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EFFECT OF REPRODUCTIVE HEALTH EDUCATION INTERVENTION ON SEXUAL ATTITUDE AMONG STUDENTS OF BAYERO UNIVERSITY, KANO STATE

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Abstract

This study assessed the effect of reproductive health education intervention programme on sexual health attitudes among students in Bayero University, Kano State, Nigeria. To achieve this purpose, a quasi-pretest post-test experimental research design was used. The population for the study comprised all 37,214 registered students in Bayero University, Kano, Nigeria. The total sample size of 100 respondents was drawn from the population using a multi-stage sampling procedure, which included stratified, simple random, proportionate and systematic sampling. The instrument for data collection was a researcher-structured closed-ended questionnaire and health education manual, which was validated. The research question was answered using mean and standard deviation. Inferential statistics of the paired sample t-test was used to test the stated hypothesis at a 0.05 level of significance. The results revealed that health education intervention has a significant effect on the attitude towards sexual health ($t = 13.39$, $p = 0.000$). Based on the findings of the study, the study concluded that health education intervention significantly improves attitudes towards sexual health among Bayero University, Kano students. Based on the conclusion, the study recommended the need for Bayero University management to implement comprehensive sex education programmes to proactively address any underlying attitudes that may contribute to risky sexual behaviours.

Keywords: Effect, Reproductive Health Education, Intervention, Sexual Attitude, Students, University

Introduction

Reproductive health is a crucial aspect of overall well-being that encompasses physical, mental, and social dimensions related to the reproductive system and its functions (World Health Organization [WHO], 2023). It involves the ability to have a satisfying and safe sex life, the capability to reproduce, and the freedom to decide if, when, and how often to do so. The global perspective on reproductive health has evolved significantly over the past few decades, with increasing recognition of its importance in achieving sustainable development goals and promoting gender equality (United Nations Population Fund [UNFPA, 2022).

The International Conference on Population and Development (ICPD) held in Cairo in 1994 marked a paradigm shift in how reproductive health was perceived and addressed globally (UNFPA, 2024). This conference emphasised the need for a comprehensive approach to reproductive health, moving beyond narrow population control objectives to encompass a broader range of issues, including sexual health, family planning, maternal health, and the prevention and treatment of sexually transmitted infections (STIs), including HIV/AIDS (Akorede et al., 2022; Ologele et al., 2020; Starrs et al., 2018).

Among undergraduate students, reproductive health education takes on particular significance. University students are typically at a stage in life where they are exploring their sexuality, forming relationships, and making decisions that can have long-lasting impacts on their reproductive health (Akorede et al., 2022). They are also often away from parental supervision for the first time, which can lead to increased sexual risk-taking behaviours if not equipped with proper knowledge and skills. Research has consistently shown that university students in many parts of Africa, including Nigeria, have significant knowledge gaps when it comes to reproductive health (Akorede et al., 2023; Biu et al., 2025). These gaps can lead to risky sexual behaviours, unintended pregnancies, and increased vulnerability to STIs, including HIV. Furthermore, misconceptions and myths about contraception and sexual health are prevalent among this population, highlighting the need for evidence-based reproductive health education interventions (Harande et al., 2025; Oluwasola et al., 2021).

The sexual attitudes of university students are influenced by a complex interplay of factors, including cultural norms, peer pressure, media influences, and access to information and services (Muhammed et al., 2025; Okonkwo et al., 2022). In many African societies, including Nigeria, discussions about sexuality and reproductive health are often considered taboo, leading to a culture of silence that can hinder open communication and education on these topics (Ajayi et al., 2020).

Bayero University, located in Kano State, Nigeria, provides an interesting case study for examining reproductive health education and its impact on sexual attitudes among undergraduate students. Kano State, situated in northern Nigeria, is characterised by a predominantly Muslim population and conservative cultural norms that can influence perceptions and behaviours related to reproductive health (National Population Commission [NPC] & ICF, 2019). The cultural and religious background of Kano State presents both challenges and opportunities for reproductive health education. While traditional values may sometimes conflict with certain aspects of comprehensive sex education, religious teachings also emphasise the importance of health and well-being, which can be leveraged to promote positive reproductive health behaviours (Zakari et al., 2021). Understanding and navigating this complex socio-cultural landscape is crucial for developing effective reproductive health education interventions for students at Bayero University.

In Bayero University, understanding the specific needs and challenges faced by students is crucial for developing effective reproductive health education interventions. Factors such as gender dynamics, socioeconomic background, and previous exposure to reproductive health information can all influence how students receive and internalise reproductive health education (Akorede et al., 2019; Usman et al., 2022). The potential impact of reproductive health education on sexual attitudes among Bayero University students extends beyond individual health outcomes. Improved reproductive health knowledge and practices can have broader societal benefits, including reduced rates of unintended pregnancies, lower STI prevalence, and increased gender equality (UNFPA, 2023). Moreover, university students, as future leaders and influencers in their communities, have the potential to become advocates for reproductive health and rights, contributing to positive social change.

Statement of the Problem

Reproductive health is increasingly being recognised as an important aspect of human development. This is because it shapes the undergraduates' sexual knowledge and behaviour and sets the stage for good health and life expectancy beyond the reproductive years. Many governments in Sub-Saharan Africa, including Nigeria, viewed with concern the region's continued rapid population growth, high birth rates, and escalating rates of sexually transmitted infections. Unprotected adolescent sexual activity significantly contributes to the number of adolescents exposed to sexually transmitted diseases (Abdulbaqi et al., 2019; Akorede et al., 2022).

University is a place where students have the freedom to make choices and decisions about every aspect of their lives, which were initially influenced by their parents or guardians. Considering the change in environment and freedom from routine, these students are exposed to various types of experiences. These experiences include physical and sexual maturation, movement towards social and economic independence and development of identity. The University is becoming more of a challenge to students (Akorede et al., 2022).

Sexual behavioural patterns that are established during this process, such as sexual risk-taking or unprotected sex, can have long-lasting negative effects on the future health and well-being of the students. Negative attitudes towards this may lead to unwanted pregnancy, unsafe abortions, transmission of sexually transmitted diseases, and other problems that may affect the student's physical and emotional well-being. Nigerian universities today have to struggle with many attitudinal problems of their students. Such problems include truancy, drug offences, unprotected sex, unplanned pregnancy, abortion, rape, indecent sexual escapades, sex for marks and secret cult sexual initiation ceremonies.

Although they constitute one of the most dynamic human resource bases and one of the healthiest groups in most populations, their potentials are often negated by the poor choices they make, which translate to risky behaviours and eventual ill health. While they represent 25% of the sexually active population, they account

for about one-half of all new sexually transmitted infections (STIs) because they are more susceptible, for biological, behavioural and cultural reasons (Lawal & Olley, 2017).

In recent times, there has been a growing interest in the sexual and reproductive health of higher institution students all over the world. Although they constitute one of the most dynamic human resource bases and one of the healthiest groups in most populations, their potentials are often negated by the poor choices they make, which translate to risky behaviours and eventual ill health. Although several educational programs have been carried out among in-school students in Nigeria to increase awareness about risky sexual behaviour and promote safe and responsible sexual behaviour, it has been found that in many cases, several misconceptions exist among them, and there are gaps in their knowledge (Amanu et al., 2023).

Research Question

Will reproductive health education intervention modify the sexual health attitude of students in Bayero University, Kano State?

Hypothesis

There is no significant effect of health education intervention on the attitude towards reproductive health among students of Bayero University, Kano.

Methodology

This study employed a quasi-experimental pre-test and post-test design to examine the effect of health education intervention on the sexual attitudes of students at Bayero University, Kano. The research involved two groups: an experimental group that received the intervention and a control group that did not. This design was chosen to allow for the measurement of changes in attitude before and after the intervention. The study population consisted of 37,214 undergraduate students at Bayero University, Kano. A sample size of 100 students was selected using multi-stage sampling techniques, including stratified, simple random, proportionate, and systematic sampling. Twenty participants were randomly selected from each of five randomly selected faculties. Data collection was conducted using a researcher-developed closed-ended questionnaire, which was used for both pre-test and post-test. The questionnaire contains items on sexual health attitude modification. Responses were scored using a 4-point Likert scale, with mean scores of 2.5 and above considered positive or accepted. The validity of the instrument was ensured through vetting by experts from relevant departments. Data collection procedures involved distributing copies of the questionnaire to the 100 respondents with the help of a research assistant. Inclusion criteria for participants included being from selected faculties and departments, giving consent, and scoring below moderate on the pre-test. Exclusion criteria included being from non-selected faculties, not giving consent, and scoring moderate or above on the pre-test. The research question was answered using mean and standard deviation, and the hypothesis was tested using paired sample t-tests at a 0.05 level of significance.

Results

Research Question: Will reproductive health education intervention modify the sexual health attitude of students in Bayero University, Kano State?

Table 1: Mean and Standard Deviation of Reproductive Health Education Intervention on Sexual Health Attitude of Students in Bayero University, Kano State

S/N	Item	Mean	Std. Dev.	Mean Difference
1.	Pretest	2.28	0.71	
				1.17
2.	Post-test	3.45	1.40	

Observation of Table 1reveals that there is a mean difference of 1.17 on the pretest and post-test items on the sexual health attitude of students in Bayero University, Kano State, Nigeria. The Pretest results revealed a mean score of 2.28, which indicates that most respondents have a negative attitude toward sexual health. However, the Post-test results showed a higher mean score of 3.45, which indicates that the intervention of health education positively impacted the respondents' attitude toward sexual health.

Hypothesis: There is no significant effect of health education intervention on the attitude towards sexual health among students of Bayero University, Kano.

Table 2: Paired Sample t-test representation of Pretest and Post-test of Sexual Health Attitude

Sexual Health Attitude	N	Mean	Std. Dev.	Mean Difference	df	t-value	p-value
Pretest	50	2.28	0.71				
				1.17	49	13.39	0.000
Post-test	50	3.45	1.40				

0.05 alpha level of significance

Table 2 shows that health education intervention has a significant effect on the attitude towards sexual health among students of Bayero University, Kano. It was because the p-value of 0.000 was found to be less than 0.05 (0.000 < 0.05) and a t-value of 13.39. Also, the mean score obtained for the pretest was 2.28, while the post-test mean score was 3.45, which has a significant difference of 1.17 in the mean score. The result thus revealed that health education intervention has a significant effect on the attitude towards sexual health among students of Bayero University, Kano. With this, the null hypothesis, which stated that there is no significant effect of health education intervention on the attitude towards sexual health among students of Bayero University, Kano, was rejected.

Discussion

The findings from this study have revealed a significant effect of health education intervention on the attitude towards sexual health among students of Bayero University, Kano. This outcome aligns with a growing body of research that underscores the importance and efficacy of comprehensive sexual health education programs in shaping positive attitudes and behaviours among young adults. The observed impact on students' attitudes towards sexual health can be attributed to various factors, including the provision of accurate information, the dispelling of myths and misconceptions, and the creation of an open, supportive environment for discussing these often-sensitive topics.

One of the key studies that corroborates our findings is the research conducted by Adebayo et al. (2018) on the effect of a sexuality education program on the knowledge, attitude, and practices of in-school adolescents in Ibadan, Nigeria. Their study demonstrated that a comprehensive sex education program significantly improved students' knowledge, attitudes, and practices related to sexual and reproductive health. This parallel finding strengthens the argument for the implementation of similar interventions across different educational settings in Nigeria, as it suggests a consistent positive impact of such programs on young people's sexual health awareness and attitudes.

Further support for our findings comes from the study by Odo et al. (2018), which examined the impact of health education intervention on attitudes towards safe sexual practices among undergraduate students in Enugu State, Nigeria. Their research revealed a significant improvement in students' attitudes towards safe sexual practices, such as condom use and HIV testing, following a health education intervention. This alignment between their results and ours emphasises the potential for health education programs to foster more responsible and health-conscious attitudes towards sexual behaviour among Nigerian university students.

The broader implications of our findings are further reinforced by a systematic review conducted by Picot et al. (2012). Their comprehensive analysis of behavioural interventions for the prevention of sexually transmitted infections in young people aged 13-19 years concluded that well-designed health education programs can positively impact knowledge, attitudes, and behaviours related to sexual health among young people. This review lends additional weight to our findings, suggesting that the positive effects observed at Bayero University, Kano, are part of a wider trend in the efficacy of sexual health education interventions.

Moreover, a global perspective on the impact of sex and HIV education programs is provided by the study of Kirby et al. (2018). Their research, which examined the impact of such programs on the sexual behaviours of young people worldwide, found that comprehensive sexuality education programs emphasising abstinence, contraception, and healthy relationships can lead to significant improvements in students' attitudes towards safer sexual practices. This includes outcomes such as delayed sexual initiation and increased condom use. The

consistency between their global findings and our localised results at Bayero University underscores the universal applicability and importance of comprehensive sexual health education.

The positive impact of health education intervention on the attitude towards sexual health among students of Bayero University, Kano, can be attributed to several key factors. Primarily, the provision of accurate and comprehensive information about sexual and reproductive health plays a crucial role in dispelling myths, misconceptions, and stigma surrounding these topics, as noted by Odu et al. (2019). By addressing these informational gaps and challenging prevalent misconceptions, the intervention likely fostered a more positive and empowered attitude towards sexual health among the students. This process of demystification and open discussion can be particularly impactful in conservative cultural contexts where sexual health education may have been previously limited or considered taboo.

Furthermore, the effectiveness of the intervention may be attributed to the use of interactive and engaging educational approaches. As highlighted by Ojo et al. (2020), methods such as workshops, group discussions, and peer-to-peer learning can create an environment that encourages open communication and the development of critical thinking skills related to sexual health. These participatory approaches likely contributed to the significant attitudinal changes observed in our study by allowing students to actively engage with the material, ask questions, and relate the information to their own experiences and cultural context.

The findings from this study at Bayero University, Kano, contribute to a growing body of evidence supporting the efficacy of health education interventions in shaping positive attitudes towards sexual health among young adults. The consistency of these results with both local and international studies underscores the universal importance of comprehensive sexual health education. As we move forward, it is crucial to continue refining and implementing such interventions, taking into account local cultural contexts while ensuring that young people have access to the knowledge and skills they need to make informed decisions about their sexual health.

Conclusions

Based on the findings, the study concluded that reproductive health education intervention significantly improves attitudes towards sexual health among Bayero University, Kano students.

Recommendations

Based on the conclusion, the study recommended the need for Bayero University, Kano State, management integrate such reproductive health education interventions into the curriculum to foster a more holistic approach to sexual and reproductive health education.

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