



SEXUAL AND REPRODUCTIVE HEALTH EDUCATION AS CORRELATES OF HEALTH OUTCOME AMONG UNDERGRADUATE STUDENTS



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Abstract

Health education plays important roles in human life, and it is also a fundamental right, which increases self-esteem, develop effective communication skills and encourages awareness about health and disease related knowledge. Simple random sampling techniques were employed to select three hundred (300) undergraduate students in Tai Solarin University of Education. The data collection instrument consisted of a researcher-designed questionnaire. The data analysis involved Analysis of Covariance (ANCOVA). The findings reveal that sexual health education ($F_{(1, 299)} = 123.717$) and reproductive health education ($F_{(1, 299)} = 123.717$) of undergraduate students significantly influence health outcome ($P < .05$); assertive skills of undergraduate students on sexual and reproductive healthful living significantly influence health outcome ($F_{(1, 299)} = 33.522$, $P < .05$) in Tai Solarin University of Education, Ijagun, Ogun State. Based on the findings, it was therefore recommended that universities should prioritize the integration of comprehensive sexual and reproductive health education into the undergraduate curriculum. Health education providers, both within and outside academic institutions, should collaborate to design and implement evidence-based programs that enhance assertive skills related to sexual and reproductive health.

Keywords:

Sexual health education, reproductive health education and health outcome

Introduction

Health outcomes refer to the effects or result that stem from healthcare practices, interventions, or policies. They can be assessed at various levels, including individual, community, or population health. It can be categorized based on the time frame of assessment. Short-term outcomes may include immediate effects, while long-term outcomes involve sustained changes over time (Yanagiura, 2023). Health outcomes serve as critical indicators for evaluating the quality and effectiveness of healthcare services and interventions, positive outcomes are associated with high-quality care. Patients and healthcare providers use health outcomes to make informed decisions about treatment options, taking into account potential risks and benefits. Governments and healthcare organizations use health outcome data to shape policies, allocate resources, and improve overall public health (Maltezou & Poland, 2016). Health outcomes research contributes to the advancement of medical knowledge, guiding further research, and the development of innovative treatments and interventions; healthcare resources can be efficiently distributed based on the analysis of health outcomes, directing efforts toward interventions that yield the greatest positive impact (Yanagiura, 2023). However, health outcome could be influenced by health education, most especially in the aspect of sexuality and reproduction.

Health education plays important roles in human life and it is also a fundamental right. It can help to increase self-esteem, develop effective communication skills and encourage awareness about health and disease related knowledge (Ferrier, 2016). The mixture of myths/stigma secrecy, lack of knowledge, social disparity and negative media messages confuses young people and encourages poor self-esteem resulting in uninformed choices being made and it may lead to incorrect knowledge about sex, unprotected sex, unplanned pregnancy; STI'S including HIV/AIDS or deeply unhappy and damaging relationship (Cort, Reynolds & Chakraborty, 2023). Sexual practices are defined as sexual activities that may

expose an individual to the risk of sexually transmitted infections (STIs) including HIV and unplanned pregnancies (Hawkes, 2008). Some of these practices include unprotected sexual intercourse, multiple sexual partners, forced or coerced sexual intercourse and sexual intercourse for reward.

However, lack of knowledge about consequences of these negative behaviours and poverty has been identified as factors that increase the chances of undergraduates engaging in sexual practices. Undergraduates face different challenges related to their sexuality which have an influence on their perception of the world and themselves. There has been increasing public health concern about the reducing age of initiation of undergraduates into sexual activities. The rate of sexual practices and the spread of STIs continue to be on the increase due to many factors including dearth of information regarding sexuality (Sande, 2020). Each year, approximately one million young women aged 15-19 become pregnant; the vast majority of these pregnancies are unplanned (Shiwnarain, 2017). Abstaining completely from sexual activity will eliminate these risks and where abstinence is not a reasonable choice or goal, preventive measures are imperative. The observed that unsafe sex was second among the top ten risk factors in the global burden of all diseases globally (Naghavi & Forouzanfar, 2013)

Sexual practice is the core of sexual matters in youths. In young people, sexual practices have been recognized as an important health, social and demographic concern in the developing world. It is a priority public health concern because of the high prevalence of HIV/AIDS and sexually transmitted infections (STIs) among this age group (Amo-Adjei, Yenyi, Ahanotu & Okyere, 2023). Sexual and reproductive health education provide factual knowledge essential to the feature of anatomy and physiology of human and animals reproduction which every educated person should have sexual and reproductive health education intimate and solidified pure health attitude towards sex and reproduction (Mohamed, 2018).

Sexual and reproductive health education is a physiological phase of human relations, how they are affected by male and female relationship. It also emphasizes attitude development and related to association between the sexes (Wen, Ding, Guo & Zheng, 2023). According to Hidayah, Handayani and Musthofa (2019) said that students that are teenagers pass through a period of stress and storm in education as their sexual urge is at strongest, the change from childhood to adult is an especially dangerous time in the life of students, who are teenagers. Sexual and reproductive health education programmes to students create, productive and reproductive health issue for the society, pregnancy, childbirth, and sexually transmitted infection are major contributor to health outcome through sexual and reproductive health education programmes in the society. Today, sexual and reproductive health education usually refers to classroom lesson about sex taught in schools. Sexual and reproductive health education also aims at contributing to young people's positive experience of their sexuality by enhancing the quality of their relationships. It offers sexuality programmes aimed at providing accurate information about human sexuality for young people to develop and understand their values, knowledge, attitudes and beliefs about sexuality. This according is a means by which they are help to protect themselves against abuse, exploitation, unintended pregnancies and sexually transmitted diseases (Frawley & Wilson, 2016).

Sexual and reproductive health education is described as education about human sexual anatomy, sexual reproduction, sexual intercourse, reproductive health, emotional relations, reproductive rights and responsibilities, abstinence, contraception, family planning, body image, sexual orientation, sexual pleasure, values, decision making, communication, dating, relationships, sexually transmitted infections (STIs) and how to avoid them, and birth control methods (Castellanos-Usigli & Braeken-van Schaik, 2019). Sexual and reproductive health education is the instruction of issues relating to human sexuality, including emotional relations and responsibilities, human sexual anatomy, sexual activity, sexual reproduction, age of consent, reproductive health, reproductive rights, safe sex, birth control and sexual abstinence (Pitre & Lingam, 2021). Sexual and reproductive health education that covers all of these aspects is known as comprehensive sexual and reproductive health education. Common avenues for sexual and reproductive health education are parents or caregivers, formal school programs, and public health campaigns (Lewinger, 2023).

Sexual and reproductive health education is the process of acquiring information and forming knowledge, attitude and belief about sex, sexual identity relationship and intimacy. Students are so curious about themselves and all that affect their lives sometimes they ask certain questions about themselves which required parent's response (Rosyita, Panghiyangan, Noor, Husaini & Marlinae, 2020). Yarrow (2014) state that it has now been realized that it is much better for young group and students to acknowledge the fact they have sexual desire and recognized that this is entire natural, any problem that emanate as a result can be dealt with more effective than when children are access to sexual and reproductive health education and what it presents. Sexual and reproductive health education affect inductive behaviour and help children, family to develop into effective family member respectively.

Kranker, Bardin, Lee Luca and O'Neil (2020) claimed that nearly one million students aged 15-19 years become pregnant in the United State of America yearly, and about 30,000

pregnancies occur out of wedlock and unintended. Although up to date statistics were not available about the situation in Nigeria, there is no doubt that hundreds of Nigerian teenage girls roam about the stress of Nigeria's urban centers offering themselves to various men for economic gains. According to Marzouk, He and Lee (2022), health education plays important roles in human life and it is also a fundamental right. It can help to increase self-esteem, develop effective communication skills and encourage awareness about health and disease related knowledge. The mixture of myths/stigma secrecy, lack of knowledge, social disparity and negative media messages confuses young people and encourages poor self-esteem resulting in uninformed choices being made and it may lead to incorrect knowledge about sex, unprotected sex, unplanned pregnancy; STI'S including HIV/AIDS or deeply unhappy and damaging relationship.

For many years the situation has been that many teenagers would gain initial information about sexuality and related issues from other misinformed youngsters who did not know much themselves. Corcoran, Patrician, Childs and Shirey (2019) state that most students do not receive direct formal lessons or talks about sexuality and sexual and reproductive health education from their parents or teachers. Siraj-Blatchford (2019) state that appreciation for the self must start early in life and be developed further each year if children are to feel comfortable with their sexuality and make good sexual decision through preadolescent, adolescent and adult years. Olakunle and Banounin (2019) further states that sexual and reproductive health education can result in young adults delaying first intercourse or, if they are already sexually active, in using contraception.

Problem Statement

In recent times, many students are faced with different challenges relating to sex/sexuality, with cases of poor performance in school, high rate of sexually transmitted diseases including HIV/AIDS, in addition to the rapid increase in immoral dressing and speech found here-and-there in our society. A large number of students have been confirmed HIV positive, while some are already dead or at the point of death because of AIDS. This has been linked to negligence to adhere to guides regarding sex/sexual and reproductive health education. Often the society frowns at these adolescents due to series of problems they face. Most of them drop out of schools, live on welfare, often below poverty-line, while their health and that of their babies (in the case of the pregnant ones) suffer. Other than the sexual and reproductive health education that is taught in schools, programs have been introduced to help increase awareness in young people about the risks of irresponsible sexual behavior. According to Korets (2021), in spite of the high levels of knowledge, young people do not appear to be applying that knowledge to their sexual behavior. The alarming rate of STD infections, HIV infections and diseases related to reproductive organs are debilitating factors to the growth of the community, our young people and their future. This study will focus on investigating sexual and reproductive health education as correlates of health outcome among undergraduate students in Tai Solarin University of Education, Ijagun, Ogun state.

Hypotheses

This following hypotheses were tested;

- i. Sexual health education of undergraduate students will not significantly influence health outcome in

Tai Solarin University of Education, Ijagun, Ogun State

- ii. Reproductive health education of undergraduate students will not significantly influence health outcome in Tai Solarin University of Education, Ijagun, Ogun State
- iii. Assertive skills of undergraduate students on sexual and reproductive healthful living will not significantly influence health outcome in Tai Solarin University of Education, Ijagun, Ogun State

Literature Review

Oonyu (2019) evaluated the need for SRH education to improve the health knowledge and behaviors of Makerere University female students. The findings revealed that 264 students (66.3%) expressed a strong desire for SRH knowledge to assist them in overcoming hurdles such as the difficulty to obtain trustworthy and correct information, to empower them in decision making, and to overcome insufficient knowledge from parents and universities. It was determined that SRH Education is required for university students in order to provide accurate and appropriate information on Sexual Reproductive Health (SRH). It was suggested that SRH Education courses be produced and presented either as independent modules or integrated into the current curricula.

Ihejiamaizu, Ajake, and Meremikwu (2012) investigated the impact of reproductive health education on undergraduate students' attitudes about family planning in southern Nigeria. The collected data was analyzed using covariance statistics. The results demonstrated that the reproductive health education package had a significant impact on undergraduate students' attitudes about family planning. The findings informed the recommendations. Marta, Lucia, Margarida, and Jose (2011) investigated the importance of sex education in schools and its effectiveness in encouraging healthy sexual behavior among university students. Students who received

sex education in school reported having less sexual risk behaviours. The majority of young people have reasonable knowledge, favorable attitudes toward contraception/STIs, and condom-use skills. Their findings show a link between getting sex education and protective sexual behaviors, knowledge, drive, and abilities.

Methodology

This research was conducted using a descriptive survey research design. The sample of this research was three hundred (300) undergraduate students, which cut across the five (5) colleges in Tai Solarin University of Education, Ijagun, Ogun State. However, simple random sampling technique was used to select sixty (60) students from each of the college. Therefore, a total of 300 respondents were selected for the study. The research instrument which was used for this study is the questionnaire which is the most commonly used method of data collection for survey research. The questionnaire was self-developed with two parts. The first part, section A, provides the information about demographic information of the respondents while section B, provides statements to be responded to by the respondents. The modified Likert scale of Strongly Agreed, Agreed, Disagreed and Strongly Disagreed was utilized in framing the statements. The questionnaire was administered personally by the researcher with six (6) research assistants on the field. The data collected from this study was analyzed using Analysis of Covariance (ANCOVA) to test the study variables. All hypotheses were tested at 0.05 level of significance, using Statistical Package for Social Sciences (SPSS) version 20.

Results

Research hypothesis one: Sexual health education of undergraduate students will not significantly influence health outcome in Tai Solarin University of Education, Ijagun, Ogun State

Table 4.8: Summary of Analysis of Covariance of Research Hypothesis One
Tests of Between-Subjects Effects

Dependent Variable: Health Outcome						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	71.589 ^a	1	71.589	123.717	.000	.516
Intercept	23.523	1	23.523	40.652	.000	.332
Sexual HE	71.589	1	71.589	123.717	.001	.516
Error	155.078	288	.579			
Total	2310.000	300				
Corrected Total	226.667	299				

a. R Squared = .516 (Adjusted R Squared = .513)

The data on Table 1 shows that there is a significant relationship between sexual health education and health outcome ($F_{(1, 299)} = 123.717, P < .05$). Moreover, the partial Eta squared indicates that the independent variable (sexual health education) has moderate effect on dependent variable (health outcome); however, independent variable (sexual health education), contributes to variance in health outcome of undergraduate students by 51.6%. The remaining unexplained 48.4% could be attributable to the preponderance of several

other variables not covered by this study. Hence, sexual health education of undergraduate students significantly influence health outcome in Tai Solarin University of Education, Ijagun, Ogun State.

Hypothesis two: Reproductive health education of undergraduate students will not significantly influence health outcome in Tai Solarin University of Education, Ijagun, Ogun State

Table 2: Summary of Analysis of Covariance of Research Hypothesis Two
Tests of Between-Subjects Effects

Dependent Variable: Health Outcome

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	66.908 ^a	1	66.908	112.239	.000	.595
Intercept	28.702	1	28.702	48.148	.000	.352
Reproductive H.E	66.908	1	66.908	112.239	.000	.595
Error	159.759	298	.596			
Total	2310.000	300				
Corrected Total	226.667	299				

a. R Squared = .595 (Adjusted R Squared = .593)

The data on Table 2 shows that there is a significant relationship between reproductive health education and health outcome ($F_{(1, 299)} = 112.239$, $P < .05$). Moreover, the partial Eta squared indicates that the independent variable (reproductive health education) has moderate effect on dependent variable (health outcome); however, independent variable (reproductive health education), contributes to variance in health outcome of undergraduate students by 59.5%. The remaining unexplained 40.5% could be attributable to the preponderance of several other variables not

covered by this study. Hence, reproductive health education of undergraduate students significantly influence health outcome in Tai Solarin University of Education, Ijagun, Ogun State.

Hypothesis three: Assertive skills of undergraduate students on sexual and reproductive healthful living will not significantly influence health outcome in Tai Solarin University of Education, Ijagun, Ogun State

Table 3: Summary of Analysis of Covariance of Research Hypothesis Three
Tests of Between-Subjects Effects

Dependent Variable: Students' interest

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	25.200 ^a	1	25.200	33.522	.001	.611
Intercept	120.851	1	120.851	160.761	.001	.875
ASSRHL	25.200	1	25.200	33.522	.002	.611
Error	201.467	298	.752			
Total	2310.000	300				
Corrected Total	226.667	299				

a. R Squared = .611 (Adjusted R Squared = .608)

The data on Table 3 shows that there is a significant relationship between assertive skills of undergraduate students on sexual and reproductive healthful living and health outcome ($F_{(1, 299)} = 33.522$, $P < .05$). Moreover, the partial Eta squared indicates that the independent variable (assertive skills of undergraduate students on sexual and reproductive healthful living) has large effect on dependent variable (health outcome); however, independent variable (Assertive skills of undergraduate students on sexual and reproductive healthful living), contributes to variance in health outcome by 61.1%. The remaining unexplained 38.9% could be attributable to the preponderance of several other variables not covered by this study. Hence, assertive skills of undergraduate students on sexual and reproductive healthful living significantly influence health outcome in Tai Solarin University of Education, Ijagun, Ogun State.

Discussion of Findings

The study showed that sexual health education of undergraduate students significantly influence health outcome in Tai Solarin University of Education, Ijagun, Ogun State. This finding do not align with the study of Larissa, Luis and Fernando (2020) who revealed that knowledge of students regarding sexual health in undergraduate courses is insufficient, as evidenced by deficiencies in teaching and difficulties in addressing the subject with patients.

The study showed that reproductive health education of undergraduate students significantly influence health outcome

in Tai Solarin University of Education, Ijagun, Ogun State. This finding is consistent with the study of Katherine, Arifa, Amina and Md Tanvir (2022) who found that formally educating persons with disabilities expands their SRH knowledge and familiarity with SRH services, as well as leads to more economic opportunities so they can afford SRH services. Increasing formal education levels for persons with disabilities, paired with integrating comprehensive sexuality education (CSE) in their schools, will likely help close the gap in SRH health disparities for this vulnerable population.

The study showed that assertive skills of undergraduate students on sexual and reproductive healthful living significantly influence health outcome in Tai Solarin University of Education, Ijagun, Ogun State. This discovery aligns with the study conducted by Ihejiamaizu, Anagbogu and Odigwe (2016) who found that there was a significant difference between the effects of reproductive health education and normal sex education curriculum on undergraduate students' sexuality in all the treatment groups.

Conclusion and Recommendations

In conclusion, the study reveals a significant association between sexual health education, reproductive health education, and assertive skills, emphasizing their collective influence on overall health outcomes. This highlights the importance of comprehensive sexual and reproductive health programs within university settings, acknowledging their potential to positively shape the well-being of undergraduate

students. As students navigate critical life decisions, the incorporation of evidence-based education becomes paramount, ensuring that they are equipped with the knowledge and skills necessary for responsible and informed choices. Ultimately, prioritizing sexual and reproductive health education establishes a foundation for healthier lifestyles and positively impacts the long-term health trajectories of undergraduate students. It is therefore recommended that universities should prioritize the integration of comprehensive sexual and reproductive health education into the undergraduate curriculum. Health education providers, both within and outside academic institutions, should collaborate to design and implement evidence-based programs that enhance assertive skills related to sexual and reproductive health. Government agencies, non-profit organizations, and community health providers should work collaboratively to raise awareness, advocate for policies supporting comprehensive health education, and allocate resources for the implementation of evidence-based programs.

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