Risky sexual behaviour of students in secondary schools in Oshikuku, Namibia: A cross sectional survey of knowledge, attitudes and practice.

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Research Assignment submitted in partial fulfillment of the Master of Medicine in Family Medicine degree

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DECLARATION

I, the undersigned, hereby declare that the work contained in this assignment is my original work and that I have not previously submitted it, in its entirety or in part, at any university for a degree. I also declare that ethical approval for the study was obtained from the Health Research Ethics committee of Stellenbosch University (Reference number S13/08/144)

Signature…………………………        Date…………………………………………
ABSTRACT

Introduction: Risky sexual behaviour amongst teenage youth is a significant factor in HIV transmission, other sexually transmitted infections and teenage pregnancy. Little is known about the sexual behaviour of youth in northern Namibia. This study aimed to survey youth in Oshikuku in order to evaluate their knowledge, attitudes and sexual practices.

Methods: A cross sectional survey was conducted with grade 11 and 12 students in secondary schools. A total of 309 students participated and completed a self-administered questionnaire.

Results: 104 (33.7%) were currently sexually active, while 169 (54.6%) had ever had sex. Although all sexually active respondents had used a condom at some time only 25/104 (24.0%) had used one with their current partner. The mean age of sexual debut was 10 years in those sexually active. Only 139 (45.2%) had accessed family planning and only 15 (4.8%) had accessed the clinic for a sexually transmitted infection, despite high rates of genital ulceration (15.2%) and penile discharge (24.5%). Respondents generally had good knowledge of risky sexual behaviour, although only 121 (40.4%) were aware of the benefits of male circumcision. Other issues included beliefs that girls could not refuse sex with their boyfriend (85.2%) and mean “yes” when they said “no” (19.8%), coupled with high rates of sexual coercion (10.9%).

Conclusion: HIV youth prevention programmes in northern Namibia should take cognisance of the issues uncovered in this survey and ensure they are addressed. Primary care services should consider how access to adolescent friendly services for family planning and sexually transmitted infections can be improved.
INTRODUCTION

The HIV/AIDS epidemic is a problem throughout the world, with its consequences being felt mainly in low income countries. There has been a significant reduction in the number of adults and children acquiring HIV infection, from 2.5 (2.5-2.7) million in 2009 to 2.1 (1.9-2.4) million in 2013.(1) At the same time the number of AIDS death is declining with 1.6 (1.4-1.9) million AIDS death in 2012, down from 2.3 (2.1-2.6) million in 2005.(2)

In Namibia, HIV/AIDS is a critical public health issue. The HIV prevalence rate in Namibia is among the highest in the world with a prevalence of 16.9% among pregnant women attending ante-natal clinics.(3) The overall adult HIV prevalence in Namibia is estimated at 15.3%.(4) The estimated HIV prevalence is 10.3% among 15-24 years old females and 3.4% amongst 15-24 years old males.(5)

Since independence in March 1990 HIV has been the leading cause of death in the country and close to 17% of those under the age of 18 years are now orphans.(6) The national epidemic is still growing, and in only a few places in the country are there signs that the epidemic may have reached a plateau.(7) HIV particularly targets teenagers and young adults who are the most vulnerable.(8) Risky behaviours such as unprotected sex, multiple partners, no or inconsistent use of condoms and substance abuse are putting them at high risk of HIV and other sexually transmitted diseases. Another serious issue is the younger girls' disempowerment and inability to negotiate around sexual behaviour because of fear of physical, emotional or financial abuse or rejection by their partner. This is exacerbated by the fact that many young women are having sex with older men or “sugar-daddies" that support them financially.(9)

These are some of the problems our adolescent generation face in our community. The spread of HIV in any community is in part determined by knowledge of how HIV is transmitted or prevented, attitudes and beliefs about sex and relationships, as well as sexual practices. Educating our secondary school children about safe sex is one of the most useful ways of postponing the age of sexual debut, reducing unsafe sex and decreasing their risk of HIV.
Intervention programmes providing sex education in schools have been reported to result in a marked improvement in the knowledge of students about HIV/AIDS and have been associated with a positive change in their attitude towards the disease. It is important that adolescents understand HIV prevention and transmission, as well as develop positive attitudes and safe practice. School-based educational programmes can improve knowledge, build self-esteem and self-efficacy, explore attitudes and beliefs, and model safe behaviour.

Intervention programmes operating in schools address specific issues such as promoting social, emotional, cognitive, behavioural and moral competence. The need for change is directed towards both the school and home environments, and includes specific academic instruction and development of a positive school culture that is caring, nurturing and participatory.

The adolescent stage of the lifecycle is associated with development of a unique identity, gender roles, sexual identity and orientation. It may involve experimentation in a number of areas as well as testing or challenging authority. The advent of puberty and its associated cognitive, emotional and physiological development, coupled with the emergence of sexual expression and the desire to experiment, general risk taking, and high levels of mobility often lead to heightened vulnerability for young people. Because of their age and immaturity young people are frequently limited in their ability to negotiate sexual relationships and contraceptive use and may also underestimate their own risk of HIV. These factors place them at a particular risk of engaging in risky sexual behaviours.

Studies on knowledge, attitudes and practice with regard to sexual behaviour are limited in Namibia. One study performed by UNICEF in 2006 assessed the current state of HIV risk behaviour amongst adolescent and young Namibians aged 10-24 years. They found that in the age group 10-14 years knowledge about HIV/AIDS was high and knowledge about transmission was higher than that for prevention. However knowledge of sexually transmitted infections (STI) was very low for this group. When asked about relationships and sexual activity 87.4 % reported not being in a relationship and 91.8 %
had not had sex. Among those who had sex, the median age of sexual debut was 13 years. It was noticed that even though the actual number of sexually active children was small, of concern was the number involved in inter-generational sex. Sexual patterns at this young age need to be addressed as they may become the norm and exposure to high risk this early in life results in more prolonged exposure to risk and likelihood of HIV infection later on. (15)

In the age group 15-24 years, knowledge about HIV/AIDS was also high, while knowledge of STIs was again low. The 15-24 year old out-of-school respondents knew more about STIs than their in-school counterparts. In the out-of-school youth, knowledge of HIV transmission was similar to knowledge of prevention. In the in-school youth knowledge of HIV transmission was higher than knowledge of prevention. Overall 50.4% of those in the 15-24 years age category had been sexually active and the median age of sexual debut was 15 years. There were quite significant gender differences with 58.3% of males and 42.1% of females being sexually active. Amongst this age group 18.9% of women had been pregnant, of which 40% reported a pregnancy as a result of sexual coercion.

Risky behaviour in this age group was assessed and it was noted that people tended to under-report their own risk. The most common risk factors for this age group were sex with an unfaithful partner (36.7%), having multiple partners (31.1%), having unprotected sex (17.6%), and having sex with someone one you did not know well (13.9%). (8)

In the age group 10-14 years, the proportion of respondents who felt confident that they could use a condom correctly (43.4%) was equal in size to that of respondents who claimed that they could not use a condom correctly (43.1%). A further 14% were unsure about their ability to use condoms correctly.

When asked about their future intent to use condoms 61% agreed that they would ensure that a condom is used whenever they have sex, 25% did not agree and 13.5% were undecided. Although members in this age group were generally aware of the potential value of condoms in the prevention of HIV infection, a substantial number were
still not convinced of its benefits. This is one area where a specific focus in future programmes may be required.

In the age group 15-24 years, a significant proportion did not have favourable views on condoms. Overall though almost 77% of sexually active respondents used a condom the last time they had sex. Men (71.4%) were significantly less likely to have used a condom during their last sexual encounter than women (81.4%). Those respondents still in school (70.9%) were also significantly less likely to have used a condom than those who were no longer in school (82.7%). Thus, although condom use is high overall, significant gender and age gaps do exist and it is the younger male respondents who are less likely to use a condom.(9) In a study in South Africa that looked at poverty and risky sexual behaviour it was noticed that poorer women are less likely to be knowledgeable about HIV/AIDS or the sexual transmission route of the virus and engage in risky sexual behaviour as compared to women in more affluent households.(16)

Risky sexual behaviour has also led to teenage pregnancy, which has been associated with frequent sex without reliable contraception, sexual coercion, poor sexual communication between partners, the perception that most of your friends have been pregnant or that one has to prove one’s fertility, poverty and promiscuity.(17)

The study will provide useful information to the local health and education sectors as well as some indication of trends within the country.

AIM AND OBJECTIVES

To assess the knowledge, attitudes and practice of students in secondary schools in Oshikuku, Namibia with regards to sexual behaviour. The objectives of the study were:

1. To assess the knowledge of students regarding risky and safe sexual behaviour.
2. To assess the beliefs and attitudes of students regarding risky and safe sexual behaviour.
3. To assess the reported sexual behaviours of students.
4. To identify factors that may influence these students to engage in risky sexual behaviour.

METHODS

STUDY DESIGN

The study design was a descriptive cross sectional survey.

SETTING

Oshikuku district is one of the four districts that make up the Omusati region in Northern Namibia. It has a catchment area of 2727 square kilometres and population of 112,629 according to the Omusati regional annual report for 2014. Cultivation of fields and cattle rearing are the major occupations. The level of education in Oshikuku is low compared to the overall level of education in Namibia. Most of the children fail to complete grade 12. There are four secondary schools in Oshikuku. The 2014 sentinel survey in Oshikuku district on pregnant women showed an HIV prevalence of 18.6 %.

STUDY POPULATION AND SAMPLING STRATEGY

The study population included students in grades 11-12 in four secondary schools in Oshikuku with about 3000 learners. On the assumption that 50% of the children would have good knowledge of risky/safe sexual behaviour a sample size calculation suggested that 385 would be sufficient to provide results with 5% precision and 95% confidence intervals.

In three of the schools there were six classes in grade 11 and five classes in grade 12, while the remaining school had six classes for each grade. All students that were present in school on the day the questionnaire was administered were invited to participate in the survey and those who agreed completed the questionnaire.
DATA COLLECTION

A questionnaire was developed (Appendix A) based on a previously validated questionnaire used in a similar study in South Africa. The draft questionnaire was further validated by my principal medical officer, an expert in local HIV management, and Professor Bob Mash who had supervised a PhD on adolescent sexuality.

The self-administered questionnaire included questions related to:

1. Students’ socio-demographic background
2. Knowledge of risky and safe sexual behaviour
3. Attitudes and beliefs that influence sexual behaviour
4. Actual sexual history and behaviour

The questionnaire was piloted with ten students in one of the secondary schools, with five students from grade 11 and five from grade 12, to ensure that it was understood and feasible to administer.

The school was visited on a particular day, as pre-arranged with the authority and learners, all students who agreed to participate were seated in a hall with sufficient privacy between learners. The questionnaire took approximately 15 minutes to complete.

Most students in grade 11 and 12 were expected to read and write in English, however, in order to overcome any language barrier the research assistant explained each question in the local language so that the students could understand and answer correctly. All questionnaires were filled in at the same time and the completed questionnaires folded and placed confidentially in a ballot box.

DATA ANALYSIS

Data were entered into an Excel spreadsheet, checked and cleaned. For descriptive purposes, frequencies and percentages as well as means and standard deviations were
reported. For testing associations, the t-test was used to compare means between two groups and Pearson’s chi square test to compare categorical variables.

RESULTS

The number of grade 11 and 12 students in each school that completed the questionnaire was roughly equal: 77 in School 1, 80 in School 2, 74 in School 3, and 78 in School 4. Altogether 309 secondary school students completed the questionnaire and the mean age of respondents was 18.4 years (SD 1.4) with a range from 15 to 24 years; 193 (62.5%) were female and 114 (36.9%) were male, with two of the respondents not specifying their sex. Out of the respondents 152 (49.2%) were in grade 11 and 154 (49.8%) were in grade 12, and three students did not specify their grade. In terms of their family context 122 (39.5%) lived with both parents, 102 (33.0%) lived with one parent, 80 (25.9%) lived with other relatives, one (0.39%) with a friend, and four (1.3%) did not state their home situation.

Table 1 presents the results for the sexual behaviour of the students. Approximately a third 104 (33.7%) of the group were currently sexually active and of these only 25 (24.0%) had used a condom with their partner. Overall 169 (54.6%) of the students had ever been sexually active and of these 100 (0%) had used a condom at some point. Note that more respondents reported ever using a condom than reported ever having sex, which suggests that they may have been more honest when answering the question on condom use. This also suggests that all those sexually active were at least familiar with condoms and had used them at some point. Of the 169 who had been sexually active eight (4.7%) had had anal sex, 16 (9.5%) had been coerced into sex without giving consent, 18 (10.7%) had had sex with someone they do not know, while 27 (16.0%) had sex with older partners. Note that a quarter of those coerced into sex also fell pregnant.

A good number of the group 243 (78.3%) had heard of family planning, although only 139 (45.2%) had used contraception at some time. The mean age of sexual debut of students who had ever had sex was 14.4 years, with a range of 5 to 22 years and two of the students were sexually abused at the age of five years. Very few students reported sex under the influence of either alcohol or drugs and relatively few reported sex with an
older person (more than 5 years their age). Although up to a quarter had experienced symptoms suggestive of sexually transmitted infection relatively few had sought help at the local clinic.

Table 1: Sexual behaviour of secondary school students (N=309)

<table>
<thead>
<tr>
<th>Sexual behaviour</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever had sex</td>
<td>169 (54.6)</td>
</tr>
<tr>
<td>Had sex in last year</td>
<td>104 (33.7)</td>
</tr>
<tr>
<td>Had anal sex</td>
<td>8 (2.5)</td>
</tr>
<tr>
<td>Had oral sex</td>
<td>22 (7.1)</td>
</tr>
<tr>
<td>Had sex under influence of drug(s)</td>
<td>6 (1.9)</td>
</tr>
<tr>
<td>Had sex under influence of alcohol</td>
<td>19 (6.1)</td>
</tr>
<tr>
<td>Ever had sex to get material things</td>
<td>9 (2.9)</td>
</tr>
<tr>
<td>Ever had sexual intercourse without your consent</td>
<td>16 (5.1)</td>
</tr>
<tr>
<td>If yes, did you get pregnant</td>
<td>4/16 (25)</td>
</tr>
<tr>
<td>Ever had sex with an older person, more than 5 years your age</td>
<td>27 (8.7)</td>
</tr>
<tr>
<td>Ever had sex with someone you do not know</td>
<td>18 (5.8)</td>
</tr>
<tr>
<td>Ever forced someone to have sex</td>
<td>18 (5.8)</td>
</tr>
<tr>
<td>Ever been pregnant</td>
<td>10 (3.2)</td>
</tr>
</tbody>
</table>

**Use of condom**

| Knows how to use a condom                                     | 197 (63.9) |
| Ever used a condom when having sex                           | 175/169 (100.0) |
| Never used a condom with current partner                      | 79/104 (75.9) |

**Contraceptive**

| Heard of family planning                                     | 243 (78.6) |
Table 2 presents knowledge of sexual behaviour and compares those who were and were not sexually active in the last year. Students had relatively good knowledge about risky sexual behaviours although many did not see oral and anal sex as proper sexual activities, which might also carry risk. Almost all the students knew that unprotected sex with an HIV positive person can lead to HIV infection and 252 (82.0%) of students knew that condom use can prevent HIV infection. The majority of students knew that multiple sexual partners increases the chances of HIV infection, but less than half of the students knew that male circumcision could help prevent HIV infection. There were no significant differences in terms of such knowledge between those who were and were not sexually active.
Table 2: Knowledge of sexual behaviour in those who are and are not sexually active in last year (N=309)

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>All N=309 n (%)</th>
<th>Sexually active N=104 n (%)</th>
<th>Not sexually active N=205 n (%)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral sex is really sex</td>
<td>42 (13.5)</td>
<td>14 (13.5)</td>
<td>28 (13.6)</td>
<td>0.937</td>
</tr>
<tr>
<td>Anal sex is really sex</td>
<td>38 (12.3)</td>
<td>9 (8.6)</td>
<td>29 (14.1)</td>
<td>0.354</td>
</tr>
<tr>
<td>Sex without consent is rape</td>
<td>249 (81.3)</td>
<td>83 (80.5)</td>
<td>166 (81.7)</td>
<td>0.582</td>
</tr>
<tr>
<td>Unprotected sex with an HIV positive person can lead to HIV infection</td>
<td>296 (96.1)</td>
<td>98 (94.2)</td>
<td>198 (97.1)</td>
<td>0.374</td>
</tr>
<tr>
<td>Multiple sexual partners increases chances of HIV infection</td>
<td>252 (82.0)</td>
<td>84 (80.7)</td>
<td>168 (82.7)</td>
<td>0.850</td>
</tr>
<tr>
<td>Condom use can prevent HIV infection</td>
<td>252 (82.0)</td>
<td>85 (82.5)</td>
<td>167 (81.6)</td>
<td>0.342</td>
</tr>
<tr>
<td>Male circumcision can prevent HIV infection</td>
<td>121 (40.4)</td>
<td>36 (35.2)</td>
<td>85 (43.1)</td>
<td>0.423</td>
</tr>
</tbody>
</table>

Table 3 presents beliefs and attitudes regarding sexual behaviour and compares those who were and were not sexually active in the last year. Almost all the students that took part in the survey would use a condom if their partner wanted it, although the majority of those currently sexually active never used condoms with their current partner (Table 1). A few of the students 43 (14.0%) believed that using a condom meant a lack of trust in a relationship.

A great majority of the students would not have sex with someone that they did not know and would be interested to know if their partner had other sexual partners. Also, about 261 (84.4%) of all students would not trade sex for material gain and three-quarters of the students were in favour of screening for HIV before sex.
However, more than a third of the students believed that premarital sex was acceptable and about a third believed that having sex was a way of expressing love. Also, only a paltry 45 (14.8%) of all students believed that girls have the right to refuse sex. All together 110 (36.1%) students do not see anything wrong in having multiple sexual partners and 127 (41.9%) of students were favourably disposed to having babies before marriage as a sign of attaining adulthood.

Only three of the statements showed a significant difference between those who were and were not sexually active. Students that were sexually active were less likely to have sex with a stranger and more likely to see it as a way of expressing their love for a person. Not surprisingly those that were sexually active were more comfortable with sex before marriage.

**Table 3: Beliefs and attitudes regarding sexual behaviour in those who are and are not sexually active in last year (N-309)**

<table>
<thead>
<tr>
<th>Beliefs and attitudes</th>
<th>Answered yes N=309 n (%)</th>
<th>Sexually active N=104 n (%)</th>
<th>Non sexually active N=205 n (%)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you use a condom if your partner wants to but you do not want to use.</td>
<td>289 (93.5)</td>
<td>99 (95.1)</td>
<td>190 (92.6)</td>
<td>0.503</td>
</tr>
<tr>
<td>Would you refuse to have sex with someone you do not know</td>
<td>262 (84.7)</td>
<td>79 (75.9)</td>
<td>183 (89.2)</td>
<td>0.001</td>
</tr>
<tr>
<td>Would you talk about sex with your partner</td>
<td>247 (79.9)</td>
<td>81 (77.8)</td>
<td>166 (80.9)</td>
<td>0.445</td>
</tr>
<tr>
<td>Would you ask your partner about other sexual partner</td>
<td>264 (85.4)</td>
<td>93 (89.4)</td>
<td>171 (83.4)</td>
<td>0.123</td>
</tr>
<tr>
<td>Would you refuse sex for money or gift</td>
<td>261 (84.4)</td>
<td>86 (82.6)</td>
<td>175 (85.3)</td>
<td>0.527</td>
</tr>
<tr>
<td>Would you go for HIV test before sex</td>
<td>234 (75.7)</td>
<td>62 (59.6)</td>
<td>172</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Do you think having sex is a way of showing love
Do girls have the right to refuse sex with their boyfriend
Do girls mean yes when they say no
Is pregnancy before marriage OK
Is sex before marriage OK
Does using a condom mean a lack of trust
Should men have many sexual partners
Does HIV show in appearance
Immoral women have many sexual partners
Does having baby before marriage make you an adult
Should women express sexual desires

<table>
<thead>
<tr>
<th></th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Unsure (%)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think having sex is a way of showing love</td>
<td>89 (29.0)</td>
<td>46 (45.0)</td>
<td>43 (21.0)</td>
<td>0.000</td>
</tr>
<tr>
<td>Do girls have the right to refuse sex with their boyfriend</td>
<td>45 (14.8)</td>
<td>21 (20.5)</td>
<td>24 (11.8)</td>
<td>0.072</td>
</tr>
<tr>
<td>Do girls mean yes when they say no</td>
<td>60 (19.8)</td>
<td>20 (19.4)</td>
<td>40 (20)</td>
<td>0.993</td>
</tr>
<tr>
<td>Is pregnancy before marriage OK</td>
<td>42 (13.8)</td>
<td>11 (10.7)</td>
<td>31 (15.3)</td>
<td>0.164</td>
</tr>
<tr>
<td>Is sex before marriage OK</td>
<td>98 (32.3)</td>
<td>48 (47.0)</td>
<td>50 (24.8)</td>
<td>0.000</td>
</tr>
<tr>
<td>Does using a condom mean a lack of trust</td>
<td>43 (14.0)</td>
<td>18 (17.6)</td>
<td>25 (12.3)</td>
<td>0.361</td>
</tr>
<tr>
<td>Should men have many sexual partners</td>
<td>34 (11.0)</td>
<td>13 (12.6)</td>
<td>21 (10.2)</td>
<td>0.174</td>
</tr>
<tr>
<td>Does HIV show in appearance</td>
<td>28 (9.0)</td>
<td>10 (9.6)</td>
<td>18 (8.7)</td>
<td>0.362</td>
</tr>
<tr>
<td>Immoral women have many sexual partners</td>
<td>76 (25.1)</td>
<td>25 (25)</td>
<td>51 (25.2)</td>
<td>0.909</td>
</tr>
<tr>
<td>Does having baby before marriage make you an adult</td>
<td>127 (41.9)</td>
<td>47 (46.5)</td>
<td>80 (39.6)</td>
<td>0.489</td>
</tr>
<tr>
<td>Should women express sexual desires</td>
<td>60 (19.8)</td>
<td>19 (19)</td>
<td>41 (20.2)</td>
<td>0.098</td>
</tr>
</tbody>
</table>

DISCUSSION

In the survey, almost two-thirds of the students had comprehensive knowledge about risky sexual behavior. However, knowledge itself is insufficient in preventing HIV transmission, because persistence in high risk behavior occurs for a variety of reasons apart from individual knowledge and is subject to external influences that need to be understood.(18) In the survey most respondents had a low level of knowledge regarding male circumcision as a strategy to prevent HIV infection, a survey done in sub-Saharan African shows that male circumcision reduces female to male transmission of HIV and reduces the incidence.(19) In Namibia, the male circumcision programme was initiated
in 2014 and targets males 10 years and above and is still being implemented in all regions of the country. This might be the reason for the low knowledge in our survey, although in some rural parts of the country male circumcision is done traditionally.

A little over half of the respondents in this survey had been sexually active, which is in agreement with a 2006 UNICEF study in Namibia as a whole, which found that 50.4% of respondents in the 15 to 24 year-old age group had been sexually active. The mean age of sexual debut however was 15 years in the latter study compared to our study with a mean age of 10 years. This may partly explain why the prevalence of HIV in Oshikuku district is higher than the national average and that of most of the other districts in Namibia as early initiation of sexual intercourse is a significant risk factor for the spread of HIV and other STIs. (16) Modifying sexual behavior plays a very important role in curbing the HIV/AIDS epidemic among young people.(20)

Although almost all respondents would use a condom if their partner wanted it, only a quarter of the sexually active ones had used a condom while having sex with their current partner. This is a pointer to the degree of risk being taken by this age group that predisposes them to HIV infection. In spite of the fact that this is an improvement over an earlier study (16), the consistency and correctness of use needs to be further explored in a future, qualitative study. This negative attitude to condom use is further strengthened by the fact that 41.9% of respondents supported having babies before marriage.

The survey found that although a quarter of respondents reported symptoms of STIs, very few (4.9%) sought help at the local clinic, which is a risk taken by this age group that predisposes them to HIV infection, as early treatment of STIs could reduce their chances of HIV infection.(21) This and the issue of condom use could be ameliorated by the introduction of adolescent friendly health services which the local clinic currently lacks.(23)
Sexual intercourse with a stranger was not ruled out by 15.3% of our respondents in a close approximation to a 2006 nationwide study which reported a figure of 13.9%. This is quite worrisome especially given the fact that the encounter is likely to be unprotected.(16)

Sexual intercourse for money or gifts was not reportedly widespread among the students compared to an earlier study.(23) One would have thought it to be the practice as students seek financial gains from their partners or older men because of poor socioeconomic conditions; this can be a key factor in the development of transgenerational sexual relationship. The power and gender imbalance in these relationship and resultant unsafe sex leads to increased risk of STIs and HIV in school girls.

Sexual intercourse by coercion was reported by 19.8% of the respondent which was also reported in a randomised trial of a UNICEF- sponsored program where boys in the controlled arm trial believed it was permissible to beat a girlfriend who refused to have sex with her boyfriend.(21)

Limitations

Discussion of sex and sexuality is quite sensitive in most parts of Namibia, and therefore accurate information on these issues is relatively difficult to obtain. As the responses were self-reported, it was expected that respondents might deliberately conceal responses or might provide responses that are subject to recall bias. While measures were taken to reduce these inaccuracies, including carefully selected assistants who tried to explain most of the questions in the local language and to administer the survey with an assurance of anonymity, it is possible that the proportion of respondents that engaged in high risk activities is actually higher than what was reported.

Although the original desired sample size was not obtained, a revised sample size based on the actual proportions obtained in answer to the questions suggested that a sample of 246 was sufficient to measure this accurately.
The study should be generalizable to the grade 11 and 12 students in the Oshikuku district, although the survey had a higher percentage of female respondents than expected which suggests some selection bias may have occurred. It is not representative of all young people in this age group (15-24 years) as not everyone attends high school. The results cannot be generalized to Namibian youth in general.

**Recommendations**

Future research could attempt to explore qualitatively some of the findings uncovered in this survey in order to better understand in depth the factors involved. The following recommendations can also be made:

- Sexual education should be started in early or even pre-adolescence due to the early sexual debut
- Active health promotion regarding the benefits of male circumcision and condom use should be made a priority
- Access to age-appropriate and confidential treatment for adolescents with symptoms of STIs should be improved.
- School programmes should address the key issues identified in this study such as sexual coercion, the rights of girls to refuse sex and to mean “no” when they negotiate with their partners, risks of multiple partners, sex with unknown partners and teenage pregnancy.

**CONCLUSION**

In our survey the students exhibited a relatively good knowledge regarding risky sexual behaviors even though a sizeable number do not see anything wrong in keeping multiple sexual partners and one third found premarital sex acceptable, while some believed in having a baby before marriage as a sign of attaining adulthood.

There were a number of factors identified that may influence risky/safe sexual behavior among students. These factors may influence student’s behavioral pattern by altering
their perceptions and social consequences of falling pregnant and their self-efficacy in relation to sexual behavior.

REFERENCES


APPENDIX

QUESTIONNAIRE

My name is Stanislaus Ozimede, a Master's degree student at the University of Stellenbosch in South Africa. I am conducting a research titled: “Risky sexual behaviour of students in schools in Oshikuku, Namibia: A cross sectional survey of knowledge, attitudes and practice.”

I would like you to answer the following questions as honestly as possible. The questionnaire is anonymous. I thank you for your time to answer these questions.

Demographic background

1. How old are you? ___________________ years

2. What sex are you? a. Male b. Female


Knowledge questions

5. Is oral sex really sex?

6. Is anal sex really sex?

7. It is rape if you are physically forced to have sex without your consent.
8. A person can get HIV by having unprotected sex with an HIV positive person
   a. Agree  b. Disagree  c. Not sure

9. A person has a greater chance of getting HIV by having sex with more than one sexual partner
   a. Agree  b. Disagree  c. Not sure

10. Using a condom at all times prevents a person from getting HIV
    a. Agree  b. Disagree  c. Not sure

11. Male circumcision helps with the prevention of HIV infection
    a. Agree  b. Disagree  c. Not sure

Sexual behaviour.

12. Have you ever had an ulcer on or close to your penis or vagina?
    a. Yes  b. No

13. Have you ever had a discharge from the vagina or penis?
    a. Yes  b. No

14. Have you ever gone to the clinic with a sexually transmitted infection?
    a. Yes  b. No

15. Have you ever had sex?
    a. Yes  b. No
16. If yes, at what age was your first sexual intercourse?

Write your age............years

17. Have you had sex in the last year?

a. Yes   b. No

18. Have you ever had anal sex (anal sex with someone is when the penis was in the anus)?

a. Yes   b. No

19. Have you ever had oral sex (oral sex is when either you or your partner's mouth was on the penis or vagina)?

a. Yes   b. No.

20. How many sexual partners did you have in the last year?

Write the number............

21. Do you know how to use a condom correctly?

a. Yes   b. No

22. Do you ever use a condom when having sex?

a. Yes   b. No   c. Not applicable

23. How often do you and your partner(s) use a condom?

a. Never   b. Less than half of the time   c. More than half of the time   d. Always

24. Have you ever had sex under the influence of drugs?
25. Have you ever had sex under the influence of alcohol?
   a. Yes    b. No

26. Have you ever had sex with someone in order to get something from them (e.g. clothes, food, air time, cell phone)?
   a. Yes    b. No

27. Have you ever been forced to have sexual intercourse with someone without your consent?
   a. Yes    b. No

28. If yes, did you get pregnant as a result of that?
   a. Yes    b. No

29. In the last year have you ever had sex with someone more than 5 years older than you?
   a. Yes    b. No

30. If yes, what age group?
   A. 20-25 years   b. 25-30 years   c. 30 years and above.

31. Have you ever had sex with someone you did not know well in the last year?
   a. Yes    b. No

32. Did you ever force someone to have sex with you?
   a. Yes    b. No

33. Have you ever been pregnant?
34. If yes, what was the outcome of pregnancy?
   a. Abortion   b. Miscarriage   c. Delivery

35. Have you heard of family planning?
   a. Yes   b. No

36. Have you ever used Family Planning?
   a. Yes   b. No

37. What type of Family Planning have you ever used?
   Tick all that apply
   a. Condom
   b. Depo injection
   c. Intra uterine device
   d. Contraceptive pills

38. What type of family planning are you using now?
   Tick all that apply
   a. Condom
   b. Depo injection
   c. Intra uterine device
   d. Contraceptive pills
BELIEFS

In order to have safe sex

39. Would you use a condom if your partner wanted to?
   a. Yes        b. No

40. Would you refuse to have sex with someone you do not know very well?
   a. Yes       b. No

41. Would you talk about safe sex with a casual partner?
   a. Yes      b. No

42. Would you ask a partner about his/her other sexual partner?
   a. Yes      b. No

43. Would you refuse sex with someone who is offering you money or a gift?
   a. Yes       b. No

44. Would you make sure that your partner goes for an HIV test before having sex with you?
   a. Yes       b. No

45. A person has to have sex to show love
   a. Agree     b. Disagree     c. Not sure

46. Girls do not have the right to refuse sex with their boyfriends.
   a. Agree     b. Disagree     c. Not sure

47. Girls usually mean ‘yes’ when they say ‘no’ to sex
a. Agree       b. Disagree       c. Not sure
48. It is OK for a girl to be pregnant before marriage
a. Agree       b. Disagree       c. Not sure
49. It is OK to have sex before marriage
a. Agree       b. Disagree       c. Not sure
50. Using condoms shows a lack of trust
a. Agree       b. Disagree       c. Not sure
51. Men should have many sexual partners
a. Agree       b. Disagree       c. Not sure
52. You can tell if someone has HIV from how they look
a. Yes         b. No
52. Immoral women have many sexual partners
a. Agree       b. Disagree       c. Not sure
53. Having sex is important in a relationship
a. Agree       b. Disagree       c. Not sure
54. Having a baby before marriage makes you feel like an adult
a. Agree       b. Disagree       c. Not sure
55. Women should not express their sexual desire in a relationship
a. Agree       b. Disagree       c. Not sure
PARTICIPANT CONSENT FORM

TITLE OF THE RESEARCH PROJECT

Risky sexual behaviour of students in secondary schools in Oshikuku, Namibia: A cross sectional survey of knowledge, attitude and practice.

PRINCIPAL INVESTIGATOR; Sunday Stanislaus Ozimede

REFERENCE NUMBER; 17366992

ADDRESS; St Martins Hospital, Oshikuku. Namibia

CONTACT NUMBER; +264813441770

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask the study staff or doctor any question about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research involves.. Also, your participation is entirely voluntary and you are free to decline or participate. If you say no, this will not affect you negatively in any way whatsoever. Your also free to withdraw from the study at any point, even if you do agree to take part.

This study have been approved by the Health Research Ethic Committee at Stellenbosch University and will be conducted according to the ethical guidelines and principle of the international declaration of Helsinki, South African Guidelines for Good Clinical practice and the Medical Research council (MRC) Ethical Guidelines for Research.

The study is to assess the knowledge, attitudes and practice of students in secondary schools in Oshikuku, Namibia with regards to sexual behaviour. The study will assess your knowledge, beliefs and attitudes regarding risky sexual and safe sexual behaviour and also identify factors that may influence you to engage in risky sexual behaviour.
This will be done by means of a questionnaire.

You have been invited to participate in the survey because you fall within the age and grade level for the study.

Your responsibility will be to fill in the questionnaire as correctly as possible.

All the information gathered from the survey concerning risky and safe sexual behaviour will be used to better understand the issue in Namibia and to help design better educational programmes.

There is no risk involve in you taking part in this research.

You will not need to write your name on the questionnaire and your answers will be confidential. Only the research group and ethical committee will have access to the questionnaires collected.

You will not be paid for taking part in the survey.

You can contact Dr Ozimede at telephone number +264813441770, if you have any further queries or encounter any problems.

You can contact the Health Research Ethics Committee at +27-21-938 9207 if you have any concerns or complaints that have not been adequately addressed by your study doctor.

You will receive a copy of this information and consent form for your own records.

**Declaration by participant**

By signing below, I………………………………………………………………………………………………………………agree to take part in a research study entitled risky sexual behaviour of students in secondary schools in Oshikuku, Namibia; A cross sectional survey of knowledge, attitudes and practice.

I declare that
• I have read or had read to me this information and consent form and that it is written in a language with which I am fluent and comfortable.
• I have had a chance to ask question and all my question have been adequately answered.
• I understand that taking part in this study is voluntary and I have not been pressurised to take part.
• I may be asked to leave the study before it has finished, if the study doctor or researcher feels that it is in my best interest, or if I do not follow the study plan, as agreed to.

Signed at
(place)……………………………………………on(date)……………………………..2014

………………………………………………..
…………………………………………………………..
Signature of participant                                              signature of witness

Declaration by investigator

I (name)………………………………………………………………declare that;

• I explained the information in this document
to……………………………………………………
• I encouraged him/her to ask question and took adequate time to answer them
• I am satisfied that he/she adequately understand all aspect of the research, as discussed above
• I did/did not use a interpreter. ( if an translator is used then the translator must sign the declaration below.

Signed at (place)………………………………………………on
(date)…………………………………………
Declaration by translator

I (name)………………………………………………………………..declare that;

• I assisted the investigator
  (name)……………………………………………………………….to explain the
  information in this document to (name of
  participant)…………………………………………………………using the language
  medium of Afrikaans/Oshiwambo.

• We encouraged him/her to ask questions and took adequate time to answer
  them.

• I conveyed a factually correct version of what was related to me.

• I am satisfied that the participant fully understands the content of this informed
  consent document and has had all his/her question satisfactorily answered.

Signed at (place)…………………………………………………on
(date)………………………………………

Signature of translator  Signature of witness
CONSENT FORM.

TITLE OF RESEARCH PROJECT

Risky sexual behaviour of students in secondary schools in Oshikuku, Namibia: A cross sectional survey of knowledge, attitude and practice.

PRINCIPAL INVESTIGATOR: Sunday Stanislaus Ozimede

REFERENCE NUMBER: 17366992

ADDRESS: St Martins Hospital, Oshikuku, Namibia.

CONTACT NUMBER: +264813441770.

Your child (or ward, if applicable) is being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask the study staff or doctor any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how your child could be involved. Also, your child’s participation is entirely voluntary and you are free to decline to participate. You are also free to withdraw him/her from the study at any point even if you do initially agree to let him/her take part.

This study has been approved by the Health Research Ethics Committee at Stellenbosch University and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South Africa Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research.

The study aims to assess the knowledge, attitudes and practice of students in secondary schools in Oshikuku, Namibia with regards to sexual behaviour. The study will assess the knowledge, beliefs and attitudes of students regarding risky sexual and safe sexual behaviour and also identify factors that may influence these students to engage in risky sexual behaviour.
This will be done by means of a questionnaire.

Your child has been invited to participate in the survey because he/she falls within the age and grade level of the study.

All the information gathered from the survey concerning risky and safe sexual behaviour will be used to better understand the issue in Namibia and to design better educational programmes.

There is no risk involved to your child taking part in this research.

The information collected will be anonymous (your child’s name is not required) and treated as confidential. Only the research group and ethics committee will have access to the questionnaires collected.

You or your child will not be paid for taking part in this study.

You can contact Dr Ozimede at telephone number 264813441770, if you have any further queries or encounter any problem.

You can contact the Health Research Ethics Committee at +27-21-938 9207 if you have any concerns or complaints that have not been adequately addressed by your child’s study doctor.

You will receive a copy of this information and consent form for your own records.

**If you DO NOT want your child to participate in the study survey you can fill and return the form to the investigator, but if you are happy for your child to participate you do not need to fill the form.**

**REFUSAL FORM**

I (name)……………………………………………………………………(parent/guardian)
of(name)…………………………………………........... DO NOT WANT my child to participate in the study “Risky sexual behaviour of students in secondary schools in Oshikuku, Namibia: A cross sectional survey of knowledge, attitude and practice.”
Signed at (place)…………………………………………..on
(date)……………………………………………….

Signature (parent/guardian)                                      Signature witness