Assessment of Risky Sexual Behaviour and Associated Factors Among Jimma University of Kitto Furdisa Campus Students, Jimma Town, Oromia Region, South West of Ethiopia, 2015

Samuel Abdu A*, Habtamu Tesfaye M, Bekana FeKecha H
Department of Nursing, Jimma University, Ethiopia

Abstract

**Background:** Risky sexual behaviors including early sexual debut, unprotected sexual intercourse, multiple sexual partner and changing sexual partners, occur in broader context.

**Objective:** To assess risky sexual behaviors and associated factors among Jimma university of Kitto Furdisa students, Jimma zone, Jimma town, Kitto Furdisa in 2015.

**Method:** Cross-sectional study was conducted on 407 undergraduate Engineering students of Jimma university of Kitto Furdisa students and with sampling technique of Stratified random sampling technique. Data was collected through self-administered questionnaire and analyzed using SPSS. For significant statistical association between dependent and independent variable chi-square test was employed and data was presented using table as needed.

**Results:** A total of 407 questionnaires were distributed and 356 returned which makes the response rate 87.5%. 250 (70.2%) were male, majority 263 (73.9%) were in the age range of 20-24 years, 304 (85.4%) of them were aware of risk sexual behavior, 65 (32.9%) had their first sexual intercourse at the age 15-19 years followed by 46 (23.4%) at the age 20-24 year and 83 (42.1%) were do not remember their first sexual intercourse. Age, previous place residence and academic year are significantly associated with risky sexual behavior at p<0.05.

**Conclusion:** This study revealed that there is risky sexual behavior among JIT students. Thus, continuous health information’s to create awareness on condom utilization and anticipation of future risks should be provided by Anti-HIV/AIDS club of Jimma University of Kitto Furdisa Campus Students, Peer-club of students and student clinic.

**Keywords:** Risky behaviour; Jimma University; Kitto Furdisa campus

Introduction

Youths are especially at risk firstly because they are adventurous and very sexually active, being at an age where sexual hits and conquests are perceived as important for self-esteem. Secondly they have multiple sexual partners, and are more likely to practice innovative sexual and risky techniques. Thirdly students are financially insecure. Therefore financial incentives form older men exert strong influence towards their acceptance of risky sexual behaviours especially as regards to non-condom as other study have also indicated [1].

Risky sexual behaviours including early sexual debut, unprotected sexual intercourse, multiple sexual partner and changing sexual partners, occur in broader context. The intensity of involvement in sexual risk behaviour ranges from no sexual relationship to unprotected in sexual intercourse with multiple partner and prostitution. Sexually active teenagers who exhibits few positive or pre-socially behaviours such as involvement in organized action at School or in the community are at high risk for outcomes such as early sexual activity and pregnancy during their teenage years [2]. The trends in sexual activity younger ages are increasing alarmingly in the world. In many countries the majority of young age people are sexually active before age of 20 and premarital sex is common among 15-19 years old [3].

In 2008, young people aged 15-24 years accounted for 42% of new HIV infection in people aged 15 and older and nearly 805 of this live in sub-Saharan Africa [4]. As part the young age bracket, undergraduate University students are in an important group exposed to range risky behaviours. The increased privacy afforded by living outside of their parents. Home provides greater opportunity for sexual expression risk behaviours among undergraduate may be further worsened by the fact that they mostly live in campuses without boundaries or security peer-pressure, economic problems and lack of youth friendly recreational facilities [5].

In the 2006 year almost two third of infection with HIV were in Sub-Saharan countries; Ethiopia is one of the countries where HIV/AIDS is fuelling and striking its population of all ages including adolescents. World Health Organization estimated that, the people with newly acquired infections of HIV between the age of 15 and 24 years mainly through unsafe sexual practice [6].

Despite public health effort to educate individuals about risk behaviours and provide solution to reduce or avoid sexually transmitted diseases (STDs) young people continue to contract HIV and/or STDs at an alarming rate. Rate of HIV continue to rise among young adult ages 15 to 24 that accounted for approximately 14% of all HIV new cases in the USA during 2005 [7].

A study done on knowledge and attitude of college students of Kerala towards HIV/AIDS,STDs and sexualities in India 45% knew as AIDS is not curable at present 34.5% were aware of symptoms of STDs and AIDS. Even boys were afraid of donating blood at blood Bank and receiving injection from governmental hospital. Because they associative with lack of aseptic precautions with increased risk of acquiring infections including HIV however, 55% of then believer as

*Corresponding author: Samuel Abdu A, Department of Nursing, Jimma University, Ethiopia, Tel: 251928236767; E-mail: samuelabdu2004@gmail.com
Received November 16, 2016; Accepted May 18, 2017; Published May 25, 2017


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AIDS is a curable disease. It was believed by the study subjects that Boys engaged in premarital sex than girls [8].

According to study conducted in risk of HIV and sexual risk behaviours in USA, Turkey and South Africa, Those sexually active 27.6% of the USA female students compared with 2.1% south African and none of the Turkish students had their first sexual intercourse before age of 15 31.1% of USA, 9.7% of Turkish and 10.6% of south Africa male students had their sexual debut before the age of 15 [3].

The study conducted on pattern of risky sexual behaviour and associated factors among undergraduate students of porter court university river state Nigeria revealed More than half them 52% had either by friend or girlfriend and 52% have had sex with someone 33.6% of them had their sex for the first time at age range of 5-19 years 3.2% 5-9years, 5.1% 10-14 years 25.3% 15-19 years and 14.1% 20-24 years and 52.3% above 24 years 23.5% had sex with someone in the month preceding the study and 13.4% had one sexual partner girl Boyfriend topped the list of person respondents had sex with and only 31.8% of them used a form of protection [9].

A study done in Zambia shows 48% of the first sex done for the desire to experiment 18% due to peer pressure, 3.6 need of money, 5.4 preparation for marriage and 2.2% forced the largest group of school girls 65% had their first sexual intercoms between the age of 15 and 17 years [9,10].

As across-sectional study done on pattern of sexual risk behaviour among undergraduate university students in Ethiopia revealed 28% students had sexual intercourse at once more proportion of male students ever had sexual intercourse compared to females 4.8% 22.8% of those students had their sexual debut after they joined university. About 6% of students with sexual partners half of the males with sexual experience had intercourse with commercial sex workers about 60% of students had used condom rarely [11].

As study done in Jimma University in 2009, 26.9% ever had sexual intercourse 75.6% started sexual intercourse during their secondary school from those 51% had sex with the last 12 months and 28.3% had multiple sexual partners, consistent condom use with non-regular partner was 69.1%. Lack of parental control, substance use, peer pressure campus and outside environment were identified as predisposing factors; males were about three times more likely to ever had sexual intercourse as compared to females. Majority 68% had first sexual intercourse with boyfriend or girlfriend 48.1% had their first sexual intercourse with individuals of same age females were more likely to have first sex with individuals who were about five year or older than them [12].

Another study done on risky sexual behaviour and predisposing factors among students of Jimma University in 2012 the following result were obtained 26.9% had ever sexual intercourse the mean age at first intercourse was 17+2.7years. Most, 75.6% started sexual intercourse during secondary school. Among those who ever had sexual intercourse, 51% had sex in their last 12 months of the study period and 28.3% had multiple sexual partners. Consistent condom use with non-regular partners in the last 12 months of the study time was 69.1% Lack of prenatal control, peer pressure, campus and outside environment were identified as predisposing factors [12].

However, to what extent the risky sexual behaviour exist among Jimma university students, particularly among Kitto Furdisa Campus regular students is not known, thus this study is aimed to assess the risky sexual behaviour of undergraduate students.

### Materials and Methods

#### Study area

This study was conducted at Jimma university of Kitto Furdisa, found in Oromia regional state, Jimma zone, Jimma town in Kitto Furdisa Kebele which is located 352 km south west of Addis Ababa. Kitto Furdisa was one of Jimma university branch, which is established 4 years back and today teaches different department such as civil, water and pre engineering. The total population of university was 9960 students (which projected from the technology Institute (Faculty) register office of 2nd semester data of students of 2014/2015.

#### Study period

This study was conducted from May 25-June 30, 2015.

#### Study design

Institutional based cross sectional study design.

#### Population

**Source population:** All Jimma university of Kitto Furdisa students.

**Study population:** All Selected regular Jimma university of Kitto Furdisa students.

#### Sample size determination and sampling technique

**Sample size:** Single population estimation parameter is used to calculate sample size.

\[
 n = \frac{(z\alpha/2)^2 \times pq}{d^2}
\]

\[
 n = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2}
\]

\[
= 384
\]

Where, \( n \): minimum sample size

\( p \): Estimate of the prevalence rate for the population

\( d \): The margin of sampling error tolerated (5%)

\( z \alpha/2 \): The standard normal variable at 1-2% confidence level is mostly 5%.

But the source population (N) is <10,000; the sample size will be modified using the correction formula.

\[
 n' = \frac{n}{N} = \frac{384}{1 + \frac{384}{9960}}
\]

\[
= 384
\]

\[
= 9960 + 384
\]

\[
= 9960
\]

\[
= 10344
\]

\[
= \frac{384 \times 9960}{10344}
\]

\[
= 370
\]
Where, \(nf\): Final sample size

\(Ni\): Initial sample size

\(N\): Total population

Add 10% for non-respondents = 10% of sample size + sample size

\[= 37 + 370 = 407\]

**Sampling technique**

**Stratified random sampling technique:** Students were stratified by their year (batch) and final study subjects will be selected from each year by statistical sample size proportion allocation as follows:

\[ni = \frac{Ni \times n}{N}\]

Where, \(N\): Total population

\(Ni\): Population size in each stratum

\(ni\): Sample to be drawn from each stratum

\(n\): Total sample size to be drawn from total population

First year: \[ni = \frac{Ni \times n}{N} = \frac{1871 \times 407}{9960} = 76\]

Second Year: \[ni = \frac{Ni \times n}{N} = \frac{1440 \times 407}{9960} = 59\]

Third Year: \[ni = \frac{Ni \times n}{N} = \frac{1791 \times 407}{9960} = 73\]

Fourth Year: \[ni = \frac{Ni \times n}{N} = \frac{2759 \times 407}{9960} = 113\]

Fifth Year: \[ni = \frac{Ni \times n}{N} = \frac{2099 \times 407}{9960} = 86\]

Total sample size: \[76 + 59 + 73 + 113 + 86 = 407\]

**Inclusion and exclusion criteria**

**Inclusion:** All students learn regular academic years at Jimma university of Kitto Furdisa, present during data collection and volunteer to participate was included in study.

**Exclusion criteria:** All students those were absent during data collection, not volunteer during data collection excluded from the study.

**Study variable**

**Independent variables:**
- Age
- Sex
- Previous place of residence
- Income
- Use of substance
- Condom use

**Dependent variable:** Risky sexual behavior.

**Data collection techniques**

Data was collected using semi structured self-administered questionnaire designed in English language.

**Data collection instruments**

Data was collected through semi structured opened and closed-ended questionnaires. The questionnaire was pre tested before duplicating to get valuable information. It was structured as closed ended questionnaire and was developed and adapted after review of relevant literatures and arranged according to particular objective it can address.

**Data analysis**

Data analysis was made by principal investigator using scientific calculator. Frequency and percentage of each variable will be presented using table. Chi square -test will be done to understand the association (Table 1).

**Ethical consideration**

Ethical approval was obtained from the college of health science office. Permission also obtained from Jimma university of Kitto Furdisa administration. Once permission is obtained from responsible body, verbal informed obtained from participant of this research study, clear information about purpose of study, their confidentiality, the name of participant didn't includes in questionnaires, and the right participant have to withdraw themselves at any time during the interview.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Factors</th>
<th>Non-risky behavior</th>
<th>Risky Behavior</th>
<th>Total</th>
<th>(X^2/P) value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15-19</td>
<td>41 (75.9)</td>
<td>13 (24.1)</td>
<td>54</td>
<td>(X^2=2)</td>
</tr>
<tr>
<td></td>
<td>20-24</td>
<td>227 (86.3)</td>
<td>36 (13.7)</td>
<td>263</td>
<td>(P=0.012)</td>
</tr>
<tr>
<td></td>
<td>25-29</td>
<td>38 (97.4)</td>
<td>1 (2.6)</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>215 (86.0)</td>
<td>35 (14.0)</td>
<td>250</td>
<td>(X^2=1)</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>91 (85.8)</td>
<td>15 (14.2)</td>
<td>106</td>
<td>(P=0.970)</td>
</tr>
<tr>
<td>3</td>
<td>Previous place of residence</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Urban</td>
<td>193 (88.9)</td>
<td>24 (11.1)</td>
<td>217</td>
<td>(X^2=1)</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>113 (81.3)</td>
<td>26 (18.7)</td>
<td>139</td>
<td>(P=0.043)</td>
</tr>
<tr>
<td>4</td>
<td>Monthly income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;250 (ETB)</td>
<td>154 (88.5)</td>
<td>20 (11.5)</td>
<td>174</td>
<td>(X^2=2)</td>
</tr>
<tr>
<td></td>
<td>250-500 (ETB)</td>
<td>82 (87.2)</td>
<td>12 (12.8)</td>
<td>94</td>
<td>(P=0.131)</td>
</tr>
<tr>
<td></td>
<td>&gt;500 (ETB)</td>
<td>70 (79.5)</td>
<td>18 (20.5)</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Academic year</td>
<td></td>
<td></td>
<td></td>
<td>(X^2=4)</td>
</tr>
<tr>
<td></td>
<td>1 year</td>
<td>53 (74.6)</td>
<td>18 (25.4)</td>
<td>71</td>
<td>(P=0.001)</td>
</tr>
<tr>
<td></td>
<td>2 years</td>
<td>48 (87.3)</td>
<td>7 (12.7)</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 years</td>
<td>53 (77.9)</td>
<td>15 (22.1)</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 years</td>
<td>84 (94.4)</td>
<td>5 (5.6)</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 years</td>
<td>68 (93.2)</td>
<td>5 (6.8)</td>
<td>73</td>
<td></td>
</tr>
</tbody>
</table>

**Table 1:** Distribution of factors associated with risky sexual behavior among Jimma University Kitto Furdisa campus, Jimma, Ethiopia May 2015.
Results

A total of 407 questionnaires were distributed and 356 were returned filled correctly which gives the response rate of 87.46%. From 356 study respondents 250 (70.2%) were males and 106 (29.8) were females. Majority 263 (73.9%) in age range of 20-24 years followed by age from 15-19 years -54 (15.2%). Concerning ethnicity, majority were Oromo 142 (39.9%) followed by Amhara - 111 (31.2%). Regarding the religion majority of them were Orthodox 195 (54.8%) followed by Muslim and protestant 70 (19.7%). Concerning their resident area, majority of them were from urban 217 (61.0%) and rural 139 (39.0%). With regard to monthly income, majority 174 (48.9%) had <250 Ethiopian birr monthly followed by 250-500 birr 94 (26.4%).

Awareness of risky sexual behavior

Out of 356 study participants about 306 (86.0%) were aware about risky sexual behaviour, 341 (95.8%) were aware of its impacts on social and human health, majority 205 (75.37%) had got information from class room lesson while 120 (44.12%) students have got from their parents.

The students in this study considered risky sexual behaviour in different ways. Of the 356 study respondents 294 (82.6%) considered sex with multiple partner. 313 (86.5%) considered sex after substance use. 308 (86.5%) considered sex after substance use as risky sexual behavior. 0.253 (71.1%) considered risky sexual behaviour as having sex with commercial sex workers. 255 (71.6%) of them said sex through anal and oral is considered as risky behaviour.

Concerning the outcome of risky sexual behaviour, majority 340 (95.5%) indicated STI including HIV/AIDS as a great impact; Even though, separation from family or relatives were reported as social impacts.

Discussion

33.0% had their first sexual intercourse at age range of 15-19 years among these 37.0% males and 63.0% females. This was greater than the study conducted at Jimma University main campus which was 26.9%. A study done in Zambia showed the largest group of school girls 65% had their first sexual intercours between the age of 15 and 17 years [10]. This difference might be due to the cultural different in that time and know.

Concerning the reason of starting sexual intercourse 46.7% due to peer pressure, 28.42% due to desire to have sexual experiment, 10.66% were forced to do, 9.64% were preparation for marriage and 4.56% due to need of money [12]. This finding was differ from the study conducted in Zambia showed 48% of the first sex done for the desire to experiment and 18% due to peer pressure [5]. This difference might be due to students were spent most of their time with their peers which might influence their behaviour.

Among 59.2% respondents who had used condom, 74.7% had always used during sexual contact and 25.3% had used occasionally. Similar study conducted in Ethiopia walatta Sodo University revealed that 54.0% used condom always whereas 25.0% used occasionally [13].

Conclusion

This study also assessed pattern of substance use which was 356 (29.35%) among these 76.3% males and 23.7% females. 53.33% respondents had used alcohol, 24.76% had consumed or chewed chat and 10.48% have used Hashish. It differ from other study conducted in Ethiopia Bahir Dar City private College which revealed 25% of respondents used alcohol and 18.0% have used chat. The difference might be due to life or living situation of the study respondents.

Age, previous place of residence and academic year had significant statistical association with risky sexual behaviour. Similar study conducted in Jimma University main campus showed lack of parental control, substance use, peer pressure in campus and outside environment were identified as predisposing factors for risky sexual behaviour.

Acknowledgement

I would like to extend my deep appreciation to Jimma University Kitto Furdisa campus student and staffs. I am grateful to Jimma University College of health sciences department of nursing, who has given me this chance and fund this paper work.

References