

Descriptive Study of Students' Knowledge, Attitudes, and Practices toward Safe Sex in Niger Delta University in, Bayelsa State, Nigeria

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ARTICLE INFO	ABSTRACT
<p><i>Article type:</i> Original article</p> <hr/> <p><i>Article History:</i> Received: 08-Aug-2018 Accepted: 14-Jul-2019</p> <hr/> <p><i>Key words:</i> Knowledge Attitudes Safe sex Nursing students Sexual behavior Practices</p>	<p>Background & aim: Spread of sexually transmitted infections can be controlled with enhancing the knowledge and correcting the attitudes of students regarding the right and consistent use of contraceptive methods, and being in monogamous sexual relationships. This study aimed to compare the students' knowledge, attitudes, and safe sex practices between nursing and non-nursing undergraduate students.</p> <p>Methods: A descriptive survey design was employed among 240 students at Niger Delta University in Bayelsa State, Nigeria in 2018-2019. The simple random sampling technique was used to select the sample. A questionnaire designed to elicit information on knowledge, attitudes, and safe sex practices from nursing and non-nursing students. Data were analyzed using SPSS, version 17.0. Descriptive statistics were employed to describe the data.</p> <p>Results: Nursing students in this study presented with safe sexual practices, compared to non-nursing students. Sexual risky behaviors, such as having a casual partner and not using condoms, were prevalent among the non-nursing students. After summing up the scores of nursing students, they showed a better understanding of knowledge of safe sex (83.1% for nursing students versus 54.6% for non-nursing students). Similarly, the nurses' attitudes and practices seemed better than those of non-nurses.</p> <p>Conclusion: Combination of both correct knowledge and positive attitudes correlates with safe sex practices among students. Safe sex education should be introduced to non-nursing students at the Niger Delta University as a means of promoting safe sex practices among students.</p>

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Introduction

Studying the knowledge of safe sex, positive attitudes, and safe sexual practices is relevant considering the rise in problems resulting from unsafe sexual practices, such as sexually transmitted diseases (STDs) and, unintended pregnancies among university students. Safe sex means the protection of oneself and others from sexually transmitted infections. To protect from STDs and HIV/AIDS (Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV), it is important to adopt safe sexual behaviors, such as using condoms rightly and

consistently, adopting sexual abstinence, and having just one sexual partner(1, 2)

When young individuals enter into universities, they become independent and lack protection of significant orders. There is also the opportunity to associate and make new friends and for some the opportunity to experience romantic and sexual relationships(3-5). Unsafe sex and lack of knowledge or access to contraceptives, predisposed higher education students to unwanted pregnancies thereby increasing the necessity to be the victims of

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illegal abortions associated with negative consequences for maternal health (6-8).

When university students show good knowledge and practices towards the prevention of STDs and use of condoms they are more likely to exhibit good sexual practice patterns. Primary prevention is assumed to be of great importance considering the advent of some STDs for which cure is unavailable(9). Risk of infection can reduce if an individual selects a sexual partner carefully while avoiding risky sexual practices. Therefore the present study aimed to describe students' knowledge, as well as attitudes, and examine their practices towards safe sex.

Materials and Methods

In the present study, a quantitative approach was used to compare knowledge, attitudes, and related safe sex practices between nursing and non-nursing students of Niger Delta University Bayelsa State, Nigeria. The target population was a total of 485 undergraduate students from the Faculty of Nursing (n=200) and Faculty of Science (n=285). A sample size of 242 was calculated using Taro Yamane's formula $(N/1+N[e]^2)$ plus 10% anticipation of attrition. A total of 240 students (i.e., 99 nursing, and 141 science students) were recruited using proportionate random sampling technique. Inclusion criteria were: being a student of the Faculty of Nursing or Science; (in the third to last year of study), as well as available and willing to participate in the study. Exclusion criteria were being: seriously ill or sick students of the aforementioned faculties.

A questionnaire comprising of sections on respondents' demographic data, knowledge, attitudes, and practices towards safe sex was used to collect data.

The reliability test was carried out (for the questionnaire) using the test-retest method. In addition, a coefficient of 0.9 was obtained indicative of the reliability of the instrument. Content and face validity was performed using a group of experts in the field. The second author administered the questionnaire to the participants and received them 20 min. The data were analyzed using SPSS software (version 17.0). The participants were categorized as either nursing or non-nursing students. Frequencies and percentages were used to describe data, and descriptive tables were utilized to compare findings between the two sets of students. Ethical protocols were followed throughout the period of the study. Ethical clearance was obtained from the Ethics Committee of Niger Delta University. Informed consent was obtained from the subjects who received adequate information regarding the study. Subject's privacy and confidentiality were upheld throughout the present study. Participation was based on respondents' freewill as they could choose not to respond to some or all questions on the questionnaire.

Results

A total of 240 students (i.e., 99 nursing and 141 science students) participated in the present study.

Table 1. Sexual experience of the participants

Age at first sexual experience		
	Nursing students	Non-Nursing students
Age (years)	Frequency (%)	Frequency (%)
8 -10	6 (06.1)	33 (23.4)
11 - 13	12 (12.1)	15 (10.7)
14 - 16	18 (18.2)	37 (26.2)
17 and above	63 (63.6)	56 (39.7)
Person with whom the respondent had the first sexual practice		
Lover	34 (34.4)	70 (49.6)
Casual partner	21 (21.2)	40 (28.4)
Spouse	42 (42.4)	18 (12.8)
Other	02 (02.0)	13 (09.2)
Person with whom the respondent had the last sexual experience		
Lover	14 (14.1)	48 (34.0)
Casual partner	08 (08.1)	40 (28.4)
Spouse	72 (72.7)	42 (29.8)
Other	05 (05.1)	11 (07.8)

Majority (63.6%) of the nursing students had foremost sex practice at the age of 17 years. Moreover, 42.4% of the nursing students had their first sexual experience with their spouses, while 34.4% of them had their first sex practice with their lover. Majority (60.3%) of the non-nursing students had their first sex practice before the age of 17 years, while only 39.7% of them had their first sex practice at the age of 17 years and above. A higher number (49.6%) of the non-nursing students had their first sex practice with a lover as compared to only 34.4% of the nursing students. 28.4% of non-nursing students had their first sex practice with a casual partner, while it was reported as 21.2%

for the nursing students (Table 1). In addition, the majority (72.7%) of the nursing students had their last sex practice with their spouses, while only 29.8% of the non-nursing students had last sex practice with their spouses. It should be noted that 34.0% and 28.4% of the non-nursing students had their last sex practice with a lover and casual partner, respectively (Table 1).

Overwhelming majority (76.8%) of the nursing students agreed that “it is possible to contract a sexually transmitted infection without sexual intercourse” compared to 55.3% of the non-nursing students.

Table 2. Knowledge of safe sex

Statements/Questions	Nursing students (n=99)		Non-Nursing students (n=141)	
	Yes	No	Yes	No
Is it possible to contract a sexually transmitted infection without sexual intercourse?	76 (76.8%)	23 (23.2%)	78 (55.3%)	63 (44.7%)
Is it possible for a woman to become pregnant if she is engaged in an unprotected sex?	85 (85.9%)	14 (14.1%)	76 (53.9%)	65 (46.1%)
If ejaculation occurs on or near the labia (i.e., female genitals), sperm can make way to the uterus and impregnate the woman without penetration	84 (84.8%)	15 (15.2%)	80 (56.7%)	61 (43.3%)
The risk for a woman acquiring a sexually transmitted infection is more than a man’s risk.	80 (80.8%)	19 (19.2%)	68 (48.2%)	73 (51.8%)
Engagement in unprotected sex makes an individual prone to sexually transmitted infections	86 (86.9%)	13 (13.1%)	76 (53.9%)	65 (46.1%)
Wounds or sores on the genitalia make an individual prone to sexually transmitted infections.	87 (87.9%)	12 (12.1%)	83 (58.9%)	58 (41.1%)
If one is engaged in an unprotected sex during menstruation, he/she is prone to contracting sexually transmitted infections	78 (78.8%)	21 (21.2%)	78 (55.3%)	63 (44.7%)
Total	83.1%	16.9%	54.6%	45.4%

Most of the respondents are aware that the “risk for a woman getting a sexually transmitted infection is greater than a man’s risk ” although the majority (80.8%) of the nursing students showed better awareness in comparison to 48.2% of non-nursing students. Over 80% of the nursing students agreed that “it is possible for a woman to become pregnant if she is engaged in unprotected sex during

menstruation” and that “if ejaculation occurs on or near the labia (i.e., female genitals), the sperm can make way to the uterus and impregnate the woman without penetration”. In addition, 55.3% of the non-nursing students believed that a woman could get pregnant while being on her period. A majority (56.7%) of the non-nursing students believed that a girl cannot get pregnant if ejaculation occurs near the labia.

Generally, the nursing students seemed to have a greater knowledge of the risks involved during unsafe sex in terms of unwanted pregnancy and infection in comparison to the non-nursing students (Table 2).

Generally the nursing students showed a

better attitude towards condom use compared to the non-nursing students. Most of the nursing students (67.7%) expected their partner to provide a condom, in comparison to 31.9% of the non-nursing students who expected the same.

Table 3. Attitudes toward condom use

Attitudinal statements on condom use	Nursing students (n=99)		Non-Nursing students (n=141)	
	Agree	Disagree	Agree	Disagree
I expect my partner to provide condoms.	67 (67.7%)	32 (32.3%)	45 (31.9%)	96 (68.1%)
I feel embarrassed to disengage from sexual activity, if there is not a condom available.	32 (32.3%)	67 (67.7%)	95 (67.4%)	46 (32.6%)
I expect my partner to comply with my attitudes about condom use.	87 (87.9%)	12 (12.1%)	56 (39.7%)	85 (60.3%)
I do enjoy sexual intercourse with a condom.	82 (82.8%)	17 (17.2%)	46 (32.6%)	95 (67.4%)
Sexual pleasure reduces with condom use.	57 (57.6%)	42 (42.4%)	98 (69.5%)	43 (30.5%)

Only 32.3% of the nursing students felt embarrassed to disengage from sexual activity if there was no condom compared to the 67.4% of the non-nursing students. Most of the nursing students (87.9%) agreed with the term that “I expect my partner to comply with my attitudes about condom use” in comparison to 60.3% of the non-nursing students. Overwhelming

Table 4. Practices regarding safe sex

Practices regarding safe sex	Nursing students (n=99)		Non-Nursing students (141)	
	Agree	Disagree	Agree	Disagree
I have used drugs and/or alcohol when engaging in sexual activity.	65 (66.0)	34 (34.0)	107 (76.0)	34 (24.0)
I have had sex with my partner without condom only because we did not have a condom to use at the time of intercourse.	41 (41.7)	58 (58.3)	89 (63.6)	52 (37.4)
When engaging in sexual activity, my partner and I stopped the sexual act because the condom was torn.	61 (61.0)	38 (39.0)	40 (28.4)	101 (71.6)
When engaging in sexual activity, my partner and I continued the sexual act even after the condom was torn.	31 (31.5)	68 (68.5)	85 (60.0)	56 (40.0)
At the beginning of the relationship my partner and I practice safe sex, but the more comfortable we become, the less we protect ourselves.	56 (56.4)	43(43.6)	27 (17.8)	114 (81.2)
I consider myself irresponsible when it comes to practicing safe sex	23 (24.7)	76 (75.3)	63 (45.0)	78 (55.0)

majority (82.8%) of the nursing students agreed that they do enjoy sexual intercourse with condom use, compared to 32.6% of the non-nursing students. However, more than half (57.6%) of the nursing students agreed that “sexual pleasure reduced with condom use”, in comparison with 69.5% of the non-nursing students (Table3).

Over 70% of the respondents agreed they have used drugs and/or alcohol when engaging in sexual activity. The non-nursing students were likely to practice sexual activity while using drugs or alcohol than nursing students. A

majority of the non-nursing students (63.6.0%) engaged in sexual activity without condoms .Only 28.4% of the non-nursing students who use a condom would stop the sexual act if the condoms were torn. However, a majority of the

nursing students stopped sexual activity when the condom was torn with only 31.5% acknowledging continuation. Lower than 40 % of the respondents practiced safe sex throughout their relationships. Non-nursing students were less likely to practice safe sex as they grew comfortable in their relationship. A majority of the non-nursing students considered their sexual practices to be safe in comparison to the nursing students although their practices reported otherwise.

Discussion

A majority of the students had their foremost sex practice above the age of 17 years. This age is slightly lower than 19 years age stipulated in a previous study of in which young females were twice likely to start sexual activity at a younger age (10). There are several disparities reported according to the results of the studies amongst secondary school students from other parts of Nigeria that recorded sexual debut within the range of 11 and 15 years (11, 12). Delay in sexual debut may be attributed to the fact that the students are required to be more matured and have the right mind set for making informed choices.

Most of the students had sex with a boyfriend/girlfriend. In addition, 41.6% of the non-nursing students had their last sex practice with a casual partner. The non-nursing students were more likely to have casual sex than the nursing students. A higher percentage of the nursing students showed a better attitude and a safer sexual practice, compared to that of the non-nursing students. Involvement with commercial sex workers, casual sex partners, use of alcohol and drugs are less likely among the nursing students. Findings of a similar study carried out by Daniyam (13) on medical students in Jos, Nigeria, showed safe sexual practice. Results of studies demonstrated sexual and reproductive health education to delay sexual debut and make youths to have safer sexual practices (13,14,15).

Results of the present study revealed that non-nursing students had poor knowledge of safe sex practice compared to the nursing students. Up to 95.5% of the non-nursing students believed that sexual intercourse during menstruation could not lead to pregnancy and 45.0% believed that if ejaculation occurs on or

near the female genitals it will not lead to pregnancy. Based on the evidence it was proven that having sex during menstruation is unhygienic and can increase the risk of sexually transmitted infections. It can also cause pregnancy among individuals with short menstrual cycles (16). In a study carried out on the students in the USA, it was observed that students practice withdrawal contraceptive method. However, the aforementioned method is criticized for exposing the individual to HIV and pregnancy (17).

Although condom use was common among both groups of students, it seemed to be affected by some barriers. Moral values, as well as traditional and religious factors, played a role in condom use in many communities (2, 17). Making condoms available and acceptable can be achieved if it is made by distribution and health education programs on condom use performed within the universities.

Conclusion

The present study examined the level of sexual knowledge, attitudes toward condom use, and sexual behaviors among two groups of university students. High levels of knowledge of sexual issues resulted in lower risky sexual behaviors as the nursing students showed better attitudes and practices than the non-nursing students. The finding supports the need to consistently monitor the content, relevance, and effectiveness of sex education. Most importantly, the present study was useful in the identification of several principal issues that should be taken into consideration when assessing sexual behaviors and/or effectiveness of sex education. The present study provided insight to more accurately guide the future content of sex education for non-nursing students in the Madonna University, Elele, Nigeria.

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Conflicts of interest

The authors declare no conflicts of interest.

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