Assessment of Magnitude of Risk Sexual Behaviours among Mizan High School and Preparatory School Students, South West, Ethiopia, 2016: Descriptive Cross-Sectional Study

Abstract

Objective: The aim of this study is to assess the magnitude of risky sexual behaviours. Among High School and Preparatory School Students in Mizan town, Ethiopia.

Methodology: Schools based cross sectional study design were conducted from April 23-27, 2016 in high school and preparatory school students in Mizan town and the data will be collected through self-administered questionnaire. Total of 308 study subject were included in the study. Individuals were selected through simple random sampling techniques. Data was entered and analyzed by using SPSS version 20.

Result: A total of 308 study subjects were participated. About 204 (66%) of them were between the age of 16-18 years. The overall risk sexual behaviours of the respondents was about 158 (51.3%). From the total participants who ever had sexual experience, most 54(50.94%) of them had multiple sexual partner. Most of the participants, 77 (72.64%) didn't use any form of contraceptive and or barriers during their first sexual exposure. Regarding to their sexual partner, about 20 (18.87%) of them were had sex with commercial sex workers.

Conclusion and recommendation: A considerable number of students have practiced risky sexual behaviours that might predispose them to different sexual and reproductive health problems. Risky sexual behaviours were proven by having sex under the influence of alcohol and khat, having multiple sexual partners, having sexual intercourse with commercial sex workers and low practice of utilization of condoms. Youth friendly health service should be strengthened as this facilitates accessibility of services such as usage of condom, and provide information related to substance use.

Keywords: Risk sexual behaviours; Mizan high school and Preparatory school; Ethiopia

Introduction

Risky sexual behaviours increase the likelihood of adverse sexual and reproductive health consequences such as unwanted pregnancies, unsafe abortion and sexually transmitted infections including HIV/AIDS. Adolescent in sub Saharan Africa, including Ethiopia are highly risky to various risky sexual behaviours. The adolescent is a periodic, biologic, psychological, cognitive and emotional change that comes through the development of behaviours and attitude about sexuality that may potentially have serious health implication. Sexual activity among youth today possesses a special risk, such as unplanned or unwanted pregnancy.
Background

Sexually transmitted diseases are among the most common illnesses in the world and have far reaching health social and economic consequences. STDs are important because of their magnitude, potential complications and their interaction with HIV/AIDS. According to WHO report on Global incidence and prevalence of selected curable sexually transmitted infections, the total number of new cases in the world of the four STIs in 2008 in adults between the ages of 15 and 49 was estimated to be 498.9 million. The total number of new cases in Africa of the four STIs in 2008 was estimated to be 92.6 million 8.3 million cases of C. trachomatis, 21.1 million cases of N. gonorrhoeae, 3.4 million cases of syphilis and 59.7 million cases of T. vaginalis [1].

Adolescents and young adults have an increased interest in the opposite sex, highly concerned with physical and sexual attractiveness, and are frequently changing relationships [2]. As evidenced by different literatures early sexual debut among youths is influenced by a wide range of factors. Including age, sex, residence, peer influence, parent youth communication concerning reproductive health, exposure to sexual explicit media, alcohol drinking, khat chewing, and ever having a boy or a girl friend were associated with increased sexual debut, while living with parents was associated with decreased pre-marital sexual debut [3].

University students are in the youth age category and are exposed to risky sexual behaviours such as unprotected sexual intercourse leading to HIV, other STIs and unwanted pregnancies [4]. The risky behaviours may further be worsened by the fact that university students are too many in number, lack facilities for sexual and reproductive health services and live away from their parents and free from parental control. In addition, some are subjected to wide spread substance use and peer-pressure that aggravate the risky behaviours [5].

Majority of HIV infections are transmitted through unprotected sexual contact [6]. A study in Wolayta Sodo University in Ethiopia indicated the prevalence of at least one STD associated syndromes in 12 months which was 19% [7].

Students are in the age range with the highest rates of new HIV infections [8]. The university environment with its attendant relative lack of parental supervision, exposure to wide spread substance use and peer-pressure offers great opportunity or young people, who are bridging from adolescence to adulthood, to test the limits of their new-found freedom through sexual experimentation [9,10]. Such experimentation frequently involves engagement in risky sexual activities such as multiple partnerships, inconsistent use of condoms, and having sex under the influence of alcohol or drugs [11].

Methodology

Study area and period

This study was conducted in Mizan High school and Preparatory students from April 23-27, 2016 G.C. Mizan is located in Southern nation and nationality of Ethiopia. It is known coffee growing country in Ethiopia. The town is located approximately 561 Km South-west of Addis Ababa and encompasses 5 kebele in the center and 10 woreda around and estimated population in 2010 is over 48,934. They have public services like telephone, 24 hours electricity, radio station, teaching hospital, higher clinics, health centers, health colleges, technical and vocational schools, University and other public institutions which are giving services. There are 2 private and 2 governmental secondary schools (Mizan high school and preparatory school and Aman high school and preparatory school). The study conducted in governmental high school and preparatory at Mizan high school and preparatory.

Study design

A descriptive cross-sectional study was conducted to assess the magnitude of risk sexual behaviours among students of Mizan high school and preparatory.

Source population

All Mizan high school and preparatory regular students

Study population

All Mizan high school and preparatory school regular students who were randomly selected from each class.

Inclusion criteria

All students who were attending at the time of data collection in Mizan High School and preparatory school.

Exclusion criteria

Those were seriously ill to the extent of unable to respond during the data collection period.

Sample Size Determination and Sampling Procedures

A single population proportion formula, 

$$n = \frac{Z^2 \times p(1-p)}{d^2}$$

was used to estimate the sample size. The following assumptions were made while calculating the sample size. The degree of precision or margin of error chosen to be 0.05 with the reliability coefficient of 1.96% certainty (Z=1.96). Prevalence rate of risk sexual behaviours among students of pawi high school and preparatory 24% [12].

The final sample size for this study with 10% the non-response rate is a total of 308 students and simple random sampling technique was used. The students for each section under each grade level (9th, 10th, 11th and 12th) was proportionally allocated and then randomly selected to be a participant.

Data Collection Technique and Tools

Data was collected using structured self-administered questionnaires which is adopted and modified from different literatures [12,13]. The questionnaires were prepared in English and were pretested among 5% of the total students at Aman high school and preparatory school, before the actual data collection was conducted. After checking of questionnaires completeness with a pretest, the actual data collection with self-administered questionnaires was conducted by using structure questionnaire.
Fourth year Nursing Students were the data collector who were principal investigators they were responsible to lead the whole situation of the data collection process to check the data consistency and completeness.

**Data quality assurance**

The quality of data was assured by properly designed and pre-tested of the questionnaire, proper supervision of data consistency and completeness throughout the data collection and analysis. The data collectors were discussed on methods of data collection and the Questionnaire was checked on a daily basis for completeness during data collection. The data was checked in the field to ensure that all the information will properly collect.

**Data processing and analysis**

Data was entered by SPSS version 20 and after data cleaning for its completeness, analysis was done. Frequency and percent were used to summarize and present major findings to all variables of the study population by using tables, charts and graphs.

**Results**

**Socio-demographic characteristics of the respondent**

A total of 308 study subjects were participated in this study with 100% response rate and of which 167 (64%) were females and 141 (46%) were males. The mean age of the respondents was 18. From the total population of 308 students, 204 (66%) of them were between the age of 16-18 years. Most of the respondents, 126 (40%) were protestants. Of the total respondents, 211 (69%) of them were living in urban areas. Of the total participants, 290 (94%) of respondents were living with both their parents. Among the total participants, 261 (82%) of them were SNNRP (Table 1).

**Preference of sex education and awareness about risk sexual behaviours**

Of the total participants about 247 (80%) of them prefers/wants sex education. Regarding to participants source of information about sexual matters, about 298 (96.7%), 201 (65), 41 (13.4) of the participant have heard about sexuality from school, peers and home respectively (Table 2).

**Reasons for risk sexual behaviours**

About 266 (86.3%), 172 (55.8%), 289 (93.8%) of the participants replied that having multiple sexual partner, watch pornography and erotic regularity, sex with a prostitute is taken as of high risk for STIs and HIV respectively.

About 107 (34.74), 56 (18.18), 81 (26.30) of the participants commonly drink alcohol, smoke cigarette, and chew chat respectively (Table 3).

**Practice of risky sexual behaviours**

The overall risk sexual behaviours of the respondents, more than half of which were about 158 (51.3%) were replied that they were practicing risky sexual behaviours. Of the total participants who ever had sexual experience, most 54 (50.94%) of them had

| Variables | Frequency N=308 | Percentage |
|-----------|----------------|------------|
| Age       |                |            |
| 16-18     | 204            | 66         |
| 19-21     | 65             | 21         |
| 22-24     | 39             | 12         |
| Sex       |                |            |
| Female    | 167            | 64         |
| Male      | 141            | 46         |
| Religion  |                |            |
| Protestant| 126            | 40         |
| Orthodox  | 102            | 33         |
| Muslim    | 80             | 25         |
| With whom do you live now |          |            |
| Both my parents | 290 | 94   |
| My mother only | 8   | 3    |
| My father only | 5   | 1.5  |
| With friends | 5   | 1.5  |
| Ethnicity |                |            |
| SNNRP     | 261            | 82         |
| Amhara    | 29             | 9          |
| Oromo     | 10             | 6          |
| Tigre     | 8              | 3          |
| Place of residence |        |            |
| Rural area | 97             | 31         |
| Urban area | 211            | 69         |
| Educational status of the family | | |
| Uneducated | 55             | 18         |
| Read and write | 106 | 34.4 |
| Elementary | 44             | 14.3       |
| Secondary school | 18 | 5.7 |
| Tertiary school | 85 | 27.6 |
| Parents’ income Per month | | |
| <750 birr | 74             | 24         |
| >750 birr | 234            | 76         |

**Table 1** Socio-demographic characteristics of the respondents (n=308) in Mizan high school and preparatory school, 2015/16.

| Variables | Frequency | Percentage |
|-----------|-----------|------------|
| Participants who prefer/want sex education | Yes | 247 | 80 |
| No | 61 | 20 |
| Participant preference for sex education to be given/delivered | School | Yes | 239 | 96.7 |
| No | 8 | 3.3 |
| Home | Yes | 86 | 35 |
| No | 161 | 65 |
| Peers | Yes | 240 | 97 |
| No | 7 | 3 |
| Church/ mosque | Yes | 46 | 18.7 |
| No | 201 | 81.3 |
| Health institution | Yes | 230 | 93 |
| No | 17 | 7 |
| Participants source of information about sexual matters | School | Yes | 298 | 96.7 |
| No | 10 | 3.3 |
| Home | Yes | 41 | 13.4 |
| No | 267 | 86.6 |
| Media | Yes | 234 | 76 |
| No | 74 | 24 |
| Peers | Yes | 201 | 65 |
| No | 107 | 35 |
| Health institution | Yes | 89 | 28.8 |
| No | 219 | 71.8 |

**Table 2** Respondent’s awareness about risk sexual behavior in Mizan High School and Preparatory School, 2015/16.
multiple sexual partner. Most of the participants, 77 (72.64%) didn't use any form of contraceptive and or barriers during their first sexual exposure. Regarding to their sexual partner, about 20 (18.87%) of them were had sex with commercial sex workers (Table 4).

Concerning to the participants initiation of sex, from the total participants, about 32 (30.19), 26 (24.53), 17 (16.04) of them were start sex due to personal desire, peer pressure and economic problem (Figure 1).

| Variables | Frequency | Percentage |
|-----------|-----------|------------|
| Personal desire | 32 | 30.19 |
| Peer pressure | 26 | 24.53 |
| Influence of alcohol | 11 | 10.38 |
| Influence of khat or drug | 13 | 12.26 |
| Economic problem | 17 | 16.04 |
| Forced | 7 | 6.60 |

| Variables | Frequency | Percentage |
|-----------|-----------|------------|
| Boy/girl friend | 73 | 68.87 |
| Relatives | 9 | 8.49 |
| Stranger/unknown person | 4 | 3.77 |
| Sex worker | 20 | 18.87 |

Table 3 Respondent’s reasons mentioned and practiced risk behaviors in Mizan High School and Preparatory School, 2015/16.

| Variables | Frequency | Percentage |
|-----------|-----------|------------|
| Participant ever heard about STIs | Yes | 304 | 98.70 |
| No | 4 | 1.30 |
| Participants practice of risky sexual behavior | Yes | 158 | 51.3 |
| No | 150 | 48.7 |
| Participants ever had sexual experience | Yes | 106 | 34.42 |
| No | 202 | 65.58 |
| Participants who had sex with person other than regular partner | Yes | 49 | 16.23 |
| No | 57 | 33.77 |
| Participants when they start sex | 14-16 | 18 | 16.98 |
| 17-19 | 36 | 33.96 |
| 20-22 | 52 | 49.06 |

Table 4 Respondent’s practice of risk sexual behaviors in Mizan High School and Preparatory School, 2015/16.
Discussion
A descriptive cross-sectional study was carried out to determine the participants’ magnitude for risky sexual behaviours. Accordingly, the participant’s magnitude of risk sexual behaviours was identified.

In this study, the overall risk sexual behaviours of the respondents was about 158 (51.3%). This result is higher compared to study done in Boditi, Humera and Benishangul which showed that the prevalence of risky behaviours were 17.9%, 13.7% and 24%, respectively [12,14,15] This disparity might be due to the difference in the study period.

In this study, among the total students, 50.94% had multiple sexual partners. A study conducted in Wolayta Sodo University indicated that 26% of the students who had multiple sexual partners [16] and study conducted in New York on college aged students investigated that those who had multiple sexual partners were 65.6% [17]. This discrepancy of findings in different study area may be due to the difference in the sociodemographic characteristics. In this study, about 34.42% of the total respondents had ever practiced sexual intercourse. But this finding is low compared to study done from Brazil which showed that 79% of the students had ever practiced sexual intercourse [18]. This difference might be due to socio-cultural variation of the study areas.

In this study personal desire (30.19%), peer pressure (24.53%), forced (6.60%), chat influence (12.26%) and economic problem (16.04%) were the causes reported since the beginning of sexual practice. Likewise, a study finding from Bahir Dar, Oromia and Benishangul regions found that personal desire (46.39%, 27%) and peer pressure (27%, 23%, 16%) were the reasons reported for initiation of sexual intercourse respectively [12,13,19]. This signifies that the influence of adolescents’ action in their sexual relationship depends on many factors that lead them to practice risky behaviours.

Implications for Practice and or Policy
This study will be conducted with the aim of determining the magnitude of sexual risk behaviours in Mizan high school and preparatory school, Bench Maji Zone, South West Ethiopia. It is hoped that the findings of the study would contribute for policy makers and concerned body of the zone to the planning and implementation of appropriate programs to reduce risk sexual behaviours and promote reproductive health knowledge among the young people in the school and other similar learning institutions.

Limitations of the Study
This study was conducted based on self-administered questionnaire, which was subject to reporting errors and bias. Since the study was on very sensitive and private issues the possibility of underestimation cannot be ruled out. Since the study was based on cross-sectional data, which implies that the direction of causal relationships cannot always be determined.

Conclusion
Based on the above findings a considerable number of students have practiced risky sexual behaviours that might predispose them to different sexual and reproductive health problems. Risky sexual behaviours were proven by having sex under the influence of alcohol and khat, having multiple sexual partners, having sexual intercourse with commercial sex workers and low practice of utilization of condoms.

Recommendations
This study recommends that the Mizan Tepi University, school administration and health office of the zones should take the initiative to bring about healthy sexual behaviours among their school youths by establishing reproductive health clubs in the schools. Youth friendly health service should be strengthened as this facilitates accessibility of services such as usage of condom, and provide information related to substance use.

Declaration

Ethics approval and consent to participate
The study was carried out after ethically sound and acceptable, permission letter was obtained from Mizan Tepi University, collage of health science, department of nursing. After explaining the objectives of the study, verbal consent was obtained from each study participant. The data collection was conducted with strict privacy and assuring confidentiality.

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