drinking with infected individual (0.4%) as mode of HIV transmission. Abstinence, faithfulness to one's partner and use of condom as a means to prevent transmission on HIV was responded by 84.1%, 60.4% and 41.8% of student respectively. Avoiding social life with AIDS patients was reported by 1.8% of the respondents as way to prevent transmission of HIV infection [16].

The study done in Gondar, Ethiopia, in 2009 shows that, all students had heard about HIV/AIDS before the interview. The sources of information were radio (50%), Television (46.7%), newspaper (33.3%), teacher (25%), parents (21.7), Health workers (13.3%) and youth club (11.7). Where more than one source were common. About (34%) of the students (respondents) had negative attitude towards HIV, AIDS patients and other STDs. 40% of sexually active respondents had multiple sexual partners including commercial sex workers (CSWS) indicates that such rising behavior can predispose the students to the accusation of STDs [16].

More than 30% of the students associated AIDS with an immoral lifestyle and even recommended isolation of AIDS patients. Half of the students favored for screening of HIV/STIs. However one third of the students were not willing to visit infection control clinic following acquisitions of STDs other than HIV/AIDS [17].

According to the BSS (2005) report in Ethiopia, only 9.3% and 13% of the in-school youth and the out-school youth had undergone HIV test respectively. Studies undertaken in Ethiopia and other countries have shown that having stigmatizing attitude towards people living with AIDS (PLWHA) was associated with lower likelihood of HIV testing while being female or married were associated with higher odds of HIV testing. Various studies had shown that having had sex with multiple sexual partners, are those at risk and neighborhood knowledge of a test were associated with increased previous HIV testing [18].

The study conducted in Awassa in 1995 shows that 93.8% of those who responded to have heard about HIV/AIDS remembered up to three mode of disease transmission. Among these, some had wrong conceptions and speculation about HIV/AIDS transmission, such as kissing and saliva by 5.3%, body contact by 4.8% and air droplet by 1.5%. The three major risk factors perceived to expose a person for HIV infection were sexual promiscuity, taking injections, using unsterile needles and frequent sexual contact with commercial sex workers in that respective order [19].

Study done in Jimma on high school students show that about 100% of the respondents know or heard about HIV/AIDS. Radio and television is the main source of information (97.4%) and include other sources. However, only 53% rely on radio/television only. Only 39.5 got information from religious institution. About 10.5% of the subjects had undergone HIV testing and counseling. Only 57.9% of the students would change their behavior to avoid contracting HIV/AIDS. About 21.1% of the respondents don't know if a person looks healthy is infected with HIV or not [20-22]. The study that conducted in Jima zone Agaro town in 2001 indicates 40% of males and 7.5% females reported to have 2-5 and more than 5 partners respectively. Among 90 students sexual exposure 54.4% of them use condom at least once. Of those 55.7% were males and 50% were females. Among those who had used condom, 46.9% used always and 38.8% used occasionally [21].

Objective

General Objective:

To assess the level of knowledge, attitude and practice of HIV/AIDS prevention among Batu Terara preparatory school students.

Specific Objectives

1. To assess level of knowledge on HIV/AIDS prevention method in Batu Terara preparatory school students.
2. To assess attitude towards HIV/AIDS prevention method among Batu Terara preparatory school students.
3. To assess HIV/AIDS prevention method utilization among Batu Terara preparatory school students.

Methodology

Study area and Period:

The study was conducted among Batu Terara preparatory school students in Goba town, Bale zone, Oromia from April 2-5. Batu Terara preparatory school is a governmental which was established in 1995. The school is located South East Goba town 445km far from Addis Ababa. The altitude is between 2400 to 3200 meters above sea level with a weather condition of Daga. There were 493 male and 333 female students with 826 total numbers of students in the school.

Study design

Institutional based cross sectional study design was conducted.

Source population:

All Batu Terara preparatory school students during study period.

Study population:

Sample students from Batu Terara preparatory school students.

Inclusive criteria:

All regular students.

Exclusive criteria:

All night students.

Sample size determination

Sample size was calculated from the source population using single population formula.

With the following assumptions

$p = \text{proportional} = 0.5$ or 50%

$z = \text{standard normal distribution} (1.96)$

$d = \text{Margin of error (accepted error)} = 0.05$

$n = Z_{\alpha/2}^2 P(1-P)/d^2 = (1.96)^2(0.5)(1-0.5)/(0.05)^2 = 382$

Considering 10% non-respondents rate $= 383 + 10\% = 422$. A total of 422 were selected.

Sampling Technique

There were total of 826 students (Grade 11 and 12) in Batu Terara preparatory school during the study period (April 2-5) distributed in to 14 sections. In each class there were 58-60 students. 422 students

were selected from all classby using systematic random sampling from student's rosters.

Study Variables

Dependent variables

- Knowledge of HIV prevention
- Attitude of HIV prevention
- Practice of HIV prevention methods

Independent variables

- Age
- Sex
- Marital status
- Peer pressure
- Religion
- Ethnicity
- Health extension workers
- Health professions
- Family educational status
- Health service accessibility
- Accessibility to different Medias like radio, TV...
- Residence
- Teachers

Data collection

The study instrument was a self-administered questionnaire which comprised of 4 parts, Part one questions related to socio-demographic status, part two questions related to knowledge on HIV prevention methods, part three questions on attitude towards HIV prevention methods and part four questions related to practice on HIV prevention methods.

Data analysis and processing

Data was processed and analyses using tally sheets and manual scientific calculator. Finally the result presented using tables based on finding then discussion, conclusion and recommendation was given depending on the result.

Data quality management

Pre-tested questionnaire was used before the actual data collection done to increase the quality of data. The questionnaire was translated to the local language to check its consistency & we returned to the respondents for our data completeness.

Operational definitions

Knowledge: In this research paper, those who were respond-correctly 5 or less questions (<50%) out of knowledge questions will be rated as having poor knowledge while those who answered correctly 6 or more questions (60-100%) was categorized as having good knowledge.

Attitude: A tendency of mind or of relatively constant feeling of the respondent towards HIV prevention method. In this research paper

those who responded more than half of the attitude questions were recognized as having positive attitude.

Practice: Is defined as a health behavior that may promote Health or prevent disease or opposite, what the individual have been doing regarding HIV prevention.

Method: Is measure taken by person to prevent HIV transmission.

Ethical consideration

The study proposal was first submitted to Department of public health for approval. Then supportive letters was obtained from Madawalabu University ethical committee and similarly permission from Batu Terara preparatory school administrative office also obtained. The privacy right of the respondents was respected. Data collection in Batu Terara preparatory school was conducted without disrupting the learning teaching process.

Dissemination of the result

The study shall be prepared in hard and soft copy and distributed in MWU, faculty of education and Madawalabu CBE coordinator.

Result

Socio-Demographic characteristics of Respondent

Two hundred twenty two (52.6%) of the respondents were males and two hundred (47.5%) were female students. The mean age of the respondents was 18. (1.32 ± SD). We have 244 (57.9%) respondents from grade 11 and 178 (42.1%) from grade 12 and the majority of the respondents 390 (92.4%) were single and 32 (7.5%) have been married. Majority of the respondents were Orthodox Christian 310(74.1%) in Religion followed by Muslim 59(13.9%). The distribution of the respondents by their ethnicity indicated that about 64.7% were from the Oromo and 25.3% from Amhara. 253 (60%) of students were from urban and 169 (40%) were come from rural (Table 1).

Their family educational status were highest in the number from grade (1-8th) were their fathers were 143 (33.9%) and mothers 111(26.3%) and they involved on farming activity were the father 180 (43%) and the mother 117 (28%). With regarding to their socio-economic 34 (8.1%) is fall in ≤500birr/month and the rest were fall in ≥500 birr/month. 279 (66.1%) of the students were live with their parents and the remaining 56 (13.2%), 72 (17%) and 15 (3.6%) were lived alone, with friends and others respectively (Table 1).

Knowledge of HIV prevention

Almost all of the students in our study are had heard at least one of HIV/AIDS preventive methods. Abstinence, faithfulness to one's partner and usage of condom as a means of HIV/AIDS prevention methods were responded by 394 (93.4%), 355 (84.1%), 199 (47.1%) of students respectively. Unsafe sex (96.7%), sharing sharp material (90%), unsafe blood transfusion (96.5%) and mother to child transmission were reported by students. Only (12.6%) reported mosquito bite, (10.7%) eating raw meat, prepared by HIV infected person, (8.76%) sharing toilet, (9%) sharing public swimming and (10.4%) shaking hands with infected person as a mode of transmission. 64% of students were respond as a pregnant woman can transmit HIV to her unborn child and 73.9% reported that mother can transmit HIV/AIDS to her child during breast feeding (Table 2).

Result on Attitude towards HIV/AIDS prevention

About 224 (53%) of respondents were interested to use condom

Variables		Frequency	Percentage
Sex	Male	222	52.6
	Female	200	47.4
Age	15-19	368	87.1
	20-24	54	12.9
Grade	11 th	244	57.8
	12 th	178	42.2
Your Marital status	Single	390	92.4
	Married	32	7.6
Your Religion	Orthodox	310	73.4
	Muslim	59	13.98
	Protestant	40	9.5
	Catholic	3	0.7
	Other	10	2.3
Ethnicity	Oromo	273	64.7
	Amhara	107	25.3
	Gurage	8	2
	Tigre	13	3
	Other*	21	5
Residence	Urban	253	60
	Rural	169	40
Father's educational status	Unable to read	37	8.7
	Only read and write	64	15.1
	1-8 th grade	143	33.9
	9-10 th grade	48	11.3
	11 th -12 grade	59	13.9
	Certificate and above	57	16.8
Mother's educational status	Unable to read	34	8
	Only read and write	77	18.2
	1-8 th grade	111	16.3
	9-10 th grade	56	13.2
	11 th -12 grade	56	13.2
	Certificate and above	88	20.8
Father's occupational status	Employee	91	22
	Farmer	180	43
	Merchant	72	17.1
	Daily laborer	9	2.1
	Other	70	17
Mother's occupational status	Employee	81	19.2
	Farmer	117	28
	Merchant	102	24.2
	Daily laborer	52	42.3
	Other	70	17
Family income	<500 birr/month	34	8.1
	≥500 birr/month	388	91.9
Living with	Parents	279	66.2
	Alone	56	13.2
	Friends	72	17
	Other	15	3.6

Table 1: Socio-demographic distribution of marital status, residence and with whom they living of BatuTerara preparatory students, Bale zone, Oromia regional state, south east Ethiopia, June, 2013.

and 283 (67.1%) were voluntary to give advice to use condom for someone who is sexually active. 262(62.1) of students were agreed to stay abstinence until marriage.67.8% of the students were agreed to be faithful with one friends (Table 3).

Result of Practice on HIV/Aids Prevention

122 (28.9%) of the respondents were sexually active and the majority 75 (61.1 %) of them started at the age of (15) to (19). 54.1% of them used condom and 38.5% of them use nothing. 81 (66.4%) of the respondents had reported to had constant sexual partner. From 258 (61%) of students who know the presence of anti-HIV/AIDS club in their school 102 (39.5%) were participated in the anti-HIV/AIDS club. Three hundred (71.9%) of students reported that they were tested for HIV and the rest 122 (28.9%) are not tested for HIV/AIDS, from this where the majority (27.6%) who were not tested are because of fear of the result (Table 4).

Conclusion and Recommendation

Conclusion:

In our cross-sectional survey of preparatory school students in Goba, almost all students, had heard at least one HIV/AIDS prevention method and mode of transmission, where as there is low recognition in condom usage and some misconception on HIV/AIDS transmission way through mosquito bites, eating raw meat prepared by infected person and sharing public swimming and also there is negative attitude towards condom usage and practice.

Recommendation

Our investigation call for continued and strengthened health

Knowledge	Frequency	Percentage	
Heard about HIV/AIDS prevention	418	99.1	
Means of HIV trans- mission prevention they know	Abstinence	394	93.4
	Be faithful	355	84.1
	Condom	93	47.1
Way of transmission	Unsafe sex	408	96.7
	Sharing sharp material	381	90.5
	Blood transfusion	407	96.5
	Mother to child transmission	369	87.5
	Mosquito bite	53	12.6
	Eating raw meat prepared by infected person	45	10.7
	pregnant women to her unborn child	272	64
	Through breast feeding	312	73.9
	Sharing toilet	370	8.76
	Sharing public swimming	40	9
Shaking hand	44	10.4	

Table 2: Percentage distribution of result of respondents by the knowledge on HIV/AIDS Prevention Goba, Bale zone Oromia, June 2013.

Attitude	Frequency (%)	
Interests to use condom	YES	224(53%)
	No	198(47%)
Giving advice to somebody to use condom	Yes	283(67.1%)
	No	139(32.9%)
Stay abstinence until marry	Agree	262(62.1%)
	Neutral	73(17.3%)
	Disagree	87(20.6%)
Be faithful with one friend	Agree	286(67.8%)
	Neutral	59(14%)
	Disagree	77(17.4%)

Table 3: Percentage distribution result of respondents by their attitude towards HIV/AIDS prevention, Goba Bale zone, Oromia, June, 2013.

Practice		Frequency	percent
Have you ever had sex?	Yes	122	28.9
	No	300	71.1
For "yes" Q no 1	Age		
	15-19	75	61.1
	20-24	47	38.9
Used prevention method	Condom	66	54.1
	Nothing	47	38.5
	Non-respondent	9	7.4
Constant sexual partner	Yes	81	66.4
	No	41	33.6
Know ant-HIV in their school	Yes	258	61.1
	No	164	38.9
For "yes" Q above who participate	Yes	102	39.5
	No	156	60.5

Table 4: Percentage distribution of result of respondent s by their on HIV/AIDS prevention, in Goba, Bale zone, Oromia, June 2013.

education to bring change in knowledge in regard to misconceptions of HIV/AIDS transmission ways & Promoting condoms as one of the strategies of HIV/AIDS prevention process . We recommend this for the word's health bureau and Madawalabu University College of medicine & health science.

The local and school community should be thought of the importance of discussing about knowledge, attitude and practice which their children and students.

The influential people to adolescents must be parts of the education process.

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