

Sexual risk behaviours among secondary school youths in Enemay District, East Gojam Zone, Ethiopia

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Abstract

Youths are more likely to engage in sexual risky behaviours, such as unsafe sexual practices and substance abuse. Despite this, youths are not considered a health priority because of their lower morbidity and mortality rates relative to older and younger age groups. This quantitative descriptive cross-sectional study explored factors influencing sexual risk behaviours among youths in selected secondary schools in Ethiopia. Data were collected from 275 secondary school students using structured questionnaires. Data were analysed with the help of descriptive statistics. Religious attachment, parental control, and level of parental education are some examples of the factors that may influence youths to engage in sexual risk behaviours. The findings of this study have implications for both practice and policy development. The findings would enable healthcare workers to identify youths at risk of engaging in sexual risk behaviours, and subsequently motivate them to engage in safe sexual practices. Healthcare workers' efforts to minimise factors influencing sexual risk behaviours should be directed more at parents and peers than at educators. Adopting such an approach would prevent or at least minimise the risk of youths being infected with sexually transmitted infections, including HIV.

Keywords: HIV/AIDS, senior secondary schools, sexual risk behaviours, sexually transmitted infections, youths.

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Introduction

Approximately 1.7 billion people (more than one-quarter of the world's population) are between the ages of 10 and 24 years (youths), and 86 percent of these youths live in the developing world (Tsutsumi, Izutsu & Matsumoto, 2012). Youth is regarded as a period during which people explore and discover a range of life events or behaviours, such as early onset of sexual intercourse (Liao, Jiang, Yang, Zeng & Liao, 2010). Youths often get exposed to or engaged in sexual risk behaviours, like unprotected sexual intercourse and multiple sexual partners. Despite this, youths are not considered a health priority because of their lower morbidity and mortality rates relative to older and younger age groups.

However, engagement in unprotected sexual intercourse and multiple sexual partners could increase the youths' risk of unplanned pregnancies and acquisition of sexually transmitted infections (STIs), like human immunodeficiency virus (HIV) (Liao *et al.*, 2010). Globally, over four million youths are diagnosed with STIs, and over one million youths become pregnant each year (Kauffman, Orbe, Johnson & Cooke-Jackson, 2013). Added to this, the incidence and prevalence of HIV among youths is generally higher than in adults (Turnbull, 2010). The literature sources indicate that about 55% of new global HIV infection cases occur in youths (Tsutsumi *et al.*, 2012).

Over two thirds of people infected with HIV (about 22.5 million) are in Sub-Saharan Africa, which makes it the region in the world that is most affected by this pandemic (Petros, 2014). In this region, and in East Africa in particular, youths are the most affected as they have a higher prevalence of HIV than the adult population (Saad, Subramaniam & Tan, 2013). In Kauffman, Orbe, Johnson and Cooke-Jackson's (2013) view, this pattern of HIV infection is a function of the youths' engagement in sexual risk behaviours. In spite of this assertion, sexual risk behaviour in East Africa is largely a neglected area of investigation.

One in every 13 adults (about 7.6% of adult population) in Ethiopia is infected with HIV, and one out of every six adults in urban areas of this state is HIV positive (Petros, 2014). Unprotected sexual intercourse is the main mode of transmission of HIV infection among youths and adults in Ethiopia and sub-Saharan Africa (Fearon, Wiggins, Pettifor & Hargreaves, 2015). A study by Adamu, Mulatu and Si (2003) on condom use among secondary school youths in Ethiopia confirms this. Its outcome reveals that the first or initial sexual intercourse of youths is usually not protected, and youths may even engage in the same with casual or commercial sex partners. Multiple sexual partners, and sexual intercourse with casual or commercial partners are the most commonly reported sexual risk behaviours. Only a few respondents indicated that they used condom regularly and felt protected by it from sexually transmitted infections. The study notes that the geographical location of respondents may influence their use of condom and perceptions of whether it protects them from sexually transmitted infection.

The literature is clear that exposure to pornography and use of substance, such as alcohol, khat (a locally grown green plant stimulant) and shisha (a stimulant similar to marijuana) may promote sexual risk behaviours of youths in Ethiopia (Stock *et al.*, 2013; Petros, 2014). Examples of sexual risk behaviours of Ethiopian youths that are frequently cited by researchers include casual sex, engagement in multiple concurrent sexual relationships, sexual intercourse in exchange for favours, and unprotected sexual intercourse (Wand & Ramjee, 2012). However, what are still not clear in Ethiopia are secondary school youths'

sexual risk behaviours and factors that may influence them. This lack of clarity is probably a function of the limited research studies on this subject. Hence, this study, which explored factors that might influence secondary school students to engage in sexual risk behaviours in Enemay District, East Gojam Zone of Ethiopia. Its outcome resulted in the provision of recommendations for reducing and preventing HIV transmission among the youths in secondary schools in Enemay District, Ethiopia.

Methodology

Design

This is a quantitative study that utilised a descriptive cross-sectional design. This design allows for the collection of information about the status of an individual with respect to the presence or absence of subjects of interest (Joubert & Ehrlich, 2014). In this type of design, data are generally collected from a whole population or – as in this case – a subset of a population, in order to answer a research question of interest (Friis & Sellers, 2009). A cross-sectional design provides a snapshot of subjects studied at a particular point in time. The researchers utilised this design to determine and explore factors influencing sexual risk behaviours among youths at secondary schools.

Setting and Sampling

The study was conducted in Enemay District. This district has a total population of 165,292. It is situated about 260 km from Addis Ababa, the capital city of Ethiopia. The study was carried out in two mixed-sex education secondary schools in Enemay District. The target population of this study comprised of all youths in secondary schools at the Enemay District in East Gojam, Ethiopia. Enemay District, was purposely selected from 11 districts in East Gojam Zone because of its accessibility when compared with other districts. Two secondary schools, Darfur and Belay Zeleke, were included in the study. These schools had a student youth population of 3260 and 2126 respectively. One hundred and sixty six (166) and 109 youths were randomly selected from Darfur and Belay Zeleke schools respectively, using the lottery method. The sample size of 275 was calculated using the single proportion sample size formula. Only students from Darfur and Belay Zeleke secondary schools who were between the ages of 18 and 20 years and single (unmarried, divorced or widowed) were included in the study.

Data collection and analysis

Ethical clearance was obtained from the University of South Africa's Higher Degrees Committee. Permission to undertake the study was obtained from the Addis Ababa City Administration Health Bureau, the sub-cities and schools where the study was conducted. Respondents consented to participate in the study following discussions of all relevant ethical issues: privacy, confidentiality, respect, voluntary participation, prevention of harm, and participants' right to withdraw from the study at any time. Data were gathered using a structured self-administered questionnaire, developed in English and translated into Amharic (local language) to standardise questions for respondents. Most of the items were adapted from existing surveys. Each of the 275 students selected completed the questionnaire. One of the researchers was always available to assist the respondents in case they experienced problems in responding to the questions. All completed questionnaires were put into lockable boxes, which were strategically placed at the study sites (schools). Data were captured using Epi-info version 3.5, and analysis was performed using SPSS v.16 statistical packages. Data were analysed using descriptive statistics, such as percentages.

Results

Results are presented under the following subheadings: socio-demographic characteristics of secondary school students; sexual risk behaviours; students' perceptions of factors associated with sexual risk behaviours; students' perceptions of selected social norms and gender roles; knowledge of selected sexual and reproductive health issues; communication and discussion regarding sexuality, and HIV/AIDS and sexual behaviour.

Socio-demographic characteristics of secondary school students

A total of 275 secondary school students (164 [59.6%] males and 111 [40.4%] females) participated in the study, and there was a 100% response rate. The minimum and maximum ages of the respondents were 18 and 20 years old respectively. One hundred and ninety (190 [69.1%]) of the respondents were Orthodox Christians, and 149 (54.2%) of these were permanent urban dwellers. The mean age of the respondents was 18.73 (\pm 0.734) years. With regard to living arrangements, 132 (48%) of respondents were living with parents and 60 (21.1%) were living with sisters and brothers. Orthodox Christian respondents of literate parents had fewer sexual encounters than those of illiterate parents (16.3% vs 54.6% respectively). A similar pattern was noted with Muslims. Muslims of literate parents had fewer sexual encounters than those of illiterate parents (2.0% versus 27.0% respectively) (Figure 1).

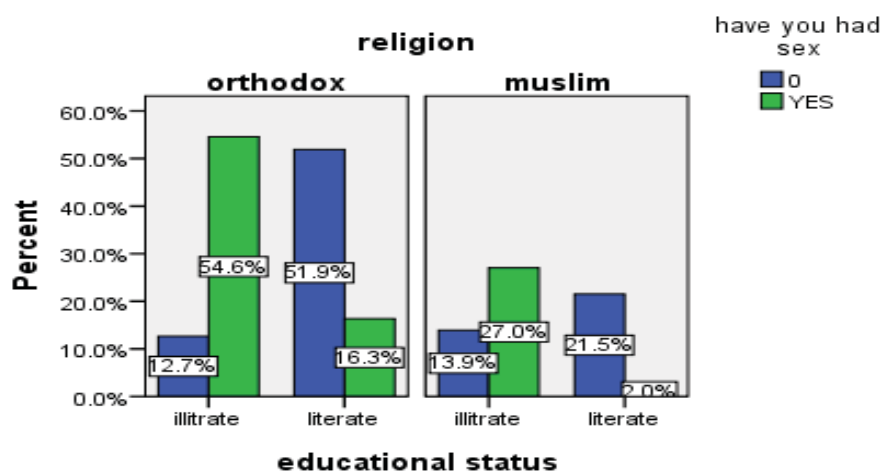


fig-1. Distribution of respondents' history of sexual intercourse by their religion and parents' educational status, Enemay District, East Gojam Zone, Ethiopia 2012.

Irrespective of religious orientation, students of illiterate parents experienced early onset of sexual activity more frequently than those of literate parents. However, Orthodox Christian students of illiterate parents had fewer early sexual encounters than Muslim students of illiterate parents (54.7% vs 56.5%). Orthodox Christian respondents of literate parents had fewer early sexual encounters than those of illiterate parents (16.3% vs 54.6%). A similar pattern of sexual encounters was also noted among Muslim respondents (2% vs 27%). With regard to Orthodox Christian students of literate parents, the results show that students younger than 18 years engaged in early sexual encounters more frequently than those who were older than 18 years (14.7% vs 2.1%). This pattern was reflected among Muslim students of literate parents (3.5% vs 1.2%). A good proportion of the respondents (106 [57.0%]) had a history of multiple sexual partners. Muslim students of illiterate parents had more frequent history of multiple sexual partners than Orthodox Christian students of illiterate parents (37.6% vs 33.2%). However, Muslim students of literate parents had less frequent history of multiple sexual partners than their Orthodox Christian counterparts (3.5% vs 8.9%). In relation to the use of condoms, Orthodox Christian students of literate parents used condoms more frequently than their Muslims counterparts (10.5% vs 2.4%). However, the use of condoms by students of illiterate Orthodox Christians parents and illiterate Muslims parents was almost the same (30.0% vs 29.4%).

Sexual risk behaviours

Table 1 shows the distribution of respondents' sexual risk behaviour per sex. One hundred sixty four (164) of the 275 respondents were males and 111 were females. While 89 (32.4%) of students (males and females) had not engage in

sexual intercourse at the time of data collection, 186 (67.6%) reported to have done so. One hundred and thirteen (113 [60.7%]) of students who had sexual intercourse were males and 73 (39.3%) were females.

Table 1: Distribution of secondary school students' sexual risk behaviours per sex

Sexual risk behaviours	Sex		
	Male N(%)	Female	Total
Have had sex			
Yes	113(68.9)	73(65.8)	186(67.6)
No	51(31.1)	38(34.2)	89(32.4)
Total	164(100.0)	111(100.0)	275(100.0)
Unprotected sex			
Yes	44(38.9)	38(52.1)	82 (44.1)
No	69(61.1)	35(47.9)	104(55.9)
Total	113(100.0)	73(100.0)	186(100.0)
Multiple sexual partners			
Yes	59(52.2)	47(64.4)	106(57.0)
No	54(47.8)	26(35.6)	80(43.0)
Total	113(100.0)	73(100.0)	186(100.0)
Early age of sexual onset			
Yes	110(97.4)	66(90.4)	176(94.6)
No	3(2.7)	7(9.6)	10(4.4)
Total	113(100.0)	73(100.0)	186(100.0)
Trading sex for money			
Yes	14(12.4)	38(52.1)	52(18.9)
No	99(87.6)	35(47.9)	134(79.1)
Total	113(100.0)	73(100.0)	186(100.0)

With regard to unprotected sex, 44 (38.9%) of the 113 male respondents who responded to have had sexual intercourse had unprotected sexual intercourse. This means that 69 (61.1%) of sexually active males used contraceptives (condoms). On the other hand, 38 (52.1%) of the 73 females who had engaged in sexual intercourse did so without the use of condoms. On examination of both males and females, 82 (44.1%) of the 186 (67.6%) respondents who reported to have had sex, engaged in unsafe sexual practice (unprotected sexual intercourse). However, 104 (55.9%) of the 186 (67.6%) sexually active respondents used condoms during sexual intercourse. Fifty nine (59 [52.1%]) of the males and 47 (64.4%) of females who reported to have had sexual intercourse did so with

multiple partners. However, 54 (47.8) and 26(35.6) males and females respectively did not report to have had sexual intercourse with multiple partners. In relation to early age of sexual debut, 110 (97.4%) of the 113 male respondents and 66 (90.4%) of the 73 female respondents who had had sexual intercourse had their first sexual intercourse at an early age, meaning before they were 18 years of age. With regard to engaging in sexual intercourse for financial gains, 38 (52.1%) of the 73 female respondents and 14 (12.4%) of the 113 male participants who had had sexual intercourse claimed to have traded sex for money. The results show that more females than males had traded sex for financial reasons.

Students' perceptions of factors associated with sexual risk practices

Table 2 shows students' perception of factors associated with sexual risk practices. Being infected with sexually transmitted infections, conception before menstruation, and lack of financial resources are the primary factors perceived by students to be associated with sexual risk behaviours. There were varied understandings among respondents regarding the time a female might conceive. Some respondents (220 [80%]) believed that conception happens before menstruation, 210 (76.4%) claimed that it occurs immediately after menstruation, 206 (79.9%) believed that it occurs during the middle of menstruation, and 165 (60%) were of the view that it occurs during the menstrual bleed.

Table 2: Students' perception of factors associated with sexual risk practices

Perception	Number	Percentage
Conception occurs before menstruation	220	80%
Conception occurs immediately after menstruation	210	76.4%
Conception occurs during the middle of menstruation	206	79.9%
Conception occurs during menstrual bleed	165	60%
Abstinence prevents HIV transmission	249	90.5%
Being faithful to one sexual partner prevents HIV	236	85.8%
Condom use prevents HIV transmission	238	86.5%
Use of sterile needles and syringes prevents HIV infection	226	82.2%
Avoiding commercial sex workers prevents HIV transmission	239	86.9%
Antibiotics can prevent HIV	219	79.6%

Most of the respondents (249 [90.5 %]) agreed that HIV can be prevented through sexual abstinence, 236 (85.8 %) stated that it can be prevented by being faithful to one sexual partner, 238 (86.5%) claimed that HIV can be prevented by the use of condoms, 226 (82.2 %) indicated it can be avoided by using sterile syringes and needles, 239 (86.9%) indicated that avoiding sexual contact with commercial sex workers can prevent the transmission of HIV, and 219 (79.6 %) respondents believed that HIV can be prevented by using antibiotics prophylactically.

Students' perceptions of selected social norms and gender roles

One hundred and seventeen (117 [71.3%]) male respondents and 83 (74.8%) female respondents believed that having knowledge of condom use might encourage sexual activity of youths. A total of 143 (87.2%) male respondents and 89 (80.2%) female respondents said that having sexual intercourse while still a teenager is against their values. In addition, 86.6% of female respondents and 70.1% of male respondents believed that it is important to remain a virgin until married. About 50% of male and female respondents claimed that having a child while in high school is a challenge for the mother. Added to this, 131 (79.9%) of the male respondents stated that males are responsible for managing family expenditure

Communication and discussion regarding sexuality and HIV/AIDS

In this study, about 80.4% (221) of the respondents reported that they had discussed sexuality and HIV/AIDS with teachers, parents, peers and friends, and 87.3% of them indicated that teachers are good sources of information regarding HIV/AIDS. However, a high percentage of respondents also claimed that friends (82.9%) and health practitioners (71.3%) are good sources of information on HIV/AIDS. Furthermore, 109 (39.6%), 90 (32.7%) and 84(30.5%) of the respondents indicated that books and films, mass media and family members respectively could also serve as sources of information on HIV/AIDS.

Discussion

This study explores factors that may influence youths to engage in sexual risk behaviours, and provides recommendations for reducing or preventing unsafe sexual practices, and consequences thereof, among youths in secondary schools. Most of the youths of the two secondary schools studied in Enemay District had had sexual intercourse. One hundred and eighty six (67.6%) of the 275 youths had had sexual intercourse. This is not the first time a high rate of sexual intercourse is reported in places of higher learning in Ethiopia. In 2010, a study involving 5824 sample of students from five public universities in Ethiopia showed that 281 had sexual intercourse with more than one sexual partner, 207 had sexual intercourse without using a condom, and 200 had had sexual intercourse with commercial sex workers (Petros, 2014). Sexual intercourse remains the main mode of transmission of HIV infection among youths in Ethiopia and sub-Saharan Africa, despite improved HIV/AIDS prevention and transmission knowledge (Fearon *et al.*, 2015). The present study demonstrates that many youths are confronted at some point with choices to have or not to have sex, and if the former is the preferred option, they are also confronted with the options to use condoms or other preventive strategies, such being faithful to one partner. The study outcome is not clear whether social economic factors

influenced any of the respondents to engage in unsafe sexual practices; in other words unprotected sexual intercourse.

Unprotected sexual intercourse

Eighty two (82 [44.1%]) of the 186 respondents who claimed to have had sexual intercourse indicated that they did so without protecting themselves. In other words, these respondents reported to have had sexual intercourse without the use of condoms. The proportion of these students was almost half of those who had protected sexual intercourse. An unsafe sexual practice, like not using condoms is considered a sexual risk behaviour, as it increases people's chance of contracting HIV and other STIs (Fearon *et al.*, 2015). The high incidence of unprotected sexual intercourse noted among youths of Darfur and Belay Zeleke secondary schools in Enemay District is not unique to this study. Seloilwe's (2005) study on HIV transmission revealed that unprotected sexual intercourse was common among students (male and female) in Botswana albeit improved knowledge of HIV and modes of HIV transmission. However, students of the same study reported that they often use condom during the early stages of their relationships, but decreases its use with time as relationships progress (Seloilwe, 2005). Such a trend of condom use may predispose youths to sexually transmitted infections. Some youths of this study are aware of approaches to adopt to prevent or minimise the risk of contracting HIV and other sexually transmitted infections. Examples of such approaches include the use of condoms, abstinence, and faithfulness.

Multiple sex partners

A significant proportion of respondents (85%) believed that being faithful to one sexual partner prevents HIV transmission. Although this was the case, 57% of respondents reported that they had multiple sex partners. This suggests that people's perceptions and beliefs do not always influence their behaviours. In the case of sexual intercourse, people's desire to engage in the same appears to play a major influential role than beliefs and perceptions. Engagement in sexual intercourse with concurrent multiple partners are considered a high-risk behaviour for contracting STIs, HIV (Fearon *et al.*, 2015). In spite of this, some youths of this study had multiple concurrent sexual partners. This is not likely to be a function of lack of knowledge of STIs, as most of the youths reported to be knowledgeable about the same, including modes of transmission. However, according Seloilwe's (2005), it could be attributed to view that youths find it prestigious to have multiple sexual partners. Multiple concurrent sexual partner behaviour and its implications, for example, risk of STIs transmission, are not exclusive to youths in Africa. Similar concerns have been reported elsewhere. For example, the outcome of Liao *et al.*'s (2010) study revealed that some school youths in China do also have multiple sexual intercourse partners.

Early sex debut

In Ethiopia having sexual intercourse before the 18th birthday is considered 'early' and inconsistent with the social, cultural and gender norms (Petros, 2014). Most of the respondents reported to have had sexual intercourse before their 18th birthday. Such behaviour contributes to the high prevalence and incidence of HIV infections, and pregnancy among youths in Ethiopia (Petros, 2014). This is likely the case, as literature sources consistently refer to early sexual intercourse debut as a significant risk factor of HIV and other STIs (Wand & Ramjee, 2012). In Stock *et al.*'s (2013) view, the role which early sexual intercourse debut plays in the high incidence of STIs and pregnancy among youths is generally enhanced by the disinhibitory function of substances (drug and alcohol). Seloilwe (2005) agrees with this and states that substance use and misuse are the leading risk factors for early sexual intercourse and spread of HIV/AIDS among students of the University of Botswana.

Trading sex for financial gain

The importance of understanding the economic context in which sexual behaviour occurs is illustrated in this study, as both male and female school youths offered discussions on trading sex for financial gains. The results indicate that more female than male youths reported to have exchanged sex for money. The gender difference could be attributed to the females' lack of or limited financial resources for items, like food, clothing, cosmetics and cell phones. Abdu, Umar, Faisal, Tajuddin, Suria and Yakasai (2016) agree with this and state that students in higher learning institutions in Africa often come from a wide range of socio-economic backgrounds, and some often adopt lifestyles that create excess demands on their financial resources. This category of students may exchange sex for money to meet their social needs (Abdu *et al.*, 2016). It is therefore not surprising to note that the exchange of sex for money was reported to often involve adult men, but sexual negotiations with male youths were reported as well. This behaviour exposes youths to the risk of contracting STIs. While this is the case, it is not clear whether the youths of this study who exchanged sex for money used condoms to protect themselves from STIs.

Recommendations

Given that parents and peers have influence over youths' sexual behaviours, efforts to minimise or alleviate factors influencing sexual risk behaviours should be directed more at parents and peers rather than at educators. Added to this, parents need to be educated about reproductive and sexual matters and assisted in enabling their youths to navigate safely through this vulnerable stage of life.

Limitations of the study

This is a quantitative descriptive study that only employs descriptive statistics. Thus, its outcomes can not be generalised to the wider population of youths in Ethiopia even though it used a random sampling approach. The study was conducted in two secondary schools of a single district (Enemay) in Ethiopia. The factors influencing the sexual behaviours of youths of this district (e.g. culture) may be different from those influencing the sexual behaviours of youths in other districts in Ethiopia. Hence, given the possible differences and descriptive nature of this study, its findings cannot be generalised to the wider population of youths in Ethiopia.

Conclusion

The findings of this study indicate that a considerable proportion of youths in secondary schools at the Enemay District in East Gojam, Ethiopia are sexually active. There are a range of factors that may influence youths' sexual activities. Examples include religious affiliations and parental educational status or literacy level, and parental control. Orthodox Christian respondents of literate parents had fewer sexual encounters than those of illiterate parents. This is the case for those of other religious denominations. Youths who had experienced peer pressure were more likely to initiate sexual activity than those not subjected to such pressure. Most of the youths in this study had engaged in at least one type of sexual risk behaviour, such as multiple sex partners, trading sex for money, and unprotected sex. Such behaviours expose youths to the risk of unwanted pregnancies and STIs. Condom was the contraceptive method youths reported to use to prevent unwanted pregnancies and acquisition of STIs, like HIV. Although the outcomes of this study cannot be generalised because of their descriptive nature, they have however generated more insight into secondary school youths' sexual risk behaviours. Such insight serves as a useful resource for alleviating or minimising factors influencing sexual risk behaviours among secondary school youths.

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