



Risky Sexual Behaviour and the Associated Factors Among Secondary School Youths in Khorixas, Namibia

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ABSTRACT

Background: Like most African countries, Namibia has a large percentage of its population in the youthful age group, most of whom are in secondary school. In Namibia, the age of consent for sex is 16 years but, in most cases, children have their sexual debut way below the age of 16 years. **Objective:** The aim of this study was to assess the prevalence of risky sexual behaviour and the associated factors among secondary school youths aged 15-21 years in the Khorixas district of the Kunene Region in Namibia. **Methods:** This was a quantitative descriptive cross-sectional study. A self-administered pre-tested questionnaire was used to collect data from 276 learners, selected from three public schools in the Khorixas district employing a cluster sampling technique. Information on demographics and factors associated with risky sexual behaviour was gathered. Data were analyzed using SPSS version 25 software which included descriptive statistics generating frequencies and percentages. **Results:** The study revealed the prevalence of risky sexual behaviour among secondary school youths in Khorixas district, Kunene region of Namibia to be 78.9%. The risky sexual behaviour identified included multiple partners, nonuse of condoms and early sexual debut. Gender, place of residence, parental educational level, peer pressure, alcohol use/abuse, and watching pornographic content were some of the factors found to lead to risky sexual behaviour among the youths in this district of Namibia. **Conclusion:** Risky sexual behaviour is common in secondary schools in Khorixas district of Namibia. This sexual behaviour may follow these youngsters to adulthood and may significantly affect their social and reproductive life. Complications resulting from risky sexual behaviour among school youths include contracting STIs and HIV, getting unwanted/unplanned pregnancies and dropping out of school prematurely.

Keywords: Risk sexual behaviour, Secondary school youths, Sexually transmitted infection (STIs), Unwanted pregnancy, School drop-out, Child dumping.

INTRODUCTION

Risky sexual behaviours are the activities or practices that lead to unpleasant health outcomes such as teenage pregnancies, sexually transmitted infections (STIs) and HIV. They include early sexual debut, multiple sexual partners and unprotected or unsafe sexual intercourse [i]. Secondary school youths' involvement in risky sexual behaviour generally enhances their vulnerability to various problems related to reproductive health and social life. Globally, a large number of female students in the age bracket 15-20 years fall pregnant and as a result, drop out of school, the majority of whom never resume school after giving birth to their babies [ii]. Just like Flisher *et al.* found in a study in Cape Town high-school students, the proportion of sexually active students has increased since 1990 and a large number of students are at risk of falling pregnant [iii]. Pregnancy is not the only result of risky sexual behaviour among school youth. Many of them acquire STIs including HIV. Secondary school youths (10–24 years) in sub-Saharan Africa remain a dominant reservoir of HIV infection and other STIs, with 42% of new infections in 2010 and 38% of the global HIV infections in 2015 harboured among adolescents aged 10–19 years [iv]. This implies that secondary school youth are greatly vulnerable to HIV acquisition and this is exacerbated by the fact that a large proportion of the young people do not know their HIV status yet they continue to be involved in risky sexual behaviours [v].

The consequences of risky sexual behaviour among the youth are a public concern in Namibia. In 2014, HIV prevalence among the youth (aged 15- 24 years) was 4.0% of which 0.5% were new HIV infections, and annually the rate of new HIV cases was higher among this age group [vi]. In 2015, the rate of teenage pregnancies in Namibia was 31.3%. In the same year Kunene Region, in which Khorixas district is found, recorded the highest teenage pregnancy rate at 39%. This is an indication of a high prevalence of risky sexual behaviour among school-going-age youths [6]. Consequently, risky sexual behaviour among learners leads to dropping out of school, neglect, loss of self-esteem, wasting time seeking medical attention and other complicated social issues which result in the learners failing in their academic endeavors. Poor academic achievement limits the learners from succeeding in life in areas of career opportunities which is key in elevating their standards of living. A holistic approach to preventing STI and HIV/AIDs, unwanted pregnancies and other adverse effects of risky sexual behaviour among the youths requires a comprehensive understanding of context-specific sexual behavioural characteristics ingrained in the youth [vii]. This, this study aimed to establish the prevalence of risky sexual behaviour and associated factors among secondary school youths in the Khorixas district of the Kunene Region in Namibia.

METHOD AND DESIGN

Study Design and Setting

This was a descriptive cross-sectional study carried out among secondary school youths aged 15-21 years in the Khorixas district, Namibia between June 2022 and February 2023. Three secondary schools were selected as they were the only ones with junior and secondary school learners.

Study Population

The study population consisted of secondary school youths (girls and boys) from grades 9 to 12, aged 15-21 years in Khorixas district, Namibia.

Sampling Method

A multi-stage sampling based on the tiered structure of clusters in a given population was used. Students were sampled from three secondary schools which had both junior and secondary school students. From each school, learners were stratified in grades i.e., grade 9, 10, 11 and 12. Learners from each grade were randomly sampled using the Bowley proportional allocation method.

Sample Size Estimation

The sample size was calculated using Taro Yamane's formula which assumes a normal distribution. Subsequently, risky sexual behaviour and associated factors among the youth were assumed to be normally distributed in terms of their occurrence. Using the Taro Yamane's formula, $n = N / (1 + Ne^2)$, a sample size of 300 learners was used.

Measures

A self-administered pre-tested questionnaire written in English with close-ended questions was used. The questionnaire was divided into three sections: Section A: Study participants socio-demographic characteristics: age, gender, grade, parent/guardian marital status, parent/guardian employment status, parent/guardian educational level and place of residence; Section B: Sexual behaviour and practice which assessed all activities and actions practised which pamper an individual's sexual needs; Section C: examined the determining factors linked to the risky sexual behaviour exhibited by the youth. The data were analysed using Statistical Package for Social Sciences (SPSS) version 25.

Operational Definition**Youths:**

Youths in this study refer to learners aged between 15-21 years in grades 9 to 12 at selected schools in Khorixas district.

Secondary School:

This is an intermediate stage of learning that falls between elementary and tertiary levels of education. For this study, these are schools with grades 9-12.

Risky Sexual Behaviour:

These are sexual activities that put an individual at risk of unpleasant health outcomes e.g., being sexually active at a young age, below the age of 16, practicing unprotected sex or nonuse of contraception and having multiple partners.

Data Collection:

A self-administered pre-tested questionnaire was used to collect data from 276 learners selected from three public schools in the Khorixas district employing the multistage sampling technique. The questionnaire consisted of socio-demographic characteristics and factors associated with risky sexual behaviour. Data were collected over a period of six weeks between September and mid-October 2022. The collection of data was done after classes to avoid interruption of class activities. Reliability was ensured by pilot testing prior to the actual study to ensure that all important areas of concern were reflected. Validity was ensured by developing the data collection tool based on the literature reviews and by handing the instrument to an expert to check for the validity of the instrument.

Data Analysis

Collected data were analyzed using SPSS version 25 software which included descriptive statistics and generating frequencies and percentages.

RESULTS

Sociodemographic Characteristics of the Study Participants

A total of 300 questionnaires were distributed to the learners of which 276 were completed and returned giving a response rate of 92%. Out of the 276 participants, 56% were females and the mean age was $17.46 \pm SD 1.676$ (see Table 1). The majority (40%) of the participants were in grades 9 and 10. Almost all participants were single as opposed to married and all the single participants lived with a member of their family. Eighty (80) (28.9%) of the participants stayed with both parents. The majority of the parent(s)/guardians were either formally employed 69 (24.9%), or self-employed 128 (46.4%). Forty-four (44) (15.9%) of the parent(s)/guardians of the study participants had no formal education. Sixty-four (64) (23.4%) had primary school education, 103 (37.2%) had secondary school education and 65 (23.5%) had tertiary level education.

Table 1: Sociodemographic Characteristics of study participants (N = 276)

Demographic Variable	Characteristic	Frequency	Percent
Age	15 years	25	9%
	16 years	72	26%
	17 years	58	20.9%
	18 years	50	18.3%
	19 years	31	11.4%
	20 years	22	7.9%
	21 years	18	6.5%
	Mean	17.46	
	Std. Deviation	1.676	
Gender	Female	155	56%
	Male	121	44%
Grade	Grade 9	111	40.1%
	Grade 10	90	32.5%
	Grade 11	17	6.5%
	Grade 12	58	20.9%
Marital Status	Married	6	2.5%
	Single	270	97.5%
Parent/guardian	Aunt	10	3.6%
	Both parents	80	28.9%
	Father	51	18.4%
	Grandmother	17	6.5%
	Mother	91	32.9%
	Sister	12	4.3%
	Spouse	6	2.2%
	Uncle	9	3.2%
Parent/guardian marital status		276	
	Divorced	27	9.8%
	Married	107	38.7%
	Single	126	45.7%

Parent/guardian employment status	Widowed	16	5.8%
	Formally employed	69	24.9%
	Self-employed	128	46.4%
	Unemployed	79	28.7%
Parent/guardian educational level	None	44	15.9%
	Primary	64	23.4%
	Secondary	103	37.2%
	Tertiary	65	23.5%
Place of residence	Rural	94	33.9%
	Urban	182	66.1%

Sexual Activity and The Associated Risky Behaviour

About 78.9% of the participants in secondary schools in Khorixas were sexually active. Of those who were sexually active, only 39.4% indicated that they were using condoms, and 59% had more than one sexual partner. Percentage-wise, boys were more likely to have more than one sexual partner than girls, 79% versus 72.1%. (Table 2)

Table 2: Relative percentage of participants with risky sexual behaviour among secondary school youth in Khorixas (N = 276)

Variables	Response	Male	Female	Total
Sexually active	Yes	98/121	120/155	218 (78.9%)
Condom use	No	38 (38.0%)	48 (40.7%)	86 (39.4%)
Contraceptive usage	No	NA	52/120 (51.7%)	NA
More than 1 sexual partner	Yes	79/121(79%)	85/155(72,1%)	164 (59%)

Condom Usage

Majority (60.6%) of the participants reported to have used condoms on their first sexual encounter again with a bigger proportion of boys than girls more likely to use condoms on their first sexual encounter, 62% versus 59.3% (table 3).

Table 3: Condom usage at first sexual encounter among sexually active secondary students in Khorixas (n = 218)

		Male		Female		Total	
		Frequency	Percent	Frequency	Percent	Frequency	Percent
Was a condom used at first sexual encounter	Yes	62	62.0%	70	59.3%	132	60.6%
	No	38	38.0%	48	40.7%	86	39.4%
Why was a condom not used at first encounter	Did not have a condom	33	89.2%	24	50.0%	57	67.1%
	Partner refused	0	0.0%	15	31.3%	15	17.6%
	Did not know how to use it	4	10.8%	1	2.1%	5	5.9%
	Wanted to conceive	0	0.0%	8	16.7%	8	9.4%
Condom usage (other times)	Regularly	60	61.2%	62	52.5%	122	56.5%
	Sometimes	37	37.8%	46	39.0%	83	38.4%
	Never	1	1.0%	10	8.5%	11	5.1%

Factors Contributing to Risky Sexual Behaviour

Table 4 below summarises the factors associated with risky sexual behaviour. Peer pressure came out as the greatest influencer of risky sexual behaviour. The likelihood of peer pressure influencing risky sexual behaviour was more than 1.5 times (OR=1.61; CI: 0.898 - 2.887). Other factors included drug and alcohol abuse, and watching pornographic videos/movies. More than half, 151 (54.7%), of the participants consumed alcohol. The youth with a history of alcohol consumption were four times more inclined to engage in risky sexual behaviour (OR=3.638; CI: 2.186 - 6.055). The youths with a history of alcohol and drug use were 7.5 times more likely to engage in risky sexual behaviour (OR= 7.508; CI: 3.941 - 14.304). Percentage-wise, more males than females with risky sexual behaviour consumed alcohol, 87 (71.9%) Vs 64 (41.3%). Similarly, the youths who take drugs other than alcohol were 1.3 times more likely to engage in risky sexual behaviour (OR= 1.285; CI: 0.521 - 3.166).

Pornography

Youth with a history of watching pornographic movies were 1.5 times more likely to engage in risky sexual behaviour (OR= 1.768; CI: 0.959 - 3.258) (Table 4).

Table 4: Factors Contributing to Risky Sexual Behaviour in Khorixas Namibia

		Male		Female		Total		OR	95% Confidence Interval	
		Frequency	Percent	Frequency	Percent	Frequency	Percent		Lower	Upper
Peer pressure on sex	Yes	76	62.80%	92	59.40%	168	60.90%	1.61	0.898	2.887
	No	45	37.20%	63	40.60%	108	39.10%			
Alcohol consumption	Yes	87	71.90%	64	41.30%	151	54.70%	3.638	2.186	6.055
	No	34	28.10%	91	58.70%	125	45.30%			
Alcohol consumption frequency	Rarely	31	36.50%	31	56.40%	62	44.30%			
	Occasionally	34	40.00%	17	30.90%	51	36.40%			
	Regularly	20	23.50%	7	12.70%	27	19.30%			
Drug's intake (other than alcohol)	Yes	35	34.30%	4	4.30%	39	20.10%	1.285	0.521	3.166
	No	67	65.70%	88	95.70%	155	79.90%			
Alcohol and drugs influence sex	Yes	91	75.20%	91	58.70%	182	65.90%	7.508	3.941	14.304
	No	30	24.80%	64	41.30%	94	34.10%			
Pornographic influence on sex	Yes	84	69.40%	64	41.30%	148	53.60%	1.768	0.959	3.258
	No	37	30.60%	91	58.70%	128	46.40%			
Frequency of watching pornographic content	Rarely	28	31.10%	40	40.00%	68	35.80%			
	Occasionally	47	52.20%	41	41.00%	88	46.30%			
	Regularly	15	16.70%	19	19.00%	34	17.90%			

DISCUSSION

The aim of this study was to assess the prevalence of risky sexual behaviour and the associated factors among secondary school youths aged 15-21 years in the Khorixas district, Kunene Region in Namibia. Like most African countries, Namibia has a large percentage of its population in the youthful age most of whom are in secondary schools. In Namibia, the age of consent for sex is 16 years but, in most cases, children have their sexual debut way below the age of 16 years. We believe the information obtained in this study can be extrapolated to other regions of Namibia and, indeed, most other countries especially those on the African continent. The risky sexual behaviour identified in this study are early sexual debut, multiple sexual partners and nonuse of condoms during the sexual act. The factors that catalyze this behaviour, which we refer to as associated factors, included peer pressure, drug and alcohol use/abuse, urbanization, gender and parents'/guardians' level of education.

The study revealed the prevalence of risky sexual behaviour among secondary school youths in Khorixas district, Kunene Region of Namibia to be 78.9%. Similar studies found risky sexual behaviour to be 80.8% among students in China, 82.1 % among university students who had

experienced heterosexual intercourse in the United States and 74% among university students in Turkey. [viii] These prevalences are so close depicting a global similarity in youths' sexual behaviour.

The mean age of sexually active secondary youth in Khorixas was 15 years. This finding conforms with that in the Ghanaian study in which the majority (58.9%) of the sexually active students were aged 15 years of age [ix]. It is common knowledge that the younger one is at the time of sexual initiation, the higher the chances of getting problems and complications relating to sexual intercourse since decision-making by that time is still poor. These young people are poor at negotiating protected sexual intercourse.

Non-use of condom during sexual act is regarded as risky sexual behaviour as it puts individuals at risk of not only acquiring sexually transmitted infection (STIs), but also falling pregnant and the accompanying complications. STIs are associated with pelvic inflammatory disease, chronic pelvic pain and infertility, and, if one acquires Human Papillomavirus (HPV), they risk getting cancer of the cervix in future. Pregnancy at this tender age puts the adolescent at risk of having anaemia during pregnancy, getting obstructed labour and operative delivery as well as obstetric fistulae. Since pregnancy at this age is not planned, it is also not wanted and, in many societies, this results in child rejection, child dumping and infanticide. In this study, we found that several school youths did not use condoms during their first sexual encounter. Similar findings were obtained from studies in the United States of America and China, still depicting a global similarity [9].

Having multiple sexual partners was another risky sexual behaviour found among secondary school youths in the Khorixas district of Namibia with 164 (59%) having more than one sexual partner at the time of the study. This risky sexual behaviour was more significant in male school youths, 79%, than females, 59%. This is similar to findings in a study of adolescents in North Gondar, Ethiopia which showed that 76 % of the male students and 57 % of the females had multiple sexual partners [x]. This sexual behaviour increases the risk of acquiring STIs not only among male school youths but also their female sexual partners. In a study in Botswana on the predictors of risky sexual behaviour among young people in the era of HIV/AIDS, it was found that about 9.9% of school youths had multiple sexual partners and males were more likely to have multiple partners and to experience earlier sexual initiation than females, thus increasing their risk of contracting and transmitting STIs from partner to partner [xi].

Given their age and the task ahead them regarding shaping their future, one would have expected these youths to still be abstaining from sex. In this study, therefore, we explored into what catalyses this sexual behaviour. Gender was found to be an important determinant of adolescents' sexual behaviour (OR=1.493, 95% CI: 0.821 - 2.716). Female students were more inclined to be sexually active than males. This may be related to the fact that female children get their puberty earlier than boy children. On the contrary a study conducted in the North West Province of South Africa revealed that 44% of the adolescents had had sexual exposure, 61% of whom being males and 39% females. In the same study, males had a lower age of sexual debut than females [4]. Similarly, a cross-sectional study among ART attendees in Addis Ababa Public Hospitals, Ethiopia found that more males (63%) become sexually active earlier than females 42% [xii]. So, much as gender may be an influential factor, geographical location and, possibly, exposure could play a role in influencing the age at initiation of sexual activity.

There was a positive correlation between place of residence and adolescent high-risk sexual behaviour (OR=7.508, 95% CI: 3.941 - 14.304) with urban dwelling school youths being more inclined to be involved in risky sexual behaviour than rural dwelling youths. Other researchers also found that youths in urban settings had a higher probability of being involved in risky sexual behaviour [9]. On the contrary, in a review paper on the impact of the internet and pornography on adolescents, it was found that a higher proportion of sexually active participants were from rural areas [xiii]. Youth in urban areas are more likely to get information about sexually transmitted infections and are therefore more knowledgeable about HIV/AIDS prevention, hence more likely to practice condom use than rural youth dueller [xiv].

There was a positive correlation between the level of parents' education and youths' sexual behaviour, with youths staying with parents/guardians having no or lower education background being more likely to be involved in risky sexual behaviour than their counterparts (OR= 1.236, 95% CI: 0.540 - 2.828). Literate parents sometimes spend time interacting or discussing with their youths' issues to do with education, risky sexual behaviours and their negative implications. Subsequently, youths of literate parents are less likely to engage in sexual activities early [4, 9]. In a study on adolescents' preferences regarding sex education and relationship education, it was found that educated parents tend to pass information about HIV/AIDS prevention to their youths, thus reducing their chances of engaging in risky sexual behaviour like early sexual debut, unprotected sex and multiple sexual partners [xv].

The majority (60.9%) of the youths in this study were influenced by their peers to engage in sexual activity. We found that males were more likely to be influenced by their peers to get involved in sexual activities. The likelihood of peer pressure influencing risky sexual behaviour was more than 1.5 times (OR=1.61; CI: 0.898 - 2.887). Studies by Khan, M; and Cherie, A. got similar findings [xvi, xvii].

There was a strong association between alcohol consumption and risky sexual behaviour among the school youths in Khorixas district. The youths who consumed alcohol were 7.5 times more likely to engage in risky sexual behaviour than those who did not consume alcohol (OR= 7.508; CI: 3.941 - 14.304). These findings conform with findings from a study on sexual and reproductive health behaviour among university students in Namibia, in which there was a significant relationship between substance abuse and risky sexual behaviour [xviii]. Similarly, in Colombian high school, it was reported that 18.4 % of the learners had sexual intercourse after alcohol consumption and 5.8 % after illicit drug consumption [18, xix]. Furthermore, in Adhikari's study in Nepal, 54 % of college students who frequently consumed alcohol were inclined to be more sexually active than those who never or rarely consumed alcohol [xx]. In Ethiopia, alcohol and substance abuse were implicated in youths' sexual decision-making with 25% of sexually active high school youths reporting using alcohol or drugs during their most recent sexual encounter [11]. In a study which involved Grade 8 learners in South Africa, it was discovered that during the most recent sexual encounter, 39% of the adolescents were under the influence of alcohol or marijuana [4, 19]. Alcohol intoxication usually leads to poor judgement especially regarding having protected sexual intercourse.

Exposure to pornographic materials had a strong correlation to adolescents' engagement in risky sexual activity. Youth who watched pornographic movies were 1.5 times more likely to be involved in risky sexual behaviour (OR= 1.768; CI: 0.959 - 3.258). Male school youths watched

pornographic movies more than female school youth did. These findings are similar to the findings in a South African study that showed that adolescent males watching pornography had a higher tendency to be sexually active [8]. Watching pornographic content in North-Western Ethiopia was found to be significantly linked to premarital sexual practices [xxi]. It is argued that youths who are frequently exposed to pornographic and sexual-related news and information tend to engage in multiple sexual partnerships [8].

CONCLUSION

Risky sexual behaviour was found to be prevalent among secondary school youths in Khorixas district in Namibia. This problem may not be unique to secondary schools in Khorixas district. Even youths in other secondary schools in Namibia most likely face the same problem. In this study, we found some of the catalysts to risky sexual behaviour to be peer pressure, watching pornographic videos (these could even be circulating more easily on social media of recent), low level or lack of formal education of parents/guardians, alcohol consumption and drug abuse by school youths, and urbanization. The risky sexual behaviour found include early sexual debut, multiple sexual partners and non-use of condoms during sexual acts. Some of the youth could not use condoms because they did not have them at the time. We also found that female youths initiated sexual activity earlier than male youths. Non-use of condoms during sexual intercourse for these, especially unmarried young people, may result in contracting STIs and HIV, unwanted/unplanned pregnancies and dropping out of school prematurely.

Authors' Contributions

Petrus and Lukolo designed and developed the study and collected and analysed the data. Petrus prepared the original draft under the guidance of Lukolo. Lukolo; and Kimera revised and edited the manuscript, did the proof reading and finalisation of the paper. Kimera and Lukolo did paper technical work. All the authors read and approved the final manuscript.

Ethical Consideration

Ethical clearance was obtained from the University of Namibia Research Ethics Committee. Approval to conduct the study was obtained from the Ministry of Education through the respective school principals and the regional director. The rights of the participants were ensured throughout the study process and confidentiality of data was maintained anonymously.

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Declaration of conflict of interest:

All authors declare no conflict of interest.

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