

Knowledge and Attitude Regarding Cervical Cancer Screening Among Female Students Of Polytechnic, Ibadan, Oyo State

Peter Olaoluwa Adediji Nigeria Centre for Disease Control and Prevention. (Surveillance and Epidemiology Department)

Olubunmi Ayinde Oyo State Ministry of Health (Director of Public Health)

Francis Adeniyi Balogun JP (RCHP)

Lead city University, Ibadan. Nigeria Faculty of Basic Medical and Health Science, Community Health Department.

Omole, Michael Segun (PhD) School of Health Information Management,

Osun State College of Health Technology, Ilesa, Nigeria

Macaulay Oluropo Babafemi Ph.D.

Lagos State College of Health Technology, Yaba, Lagos.

Olufunke Adenike Vaughan University of Bradford UK

Adekola Taofeek Bashiru (RCHP)

Lead city University, Ibadan. Nigeria Faculty of Basic Medical and Health Science, Community Health Department.

Tunmise Daramola Kolawole (RCHP)

Lead city University, Ibadan. Nigeria Faculty of Basic Medical and Health Science, Community Health Department.

Abstract

The purpose of this study was to evaluate female students' attitudes and understanding of cervical cancer screening. It was decided to use a cross-sectional study design. Selected from among the 100 female students in each of the five (5) faculties were total enumeration sampling approaches. A questionnaire that was given to the respondent served as the tool for gathering data. The statistical program SPSS version 21 was used to code, enter, and analyze the data that was obtained. Data was presented using frequency tables and percentages, and descriptive statistics were utilized to analyse it. This study found that a significant portion of female students knew

about cervical cancer screening, but had negative attitudes about their preparation and willingness to undergo the screening.

The study's findings led researchers to the conclusion that respondents' knowledge about cervical cancer screening was generally high at 80 (80.0%). To get a cervical cancer screening, the majority of respondents 65 (65.0) indicated some reluctance based on their attitude. Acceptability, accessibility, gap between screenings, and screening advertising are a few examples of factors that can affect participation rate.

The study made the recommendation that cervical cancer screening must be effectively communicated to female students, particularly through the use of behavior change communication strategies where a supportive environment is offered to break down barriers and allay the fears of the female students. There is a need to design health communication interventions that would encourage tertiary level students to translate their knowledge into positive health action against cervical cancer. This can be accomplished by gradually enlightening the public. Female students should be encouraged to view screening as an opportunity to enhance effective prevention of cervical cancer rather than as an attempt to identify diseases in them.

Keywords: Knowledge, Attitude, Cervical Cancer Screening, Female Students.

INTRODUCTION

Cancer is an abnormal growth or excessive multiplication of cells in the body. It is one of the noncommunicable disease which can affect any part of body. Women's reproductive organ, is associated with the different type of cancers caused in the women reproductive system. Women's reproductive cancer is defined as the different types of cancers found in the women reproductive system caused due to various health conditions either acquired or congenital. These include cancer of the cervix, ovaries, vagina, vulva and endometrial. Cervical cancer is malignant tumour found in the tissue of the cervix. It occurs when abnormal cells in the cervix turn in to cancer cells. It is also one of the leading cause of death throughout the world. Internationally cervical cancer has been regarded as the third most common form of cancer among women after breast and colorectal cancer, (American Cancer Society, 2014).

Cases of cervical carcinoma in the African region are found to be increasing with time, (KarlyL, Silvia, and Philippe (2019). Out of the many type of female cancers, cervical carcinoma may be prevented if proper medical measures are taken in time. These preventive measures include detection and regular screening of the condition during premalignant stages. Ample knowledge is important to spot the premalignant lesions and the understanding should be spread among female students, to increase the awareness towards screening and preventing the disease conditions as soon as possible.

In general, the preliminary screening for lesions for cervical precancerous and cancerous stages are done through visual inspection, but depending on the economic conditions, in a low cost setting use of acetic acid may aid a lot compared to the enriched cytological and colposcopic screening methods in resourceful rich settings, (Parkin. Freddie, Ferlay, and Paola, 2015). According to Anorlu (2016), the major source for HPV infection and cancer of the cervix depends on various issues including early age sexual intercourse, smoking habits for the immune suppressed

individuals, having more than one sexual partners, multiple male sexual partners, male sexual partners who have had multiple partners, early age at first birth, multiparty, smoking, long-term use of oral contraceptive pills.

All over the world cervical cancer remains as the most predominant cancer among the reproductive cancers (Anorlu, 2008). It has been observed that women having early sexual activity may have HPV infection early too, more often before the age of 25 years. In most of the cases, certain infections do not show any clinical consequences. Approximately in 10% cases, the infection is retained in the patient and in a later stage after 5-10 years lesions appears which may show regression. On the other hand, certain times such cases remain stable or show progression to the next higher grade with invasive cancer, (WHO, 2019).

Cancer of the cervix is a preventable disease and a key aspect of its prevention is the detection of the pre malignant form by cervical screening; it is also one type of cancer that can be prevented and cured if detected early enough. The long transition time from a premalignant lesion to frank cancer of the cervix affords ample time for early detection and nearly complete cure even in secondary health care centres. However, this window of opportunity which has enabled the developed countries to reduce the incidence of cancer of the cervix would be wasted if the level of screening is low, (Arevian, Noureddine, and KabakianKhasholian, 2016).

Early detection is important in the management of cervical cancer, however most of the women in developing nations present with advanced disease when nothing can be done for them. Several reasons for the late presentations have been noted, namely ignorance about the symptoms, fatalistic attitude (fear of death from the disease), readiness to attribute neoplastic disease to supernatural causes thereby resulting in delays in seeking help, fear of confirmation of suspicion and of course the perennial problem of low coverage of the population by health centre services especially the rural areas. Furthermore, it has been reported that 50-90% of women who develop or die from cervical cancer have never been screened, (Adewole, Benedet, Brian, and Follen, 2015).

A literature search identified studies that examine factors influencing women's participation in screening program, their psychological reaction to the receipt of an abnormal cervical smear result, and experiences of colposcopy. Reasons given for nonparticipation included administrative failures, inconvenient clinic times, unavailability of a female screener, lack of awareness of the test's indications and benefits, considering one-self not to be at risk of developing cervical cancer, and fear of embarrassment, pain, or the detection of cancer. The receipt of an abnormal result and referral for colposcopy cause high levels of distress owing to limited understanding of the meaning of the smear test, many women believe the test aims to detect existing cervical cancer. Cervical cancer screening is relatively inexpensive and there is worldwide agreement that screening programmes for cervical cancer are a necessity, (Ngoma, 2016). Factors that can influence participation rate include: acceptability, accessibility, screening interval, promotion of screening among others.

Cervical cancer screening services are not readily available in the state at present. It is therefore expected that the findings and recommendations of this study would provide guidelines for the provision and utilization of cervical cancer screening in our environment, and thereby contribute to the reduction in the incidence and mortality of cervical cancer, (Lara, Day, and Hakama, 2019).

Reports show that the cervical cancer survival rate in the sub-Saharan African region was 21% in 2002 in comparison to that of 70% and 66% in the U.S and Western European countries, (Hamad,

2016). According to the available statistics cervical cancer ranks second among the most common cancers in women worldwide. This disease is having an estimated 493,000 new cases along with 274,000 deaths per year. Developing countries such as Africa, Southeast Asia and Latin America is having about 83% cases which represents 15% of the total female cancer (Waktola, Mihret, and Bekele, 2015). Bekele, (2015), assets that, in Sub-Saharan area, cervical cancer is known to be the major cause of cancer among women, maximum number of cases are reported from Zambia, Tanzania, Nigeria and Ethiopia, making this disease a major public health issue, (Bekele, 2015). Moreover, it was found that awareness about the cervical cancer among the Sub-Saharan African women population is negligible. The 2019 WHO report depicts the urgent need of action very clearly. The report suggests that in Ethiopia, rate of age adjusted cervical cancer is around 35.5% per 100,000 patients while the increment in new cases per year is 7619 and deaths per year is reported as 6081. Unfortunately, despite this tremendous number of reported cases and annual deaths only few women receive the support of screening services in Nigeria. Due to lack of awareness and required number of screening programs and concentration on other health issues such as AIDS, TB, malaria, the number of incidences and reports of cervical cancer is exponentially rising in the country, (Gichangi, Estambale, Bwayo, Rogo, and Ojwang, 2013). According to WHO study Screening has shown as effectively reduce the incidence of this malignancy in developed countries but in developing countries screening coverage is still low ranging from 2.0% to 20.2% in urban areas and 0.4% to 14.0% in rural areas. Low screening coverage in our country cause most patients to present to hospital with advanced disease (KarlyL et al. 2019).

Carcinoma of the cervix is a preventable disease; its prevention is through detection of premalignant stages of the disease by screening. However, in our country the knowledge, attitude and practice towards cervical cancer and its screening of women is not much is known. It is to this backdrop that the researcher decide to carry out this study on knowledge, attitude and practice regarding cervical cancer screening among female students of polytechnic, Ibadan, Oyo state.

The findings of this study will be of importance to the school management of Polytechnic, Ibadan by helping them to see the need to scale up awareness campaign on relevance of cervical screening among female students in the school. This study will also play very crucial role in generating data that are important to fill gaps for policymakers in Nigeria, in other to achieve the quest for reduction of incidence of cervical cancer in the country. It will also be the source reference material for those who are interested to conduct any further study on it.

Objective of the Study

The broad objective of this study is to assess the knowledge and attitude regarding cervical cancer screening among female students of polytechnic, Ibadan, Oyo state.

Specific Objectives

The specific objectives of this study are;

- 1. To determine the level of knowledge of cervical cancer screening among female students of polytechnic, Ibadan, Oyo state.
- 2. To determine the attitude on cervical cancer screening, among female students of polytechnic, Ibadan, Oyo state.

Research Questions

- 1. What is the level of knowledge of cervical cancer screening, among female students of polytechnic, Ibadan, Oyo state?
- 2. What is the attitude on cervical cancer screening, among female students of polytechnic, Ibadan, Oyo state?

Materials and Methods

Study design

A descriptive cross-sectional research design was employed for this investigation. This study was concerned with the gathering of data from a relatively large and representative of the population at one occurrence at a particular time which aided quantification of the knowledge and perception about cervical cancer among respondents.

Study location

The study was carried out in polytechnic, Ibadan, Oyo state. The Polytechnic, Ibadan was established in 1970 as a successor to the erstwhile Technical College, Ibadan under the provisions of a principal Edict cited as the Polytechnic, Ibadan Edict 1970. This Edict has undergone several amendments in order to make the Polytechnic relevant to the present day needs of Oyo State, the Proprietor in particular and Nigeria in general. The primary function of the Polytechnic is to provide for students training and development of techniques in applied science, engineering, environmental science and commerce. Thus, the institution was established to provide an alternative higher education to universities, particularly in technical skill acquisition. The Polytechnic Ibadan is also well known for her unique slogan written in Yoruban language as "Ise loogun Ise" which means 'Work the medicine for poverty', a classical Yoruba adage which stresses that hardwork is the way out of poverty.

The polytechnic ruins mainly National Diploma (ND) and Higher National Diploma (HND) programmes in the following on full-time, part-time or sandwich basis. It has five faculties which includes; (1) Faculty of Engineering (Civil Engineering, Electrical Engineering, Mechanical Engineering, Computer Engineering, Mechatronic), (2) Faculty of Science (Science Laboratory Technology, Biology and Microbiology, Applied Chemistry, Physics with Electronics, Geology, Computer Science, Statistics), (3) Faculty of Environmental Studies (Architecture, Urban and Regional Planning, Estate Management, Quantity Surveying, Building Technology, Painting and Sculpture, Industrial Design, Graphics and Printing, Land Surveying and informatics), (4) Faculty of Financial Management Science (Accountancy, Banking and Finance, Insurance), (5) Faculty of Business and Communication Science (Mass Communication, Marketing, Business Administration, Office Technology Management, Purchasing and Supply, Local Government Studies, Public Administration).

Study Population

The target population are female students of polytechnic, Ibadan, Oyo state.

Sample size

The sample size for this study consists of one hundred (100) female students of polytechnic, Ibadan, Oyo state.

Sampling Procedure

The sample size that was selected using Yaro Yamane (1967) formula for determining the sample size of any definite population. To generate the sample for this study, simple random technique will be used to select twenty (20) female students, each from the five (5) faculties in Polytechnic, Ibadan, giving the total of one hundred (100) female students.

Yaro Yamane formula for determining sample size

 $n = \underline{N}$ $1 + N (e)^{2}$ n = Sample size N = finite population size e = level of significance

Where:

N = 133

e = 0.05

Substituting in the formula

n	=	133
n	_	$1 + 133 (0.05)^2$
11	—	133
		1 + 133 (0.0025)
n	=	133
		1 + 0.3325
n	=	133
		1.3325
n	=	99.81
n	=	100

Instrument for Data Collection

A self-structured questionnaire created by the researcher is the data collection tool for this study. The questionnaire will be sub-dived into four (4) sections. Section A, demographic data; section B, knowledge of cervical cancer screening among female students; section C, attitude on cervical cancer screening, among female students; section D, cervical cancer screening utilisation amongst female students.

Reliability of Instruments

To ensure reliability, a test re-test method was used by sharing the questionnaire to 10 female students of University of Ibadan, who were not part of the target population but possess the same characteristics with the target population. The data collected was pre-tested using cronbach alpha on S.P.S.S. with the outcome of 0.78.

Method of Data Analysis

The Statistical Package for Social Sciences (SPSS) version 22 was used to analyze the data electronically, and the results were reported using frequency and percentages (%) for the research questions.

RESULT

Section A: Demographic Variables of Respondents

Item	Frequency	Percent	
16-20 years	70	70.0	
21-25 years	20	20.0	
26-30 years	6	6.0	
>30 years	4	4.0	
Total	100	100.0	

Table 4.1: Age Range of the Respondents

The above table shows the age group distribution of the respondents with the majority 70 (70%) within the age range 16-20 years, 20 (20%) occurring within the age range 21-25 years, while 6 (6%) 26-30 occurring within the age range 26-30 years and 4 (4%) occurring also within the age range >30 years.

Table 4.2:	Respondents	s Marital Status
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Item	Frequency	Percent
Single	75	75.0
Married	25	25.0
Total	100	100.0

Table 4.2 indicates the marital status of the respondents 75 (75%) are single, 25 (25%) are married.

Table 4.3: Religion of Respondents

Items	Frequency	Percent
Christian	60	60.0
Muslim	25	25.0
Traditional	5	5.0
Total	100	100.0

The above table 4.3 represents the respondents religion 60 (60%) are Christians, 25 (25%) are Muslims, and 5 (5%) are traditionalists.

 Table 4.4: Faculty of the Respondents

Items	Frequency	Percent
Faculty of Engineering	20	20.0
Faculty of Science	20	20.0
Faculty of Environmental Studies	20	20.0
Faculty of Financial Management Science	20	20.0
Faculty of Business and Communication Science	20	20.0
Total	100	100.0

The above table 4.4 shows the faculty of the respondents were 20 (20%) are in faculty of engineering, 20 (20%) are in faculty of science, 20 (20%) are in faculty of environmental studies, 20 (20%) in faculty of financial management science while 20 (20%) are in faculty of business and communication Science.

Analysis of research questions

Section B: Analysis of research questions

Research Question One: What is the level of knowledge of cervical cancer screening, among female students of polytechnic, Ibadan, Oyo state?

ITEM(S)	CATEGORIES	FREQ	%
Cervical cancer screening is the	Yes	70	70.0
best way of diagnosing cervical			
cancer	No	30	30.0
	Total	100	100.0

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Cervical cancer screening ensures early detection of	Yes	60	60.0
cervical cancer	No	40	40.0
	Total	100	100
Cervical cancer screening involves taking a sample from	Yes	80	80.0
the cervix for examination/test	No	20	20.0
	Total	100	100.0
Cervical cancer screening should be done every 3 years	Yes	55	55.0
	No	45	45.0
	Total	100	100.0

FREQ=Frequency, %= percentage

Table 4.1 showed that predominantly 70(70.0%) of the respondents affirmed that cervical cancer screening is the best way of diagnosing cervical cancer, while 30(30.0%) of them did not believe that. Sizeable number 60(60.0%) of them accepted that cervical cancer screening ensures early detection of cervical cancer, while 40(40.0%) of them refuted that. 80(80.0%) of them believed that cervical cancer screening involves taking a sample from the cervix for examination/test, while 20(20.0%) of them said No. About 55(55.0%) of them said cervical cancer screening should be done every 3 years, while 45(45.0%) of them said No.

Research Question Two: What is the attitude on cervical cancer screening, among female students of polytechnic, Ibadan, Oyo state?

ITEM(S)	CATEGORIES	FREQ	%
Do you think it is important for every female to go for cervical cancer screening?	Yes	70	70.0
	No	30	30.0
	Total	100	100.0
Would you go for cervical cancer screening if you were	Yes	35	35.0
asked to go?	No	65	65.0
	Total	100	100
Do you think cervical cancer screenings is of any benefit?	Yes	70	0.0
screenings is or any benefit:	No	30	30.0

 Table 4.2. Attitude towards Cervical Cancer Screening

otal	100	100.0
es	65	65.0
0	35	35.0
otal	100	100.0
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FREQ=Frequency, %= *percentage*

Table 4.2 revealed that majority 70(70.0%) of respondents answered Yes when asked if it is important for every female to go for cervical cancer screening, while 30(30.0%) of them answered No; 35(35.0%) of them when asked if they would go for cervical cancer screening if asked to go, answered Yes, while 65(65.0%) of said No; 70(70.0%) of them answered Yes when asked if they think cervical cancer screenings is of any benefit, while 30(30%) of them said No; 65(65.0%) of them answered Yes when asked if they will encourage their friends and relatives to go for cervical cancer screening, while 35(35.0%) of them answered No.

DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Discussion of findings

The major findings of the study indicate that a significant proportion of the respondents (70.0%) were between 16 to 20 years of age, and about 75.0% of them were single. This contrasts with the findings of Thapa et al. (2018), whose study reported that the majority of their respondents were aged between 20 and 29 years, with approximately 87% of them being married. Additionally, 60.0% of the participants in this study identified themselves as Christians. The sampling process involved a random selection of (20.0%) participants from each of the five faculties within the study area.

Regarding knowledge of cervical cancer screening, the study showed that respondents demonstrated a commendable level of awareness. Many participants had a good understanding of cervical cancer and recognized that screening is an effective means of diagnosing the disease and ensuring early detection. However, this contrasts with the results of several global studies, which often indicate a lack of knowledge and awareness among women about cervical cancer, leading to low uptake of screening services. For instance, studies conducted in various locations, such as Wong et al. (2019) among women aged between 21 and 56, and Abrahams et al. (2016) in South Africa (Cape Town), reported poor knowledge of cervical cancer and Pap smears in their respective populations.

Despite the positive awareness of cervical cancer screening among the respondents, only a small fraction (35.0%) indicated a willingness to undergo screening if requested to do so. The study found that the respondents' attitude towards cervical cancer screening was generally negative. One of the prominent causes of this negative attitude was identified as cultural factors, which aligns with the findings of Fort et al. (2014) in their qualitative study in Malawi on barriers to cervical cancer screening.

Furthermore, the study revealed that some women viewed cervical cancer as a fatal disease, which acted as a barrier to screening. They perceived the screening as a test that could only detect a deadly disease, which led them to overlook its potential benefits. This observation is consistent

with the findings of Tadesse et al. (2022) and Thapa et al. (2018), who also reported that lack of information about cervical cancer was a common reason for not attending cervical cancer screening.

Additionally, the study identified waiting times at the clinic as another barrier to cervical cancer screening. Women expressed frustration with long waiting periods, especially after traveling long distances to reach the clinics. Moreover, certain cultural beliefs were found to influence women's decisions regarding screening.

Conclusion

The study revealed significant findings regarding cervical cancer screening among the respondents. While a commendable level of knowledge about cervical cancer screening was observed, a considerable number of participants demonstrated a negative attitude towards undergoing the screening. This negative attitude was associated with cultural influences, misconceptions about cervical cancer, and lack of awareness about the benefits of screening. The study's results also indicated variations in demographic characteristics compared to previous research, suggesting the importance of context-specific approaches to addressing cervical cancer screening.

Implications of the study to community health practice

The implication of the results is that measurable number of respondents have negative attitude towards cervical cancer screening and are still unwilling to go for cervical cancer screening which is one of the causes high prevalent mortality rate in recent times, as a sizeable number of these respondents contact cervical cancer, without early detection. Thus, the community health workers ought to scale up sensitization and enlightenment campaign towards the awareness of benefits of cervical screening, for early detection, as a preventive measure of controlling prevalence of cervical cancer among female students.

Recommendation

From the study, only a very few of the respondents are willing to go for pap smear screening, which is one of the bed rock for prevention of cervical cancer. Hence it is hereby recommended that;

- 1. The need for cervical cancer screening should be effectively communicated to the female students, especially through the use of Behaviour Change Communication strategies where supportive environment is provided to break the barriers and allays the fear of the female students. This can be done by steady public enlightenment, to encourage the female students not to view the screening as trying to identify diseases in them but to enhance effective prevention of cervical cancer.
- 2. Family and sex education should be introduced into the school curriculum.
- 3. In The Polytechnic, it is worthwhile to introduce reproductive health as a compulsory general studies course for both males and females.
- 4. The mass media and increasing popular internet, need to be put into better use as a potent means of enlightenment. Information on cervical cancer and its prevention could be linked to those websites that are popular among students and young people. As student represent the enlightened future of the country, there awareness of the risk factors for cervical cancer could go a long way in making primary prevention of the condition more effective on the long run.

- 5. These young people should be encouraged to increase the age at first coitus, minimize the number of sexual partners and embrace use of condoms.
- 6. The existing logistics involved in obtaining pap smear is too cumbersome and discouraging, therefore it will desirable to integrate cervical screening programme and other reproductive health service into The Polytechnic health services delivery.
- 7. In centres where reproductive health services are rendered, they should be youth friendly in nature. For instance, greater access to screening can be facilitated by establishing walk in clinic. With this woman for routine pap smear will not be made to pass through the usual protocols of a routine gynaecological clinic, as this has been identified as the possible cause of fear of invasion of privacy and reluctance towards cervical screening.
- 8. The issue of cost of screening cannot be over emphasized, as this may put it beyond the reach of undergraduate, who are mostly dependent. Attempt should be made to address this issue by government and non-government organization through subsidization.

Suggestion for further studies

This study revealed that a greater number of the respondents are unwilling to go for cervical cancer screening, hence further study on the reasons for their unwilling to go for cervical cancer screening, as a preventive measure of tackling cervical cancer menace, should be studied.

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