

FACTORS AFFECTING COMPLIANCE TO SCREENING FOR INFECTIONS WITH SEXUALLY TRANSMITTED DISEASES AMONG STUDENTS IN UNIVERSITY OF DELTA, AGBOR: IMPLICATIONS FOR EFFECTIVE HEALTH PROMOTION PLANNING

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Abstract

The study examined the factors affecting compliance to screening for infections with sexually transmitted diseases among students in University of Delta, Agbor. Methodology employed in the research was the descriptive survey research design. The study population consisted all students of the University of Delta, Agbor. Sample size of four hundred (400) was obtained by random selection from the respective departments in the University. A structured questionnaire duly scrutinized and validated by experts in the field of health and medical social work was used. A reliability value of $r=0.81$ was obtained. Analysis of data was done using descriptive statistics. Hypotheses were tested using student t -tests as well as the Pearson correlation statistical method. Findings indicated that peer pressure and family backgrounds were identified as some factors influencing compliance to screening for protocols for sexually transmitted diseases. Results also showed that there exists a strong association between exposure to health education and promotion activities and compliance to screening for sexually transmitted diseases protocols ($p<0.05$); there was a strong association also between religion and compliance to screening for sexually transmitted diseases protocols ($p<0.05$); There is no significant difference in the mean perceptions of males and female students on the need to attain full compliance to screening for sexually related infections. It was recommended that health education as an elective course should form an essential part of the classes for all students in the University irrespective of their departments. Also, there is the need for stakeholders in the health sector, the Government and Management of Higher Institutions of Learning to support the campaign for full compliance to screening for infections with sexually transmitted diseases in Nigeria.

Key words: *Sexual infection, Compliance to screening, Health education, Health promotion*

Introduction

Individuals with healthcare-related infections often do suffer from a variety of challenges. These range from pains, disruption to social and economic status; possible dysfunction, cognitive impairment and sometimes loss of life if not treated (James and Slack, 2000). For students and staff within an academic

environment such as Colleges and Universities, dealing with health related consistency infections can have one or many of the aforementioned negative impacts alongside poor academic performance as a result of potential hospitalizations or decreased attention during classes and academic works.

Globally, the issues relating to compliance with screening protocols for detection of a disease or recommended treatment or medication has become a crucial contemporary topic of research (Ahmed, Scholle, Baasiri Hoover Kent, Romaguera and Tao 2009). Health Promotion education is a useful and effective tool needed to facilitate the adoption of positive attitudes necessary for attaining good health (Callander, Moreira, El-Hayek, Asselin, van Gemert, Smith and Guy, (2018). Raimi, Adindu, Udensi, Funmilayo, Opufou, Deinkuro and Adeniji (2020). Sexually transmitted diseases are among the group of diseases that are common among teenagers and the student population in Nigeria. This is due to their high sexual activity and juvenile delinquent nature and disposal. The health care processes for all transmissible or communicable diseases require the tracing or screening of possible sources of infection (Barrow Ahmed, Bolan and Workoski.,2020). Screening protocol has been developed for most of the diseases such as sexually transmitted diseases that do take time for the symptoms to be obvious. The problem is compliance to the protocols among the population or admitted patients for the required results in both the prevention and or treatment process.

Statement of the Problem

In many campuses of higher institutions of learning, vices such as smoking, illicit use of drugs, prostitution and indulgence in unprotected sexual activities have increased the need to ensure that compliance to screening for infections with sexually transmitted diseases among students is given attention in order to reduce mortality and morbidity among students. The University of Delta, Agbor is one of the growing and expanding institutions of higher learning in the state. The study investigated the factors affecting compliance to screening for sexually transmitted diseases among students in University of Delta, Agbor and implications for effective health promotion planning in Nigeria.

Research objectives

1. The study intends to investigate the factors affecting compliance to screening for infections with sexually transmitted diseases among students in University of Delta, Agbor.
2. Identify and highlight the implications of factors affecting compliance to screening for infections with sexually transmitted diseases for Effective Health Promotion Planning programmes.

Research Questions

Answers were found to the following research questions:

1. What are the perception of students in University of Delta, Agbor on importance and significance of compliance with screening for infections with sexually transmitted diseases?
2. What are some of the factors responsible for non-compliance with screening for infections with sexually transmitted diseases by students in University of Delta, Agbor?
3. Are there differences in compliance with screening for infections with sexually transmitted diseases protocol based on gender among students of the University of Delta, Agbor?
4. What are the perceptions of students in University of Delta, Agbor on impact of Health Education and promotion activities on influencing compliance with screening for infections with sexually transmitted diseases?

Research hypotheses

Ho1: There exists no positive relationship in the mean perceptions of males and female students of the University of Delta, Agbor on the need to attain full compliance to screening for sexually related infections.

Ho2: There exists no positive relationship between exposure to health education and promotion activities and compliance to screening for sexually transmitted diseases protocols among students of the University of Delta, Agbor.

Methodology

A descriptive survey design was used in this study. The study population consists of all students of the University of Delta, Agbor. The sample size of four hundred (400) students (200 males and 200 females) was randomly selected from the respective departments in the University. The instrument for data collection for this study was a rating scale and a structured questionnaire administered to the participants. A test retest method was used to assess the reliability of the instrument through the administering of the instrument to thirty (30) students in another University not in the study area and a correlation coefficient of 0.82 was obtained. The questionnaire was divided into two parts; part A and B. Part A consists of general information of the respondents. Items on a four point Likert like rating scale of strongly agree (4 points), agree (3 points), strongly disagree (2 points) and disagree (1 point) respectively to elicit information;. Also items on a four point Likert like rating scale of to a Very large extent (4 points), large extent; (3 points), moderate; (2 points) and Not at all (1 point) respectively to elicit relevant information for the study. Statistical

means of 2.5 and above are regarded as accepted, while responses receiving mean score less than 2.5 are rejected

Results

Table 1: Distribution of respondents by departments in the university

S/N	Department of respondents	No of respondents sampled	Percentages (%)
1	Microbiology	70	17.5
2	Computer Science	70	17.5
3	Business Administration	60	15.0
4	Science Education	70	17.5
5	Accounting	60	15.0
6	Mechanical Engineering	70	17.5
TOTAL		400	100.0

Source: Field work

Table presents the Distribution of Respondents by departments in the University of Delta, Agbor. A total of 400 students were selected to participate in the study.

Table 2: Distribution of respondents by gender

Participants (students)	N	Percentage %
Males	200	50.0
Females	200	50.0
Total	400	100

Source: Field work

Table 2 presents the distribution of Respondents by gender in the University of Delta, Agbor. A total of 200 male students and 200 female students were selected to participate in the study.

Research Question one: What are the perception of students in University of Delta, Agbor on importance and significance of compliance with screening for infections with sexually transmitted diseases sexually transmitted diseases?

Table 3: Perception of students in the University of Delta, Agbor on importance and significance of compliance with screening for infections with sexually transmitted diseases

S/N	Importance and significance of compliance with screening for infections with sexually transmitted diseases	Mean	St. Dev.	Remarks
1	The screening for infections with sexually transmitted diseases should not be optional for students	2.73	0.87	Accepted
2	The screening process is relatively crucial for treatment or prevention	2.84	0.83	Accepted
3	The attendant stigma associated with cost of screening for infections with sexually transmitted diseases makes it not attractive	3.01	0.78	Accepted
4	Compliance to protocol of the screening for infections with sexually transmitted diseases does not improve treatment or prevention	2.96	0.77	Accepted
5	Non-compliance to protocol of the screening for infections with sexually transmitted diseases does have serious negative consequences	2.28	0.85	Rejected

Source; Field work

Table 3 presents the perception of students in the University of Delta, Agbor on importance and significance of compliance with screening for infections with sexually transmitted diseases. With statistical means of 2.5 and above regarded as accepted, while responses receiving mean score less than 2.5 are rejected, all the items in the table were accepted except items 5. With a statistical means of 2.28, the notion that Non-compliance to protocol of the screening for infections with sexually transmitted diseases does have serious negative consequences was rejected by the respondents.

Research Question two: What are some of the factors responsible for non-compliance with screening for infections with sexually transmitted diseases by students in the University of Delta, Agbor?

Table 4: Identified factors responsible for non-compliance with screening for infections with sexually transmitted diseases by students in the University of Delta, Agbor.

S/N	Factors responsible for non-compliance with screening for infections with sexually transmitted diseases by students in the University of Delta, Agbor	Mean	St. Dev.	Remarks
1	It is prohibited by my religious beliefs	2.94	0.78	Accepted
2	Stigmatization on acceptance of screening protocols by the community	2.82	0.81	Accepted
3	Affordability of the cost for screening for infections with sexually transmitted diseases	2.31	0.85	Accepted
4	Ignorance and Lack of adequate awareness of the significance of compliance to protocol of the screening for infections with sexually transmitted diseases	2.94	0.78	Accepted
5	Non- availability of screening for infections with sexually transmitted diseases centres or equipments within the school or community	2.96	0.76	Accepted

Source; Field work

Table 4 presents the identified factors responsible for non-compliance with screening for infections with sexually transmitted diseases by students in the University of Delta, Agbor. With statistical means of 2.5 and above regarded as accepted, while responses receiving mean score less than 2.5 are rejected, all the items in the table were accepted.

Research Question three: What are the perceptions of students in the University of Delta, Agbor on impact of Health Education and promotion activities on influencing compliance with screening for infections with sexually transmitted diseases?

Table 5: Perceptions of students in the University of Delta, Agbor on impact of health education and promotion activities on influencing compliance with screening for infections with sexually transmitted diseases

S/N	Perceptions of students in the University of Delta, Agbor on impact of Health Education and promotion activities on influencing compliance with screening for infections with sexually transmitted diseases	Mean	St. Dev.	Remarks
1	Health Education and promotion activities can improve students' willingness to comply with screening for infections with sexually transmitted diseases	3.05	0.95	Accepted
2	Health Education and promotion activities can reduce	2.37	1.00	rejected

	stigmatization of students who accepts the screening for infections with sexually transmitted diseases protocols by the community			
3	Health Education and promotion activities may help in overcome cultural and religious barriers to compliance to screening for infections with sexually transmitted diseases	2.78	0.84	Accepted
4	Health Education and promotion activities impact of on students' choices and behaviors towards compliance to screening for infections with sexually transmitted diseases is insignificant	3.05	0.95	Accepted
5	Health Education and promotion activities alone may not change students' behaviors on compliance to screening for infections with sexually transmitted diseases.	2.96	0.76	Accepted

Source; Field work

Table 5 presents perceptions of students in the University of Delta, Agbor on impact of Health Education and promotion activities on influencing compliance with screening for infections with sexually transmitted diseases. With statistical means of 2.5 and above regarded as accepted, while responses receiving mean score less than 2.5 are rejected, all the items in the table were accepted except items 2. With a statistical means of 2.37, the notion that Health Education and promotion activities can reduce stigmatization of students who accepts the screening for infections with sexually transmitted diseases protocols by the community was rejected by the respondents.

Research Question four: Are there differences in compliance with screening for infections with sexually transmitted diseases protocol based on gender among students of the University of Delta, Agbor?

Research hypotheses

Ho1: There exists no positive relationship in the mean perceptions of males and female students of the University of Delta, Agbor on the need to attain full compliance to screening for sexually related infections.

Table 6: Pearson correlation analysis of mean perceptions of males and female students of the University of Delta, Agbor on the need to attain full compliance to screening for sexually related infections

Variable	N	Mean	SD	DF	P-value	r - cal	r-cri	Remarks
Male students' perception on the need to attain full compliance to screening for sexually related infections	200	3.19	0.72	398	0.001	0.662	0.195	Significant
Female students' perception on the need to attain full compliance to screening for sexually related infections	200	3.14	0.56					

Source; Field work

Table 6 shows that the calculated r-value of 0.662 is greater than the r-critical value of 0.195 at degree of freedom of 398 and 0.05 level of significance. This implies that the null hypothesis (H_0) is rejected, and alternative hypothesis (H_1) accepted meaning that there is a strong positive relationship between Male and female students' perception on the need to attain full compliance to screening for sexually related infections.

Research Question five: What are the perceptions of students in the University of Delta, Agbor on impact of Health Education and promotion activities on influencing compliance with screening for infections with sexually transmitted diseases?

Ho2: There exists no positive relationship between exposure to health education and promotion activities and compliance to screening for sexually transmitted diseases protocols among students of the University of Delta, Agbor.

Table 7: Pearson correlation analysis of mean perceptions of students in the University of Delta, Agbor on impact of health education and promotion activities on influencing compliance with screening for infections with sexually transmitted diseases

Variable	N	Mean	SD	DF	P-value	r-cal	r-critical	Remarks
Students given exposure to health education and promotion activities and compliance to screening for sexually transmitted diseases	200	3.34	0.47	398	0.001	0.879	0.195	accepted
Students compliance to screening for sexually transmitted diseases	200	3.35	0.53					

Source; Field work

Table 7 shows that the calculated r-value of 0.879 is greater than the r-critical value of 0.195 at degree of freedom of 398 and 0.05 level of significance. This implies that the null hypothesis (H_0) is rejected, and alternative hypothesis (H_1) accepted meaning that there is a strong positive relationship between students given exposure to health education and promotion activities and compliance to screening for sexually transmitted diseases and those not given exposure to health education and promotion activities

Discussion

Screening process is identified as relatively crucial for treatment or preventing of sexually transmitted diseases. The findings show that students agree that compliance to protocols for the screening for infections with sexually transmitted diseases does improve treatment or prevention. Centre for Disease Control (CDC) of the United States outline four reasons why sexually transmitted infection (STI) screening is important and they:

1. STIS are common
 2. Chlamydia and gonorrhea are usually symptomless
 3. STI screening is easy, accessible and quickly
 4. Early STI detection and treatment can preserve future fertility.
- (Willowwomenscentre.org 2000)

Mayaud and Mabey (2004) agrees with the findings of this research in which he opined that universal serological testing for syphilis which is one of the sexually transmitted diseases is recommended by the World Health Organization (WHO) as one of the most cost effective health intervention available. They are also of the view that there is an urgent need for simple and cheap diagnostic tests to

individuals especially women with asymptomatic or poorly symptomatic cervical infections, in order to avoid sequelae and reduce transmission.

The finding point out also factors responsible for non-compliance with screening for infections with sexually transmitted diseases, by students in the University of Delta, Agbor. These include religious beliefs, stigmatization of students or patients seen to have accepted screening protocols by the community and the non-affordability or high cost for screening for infections with sexually transmitted diseases. Other factors include ignorance and lack of adequate awareness of the significance of compliance to protocol of the screening for infections with sexually transmitted diseases and the non-availability of screening for infection with sexually transmitted diseases Centre or equipment within the school or community. Mayaud and Mabey (2004) identified seven factors underlying the high prevalence of STIs in developing countries among which are:

- a. Demographic factors (a large young population which is usually active);
- b. Increase in levels of prostitution through economic hardship;
- c. Lack of access to effective and affordable STI services; and
- d. High prevalence of antimicrobial resistance for some pathogens

Respondents to research question on impact of health education and promotion activities on influencing compliance with screening for infections with sexually transmitted diseases did agree that health education and promotion activities impact screening for infections. This agrees with Et-Duah, Harris and Appiah-Brempong (2021) when they stated that improvements in health outcomes starts with good knowledge of health. With health knowledge adolescents are empowered to take control of their own bodies and make informed decisions such as screening for STIs and it is and it is still an essential tool for developing the drive to change behaviour and reduce the risk of STIs among adolescents. (Gonzalez, Kadengye, and Mayega, 2019; Mmari and Sabherwal, 2013).

Conclusion

The findings of the study illustrate that selected population knows importance and significance of compliance with screening for infections with sexually transmitted diseases. They were able to identify factors that could cause non-compliance with screening for infections with sexually transmitted diseases for which one of them is religious beliefs. The findings of this study also show that there exists a strong association between exposure to health education and promotion activities and compliance to screening for sexually transmitted diseases protocols. There is no significant difference in the mean perceptions of male and female students on the need to attain full compliance to screening for sexually related infections. Peer pressure and family backgrounds was identified as a factor for degree of compliance or access to health promotion education outside the University environment.

There should be continuing education for health workers and members of the school health programme to equip them for effective health care promotion activities and services to students and members of staff. The Delta state government as well as the Federal government in Nigeria should work collaboratively to enhance the health promotion and education programmes both for students and members of the local communities aimed at promoting compliance to screening for disease protocols including those for sexually transmitted diseases.

Collaboration between health institutions and religious bodies should be established. This is so since the religious beliefs propagated does influence attitudes towards screening for infections with sexually transmitted diseases. The collaboration should be for health enlightenment purpose and which can be tied in to the sermons being preached.

The collaboration should also be established with communities especially the leaders to allow for health interactions with the young ones especially students of the communities on screening for infections with sexually transmitted diseases.

Institutions of higher learning should mandate health related faculties and departments to use specific dates outlined by the United Nations and World Health Organization for health issues for awareness campaigns for health issues especially for screening for infections with sexually transmitted diseases.

Issues of availability and affordability cannot be put aside. The government through its relevant ministries, departments and agencies (MDA) through research sponsorship should make available self-testing equipment and for hospitals diagnostic equipment and apparatus that are cheap and affordable by individuals and health institutions both public and private.

Health education and related courses should be made to become compulsory elective course for undergraduates of Higher Institutions.

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