Factors influencing youth involvement in risky sexual behaviours among student nurses: A cross-sectional study carried out among student nurses at the International School of Nursing and Midwifery Maya

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ABSTRACT

Background: Risky sexual behaviours among youth, particularly in healthcare settings, pose significant public health concerns. The aim of this study was to identify and analyse the individual, social, and environmental factors influencing youth involvement in such behaviours among student nurses at the International School of Nursing and Midwifery Maya.

Methodology: A cross-sectional study was conducted with a sample size of 100 student nurses. The survey included questions on demographic information, individual factors, social factors, and environmental factors. Data were analysed using descriptive and inferential statistics, and thematic analysis was performed on open-ended responses.

Results: The majority of the students (45%) were aged 21-23 years; 64% were females and 50% were single. The majority (70%) of the participants felt confident with their body image; 80% had a good understanding of STIs; and 60% were well informed about contraceptive methods. 50% of the participants felt that mental health influenced their sexual behaviours, with 35% engaging in risky behaviours to cope with stress. 40% of the participants were likely to engage in risky behaviours after consuming alcohol or drugs. 50 % of the participants felt influenced by their peers' attitudes towards sex; 40% reported that media influenced their perception about sexual behaviour, and 40% believed that media normalizes risky sexual behaviours.

Conclusion: Multifaceted factors influence risky sexual behaviours among student nurses. Individual factors such as body image, knowledge of sexual health, and mental health, along with social influences from peers and media, and environmental aspects like living arrangements and access to services, all contribute to these behaviours.

Recommendation: The International School of Nursing and Midwifery Maya should implement interventions such as sexual health education, promoting mental health support, addressing substance use, among others, to better support their students in making safe and informed decisions regarding their sexual health.

Keywords: Youth involvement, Risky sexual behaviours, Student nurses.

Background of the study

Risky sexual behaviours refer to actions that increase the likelihood of negative health outcomes, including unintended pregnancies, sexually transmitted infections (STIs), HIV/AIDS, and reproductive health complications. These behaviours may include engaging in unprotected sex, having multiple sexual partners, initiating sexual activity at a young age, and inconsistent use of contraceptives (Centers for Disease Control and Prevention [CDC], 2020). For youth, risky sexual behaviours are particularly concerning because of their long-term health consequences and social implications, such as stigma, poverty, and educational disruption.

Globally, youth engagement in risky sexual behaviours has become a critical public health issue. According to the World Health Organization (WHO), an estimated one-third of the world's population is between the ages of 10 and 24, and many of these young people are sexually active (WHO, 2021). Inadequate access to sexual and reproductive health services, lack of education, and social pressures contribute to widespread risky sexual behaviours in this age group. In 2020, an estimated 1 million new cases of STIs were reported daily worldwide, with youth being disproportionately affected (WHO, 2021). Despite global efforts to promote sexual health education and access to contraceptives, barriers such as cultural norms, stigma, and healthcare accessibility remain prevalent, especially in low- and middle-income countries (UNAIDS, 2020).

In Africa, the situation is even more concerning, as the region accounts for a significant portion of the global burden of STIs and HIV/AIDS among youth. The African continent is home to the world's fastest-growing youth population, and many young people engage in high-risk sexual practices due to various socio-economic, cultural,

and educational factors. According to the African Union (AU), limited access to sexual and reproductive health services, poverty, gender inequalities, and harmful cultural practices exacerbate the problem (AU, 2021). A significant number of African adolescents do not receive comprehensive sexual education, leading to early sexual debut, low contraceptive use, and high rates of teenage pregnancies and STIs (Guttmacher Institute, 2019).

Sub-Saharan Africa has one of the highest rates of risky sexual behaviours among youth globally, which has contributed to the region's disproportionate burden of HIV and other STIs. In this region, early sexual debut and low rates of contraceptive use are common, particularly among adolescents. According to UNAIDS, about 1.5 million new HIV infections were reported in Sub-Saharan Africa in 2020, with youth accounting for a substantial percentage of new cases (UNAIDS, 2020). The drivers of risky sexual behaviours in the region include poverty, inadequate sexual education, lack of access to healthcare, gender-based violence, and cultural norms that discourage the open discussion of sexual health (UNAIDS, 2020).

In East Africa, research reveals that a combination of social, cultural, economic, and educational factors contributes to these behaviours. High rates of HIV/AIDS and other STIs in East Africa put young people, including healthcare students, at elevated risk, with student nurses facing unique pressures despite their medical knowledge (Ng'ang'a et al., 2021). Economic hardships and peer influences often lead youth toward transactional or unprotected sex, while cultural norms and gender expectations further complicate sexual health choices, particularly for young women who may have limited autonomy (Wekesa et al., 2019). Additionally, limited access to comprehensive sexual education and healthcare resources, even within healthcare education environments, leaves gaps in knowledge and access to contraception and STI prevention, contributing to risky behaviours (Kimani & Muriithi, 2020).

In Uganda, youth risky sexual behaviours are a significant concern, given the country's high rates of teenage pregnancies, STIs, and HIV/AIDS among young people. According to the Uganda Demographic and Health Survey (UDHS) 2016, 25% of Ugandan girls between the ages of 15 and 19 have begun childbearing, and many of these pregnancies are unintended (Uganda Bureau of Statistics [UBOS], 2016). HIV prevalence among young people aged 15-24 in Uganda remains high, with over 140,000 new infections reported in this age group annually (Uganda AIDS Commission, 2020). Factors contributing to risky sexual behaviours among Ugandan youth include inadequate sexual education, limited access to contraceptives, peer pressure, poverty, and cultural practices that promote early marriage and childbearing. Furthermore, many young people in Uganda face social and economic pressures that may compel them to engage in transactional sex or multiple partnerships to meet their basic needs (UBOS, 2016). Despite government efforts to promote sexual and reproductive health, including the introduction of comprehensive sexuality education in schools, barriers such as conservative cultural attitudes and inadequate implementation of policies continue to challenge progress. Uganda's Ministry of Health, in collaboration with international organizations, has been working to increase access to contraceptives, promote HIV testing, and provide sexual health education to reduce risky sexual behaviours among youth (Ministry of Health, Uganda, 2021).

Wakiso District, located in the Central Region of Uganda, is one of the most populous districts in the country and faces unique challenges when it comes to youth sexual behaviour. With a growing population of young people, Wakiso has witnessed high rates of teenage pregnancies, STIs, and HIV infections. According to the Wakiso District Health Office, over 30% of teenage girls in the district have experienced early pregnancies, and many of these pregnancies are unplanned (Wakiso District Health Office, 2020). Risky sexual behaviours in Wakiso are driven by similar factors observed at the national level, including inadequate sexual education, peer pressure, poverty, and limited access to reproductive health services. Additionally, urbanization and the influx of young people from rural areas to the district in search of education and employment opportunities have further contributed to the spread of risky sexual behaviours (Uganda Youth Development Link, 2020). The high rates of school dropout due to pregnancy, along with the lack of youth-friendly health services, exacerbate the situation in Wakiso. Efforts to address these issues have been undertaken by both governmental and non-governmental organizations, focusing on improving sexual health education in schools, increasing access to contraceptives, and promoting community-based interventions that target the root causes of risky sexual behaviours (Wakiso District Health Office, 2020). Therefore, the aim of this study was to investigate the factors influencing youth involvement in risky sexual behaviours among student nurses at the International School of Nursing and Midwifery Maya

Methodology

Study design

A cross-sectional design was used; it utilizes surveys to generate quantitative data at the time of data collection. Data were collected at a point in time without having to follow up with the study participants, thus making the study cheap to execute.

Study area

The study was conducted at the International School of Nursing and Midwifery Maya; it is a private institution with diploma and certificate nursing courses with about 700 students.

Study population

The study population included students from different sets, and each year was represented.

Sample size determination

The sample size of the respondents for the research study will be determined using the (Kish, 1965) formula that was

$$n = \frac{Z^2 P (100-P)}{S^2}$$

n= the sample size to be considered for the sturdy
Z= the standard normal deviation of the confidence interval at 95%
P= Assumed pregnant mothers who were assessed among the population; 85%
S= maximum error that was to be allowed in the study, which was 7%. Therefore;

$$n = \frac{1.96^2 X 7(100-85)}{7^2}$$

n=100 respondents

Sampling technique

I used a simple random sampling technique in this study. This is because it minimizes and eliminates biases, plus gives an equal and known chance for everyone in the target population to participate in the study.

Sampling procedure

A total of 10 respondents were sampled every day for 10 days to participate in the study.
Each day, 20 pieces of paper were folded uniformly, 10 of which had “YES” written on them and 10 had “NO”. They will be placed in a small box and reshuffled, and every person who agrees to participate in the study will be asked to pick a paper. Only those who pick a paper with writings of “YES” will participate in the study.

Data collection method

The questionnaire method was used to collect data from the participants

Data collection tools

A self-administered questionnaire with closed and open-ended questions was used in data collection because it is cheap and allows data collection from many respondents in the shortest time.

Data collection procedure

An introductory letter from the International Paramedical Institute was taken to the International School of Nursing and Midwifery Maya to seek permission for data collection. After approval, I proceeded to the lecture rooms where the class president introduced me to the students. The purpose of the study was then explained to the students, and consent was obtained. The sampled respondents were then given questionnaires to fill out, after which they were checked for completeness and then kept under lock and key.

Study Variables

The dependent variable was youth involvement in risky sexual behaviours.
The independent variables were the factors influencing youth involvement in risky sexual behaviours.

Quality control

Selection criteria

Strict inclusion and exclusion criteria were followed

Inclusion criteria

Inclusion criteria were followed when selecting respondents, whereby only students present on the days of data collection were selected.

Exclusion criteria

Exclusion criteria were also followed, where those who consented and were in good health and a proper mental state were allowed to participate in the study.

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Piloting the study and pre-testing of questioners

Questionnaires were pretested at the school (ISNM) to ensure their validity and reliability in collecting accurate data. Ample time was given to every respondent for filling in the questionnaires, and interpretations were made where it was found necessary.

Data Analysis and presentation

Data were analysed manually by tallying using a pen and sheets of paper. The results were entered into a computer and were analysed using Microsoft Excel to generate tables and figures. Data were also presented in narrative paragraphs.

Ethical considerations

I asked for permission from ISNM before data collection using an introductory letter from International Paramedical Institute Maya.

Respondents were selected on the basis of informed consent.

Confidentiality was observed, and respondents were not required to write their names on the questionnaire; instead, they used codes to maintain anonymity.

Results

Demographic data

Table 1 showing the demographic data of students of ISNM who participated in the research

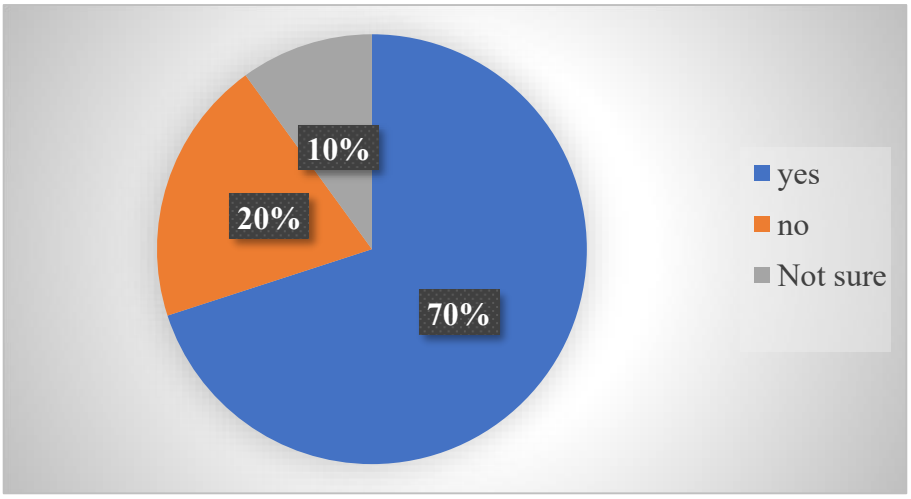
	Frequency	Percentage (%)
AGE GROUP		
18-20	30	30
21-23	45	45
24-26	15	15
27 and above	10	10
YEAR OF STUDY		
1st year	34	34
2nd year	36	36
3rd year	30	30
GENDER		
Male	36	36
Female	64	64
RELATIONSHIP STATUS		
Single	50	50
In a relationship	40	40
Married	10	10
Others		

Table 1 shows that the majority of respondents are aged 21-23 years (45%), female (60%), and in their 2nd year of study (40%).

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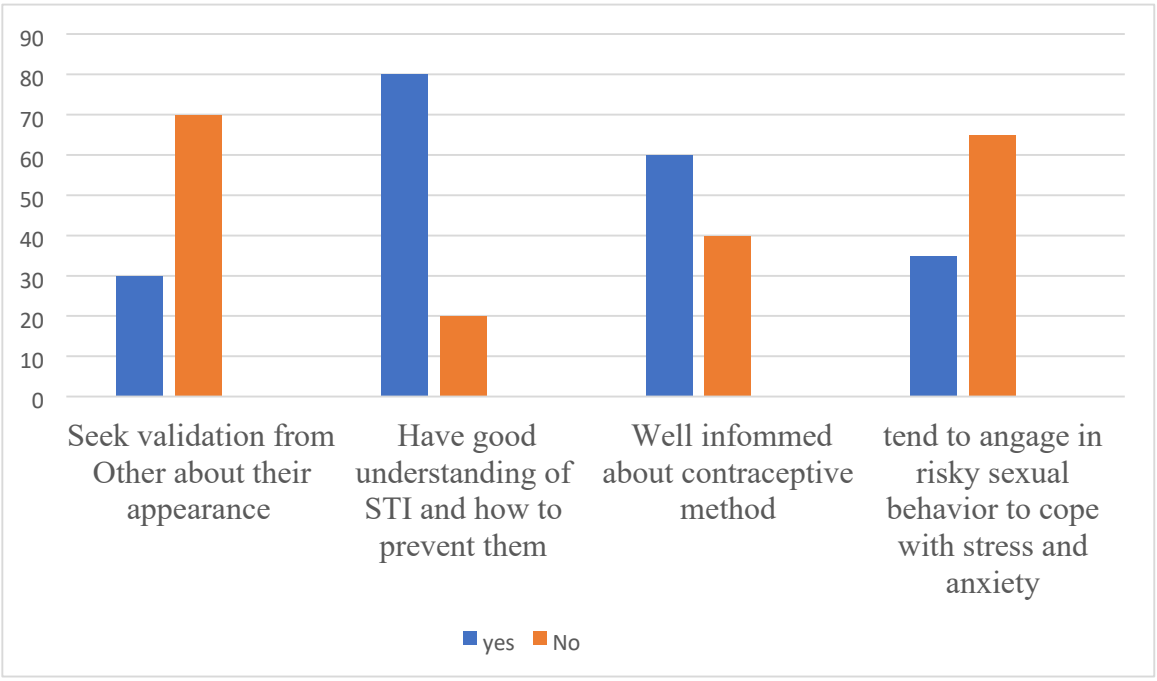
Individual factors influence students' involvement in risky sexual behaviours.

Figure 1 Showing students who feel confident with their body image



The figure shows that 70% of students feel confident with their body image, 20% don't, and 10% were not sure.

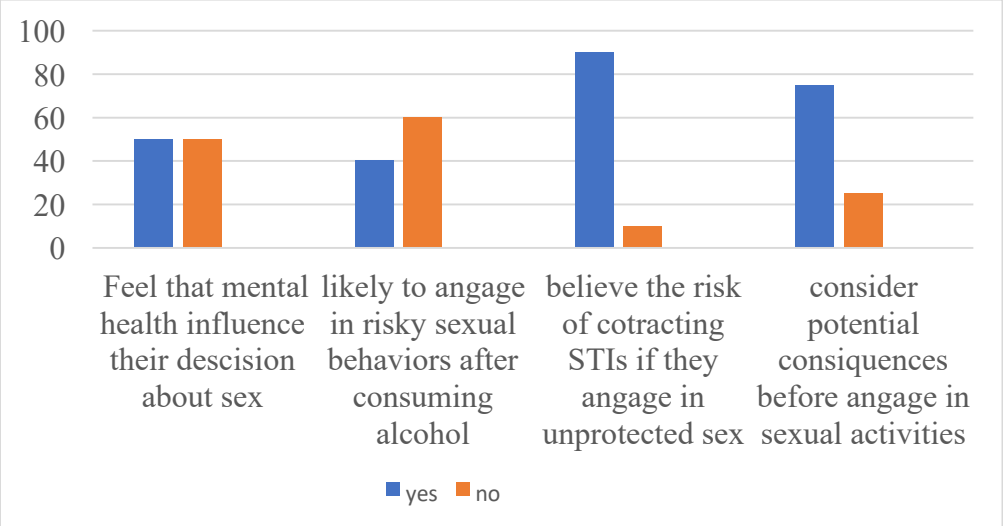
Figure 2 shows how other individual factors influence students' involvement in Risky sexual behaviours.



Shows that 80% have a good understanding of STIs and how to prevent them, and 60% are well-informed about contraceptive methods.

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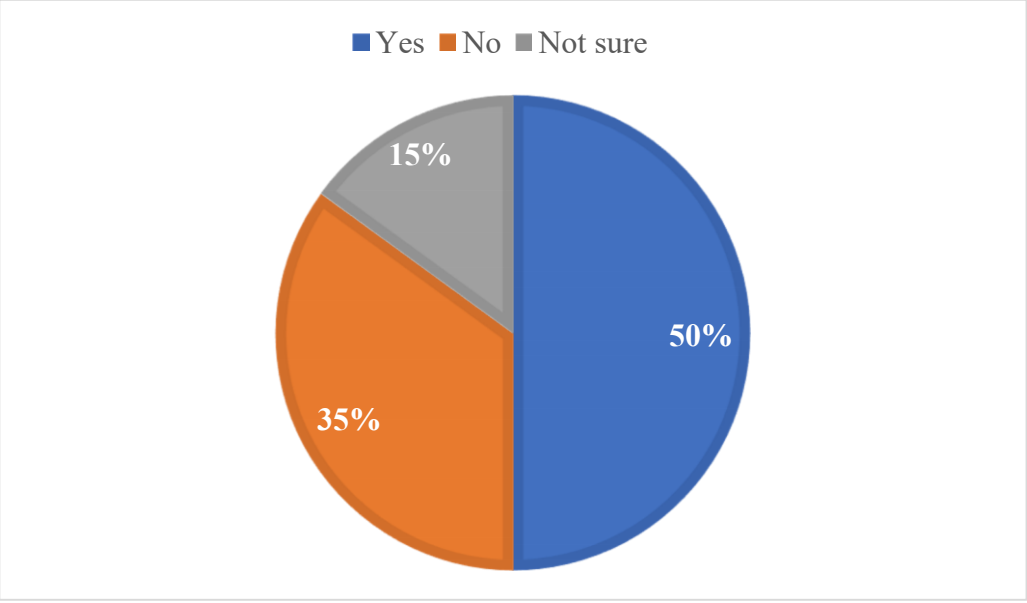
Figure 3 showing how other individual factors influence students' involvement in risky sexual behaviours



Individual factors like body image confidence, seeking validation for appearance, understanding of STIs and prevention, knowledge of contraceptive methods, engagement in risky behaviours to cope with stress/anxiety, influence of mental health on sexual behaviours, likelihood of engaging in risky behaviours after consuming alcohol/drugs, perception of STI risk with unprotected sex,
Consideration of consequences before sexual activities influences students' involvement in risky sexual behaviours.

Social factors influence students' involvement in Risky Sexual Behaviours

Figure 4 showing how peers influence students' involvement in risky sexual behaviours



50% felt influenced by their peers' attitudes toward sex; 30% reported that their family's values influence their sexual behaviour.

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Figure 5 showing that that they comforted to their peers sexual behaviours

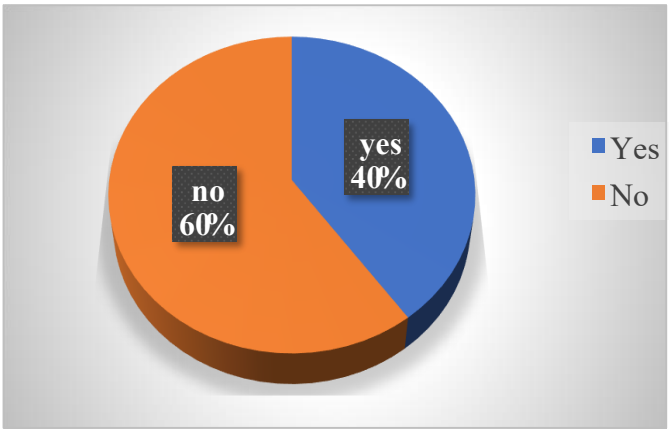
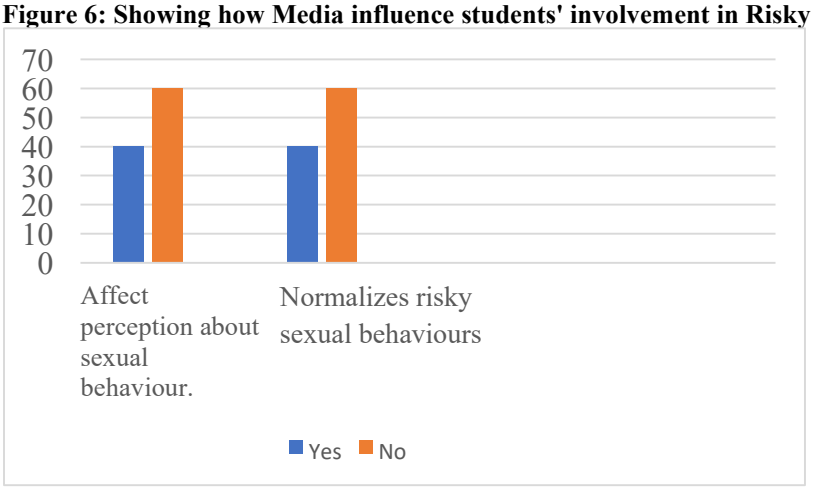


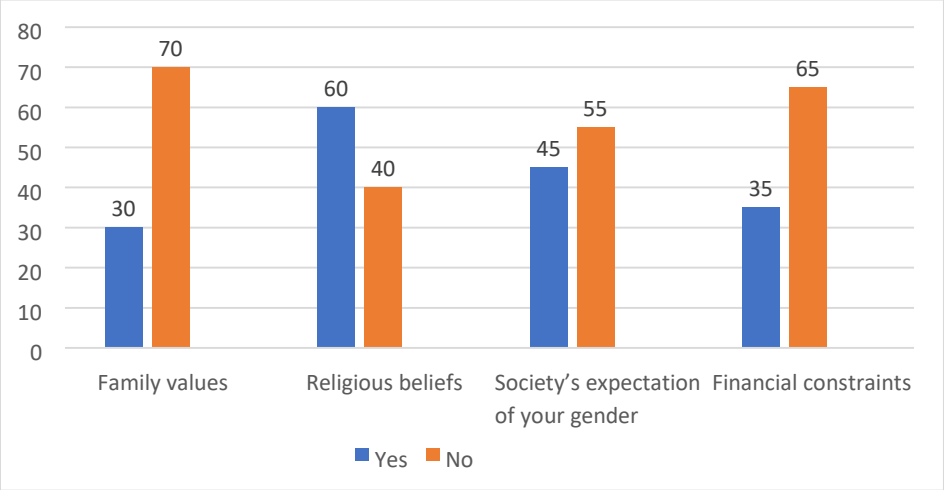
Figure 6: Showing how Media influence students' involvement in Risky Sexual Behaviours



Shows that 40% affect the student's perception about sexual behaviours and 40% believe media normalizes risky sexual behaviour.

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Figure 7: Showing how family values and religious beliefs influence students' involvement in risky sexual behaviours



Social Factors like Influence of peers' attitudes toward sex, Pressure to conform to peers' sexual behaviours, Media influence on perception of sexual behaviours, Media normalization of risky sexual behaviour, Influence of family values on sexual behaviour, Influence of religious beliefs on sexual behaviours, Influence of societal gender expectations on sexual behaviours, and Influence of financial constraints on sexual behaviours influence students Involvement in Risky Sexual Behaviours

Environmental factors influence students' involvement in risky sexual behaviours.

Table 2 shows that environmental factors influence students' involvement in risky sexual behaviours.

Parameter		Frequency	Percentage
Have easy access to sexual health services at campus	Yes	60	60
	No	40	40
Feel that lack of contraceptive influence their sexual behaviours	Yes	70	70
	No	30	30
Feel that discussions about sexual health are encouraged at campus	Yes	50	50
	No	50	50
Feel that campus location and environment influence their behaviours	Yes	55	55
	No	45	45
Feeling safe in the environment influences their sexual behaviours	Yes	70	70
	No	30	30
Believe that environmental stressors affect their behaviours	Yes	40	40
	No	60	60

60% of the participants reported that they had easy access to sexual health services on campus; 50% felt that discussions around sexual health are encouraged on campus. Common themes from the research included the significant role of peer pressure, the impact of media portrayal of sex, and the importance of accessible sexual health resources.

Environmental factors such as impact of living away from family on sexual behaviours, Access to sexual health services on campus, Influence of lack of access to contraceptives on sexual behaviours, University promotion of sexual health awareness, encouragement of sexual health discussions on campus, influence of campus location and social environment on behaviour, feeling of safety in living environment and impact of environmental stressors on sexual behaviour influences students involvement in risky sexual behaviours.

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Discussion

Individual factors

According to the survey results, 70% of students feel confident with their body image, which is in line with the Literature Insight of Cooper et al. (2018), who suggest that self-esteem and body image concerns correlate with risky sexual behaviours. The high confidence level among students might indicate lower vulnerability to risky behaviours due to body image issues. However, the 30% who lack confidence may still be at risk, highlighting the need for targeted interventions to boost self-esteem and promote healthy body image perceptions.

Research indicates that 80% have a good understanding of STIs and 60% are well-informed about contraceptive methods. However, Rosenbaum (2019) highlights that gaps in sexual health knowledge can lead to risky behaviours. The relatively high knowledge levels in our sample suggest that educational efforts are somewhat effective. However, the 40% lacking contraceptive knowledge still represents a significant risk, indicating a need for more comprehensive sexual health education that covers all aspects of contraception and STI prevention.

My Survey Result indicates that 50% report that mental health influences their sexual behaviours, and 35% engage in risky behaviours to cope with stress, which is in line with Jones & McCormack (2021), who noted that stress and mental health issues can lead to impulsive behaviours. The data aligns with this, indicating that mental health support could mitigate risky behaviours. Interventions such as stress management workshops and mental health counselling could be beneficial in reducing the incidence of risky sexual behaviours among students.

Research Results also indicate that 40% are likely to engage in risky behaviours after consuming alcohol or drugs, which corresponds with the research done by Smith et al. (2020), who emphasized that substance use impairs judgment. This significant percentage underscores the need for substance abuse education and support. Programs that address the risks associated with substance use and provide alternative coping mechanisms for stress and anxiety could help reduce risky sexual behaviours.

The research results also showed that 90% believe they are at risk of contracting STIs if they engage in unprotected sex, and 75% consider potential consequences before engaging in sexual activities. Bandura's social cognitive theory (1997) suggests that self-efficacy in managing sexual health predicts safe practices. The high perceived risk and consideration of consequences are positive indicators of preventive behaviour. This suggests that most students are aware of the risks and take steps to protect themselves, but continuous education and reinforcement of safe practices are necessary to maintain these behaviours.

Social Factors

Research survey Results showed that 50% feel influenced by their peers' attitudes toward sex, and 40% feel pressured to conform. This matches the literature by Santelli et al. 2019), who discussed how peer pressure can normalize risky behaviours. The data shows that peer influence is a significant factor, highlighting the need for peer-led education programs. Creating a supportive peer environment that promotes healthy sexual behaviours can help mitigate the pressure to conform to risky behaviours.

Research also showed that 60% believe media affects their perception of sexual behaviours, and 40% think media normalizes risky behaviour. Literature also showed that Media portrayal of sex can shape attitudes and behaviours. This suggests that media literacy programs could help students critically evaluate sexual content. Educating students on how to discern and critically analyse media messages about sex can empower them to make informed decisions.

Research results showed that 30% report family values influence their behaviour, and 50% say religious beliefs shape their views, which is in line with Meyer's (2020) literature, and other studies indicate that family and religious backgrounds can either mitigate or exacerbate risky behaviours. The mixed responses suggest diverse influences within the student population. Tailoring sexual health education to respect and incorporate these diverse backgrounds can enhance its effectiveness.

Environmental Factors

According to my research, 60% state that living away from family affects their sexual behaviours. Living independently can lead to increased freedom and potentially risky behaviours. This highlights the importance of providing support and resources for students living away from home. Programs that offer guidance on managing independence and making safe choices can be beneficial.

According to my research, 70% have easy access to sexual health services on campus, but 50% feel that lack of access to contraceptives influences their behaviours. Access to sexual health services is crucial for prevention. The data suggests that while services are available, there may be barriers to accessing contraceptives that need to be addressed. Ensuring that contraceptives are readily available and affordable can help reduce risky behaviour.

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My research showed that 65% say their university promotes sexual health awareness, and 50% feel discussions are encouraged. Active promotion and open discussions about sexual health can reduce risky behaviours. The data indicates that while efforts are being made, there is room for improvement in fostering open dialogue. Universities can enhance their sexual health programs by creating more opportunities for students to engage in discussions and access information.

Conclusions

The survey results align with the literature, indicating that individual, social, and environmental factors all play significant roles in influencing risky sexual behaviours among student nurses. Addressing these factors through targeted education, support services, and open discussions can help mitigate risks and promote healthier sexual behaviours.

Study Limitations

A fixed schedule since the researcher is expected to balance between research and coursework

Recommendations

Comprehensive sexual health education programs should be developed, covering all aspects of STIs and contraceptive methods, and incorporate mental health education to address the impact of stress and anxiety on sexual behaviours.

Stakeholders should implement substance abuse education programs that highlight the risks associated with alcohol and drug use, provide alternative coping mechanisms, and encourage peer-led education programs to create a supportive environment that promotes healthy sexual behaviours and reduces peer pressure.

Media literacy programs should be developed to help students critically evaluate sexual content in media and make informed decisions, and respect and incorporate family values and religious beliefs into sexual health education to enhance its effectiveness.

Guidance and resources should be provided to students living away from family to help them make safe and informed decisions and remove barriers to accessing contraceptives by making them readily available and affordable on campus.

Acknowledgement

First and foremost, I would like to thank the Almighty God for the gift of life, health, protection, guidance, and wisdom he has always preserved in me. Without Him, I would not have made it this far in the quest for academic achievement.

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List of abbreviations and acronyms

AIDS: Acquired Immunodeficiency Syndrome
AU: African Union
CDC: Centers for Disease Control and Prevention
HIV: Human Immunodeficiency Virus
IPI: International Paramedical Institute
ISNM: International School of Nursing and Midwifery
LGBTQ: Lesbian, Gay, Bisexual, Transgender, and Queer/Questioning
STIs: Sexually Transmitted Infections
UAC: Uganda AIDS Commission
UBOS: Uganda Bureau of Statistics
UDHS: Uganda Demographic and Health Survey
UNAIDS: Joint United Nations Program on HIV/AIDS
WHO: World Health Organization

Source of funding: The study received no external funding.

Conflict of interest
The authors declared no conflicts of interest.

Author contribution
Henry Ndawula conceptualized the study, developed the proposal, collected and analysed the data, interpreted the findings, and prepared the final research report. Achilles Kiwanuka supervised the whole research process.

Data availability
Data supporting the findings may be obtained upon request from the corresponding author.

Informed consent
Informed consent was obtained from all the participants before taking part in the study.

Author biography
Henry Ndawula is a student of International Paramedical Institute Maya, Uganda, pursuing a diploma in clinical medicine and community health.
Achilles Kiwanuka is a tutor at the International Paramedical Institute Maya, Uganda.

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