

The Influence of Gender on Access and Utilization of Reproductive Health Services Among Undergraduates in Ogun State, Nigeria

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Abstract:

It is a known fact today that early sex has implications for one's self-perception, social status and future health behaviour. Just like the western world, Nigerian youths are becoming predominantly pre-marital in their sexual activities. There is therefore a need for a friendly young people's reproductive health services. Although much research has been done on reproductive health services (RHS), but the persistence of reproductive health problems among undergraduates in Nigerian university makes this study pertinent. A survey research design was adopted for this study while multistage sampling method was used to select the school, faculties, and participants of this study. A self-designed questionnaire was used for data collection, which was pilot tested through test-re-test and yielded a reliability coefficient (index) of .860. Four research questions and five hypotheses were formulated and tested. Analysis of data was done using descriptive statistics and regression analysis fixed at the .05 significant levels. A total of 388 participants were included in the study, 39.2% and 60.8% were males and females respectively while their ages ranged from 16-27 years with a mean age of 20.9. The result found no gender difference in the undergraduates' knowledge of reproductive health services ($t = .566$, $df = 386$, $p = .437$) while gender difference was observed in the undergraduates' utilization of reproductive health services ($t = 2.222$; $df = 386$; $p = 0.03$) It was revealed further that utilization of reproductive health services will not be significantly influenced by undergraduates' sexual behaviour ($f = 0.156$, $p = .693$). Results equally showed that 21% of the total variance in the access to reproductive health services among undergraduate students is accounted for by sexual behaviour, gender, and knowledge ($R = 0.291$; $R^2 \text{ Adj.} = 0.210$; $F_{(3,387)} = 3.802$; $P = .00$) and 7% of the total variance in the utilization of reproductive health services among undergraduate students is accounted for by sexual behaviour, gender, and knowledge ($R = .015$; $R^2 \text{ Adj.} = .007$; $F_{(3,387)} = 1.950$; $P = .00$). The study concluded that factors influencing access and utilization of RHS were personal, socio-economic, and institutional in nature. Based on the outcome of this study, it was recommended that active sensitization of the youth in schools, through school health programs not just at the University level but from primary school be promoted. Nurses should

provide a youth friendly RHS, that is functional, effective and affordable at every point in time.

Keywords:

Access, Gender, Reproductive Health Services, Undergraduates, Utilization

1. Introduction

The concern about adolescent sexual and reproductive health has grown due to unprecedented increasing rates of early sexual debut that has implications for one's self-perception, social status and future health behaviour. Most behavioural responses of young people habitually revolve around sexual activities. Just like the western world, Nigerian youths are becoming predominantly pre-marital in their sexual activities [1,2] making a high proportion of adolescents irrespective of their educational level as college students or not, living in urban or rural area to be sexually active, while many engage in unprotected sex. [3,4] It has also been observed that premarital activities of today's youth has given liberty to close intimacy and reckless romantic explorations during dating, [5,6] which ultimately lead them into an unhealthy sexual reproductive life.

Gender differentials in health services utilization have also received consistent attention among researchers. UNFPA discovered that there are gender variations in the utilization of SRH services among adolescents. [7] Females have been consistently shown to have higher health conscious attitudes and concerns than males, while males have more economic empowerment and have more freedom to move about freely. The common reason advanced for gender differences is the different socialization patterns between boys and girls. Malarchar reported that girls face social and psychological barriers to accessing SRH services as against their male counterparts due to gender stereotypes. [8]

Olunloyo asserted that religion, to a large extent, greatly influences what people believe value and practice as a people. [9] Parents, community and religious leaders are however divided on issues pertaining to the discussion and provision of sexual reproductive health services for adolescents. According to them, adolescents should conform to religious principles of pre marital chastity.

Knowledge and utilization of reproductive health services is an essential component and a link between prevention, care and support. It can empower an individual to make informed decisions about their sexual lifestyle that would otherwise predispose individuals to risky sexual life. Studies have shown that Nigerian youths are faced with reproductive health challenges. About 29% of Nigerian youths were reported to be using contraceptives.¹⁰ Studies have revealed that youths are generally aware of the existence of contraceptive methods and the benefits accruing from using contraceptives. [11,12,13,14] However, this awareness is not reflected in the actual utilization of these methods, thereby leading to increase in the incidence of STIs and unsafe abortions.

Despite the challenges experienced by youths in Nigeria, the extent to which the Nigerian youths make use of reproductive health services is very limited and poor which might be as a result of poor knowledge. This predisposes youths to a wide range of reproductive health issues, which include sexually transmitted infections

such as unintended pregnancy, related complications to STIs and HIV/AIDS, teenage pregnancy, sexual assault to rape, unsafe abortion practices and college dropout among others. [4]

Undergraduate students in Nigeria are vulnerable to unintended pregnancies and the contraction of STIs. [15,16] High degree of social freedom in tertiary institutions in Nigeria affords students the opportunity to engage in sexual activities; in some cases this could also be triggered by the desire to acquire material gains. [15,17] The risk related to the high rates of sexual activity, poor knowledge and low reproductive health services usage among Nigerian students are among the most serious health risk issues that young people face and can endanger not only their physical health but also their economic, emotional and social well-being. [4,18]

With the aforementioned, it is observed that Nigerian adolescents recently have been seen as an unhealthy segment of the population but till date they still received low priority for reproductive health services. Also, the society as well as their biological make-up creates additional health challenges for them; most of which result from unprotected sex, unintended pregnancy, unsafe abortion, sexual transmitted infections (STIs) such as HIV/AIDS, early marriage, and sexual violence. It was rightly noted by Ahonsi that adolescents in Nigeria have high burden of reproductive health problems. [19] Also, as a result of the existing conservative attitude towards sexual issues in the society, sex and sex-related issues are either superficially discussed or completely neglected. The sex education in Nigerian schools never go beyond the basics and therefore lack sufficient details to allow young people particularly deal with issues that confront their sexual health behaviour.

Before now, the focus of many studies has been on health system factors that influence access and utilization of sexual and reproductive health services by young people. [20,21,22] Although there are studies on knowledge and utilization of reproductive health services among students, yet the persistence of reproductive health issues among undergraduates make this study pertinent. It is based on this background that this study sets out to assess factors influencing access and utilization of reproductive health services among undergraduates.

2. Hypotheses

Ho₁ There is no significant difference between male and female undergraduates' knowledge of reproductive health services.

Ho₂ There is no significant difference between male and female undergraduates' utilization of reproductive health services.

Ho₃ Gender of the student will not significantly influenced the utilization of reproductive health services

Ho₄ There is no significant composite and relative influence of sexual behaviour, gender, and knowledge on access to reproductive health services among undergraduate students.

Ho₅ There is no significant composite and relative influence of sexual behaviour, gender, and knowledge on utilization of reproductive health services among undergraduate students.

3. Methodology

Research Design: This research study adopted a survey research design to assess the factors influencing access and utilization of reproductive health services among undergraduates in selected tertiary institutions in Ogun State, Nigeria.

Population: The study population cuts across all university students except graduate and postgraduate students in Ogun State. The characteristic of the study population was mixed at every university irrespective of school type (private and public) gender (male and female), age, socio-economic background, ethnicity, and class level.

Sample size and sampling Technique: There are ten (10) approved universities in Ogun State. Seven (7) are owned by the private or religious organizations while the remaining three (3) are owned by the government. A sample of four hundred and fifteen (415) undergraduates was selected for this study. A multi-stage sampling procedure was used to select the various faculties/schools. The Multi-stage sampling technique was chosen because it is a stage-by-stage system of sampling. The universities were first selected through stratified random sampling method in which the universities were stratified based on ownership (private and public [federal and state]). Secondly, from the categorization of either private or public universities, four (4) universities (2 private and 2 public) were selected using balloting method of random sampling method. Thirdly, the faculties or schools in the selected universities were again stratified into two as (1) science oriented and (2) non-science oriented, in which one faculty/school each was selected based on stratification; thus, making 2 faculties per university. This shows that eight (8) faculties/schools were involved in the study. In each faculty again simple random sampling was used to pick one department in faculty. Lastly, proportional stratified random sampling method was used for the selection of 415 undergraduates in Ogun State, the selection of the student at each level was done putting into consideration the gender of the student through purposive sampling technique.

Instrumentation: The instrument used for this study was a structured survey questionnaire. The research instrument was divided into six sections based on the variables of the study. The face and content validity of the instrument were ensured through the help of experts in the field of nursing. Their observations were used to correct the items in the research instrument. The instrument was subjected to a pilot testing among forty-two (42) undergraduates of Olabisi Onabanjo University, Ago-Iwoye, Ogun State and a reliability coefficient of .831 was obtained.

Data Analysis: In this study, the data analysis tools that were adopted include descriptive and inferential statistics. Descriptive statistics of frequency distribution mean and standard deviation was used to analyze the data and provide answers to the research questions 1, 2, 3 and 4. Simple regression analysis was used to test hypotheses one through four. All the hypotheses were tested at 5 percent level of significance ($\alpha = 0.05$) using the SPSS 21 version software.

Ethical Consideration: Ethical approval for this study was obtained from Babcock University Health Research Ethics Committee (BUHREC). The ethical approval number is BUHREC/065/18.

4. Results and Discussions

The results presented on the gender difference in the undergraduates' knowledge of reproductive health services revealed that the obtained value of t was .566 at 386 degree of freedom and not significant at 0.05 alpha level. This implies that there is no

significant gender difference in the undergraduates' knowledge of reproductive health services. Further analysis of the result based on the respondents' mean scores revealed that male undergraduates with average mean score of 13.704 did not differ significantly from their female counterparts with a mean score of 13.436. The only implication of this study may be that there is a lack of youth friendly SRH activities in health facilities to support access and utilization, which stand as a barrier for first time users. Also, lack of information on the SRH service may be an hindrance. This is consistent with Khatiwada et al. that showed no huge difference in the knowledge level among respondents based on their place of residence and sex. [23]

Table 1. Results of t-test on gender difference in the undergraduates' knowledge of reproductive health services.

Gender	N	Mean	Std. Deviation	Std. Error Mean	Mean diff	df	t	p-value
Male	152	13.7039	4.85667	.39393	0.268	386	0.566	.437
Female	236	13.4364	4.32511	.28154				

Table 2. Results of t-test on gender difference in the undergraduates' utilization of reproductive health services.

Gender	N	Mean	Std. Deviation	Std. Error Mean	Mean diff	df	t	p-value
Male	152	6.0855	2.88853	.23429	0.268	386	2.222	0.03
Female	236	5.4788	2.44157	.15893				

The results presented on the gender difference in the undergraduates' utilization of reproductive health services revealed that the obtained value of t to be 2.222 at 386 degree of freedom and significant at 0.03 alpha level. The results revealed a significant gender difference in the undergraduates' utilization of reproductive health services. Specifically, this result is in favour of the male respondents compared to their female counterparts. The only deduction for this study may be due to the fact that traditional norms and value are deeply rooted against the female as compared to the male. The practice of sexuality and talk about sexual and reproductive health is highly determined by these norms and values which are not in favour of the females. This might be the reason for the gender difference observed in the undergraduates' utilization of reproductive health services. The common reason advanced for gender differences is the different socialization patterns between boys and girls. Malarchar reported that girls face social and psychological barriers to accessing SRH services as against their male counterparts due to gender stereotypes. [24]

This corroborates the findings that gender is one the main factors that determine the utilization of SRH services. [25,26,27,28] Also, findings by Adefalu and Ayodele in a report on factors influencing access and utilization of reproductive health services among undergraduates in Nigeria are consistent with these findings, it was found that more males, more than half, utilized contraceptives services than females, probably because the most popular contraceptive for males is the male condom, the uptake of which could be very high because of regular and repeated use. [29]

Table 3. Summary of Analysis of variance on the utilization of reproductive health services will not be significantly influenced by undergraduates' sexual behaviour.

Model	Unstandardized Coefficients		Standardized Coefficients	T	p-value
	B	Std. Error	Beta		
(Constant)	5.606	.311		18.045	.000
Sexual behavior	.013	.033	.020	.395	.693

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2.666	1	2.666	.156	.693
Residual	6595.115	386	17.086		
Total	6597.781	387			

a. Dependent Variable: Sexual behavior

b. Predictors: (Constant), Utilization

Undergraduates' sexual behaviour has a beta value of .020 and t-value of .156 not significant at .693 alpha level. The calculated value of $f = 0.156$ not significant at 0.05 alpha level indicated that utilization of reproductive health services will not be significantly influenced by undergraduates' sexual behaviour. Therefore, the earlier set null hypothesis was accepted while the alternate one was rejected. The implication of this result is that the utilization of reproductive health services goes beyond undergraduates' sexual behaviour, and that there other factor that may propel the utilization of reproductive health services.

This result is in tandem with that of Ilesanmi, Ezeokoli, Obasohan, Ayodele and Olaoye who reported the use of reproductive health services by the youths to be low, and that young males and females are confronted with sexual health issues stemming from preventable problems of unintended pregnancy, unsafe abortion, and sexually transmitted infections (STIs) like HIV/AIDS. [30] They concluded that the sexual behaviour of the young adults, either being promiscuous or not, failed to propel them to make use of RHS. The concern here is that adolescent sexual and reproductive health problem grown due to unprecedented increasing rates of early sexual debut, and this has implications for one's self-perception, social status and future health behaviour. Nigerian youths are becoming predominantly pre-marital in their sexual activities [1,2] which has made a high proportion of adolescents irrespective of their educational level as college students or not, living in urban or rural area to be sexually active, and many engage in unprotected sex [4] and has given liberty to close intimacy.

Table 4. Summary of Multiple Regression Analysis of relative and composite influence of sexual behaviour, gender, and knowledge on access to reproductive health services among undergraduate students.

Model	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	5.102	.555		9.199	.000
Sexual behavior	.040	.026	.077	1.517	.130
Gender	.173	.223	.039	.777	.437
Knowledge	.069	.024	.144	2.858	.004
Source of variation	Sum of Squares	Df	Mean Square	F-Ratio	P
Regression	51.972	3	17.324	3.802	0.00
Residual	1749.750	384	4.557		
Total	1801.722	387			

Multiple R (Adjusted) = 0.291; Multiple R² (Adjusted) = 0.210; Stand error estimate = 2.135

The relative contribution of each predictor variable (sexual behaviour, gender, and knowledge) to the variance in the undergraduates' access to reproductive health services revealed that knowledge of reproductive health services has a beta value of .144 and t-value of 2.858 significant at less than .05 alpha level, while sexual behaviour and gender failed to significantly influence undergraduates' access to reproductive health services. Therefore, undergraduates' knowledge of reproductive

health services is the only potent factor to the prediction of access to reproductive health services among undergraduates.

Furthermore, undergraduates' access to reproductive health services yielded a coefficient of multiple regression (R) of 0.291 and a multiple correlation square of 0.210. This shows that 21% of the total variance in the access to reproductive health services among undergraduate students is accounted for by sexual behaviour, gender, and knowledge. The Table also indicates that the analysis of variance of the multiple regression data produced an F-ratio value significant at 0.00 level ($F(3,387) = 3.802$; $P = .00$). Sexual behaviour, gender, and knowledge combined to influence undergraduates' access to reproductive health services. Therefore, the hypothesis that stated no significant composite and relative influence of sexual behaviour, gender, and knowledge on access to reproductive health services among undergraduate students was rejected.

The findings of this study is supported by that of Ayodele, Olanipekun, and Akinlana that knowledge is a key factor in the accessibility of any services related to adolescents' sexual health. Despite the sexual health challenges experienced by youth in Nigeria [4] the extent to which they make use of reproductive health services is very limited and poor which was as a result of inadequate knowledge. This predisposes youth to a wide range of reproductive health issues, which include sexually transmitted infections such as unintended pregnancy, HIV/AIDS, teenage pregnancy, unsafe abortion practices and college dropout among others.

Table 5. Summary of Multiple Regression Analysis of relative and composite influence of sexual behaviour, gender, and knowledge on utilization to reproductive health services among undergraduate students.

Model	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	6.260	.683		9.164	.000
Sexual behavior	.004	.033	.007	.135	.893
Gender	.596	.275	.110	2.170	.031
Knowledge	.028	.030	.048	.942	.347
Source of variation	Sum of Squares	Df	Mean Square	F-Ratio	P
Regression	40.437	3	13.479	1.950	.121
Residual	2654.378	384	6.912		
Total	2694.814	387			
R = 0.122; Multiple R (Adjusted) = 0.015 Multiple R² (Adjusted) = 0.007; Stand error estimate = 2.629					

The relative contribution of each predictor variable (sexual behaviour, gender, and knowledge) to the variance in the undergraduates' utilization of reproductive health services. Gender has a beta value of .110 and t-value of 2.170 significant at less than .05 alpha level, while sexual behaviour and knowledge failed to significantly influence undergraduates' utilization of reproductive health services. Therefore, gender is the only potent factor to the prediction of utilization of reproductive health services among undergraduates.

However, undergraduates' utilization of reproductive health services yielded a coefficient of multiple regression (R) of 0.015 and a multiple correlation square of

0.007. This shows that 7% of the total variance in the utilization of reproductive health services among undergraduate students is accounted for by sexual behaviour, gender, and knowledge. The table also indicated that the analysis of variance of the multiple regression data produced an F-ratio value at 0.121 significant level ($F(3,387) = 1.950$; $P = .00$). Thus, the null hypothesis was retained as sexual behaviour, gender, and knowledge will not combine to influence undergraduates' utilization to reproductive health services. This study was consistent with Cherie and Berhane in their study on knowledge of STIs and barriers to seeking health services among high school adolescents in Ethiopia. [31] They found that knowledge of symptoms of STIs were better among males compared to females; and among adolescents who have mothers with some formal education compared to those who have illiterate mothers.

5. Conclusion

It is clear from the findings of this study that a majority of adolescents do not utilize RHS. The result found no gender difference in the undergraduates' knowledge of reproductive health services while gender difference was observed in the utilization of reproductive health services. It was revealed further that undergraduates' sexual behaviour did not influence the utilization of reproductive health services. Results equally showed that 21% of the total variance in the access to reproductive health services among undergraduate students is accounted for by sexual behaviour, gender, and knowledge and 7% of the total variance in the utilization of reproductive health services among undergraduate students is accounted for by sexual behaviour, gender, and knowledge.

As a result of this, it is imperative to recommend active sensitization of the youth in schools, through school health programs not just at the University level but from the primary school. Access to reproductive healthcare services plays a major role in the improvement of youths reproductive health and positive sexual behaviour, including family planning, prevention of unsafe abortion, control of sexually transmitted infection among others.

Also, the government through learning institution should put in place an effective legal infrastructure and policies to remove barriers to the access to and utilization of reproductive healthcare services in learning institutions.

A clearer understanding of adolescence as a transition to adulthood phase, with characteristics that influence young people's behaviour would enable nurse educators and practitioners to deal with the young people appropriately. A study of this nature further emphasizes caregivers to uphold the ethic of respect for privacy and confidentiality of the services rendered to adolescents. This therefore calls for the need of adequate training of all care givers involved with the adolescents' sexual and reproductive health services.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

Author Contributions

AKO determined the research questions and led the analyses and writing; AAG and AKO provided scientific guidance into the analyses at each stage. All authors contributed substantially to writing and review of the final version.

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