

Knowledge, Attitude and Early Sexual Debut and Associated Factors among HIV Positive Youths in East and West Gojjam Zones, North West Ethiopia: A Cross Sectional Study

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Abstract

Background: Research is needed to investigate the relationship among level of knowledge, attitude and early sexual debut to inform practices that support young people living with HIV engage in sexual practices. A cross-sectional study was conducted among 343 (15-24 years of age) HIV positive youths. The study is conducted in Felege Hiwot and Debre Markos referral hospitals, northwest Ethiopia from December 2016 to February, 2017. Systematic random sampling technique was used to select the participant. Data were entered into Epi data and analyzed using SPSS version 20. Possible associated factors were screened by using binary logistic regression and independent variables with P-value less than 25% were included into multivariate logistic regression model then variables with a $P < 0.05$ at 95%CI and odds ratio for statistical significance declaration. The result showed 343 with 89.3% of response rate successfully participated. Majority 217 (63.3%) were females. More than a third of them 133 (38.8%) had poor knowledge concerning HIV and almost all (97.7%) had a favorable attitude towards people living with HIV. More than half 194 (56.6%) had sexual experience with average age of first sexual initiation at 17 (SD, ± 3) years. Early sexual initiation (less than 18 years) was 90 (46.6%) with 95% CI of (39.2% to 53.6%). About 60 (43.8%) of them did not use condom consistently. Considering factors associated with early sexual initiation, those who did not chew khat were 3.23 times more likely to engage in early sexual practice (3.23, 95% CI, 1.54-6.79). Higher numbers HIV positive youths had poor knowledge about HIV while most of them had favorable attitudes. Level of knowledge and consistent condom use was negatively associated. Non khat users were more likely to engage in the early sexual practice.

Keywords: Young, Knowledge, early sexual practice, attitude, North West Ethiopia

Introduction

According to the Ethiopian Health and Demographic Survey (EDHS) reported of 2016, the median age at first sexual intercourse for women and men is 16.6 and 21.2 years respectively [1]. First sexual intercourse and the early progression of different sexual behaviors are of concern because of their direct relationship to sexually transmitted infections [2, 3] and unwanted teenage pregnancies [4].

The magnitude of risk sexual practice was 16.7% among high school students in Gondar, Northwest Ethiopia [5]. Similarly in another study, 25% of students practiced at least one HIV risky behavior in Ethiopia [6]. Again in a study about parent adolescent communication about sexual and reproductive health among high school students in Beshnagul Gumz Ethiopia, show that the median age of first sexual debut was 16.4 years with 54.8% of them not using condom [7]. Among women with high levels of knowledge decreased likelihood of using condoms [8]. Similarly, young men with high levels of HIV/AIDS knowledge were more likely to have had three or more sexual partners but young women with high knowledge levels were more likely to have only one lifetime sexual partner [8]. Contrary to that Mexican findings, in Gambella Ethiopia; adequate knowledge about HIV/AIDS were not associated with decreased risky sexual practice [9]. Attitude was reported as the weakest predictors of condom use among sexually active youths in Addis Ababa, Ethiopia [10]. These indicated that the relationship between knowledge on HIV transmission and prevention methods, attitude towards HIV positive people with risky sexual behavior is not well documented. Additionally, several studies show that, the mean and or median age of sexual initiation was below 18 years in Ethiopia among the general youth population [5, 6, 11-13]. However, there was no

study concerning HIV positive youths. Thus the current research is aimed at investigating the relationship among knowledge, attitude and sexual practices among HIV positive youths.

Methods

Study design and setting: A cross-sectional study among HIV positive youths between the ages of 15 and 24 years was conducted in Felege Hiwot Referral Hospital, Bahir Dar and Debre Markos Referral Hospital, Debre Markos, Northwest Ethiopia. Detail methodological issues were published elsewhere [14].

Ethical consideration

Ethical approval and clearance for this study was obtained from Debre Markos University Ethical review Committee under the code of letter “Research 24/11/10”. For children less than 18 years the parents or guardians gave written consent. Those aged 18 to 24 gave also written consent. Those study participants who had symptoms concerning for a sexually transmitted disease (STD) at the time of data collection were referred for clinical care and treatment.

Results

The mean age of the respondents was 19.83 (SD of ± 3.5 years), and the majority 33.8% of them were within the age groups of 15-17 years. Most of them have completed primary education (Table 1 was published elsewhere [14]). Participants were also interviewed on 14 HIV/AIDS related questions adapted from validated study in South Africa [15]. A significant number of respondents had poor knowledge in each of the specific questions with an overall rate of poor knowledge among 133 (38.8%) (Table 1).

Participants were also interviewed on 9 attitude-related questions adapted from similar study above. Most of 97.7% the respondents have a favorable attitude towards people living with HIV/AIDS (Table 2).

The magnitude of early sexual initiation (<18 years) was 90 (46.6%) with (CI=95% CI (39.2-53.6)). Most of the participants had sexual experiences 194 (56.6%) and the average age in years at first sexual debut was 17 (SD, ± 3). Those with life time multiple sexual partners were 115 (59.3%), and they had an average of 2 sexual partners.

From a total comprehensive HIV related knowledge as the dependent variable and other independent variables computed, females were 3.38 times more likely to have poor knowledge compared to males (3.38, 95% CI=1.24-9.22).

Some of the independent variables namely female sex, alcohol and khat chewing were found to be associated with early sexual practice. However, only khat use was negatively associated with early sexual practice using the multivariate analysis (Table 3).

Discussion

About 38.8% (at 95% CI, 33.4-43.8) HIV positive youths had poor comprehensive HIV related knowledge. The study realised that there are numerous misconceptions about HIV transmission. This was evidenced from this study that, a number of participants believed HIV can be transmitted by kissing. There were quite a number who believed that washing after sexual intercourse can prevent HIV transmission and sexual intercourse with a virgin can also get rid of HIV. A number of participants also did not know that HIV can be transmitted from HIV positive mother to

their children during pregnancy, delivery, and breastfeeding. The comprehensive level of HIV related knowledge was higher in this current study than other previous studies in Ethiopia among university students were poor knowledge [6, 16-18]. This difference may be attributed to the fact that our study population are in clinical care that enhance their knowledge about HIV/AIDS. However, still the results very low that call attention of health care provider to engage in continues awareness of those age groups. But these study participants had better knowledge compared with a study in school children in eastern Ethiopia and had lower knowledge than another study carried out among Ambo university students in Ethiopia. The reason might be university students are more aware than high school students [19]. However, the study participants were expected to be knowledgeable as they should have received medical education in every clinical visit. Therefore, there is an enormous misconception on ways of HIV transmission by HIV positive youths in North-west Ethiopia. There are also false beliefs on HIV treatment as 13.1% of them replied as HIV can be cured completely, 25.1% thought HIV is a punishment from God, 6.4% thought single sexual intercourse could not transmit HIV, and healthy looking people did not transmit HIV. This finding was better awareness than a study in south-west Nigeria [20] that reported that, 37.3% of youth said pregnant women could not spread the disease to their children and 48.1% of them believed, HIV could be cured. It was obvious that HIV positive youths in this study received first hand education from the health professionals who attended to them. It could also be due to the fact that, the duration or time gap accounted for this very findings considering the duration of the Nigerian study. HIV/AIDS is a public health problem despite the poor knowledge of participants in this current study. Again, the knowledge base of both positively and negatively tested individuals for the disease has not changed.

Females were 3.38 times more likely to have poor HIV related knowledge than male counterparts. Females poor knowledge is similar to a study in Lao People's Democratic Republic among male students who had good HIV related knowledge [21]. However in a study among Iranian students females were more knowledgeable than males [22]. This discrepancy may be explained as the Iranian research was among students and our research is in the general HIV positive youths. The result presented currently explains the need for policy planning on how to increase awareness of HIV positive people in general and HIV positive youth in particular in order to enhance prevention strategies through improved knowledge of HIV transmission and prevention. Therefore, health professionals should focus on health education with more emphasis on females. Similarly, those who did not use condoms consistently were 71% less likely to have poor knowledge. The reason can be explained as the study is cross sectional design that cannot establish causal relationship between the variables. Hence appropriate design can solve such controversies. But still it is understood that poor HIV related knowledge has relationship with inconsistent condom use regardless the direction of the cause. The result implied that, people did not use condoms is not because of their poor knowledge but instead other factors like partner opposition, lack of awareness and want to be pregnant. This study is in line with other studies in Gondar, Ethiopia and South-west Nigeria that indicates male were practicing more risky sexual behaviors than females even though they had good HIV related knowledge [6, 20]. Therefore, knowledge is not a guarantee to using a condom consistently and other hindering factors has to be exploited further to understand the cause.

The attitude of HIV positive youth was also assessed using likert scale questions ranged from strongly agree to disagree strongly. Majority of participants (97.7%) have a favorable attitude towards people with HIV. As a result of higher report no further analysis was done in associated factors. This result is higher than other studies in Ethiopia and elsewhere [6, 20, 23]. The good attitude may be explained by the fact that, these youths are HIV positive and got a chance to get counseling in their respective health facilities. Despite of poor level of knowledge, this high favorable attitude can be by a study that demonstrate the amount of knowledge has no effect on attitude [24]. On the other hand improved score of knowledge can be accounted from the fact that there is social and community attitude change in general and also among HIV positive individuals in particular towards people with HIV/AIDS

over time. Furthermore the association on level HIV knowledge and attitude towards people with HIV and AIDS should be explored.

In the present study, 46.4% of youths practiced first sexual intercourse before 18 years of age with average age of 17 (SD, ± 3 years). This result is similar with studies in different parts of Ethiopia [17, 19, 25]. There were more than half of the participants who had multiple sexual partners. High number (63.3%) of HIV positive youth with single current partnership have had HIV negative sexual partner similarly those 58.2% with multiple sexual partner have had HIV negative sexual partners. The finding demonstrates their poor knowledge contribution on ways of HIV transmission to have HIV negative sexual partners. Even some did not know HIV status of their current sexual partners which might be due to high level of favorable attitude towards HIV positive people. However further qualitative study may uncover why most of HIV positive youth had HIV negative sexual partners. This finding is more severe than other studies in Ethiopia [6, 26] since the study participants are HIV positive and significant number of them had HIV negative sexual partners. This problem is also likely to be doubled as 29.4% of them never use a condom during sexual intercourse, and 43.8% use condom inconsistently. Similar studies also revealed that such risky sexual practices will lead to sexually transmitted infections including HIV and are likely to increase teenage pregnancy [27]. The favorable attitude and poor knowledge of participants might have contributed for them having negative sexual partners. Therefore, youths should be educated on less risky sexual practices for their health and to the prevention of further HIV infection to the negative sexual partner. More education is also required on the consistent use of condoms as well as counseling on the need to knowing their sexual partners HIV status.

Participants who did not use khat were 3.23 times more likely not to engage in the early sexual debut. The finding implied that, those who chew khat did not engage in early sexual intercourse. However different studies indicated that those who use a substance like alcohol [25] khat chewing among Ethiopian youth [28] was a risk factor for early sexual practice. The discrepancy could be a due to the limitation of cross sectional study design and so it is difficult to indicate which variable appeared initially. However, one study revealed that there is no association between khat chewing and erectile dysfunction [29]. Therefore, it is recommended that, an observational study is undertaken to identify cause and effects of khat use and early sexual initiation.

Limitations of the study

The study was it includes only HIV positive youth who seek care in hospitals that could exclude those outside clinical care. The second limitation is since the study design is cross sectional it cannot show cause effect relationship between dependent and independent variables.

Declarations

Ethical approval and consent to participant

Ethics approval was obtained from Debre Markos University research ethics approval committee prior to data collection.

Availability of data and material

Data will be available upon request of the corresponding author.

Acronym and abbreviation

AIDS: Acquired Immune Deficiency Syndrome

ART: Anti Retro Viral Therapy

HIV: Human Immune deficiency Virus

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Table 1: Knowledge levels among HIV positive youths North West Ethiopia

s/n	Knowledge related questions	Yes (%)	NO (%)
1*	Is AIDS spread by kissing	55 (16)	288 (84)
2*	Can a person get AIDS by sharing kitchens or bathrooms with someone who has AIDS?	12 (3.5)	331 (96.5)
3*	Can you get AIDS by touching someone who has AIDS?	14 (4.1)	329 (95.9)
4	Can men give AIDS to women?	317 (92.4)	26 (7.6)
5	Can women give AIDS to men?	319 (93)	24 (7)
6	Must a person have many different partners to get AIDS?	179 (52.2)	164 (47.8)
7*	Does washing after sex help protect against AIDS?	41 (12)	302 (88)
8	Can a pregnant woman give AIDS to her baby?	306 (89.2)	37 (10.8)
9*	Can a person get rid of AIDS by having sex with a virgin?	31 (9)	312 (91)
10	Is HIV the virus that causes AIDS?	289 (84.3)	54 (15.7)
11*	Is there a cure for AIDS?	45 (13.1)	298 (86.9)
12	AIDS can be contracted even with one intercourse	321 (93.6)	22 (6.4)
13	AIDS can be contracted from healthy looking person	321 (93.6)	22 (6.4)
14*	AIDS is a punishment from God	86 (25.1)	257 (74.9)
Total knowledge score of good knowledge correct answer)		210 (61.2)	133 (38.8)

Questions with (*) were reciprocally coded for their negative meanings.

Table 2: Attitude towards people living with HIV/AIDS among HIV positive youths of North West Ethiopia

s/n	Attitude questions	Strongly disagree N (%)	Disagree N (%)	Neutral N (%)	Agree N (%)	Strongly agree N (%)
1	People who have AIDS are dirty	227 (66.2)	97 (28.3)	4 (1.2)	6 (1.2)	9 (2.6)
2	People who have AIDS are cursed	229 (66.8)	95 (27.7)	3 (0.9)	10 (2.9)	6 (1.7)
3	People who have AIDS should be ashamed	227 (66.2)	91 (26.5)	4 (1.2)	17 (5)	4 (1.2)
4	It is safe for people who have AIDS to work with others, including children	67 (19.5)	31 (9)	3 (0.9)	142 (41.4)	100 (29.2)
5	People who have AIDS must expect some restrictions on their freedom	205 (59.8)	83 (24.2)	6 (1.7)	36 (10.5)	13 (3.8)
6	A person with AIDS must have done something wrong and deserves to be punished	227 (66.2)	94 (27.4)	6 (1.7)	11 (3.2)	5 (1.5)
7	People who have HIV should be isolated	225 (65.6)	102 (29.7)	3 (0.9)	6 (1.7)	7 (2)
8	I do not want to be friends with someone who has AIDS	192 (56)	99 (28.9)	4 (1.2)	36 (10.5)	12 (3.5)
9	People with AIDS shouldn't be allowed to work	225 (65.6)	103 (30)	1 (0.3)	8 (2.3)	6 (1.7)
Favorable attitude towards people living with HIV were 335 (97.7%)						
Unfavorable attitude towards people living with HIV were 8 (2.3%)						

Table 3: Factors associated with early sexual initiation among HIV positive youths in North West Ethiopia

Characteristics	Earl initiation Yes	sexual No	Crud odds ratio at 95% CI	Adjusted odds ratio at 95% CI	P-value
Sex					
Male	12	37	1	1	
Female	78	67	3.59 (1.73-7.43)	1.81 (0.99-3.29)	0.054
Alcohol drink					
Yes	44	67	1	1	
No	46	37	1.89 (1.06-3.37)	2.5 (0.97-6.48)	0.059
Khat chewing					
Yes	7	20	1	1	
No	83	84	2.82 (1.13-7.0)	3.23 (1.54-6.79)	0.002