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Risky sexual behaviours and associated risky determinants among students' of federal polytechnic, Oko, Anambra State

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Abstract

Adolescence is a period of life with specific health and developmental needs and rights. It is also a time to develop knowledge and skills, learn to manage emotions, relationships and attributes as well as abilities that will be important for enjoying the adolescent years. It is also a period of assuming adult roles.

Purpose: This study was aimed at exploring the risky sexual behaviours and factors associated with Risky sexual behaviours (RSB) among students' of Federal Polytechnic Oko.

Cross-sectional design was used for this study.

Method: The Instrument used for collection of data was an adapted Questionnaire (University of Florida sexual behaviour questionnaire 2019). 444 students who volunteered were used for the study. Multi-stage sampling technique was used. In stage 1, simple random sampling technique was used to select four (4) schools out of the eight (8) schools in Federal Polytechnic Oko (FPO). In stage 2, out of the four (4) schools, Proportionate sampling technique was used to select one departments from the schools, whereby for each school with less than four (4) departments, one (1) department was selected and for any school with more than four (4) departments, two (2) departments were selected. Finally, simple random sampling technique was used to select the participants for the study from the selected departments. The face and content validity was established and the reliability coefficient of the instruments was 0.82. Data analysis was done using chi-square.

Result: The results indicated that 426 (97.3%) of the participants practised risky sexual behaviour, while 12 (2.7%) did not practise RSB, however, only 140 (32.0%) had definite practice (mean score>2.5). Most of the students practised unprotected vaginal 390 (89.0%), oral 345 (78.7%) and anal sex 307 (70.1%). More than two-thirds 317 (71.0%) of the students had multiple sexual partners and engaged in smooching. More than half of the respondents were influenced by certain factors that predisposed to risky sexual behaviour, 344 (78.5%) exposed themselves to pornography, (343) 78.3% cohabituate with opposite sex, while, about half of the students accepted that risky sexual behaviour can be reduced through increase in STIs awareness. Increase in condom use (37.7%) and STI testing (35.2%) were strongly agreed as ways of reducing RSB. Nishtha and Siddharth, 2019, opined that specific sexual behaviour among students include but not limited to too early initiation of sexual activity, sexual intercourse without the use of contraception, unplanned pregnancy, multiple sexual partner and sexual intercourse with a partner infected with an STI and HIV/AIDS, unprotected vaginal sex, oral sex and outercourse/smooching (non – penetrative sexual activity) among others. Some of the factors associated with risky sexual behaviours include: Substance abuse, Prestige of Multiple Partners, Sexual Activity for Financial Gain, Sexual Activity for Good Grades, Casual Sex Partners, Peer Pressure, Gender Issues, Media, Sexual Activity to Relieve Stress, Easy access to sex, watching of pornographic.

Keywords: Students; Risky; Sexual Behaviour; Associated; Factors

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1. Introduction

Human Sexuality is one of the fundamental drives behind everyone's feelings, thoughts, and behaviours. Human sexuality defines the means of biological reproduction, describes psychological and sociological representations of self, and orients a person's attraction to others. The fundamental aspects of human sexuality are gender, sexual orientation, fantasies, behaviours, paraphilias, and sexual consent (Lucas and Fox 2022). Our focus was on behavioural aspect of human sexuality.

Human behaviour refers to the way humans act and interact. It is based on and influenced by several factors, such as genetic make-up, culture and individual values and attitudes as observed by (Natureportfolio, 2021). Sexual behaviour are viewed as normal part of growing up. It is important to note that attitudes and beliefs about sexual behaviour, and what is considered appropriate, varies according to cultural context (National Center on the Sexual Behaviour of Youth, (NSCBY) 2019).

Efrati and Gola (2019) expressed that the progression of sexual events among adolescents follows a fairly consistent sequence: kissing and holding hands, breast and chest fondling, manual genital contact, touching under clothes or without clothes, touching genitals directly and kissing. Problematic sexual behaviours by youth involve handling sexual body parts in a manner that are developmentally inappropriate and potentially harmful to themselves or their partners. Problematic sexual behaviours are repetitive sexual behaviours involving one or others that may be frequent or excessive or include coercive or aggressive sexual contact intercourse, cybersex, transmitting sexual images via cell phones and electronic media, watching and practising pornography (National Centre on the Sexual Behaviour of Youth, 2019).

Risky sexual behaviours (RSB) are sexual activities that may expose an individual to the risk of sexually transmitted infections (STIs) including HIV and unplanned pregnancies (Ajayi and Okeke, 2019). It is the description of the activity that will increase the probability that a person engaging in sexual activity with another person infected with a sexually transmitted infection will be infected or become pregnant, or make a partner pregnant as emphasized by Dimbuene, Emina and Sankoh 2014.

RSB can mean two similar things: the behaviour itself, and the description of the partner's behaviour. The description of the partners' behaviour is the number of people the partner engages in sex, the enhancers used prior to intercourse, the knowledge/awareness, whether protection is used as well as the frequency.

Risky sexual behaviour is the most common problem in adolescents and young adults which may expose individuals to permanent social, economic, psychological and physical problem. Kebede, Molla and Gerensea (2017) stated that RSB increases susceptibility of an individual to problems related to their reproductive health.

Sexual behaviour determinant are those certain conditions or attitudes that potentiate the student's tendency to associate in sexual activities which predisposes them to sexually transmitted diseases (STI), unplanned and unwanted pregnancy, psychological trauma, etc. There are individual, household and community determinant influencing RSB. The individual factors are educational attainment and religion. The educational attainment is believed to enlighten the students and make him/her knowledgeable on various forms of RSB, its consequences and the ways to avert it. The religion is based on the undergraduate personal belief, doctrine and relationship with the Supernatural God, the maker (Lwelamira, Mesanyiwa and Saferi 2015).

Aim of the Study

- To determine the various risky sexual behaviour among students of Federal Polytechnic Oko (FPO).
- To determine the risky sexual behaviour determinants among students of Federal Polytechnic Oko.

1.1. Hypotheses

- There is no significant relationship between risky sexual behaviours and factors associated with Risky Sexual Behaviour (RSB) among males and females students of Federal Polytechnic Oko.
- There is no significant relationship between educational level of students and the risky sexual behaviour and factors associated with RSB among students of Federal Polytechnic Oko.

2. Material and methods

2.1. Study design

The study design that was used for this study was cross sectional survey. The study was carried out at Federal Polytechnic Oko in Anambra State. The investigators measured the outcome and the exposures in the study participants at the same time (Folayan et al., 2014).

2.2. Sample

The target population for this study was 5607 students and the sample size used was 444 which were calculated using Taro Yamane Formula for a finite population less than 10000. Multi-stage sampling technique was used. In stage 1, simple random sampling technique was used to select four (4) schools out of the eight (8) schools in Federal Polytechnic Oko (FPO). In stage 2, out of the four (4) schools, Proportionate sampling technique was used to select one department from the schools, whereby for each school with less than 4 departments, one department was selected and for any school with more than four (4) departments, 2 departments were selected. Finally, simple random sampling technique was used to select the participants for the study from the selected departments. The face and content validity was established and the reliability coefficient of the instruments was 0.82. Data analysis was done using chi-square.

2.3. Data Collection

The instrument for data collection was adapted questionnaire. The researchers collected the data over a period of eight weeks. The researcher distributed the 444 questionnaires and 438 were retrieved indicating 98.6% retrieval rate. The face and content validity was established and the reliability coefficient of the instruments was 0.82. Data analysis was done using chi-square.

2.4. Ethical consideration

An approval letter was obtained from the ethical committee Federal Polytechnic Oko.

2.5. Data analysis

Data was analysed using statistical package for social science (SPSS) version 25 and presented in tables and frequencies. Chi-square was utilized to determine the relationship between risky sexual behaviours and factors associated with Risky sexual behaviour (RSB) among males and females students of Federal Polytechnic Oko at significant level of $p < 0.05$.

2.6. Validity/Reliability

The face and content validity of the adapted questionnaire was established. Pilot study, using test-retest reliability method showed a coefficient reliability test result of 0.82 signifying a considerable reliability. Informed consent was obtained from the participant voluntarily and confidentiality was maintained.

3. Results

The results were presented in tables according to the research questions of the study.

Table 1 Socio-demographic Characteristics of the Students

Characteristics		Frequency	Percent%
Age	16 – 20 years	87	19.9
	21 - 25 years	188	42.9
	26 – 30 years	131	29.9
	30 – 35 years	32	7.3
	Total	438	100.0
	Mean Age = 24.39 ± 4.10 Years		

Sex	Male	151	34.5
	female	287	65.5
	Total	438	100.0
Religion	Anglican	95	21.7
	Roman Catholic	171	39.0
	Pentecostal	113	25.8
	Others Christians	2	0.5
	Total Christians	381	87.0
	Islam	57	13.0
	Total	438	100.0
Academic Level	HND 1	209	47.7
	HND 2	229	52.3
	Total	438	100.0
Tribe	Igbo	316	72.1
	Hausa	40	9.1
	Yoruba	56	12.8
	Others	26	6.0
	Total	438	100.0

Mean Age = 24.39 ± 4.10 Years

Table 1 summarized the socio-demographic characteristics of the students. The age ranged from 16 to 35 years with mean age = 24.39 ± 4.10 years.

Table 2 Risky sexual behaviours practised by the students n = 438

Item	Yes%	No%
Practice of any risky sexual behaviour	426(97.3)	12(2.7)
Unprotected vaginal sex	390(89.0)	48(11.0)
Unprotected Oral sex	345(78.7)	93(21.3)
Unprotected Anal sex	307(70.1)	131(29.9)
Smooching	335(76.5)	103(23.5)
Sex under substance abuse	317 (72.4)	121(27.6)
Multiple sexual partners	311(71.0)	127(29.0)
High risk partner	255(58.2)	183(41.8)
Ever injected drugs	260(59.4)	178(40.6)
Engaging in sex work	273(62.3)	165(37.7)
Sex without condom for extra money	327(74.7)	111(35.4)
Sex after watching pornography	239(54.6)	199(45.4)
Sex after smoking or drinking	271(61.9)	167(38.1)

Table 2 showed that of the 438 students, 426 (97.3) practised a risky sexual behaviour, while 12 (2.7%) did not engage in RSB. Most of the students practised unprotected vaginal 390 (89.0%), oral 345 (78.7%) and anal sex 307 (70.1%). More than Two-thirds 317 (71.0%) of the students had multiple sexual partners and engaged in smooching.

Table 3 Determinants of risky sexual behaviour among students of Federal Polytechnic Oko

Item	Yes%	No%
Expose of self to pornography/ media	344(78.5)	94(21.5)
Residing alone in the room	327(74.7)	111(25.3)
Substance abuse	313(71.5)	125(28.5)
Peer pressure affiliated / committed	303(69.2)	135(30.8)
Alcohol / alcoholic beverage consumption	302(68.9)	136(31.1)
Drugs injection into your body	267(61.0)	171(39.0)
Early sexual initiation	298(68.0)	140(32.0)
Multiple sexual partners	288(65.8)	150(34.2)
Psychological trauma / depression	267(61.0)	171(39.0)
Lack of Family support	252(57.5)	186(42.5)
Parties / night clubs attendance on/off campus	302(68.9)	136(31.1)
Sex for financial gain	297(67.8)	141(32.2)
Sex to relieve stress	285(65.1)	153(34.9)
Sex for good grades	280(63.9)	158(36.1)
Cohabitation with opposite gender	343(78.3)	95(21.7)

Table 3 showed that of the 438 students, more than half of the respondents were influenced by certain factors that predisposed to risky sexual behaviour, expose of self to pornography/ media 344 (78.5%) and cohabitation with opposite gender 343 (78.3%), were the major determinant of risky sexual behaviour. About 313(71.5%) and 303(69.2%) of the male and female respondent reported that substance abuse and peer pressure respectively as the sole inducement for risky sexual behaviour. Similarly, 298 (68.0%) of the students' identified early sexual initiation as the prime mover of risky sexual behaviour. Psychological trauma / depression 267 (61.0%), injection of drugs into the body 267 (61.0%) and lack of family support 252 (57.5%) were the least determinants of risky sexual behaviours. More than Two-thirds 317 (71.0%) of the students had multiple sexual partners.

Table 4 The relationship between risky sexual behaviours and factors associated with RSB among students of Federal Polytechnic Oko

Variable	Practice of RSB		Total	OR ¹ (95%CI)	X ²	P
	Yes (%)	No (%)				
Expose of self to pornography/ media						
Yes	337(2.0)	7(2.0)	344	2.705	2.989	0.084
No	89(94.7)	5(5.3)	94	(0.838 – 8.725)		
Residing alone in the room						
Yes	321(98.2)	6(1.8)	327	3.057	3.965	0.046*
No	105(94.6)	6(5.4)	111	(0.965 – 9.683)		
Substance abuse						
Yes	309(98.7)	4(1.3)	313	5.282	8.795	0.003*

No	117(93.6)	8(6.4)	125	(1.561 – 17.872)		
Peer pressure affiliated / committed						
Yes	300(99.0)	3(1.0)	303	7.143	11.294	0.001*
No	126(93.3)	9(6.7)	135	(1.143 – 26.822)		
Alcohol / alcoholic beverage consumption						
Yes	298(98.7)	4(1.3)	302	4.656	7.311	0.007*
No	86(63.2)	50(36.8)	136	(1.377 – 15.740)		
Drugs injection into your body						
Yes	265(99.3)	2(0.7)	267	8.230	10.170	0.001*
No	161(94.2)	10(5.8)	171	(1.781 – 38.036)		
Early sexual initiation						
Yes	296(99.3)	2(0.7)	298	11.385	14.972	<0.001*
No	130(92.9)	10(7.1)	140	(2.460 – 52.688)		
Multiple sexual partners						
Yes	284(98.6)	4(1.4)	288	4.000	5.759	0.016*
No	142(94.7)	8(5.3)	150	(1.184 – 13.508)		
Psychological trauma / depression						
Yes	264(98.9)	3(1.1)	267	4.889	6.703	0.010*
No	162(94.7)	9(5.3)	171	(1.304 – 18.323)		
Lack of Family support						
Yes	249(98.8)	3(1.2)	252	4.220	5.345	0.021*
No	177(95.2)	9(4.8)	186	(1.127 – 15.811)		
Parties / night clubs attendance on/off campus						
Yes	299(99.0)	3(1.0)	302	7.063	11.132	0.001*
No	127(93.4)	9(6.6)	136	(1.881 – 26.520)		
Sex for financial gain						
Yes	296(99.7)	1(0.3)	297	25.046	19.993	<0.001*
No	130(92.2)	11(7.8)	141	(3.200 – 196.016)		
Sex for Good Grades						
Yes	276(98.6)	4(1.4)	280	3.680	5.008	0.025*
No	150(94.9)	8(5.1)	158	(1.090 – 12.422)		
Sex to relieve stress						
Yes	282(98.9)	3(1.1)	285	5.875	8.715	0.003*
No	144(94.1)	9(5.9)	153	(1.566 – 22.036)		
Cohabitation with opposite gender						
Yes	337(98.3)	6(1.7)	343	3.787	5.822	0.016*
No	89(93.7)	6(6.3)	95	(1.192 – 12.024)		

KEY:*= Significant at $p < 0.05$

Hypothesis 1: There was no significant relationship between risky sexual behaviours and factors associated with them among students of Federal Polytechnic Oko.

Test Statistic: Chi-square (X^2) = As shown in the table.

Odds Ratio (95%CI): As shown in the table.

Observation: p = As shown in the table.

Level of Significance: p > 0.05

Inference: The statistical analysis showed that there was significant relationship between educational level of students and the factors associated with risky sexual behaviours.

Verdict: The hypothesis that there was no significant relationship between risky sexual behaviours and factors associated with RSB among students of Federal Polytechnic Oko was therefore not accepted.

Table 5 Chi-square tests showed the association between educational level of students and the risky sexual behaviour.

		Practice of Risky Sexual Behaviour		X^2	df	P
		Yes%	No%			
Educational Level		206	3	2.552	1	0.110*
	HND 1	220	9			
	HND 2	426	12			

KEY:*= Significant at p < 0.05

Hypothesis 2: There was no significant relationship between educational level of students and their practised of risky sexual behaviour.

Test Statistic: Chi-square (X^2) = 2.552.

Odds Ratio (95%CI): 0.356 (0.095-1.333).

Observation: p = 0.110.

Level of Significance: p > 0.05.

Inference: The statistical analysis showed that there was no significant relationship between educational level of students and the practised of risky sexual behaviours.

Verdict: The researchers accepted the null hypothesis because there was no statistically significant association and rejects alternate hypothesis.

3.1. Research hypothesis 1

There was no significant relationship between risky sexual behaviours and factors associated with Risky Sexual Behaviour (RSB) among males and females students of Federal Polytechnic Oko.

The hypothesis that there was no significant relationship between risky sexual behaviours and factors associated with RSB among students of Federal Polytechnic Oko was therefore not accepted.

3.2. Research hypothesis 2

There was no significant relationship between educational level of students and the risky sexual behaviour and factors associated with RSB among students of Federal Polytechnic Oko.

The hypothesis that there was no significant relationship between educational level of students and their practice of risky sexual behaviour was therefore accepted among students of Federal Polytechnic Oko.

4. Discussion

4.1. To determine the various risky sexual behaviour among students of Federal Polytechnic Oko (FPO).

In determining the various risky sexual behaviours among students of Federal Polytechnic Oko, the results revealed that of the 438 students, 426 (97.3%) practised a risky sexual behaviour, while 12 (2.7%) did not practice RSB. Most of the students practised unprotected vaginal 390 (89.0%), oral (fellatio and cunnilingus) 345 (78.7%) and anal sex 307 (70.1%). More than Two-thirds 317 (71.0%) of the students had multiple sexual partners. In higher Institution, sexual awakening is more active and behaviours are geared towards enjoyment of pleasure. Hence, this response of indulging in unprotected sex from the respondent could be attributed to trust issues between the sexual partners, expression of the depth of their love for each other, that condom use reduces pleasure and there is no need for condom use in steady sexual relationship.

This finding corroborated with the Nigerian studies by Ajayi, Ismail *and* Akpan (2019), that when a student request for condoms use, the sex partner assumes that there is no trust in the relationship, thus, in other to express his/her trust and love, condom usage will be rejected. The general belief among adolescents is that protected coitus implies that the individual has STIs. Similarly, a study done in Ethiopia by Nigusie, Legesse, Abebe, Getachew and Alemayehu (2020) documented that One-third of the study participants had risky sexual behaviours. In Colombia, a related study by Badillo-Viloria, Sánchez, Vásquez and Díaz-Pérez (2020) on Risky sexual behaviours and associated factors among university students in Barranquilla, Colombia, it was observed that 87% of the respondents have participated in one or more times in risky sexual behaviours. The results of the study was not different from the study carried out in University of Port Harcourt, Rivers State, Nigeria by Imaledo, Peter-Kio and Asuquo (2012) where more than half of the respondents had either boyfriend or girlfriend who have ever had sex with someone.

As well as the study conducted in Governmental Higher Institution, Ethiopia by Mekonnen, Yimer and Wolde (2017) showed that more than one third of the respondent have unprotected intercourse and have used condom inconsistently. In addition to other studies findings that were in synergy with the findings of this very study, Mengesha and Enguday 2019, substantiated that the prevalence of risky sexual behaviour was found to be alarming among adolescents of high school. The probability of participating in risky sexual behaviour was found to be increased by 87% in adolescents' aged 15-19 years.

It was therefore recommended that in the university context, from the moment admission was given to students and throughout their formation period, self-control and mental training that enables undergraduates visualize their goals, identify possible obstacles to them and develop plans to overcome them, thus, increasing their capacity for self-control over impulsive, unplanned, unprotected and risky sexual behaviours.

4.2. Determinants of risky sexual behaviour among students of Federal Polytechnic Oko

In assessing the determinants / factors of risky sexual behaviour among students of Federal Polytechnic Oko, findings revealed that, more than half of the respondents were influenced by certain factors that predispose to risky sexual behaviour, expose of self to pornography/ media 344 (78.5) and cohabitation with opposite gender 343 (78.3), were the major determinant of risky sexual behaviour. About 71.5% and 69.2% of the male and female respondent reported that substance abuse and peer pressure were the sole inducement for risky sexual behaviour. Similarly, 298 (68.0) of the students' identified early sexual initiation as the prime mover of risky sexual behaviour. Psychological trauma / depression 267 (61.0), injection of drugs into the body 267 (61.0) and lack of family support 252 (57.5) were the least determinants of risky sexual behaviours. More than Two-thirds 317 (71.0%) of the students had multiple sexual partners. This was envisaged due to the location of the school in an urban area, lots of hotels, bars, restaurants, strip clubs, cohabitation in the lodges and easy availability and accessibility of opposite sex residing alone as well as in self-contained apartment in the same hotels.

Oyefara, Eborika, Adejoh and Akeju (2019) further confirmed the findings of this study who reported that drug and alcohol usage was found to be related to involvement in high sexual activities among students/adolescent. In addition, the findings above was also in agreement with the study done by Lin, Mei, Tung, Tao-Hsin and Mei-Yu (2019), by Mekonnen, Yimer and Wolde (2017), together with Mengesha and Enguday, 2019. The results of this study also showed that Ajayi and Okeke (2019) argued that undergraduate who frequently exposed themselves to pornographic and sexual-related news and information tend to be more likely to engage in multiple sexual partnerships. Conversely, students with a high level of exposure to advisory news and information on the dangers of engaging in multiple sexual partnerships and to advocacy on the need for consistent condom use would more likely avoid multiple sexual

relationships and also use condoms. The outcome of habitual watching of pornographic and media cause psychological, physical and social risk on the students.

Lakamano, Abdu, Hebtamu and Bekana (2017) demonstrated that 33.0% had their first sexual intercourse at age range of 15-19 years among these 37.0% males and 63.0% females and the reason of starting sexual intercourse 46.7% due to peer pressure, contrarily, Girmay and Mariye study in 2018 revealed that students not facing peer pressure were 0.36 times less likely to develop risk sexual behaviour (AOR = 0.357, 95% CI 0.172, 0.744).

It is known that the undergraduates were aware of the risky sexual behaviour and their consequences, it was therefore recommended that in-depth enlightenment campaign should be done on use of contraception, policy enacted against cohabitation while guidance and counselling course should be enshrined into the departmental curriculum, separate lodges should be mapped out for different sex. Moreover, the impoverished students' should be assisted with funds.

5. Conclusion

Most of the students indulged in risky sexual behaviour such as unprotected vaginal, oral anal sex and smooching. The risky sexual behaviour determinants among the students were exposure of self to pornography, cohabitation with opposite gender, substance abuse, peer pressure, psychological trauma, residing alone in the room, among others. In addition, more than three- quarter of all the age group indulged in unprotected sex and this is attributed to the explorative and inquisitive nature of these age group and other determinants. The age group 21 – 25 years and 26 – 30 years indulged most.

Recommendations

Based on the findings of this study, the following recommendation has been proffered;

There is need to create a caring environment and recreational facilities in the school where the students can engage themselves and dissipates their energy in building desire physical, mental and social health.

The students should cultivate the culture of regular STIs screening and discussion of sexual issues with their pattern.

There should be seminars and teaching with emphasis on risk avoidance, positive role-models, healthy relationships and long/short effects of risky sexual behaviour will help to reduce the incident rate of RSB.

Compliance with ethical standards

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Disclosure of conflict of interest

There is no conflict of interest among the authors.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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