Knowledge, Attitude and Practice of Cervical Cancer Screening Amongst Female Students of a Private University in South-South Nigeria.

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ABSTRACT

This study is aimed at assessing the knowledge, attitude and practice of female students towards cervical cancer screening. An institution based descriptive study was conducted in April 2022 at PAMO University Of Medical Sciences Port-Harcourt, Nigeria among female students who were over 18 years of age. Health belief theory guided the study. A questionnaire designed, developed and validated by the researchers was used in collecting data for the study. Out of three hundred students that constituted the population for the study, one hundred and seventy female students was sampled using simple random sampling technique. The results showed that 98% of the respondents had a good knowledge of cervical cancer and screening, with over half of the respondents having a favorable attitude towards cervical cancer screening. However, less than 20% of the respondents had been screened for cervical cancer. Therefore, the health sectors and the university community were recommended to mobilize resources to strengthen the availability and utilization of cervical screening facilities.

Keywords: Cervical cancer, cervical cancer screening, knowledge, attitude, practice

INTRODUCTION

According to the World Health Organization (WHO 2021) cervical cancer is the fourth most common cancer in women. Almost all cervical cancer cases (99%) are linked to infection with high-risk human papillomaviruses (HPV), an extremely common virus transmitted through sexual contact. The HPV virus exists in over 150 different types, thirteen of which have been identified as "high risk HPV" due to their significant carcinogenic potential leading to the development of cervical cancer with HPV types 16 and 18 accounting for the highest risk causing about 70% of all cervical cancers worldwide (Liu et al, 2017). Although most infections with HPV resolve spontaneously and cause no symptoms, persistent infection can cause cervical cancer in women. In 2018, an estimated 570 000 women were diagnosed with cervical cancer worldwide and about 311 000 women died from the disease (WHO, 2021). Cervical cancer is one of the most successfully treatable forms of cancer, as long as it is detected early and managed effectively. Nigeria has a population of 56.2 million women ages 15 years and older who are at risk of developing cervical cancer (IARC, 2021). Current estimates indicate that every year 12,075 women are diagnosed with cervical cancer and 7,968 die from the disease. Cervical cancer ranks as the 2nd most frequent cancer among women

in Nigeria and the 2nd most frequent cancer among women between 15 and 44 years of age and about 3.5% of women in the general population are estimated to harbor cervical HPV-16/18 infection at a given time. Several common risk factors recognized to be associated with cervical cancer worldwide include sexually transmitted diseases (mainly HPV and others, human immunodeficiency virus, herpes simplex virus), reproductive and sexual factors (multiple sexual partners, early age at the first sexual intercourse, early age at first delivery, parity, and oral contraceptive pills), behavioral factors (smoking and obesity), and host factors (genetic sensitivity) (Momenimovahed & Salehiniya, 2017). Abnormal vaginal bleeding, foul-smelling vaginal discharge, and contact bleeding are recognized as the major signs of cervical cancer, and in many cases, women with cervical cancer report no symptoms. (Durrani, et al, 2019). Incidence of cervical cancer has decreased in developed countries over the decades this is mainly attributed to increased awareness and more effective screening and prevention strategies employed in these countries (Torre, et al, 2017).

Statement of the Problem

The growing incidence of cervical cancer amongst young women in Nigeria necessitates the study on their awareness and utilization of preventive services and screening for prompt diagnosis. Although cervical cancer is a rising public health problem, majority of young women in Nigeria are ignorant of cervical cancer. The Earlier mentioned ignorance results from diverse factors some of which are the gross disparities in the accessibility to preventive healthcare services, education and social media amongst Nigerian women. Considering that preventive measures and early detection stand to greatly reduce the incidence of cervical cancer, cost of treatment and the lack of awareness cannot be further overlooked. General ignorance on cervical cancer and its preventive screening measures has facilitated the non-utilization of preventive modalities, late detection and diagnosis, ineffective medical management and death from end stage metastasis amongst women. Also, the lack of published research on the knowledge and practice on cervical cancer and screening amongst young university students in Nigeria precipitates the need for this study. It is not clear if any work on this in Rivers State, Nigeria has been published.

Objectives of Study

To assess the level of knowledge of cervical cancer screening among students of PAMO University.

To ascertain the attitudes towards practice of cervical cancer screening among students of PAMO University.

To determine the cervical screening status among students of PAMO University.

THEORETICAL REVIEW

The Health Belief Model by Hochbaum and Rosenstock

This model was developed to attempt understanding why people failed to participate in programs that are used to prevent disease from happening. The Health Belief Model was later used to study patients' behaviors towards health-related conditions such as responses to symptoms and compliance with medical treatments. The Health Belief Model suggests that we are able to predict a person's likelihood to adopt a behavior based on their personal beliefs towards the threat of the illness and effectiveness of the behavior change. (LaMorte, 2018). The Model is composed of 5 constructs, Perceived Severity, Perceived Susceptibility, Perceived Benefits, Perceived Barriers, and Self Efficacy. With these constructs we are able to understand more about behavior change and what stops a person from making that behavior change.

Constructs of the Health Belief Model.

Perceived Severity

Perceived severity is one aspect of the health belief model. It refers to an individual's belief about the seriousness of contracting an illness or disease, or the severity of the consequences of leaving it untreated. When combined with perceived susceptibility, they are labeled as perceived threats. When evaluating the severity of a disease, an individual should consider both medical consequences (death and disability) and social consequences (family life, career, and social relationships) of the disease. If a person believes that an illness could have severe consequences to any aspect of their life, according to the health belief model, they will be more likely to change a health behavior to prevent the disease. However, if an individual does not consider the risks of an illness or disease then they are unlikely to change any behaviors. (LaMorte, 2018).

Perceived Susceptibility

Perceived susceptibility, also called perceived vulnerability, refers to one's perception of the risk or the chances of contracting a disease or medical condition; it entails a wide variation in feelings of personal vulnerability to an illness or disease. It has been shown that an individual's decision to take on a healthy behavior is influenced by the perceived vulnerability to illness if contrary measures are observed. (LaMorte, 2018).

Perceived Benefits

The Health Belief Model relies on two main factors to change a health behavior; the desire to avoid illness and the belief that a behavior can prevent the illness. The second factor in the model relies on perceived benefits, which is the belief that there are potential positive aspects of a health action including a person's perception of the effectiveness of changing a behavior to reduce the threat of disease. An individual is likely to change a behavior if the health action is perceived as beneficial (LaMorte, 2018).

Perceived Barriers

This refers to a person's feelings on the obstacles to performing a recommended health action. There is wide variation in a person's feelings on barriers, or impediments, which lead to a cost/benefit analysis. The person weighs the effectiveness of the actions against the perceptions that it may be expensive, dangerous (e.g., side effects), unpleasant (e.g., painful), time-consuming, or inconvenient (LaMorte, 2018).
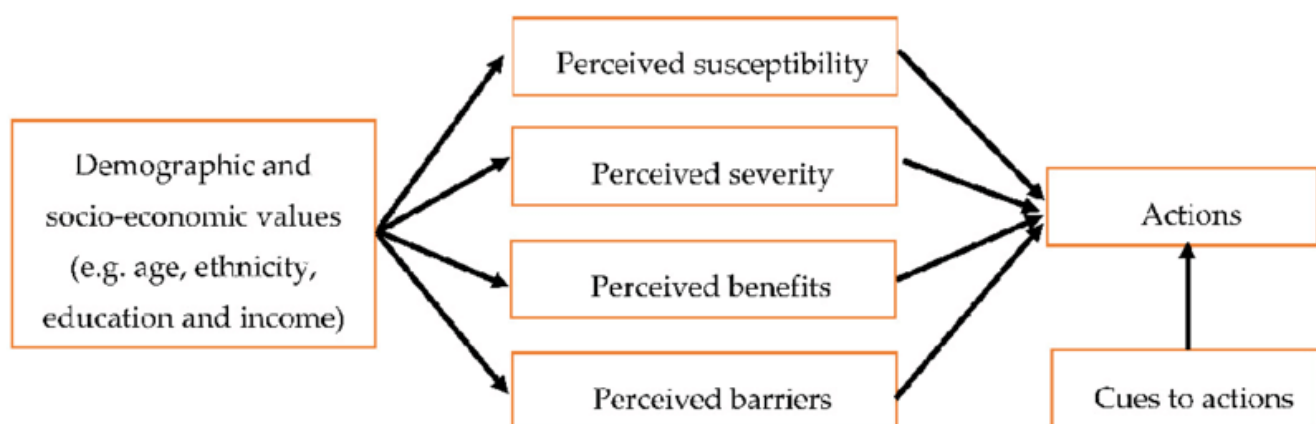

Fig. 1 Representation of the Health Belief Model

Application to study

Application of Perceived Severity in Health belief model

This model depicts a link between the perceived severity of cervical cancer and the attitude of women towards cervical cancer and screening. Utilizing this model in this study, women with greater perception of cervical cancer as a severe illness would be more likely to have had pap smear tests or utilized other screening methods. Hence, when creating health promotion programs, beliefs on severity should be considered as it creates fear in people to get them to participate in the program.

Application of Perceived susceptibility in Health belief model

The perceived susceptibility is another key construct in human health behavior according to this theory, women who view themselves as vulnerable to cervical cancer take on active precautionary measures such as screening, use of contraception and otherwise. Researchers believe that in order to motivate people to take action on specific health behaviors, one must know the potential influence of the uncomfortable, or how they can be affected by it. Health educators should educate clients on individuals on risk factors to create their perceived susceptibility.

Application of Perceived benefits in health belief model

This study identified the relationship between the perceived benefits of cervical cancer screening to health and the utilization of screening services. According to the health belief model women are motivated to change health behavior based on the knowledge that improved behaviors can prevent them from illness or improve their health status. Hence highlighting these benefits in health education will improve outcome.

Application of Perceived barriers in health belief model

This theory reveals that women with high perception on barriers for cervical cancer screening would be less likely to have ever undergone screening than participants less barriers. Also, some perceived barriers have been described, including: not knowing about the importance of screening, accessibility, time constraints and embarrassment. This study would identify the relationship between perceived barriers and to cervical screening and utilization of screening services.

EMPIRICAL REVIEW

An institution based cross-sectional study was conducted by Getaneh & Tegene, et al, (2021) assessing the knowledge, attitude and practices on cervical cancer screening among undergraduate students in University of Gondar, College of Medicine and Health Sciences, Northwest Ethiopia. 403 female students were recruited using simple random sampling and descriptive data analysis was used to report results. From results obtained more than half of the respondents (59.3%) had a good knowledge, with about 67.7% having a favorable attitude. However, less than 1% of the respondents had been screened for cervical cancer.

A cross-sectional study to evaluate the knowledge, attitude and practice of cervical cancer screening among market women in Kaduna State, Nigeria was conducted by Saad & Kabiru, et al, (2013).It was a descriptive cross-sectional, questionnaire-based study carried out to assess the knowledge, attitude and utilization of cervical cancer screening among market women, aged 15 years and above, in Sabon Gari Local Government Area of Kaduna State with a sample size of 269 .Questions were both closed ended and open ended, providing information about basic demographic data and items sold, pregnancy history and gynecological history like menstrual history, vaginal discharge, and pain during intercourse, post-coital bleeding, etc. Knowledge about the risk factors of cervical cancer and screening methods, attitude and utilization of cervical cancer screening were assessed and obtained data was analyzed using SPSS version 11.Results

showed that the knowledge score of cervical cancer screening was fair. There was (43.5%) of cervical cancer screening among respondents. Their knowledge of risk factors for cervical cancer was generally poor; although 62.5% of them were aware that sexually transmitted infection ware a risk factor. Although their knowledge of symptoms of cervical cancer was fair, their attitude towards cervical cancer screening was poor (19.6%).

It was observed that better facilities, provision of more female staff at screening centers and offering service at cheaper cost would enhance utilization of cervical cancer screening.

A similar study was conducted by Olubodun & Odukoya, et al, (2019) titled Knowledge, attitude and practice of cervical cancer prevention, among women residing in an urban slum in Lagos, South West, Nigeria. The study was a descriptive cross-sectional study carried out among 305 women of reproductive age in Idi-Araba, Lagos, Nigeria. Multistage sampling method was used to select respondents and data was collected using interviewer administered questionnaires with analysis using SPSS 20 software. Most of the respondents (98.7%) had heard about cancer but only 39 (12.8%) had heard of cervical cancer. About 90% did not know any risk factors of cervical cancer. Majority of respondents did not know of the symptoms of cervical cancer (90.8%), cervical cancer screening (92.1%) and HPV immunization (98.4%). Most of the respondents' knowledge of cervical cancer came from the media and the hospital. Concerning their attitude Majority (64.3%) considered themself insusceptible to cervical cancer and the commonest reason was belief in spiritual protection (60.7%). However, most respondents (88.9%) were willing to undergo cervical cancer screening and majority, (93.8%) were also willing to be immunized. Study results showed need for increased cervical cancer awareness and promotion campaigns and improved access to cervical cancer prevention services.

A study was also conducted by Dozie & Elebari, et al,(2021) with the title Knowledge, attitude and perception on cervical cancer screening among women attending ante-natal clinic in Owerri west L.G.A, South-Eastern Nigeria. It was a cross-sectional study conducted using a random sampling technique among 231 respondents attending ante-natal clinic in a cluster of 4 selected public primary health care centers between 1 June 2019 and 5 August 2019. A structured questionnaire was used for data collection, and data obtained was analyzed using a descriptive technique (frequency distribution and percentage) and analysis was performed with Statistical Package for Social Sciences (SPSS) Version 21. Results showed that the majority of the respondents had heard of cervical cancer screening (68.8%) and 80.5% were respectively aware where the screening can be done. More than half of the respondents (60.2%) were not aware that cervical cancer can be treated. Apparently more than half of the participants (52.8%) received information on cervical cancer from their friends, while only a few (0.4%) received from media (newspaper, TV, radio, posters etc.). Only (19%) were able to identify HPV as the true cause of cervical cancer. The majority of the respondents were unsure that getting screened would only make them worry (32.9%), hated hospital smell, and did not want to attend screening even when given free and were unsure that it is not important for a woman of their age (41.6%). However, most of them (42.4%) were willing to go for screening. On the other hand, the majority of participants agreed they do not have money to waste on screening (42.9%). However, a larger proportion of the participants strongly agreed that they did not experience discomfort or pain and therefore there was no need for cervical screening (43.7%) or do not require screening (34.6%)).The majority of them were unsure that they are too young to undergo screening (32.9%) and that cervical cancer screening is painful (32.9%).

Another study was carried out by Tsegay & Araya, et al, (2019) titled Knowledge, Attitude, and Practice on Cervical Cancer Screening and Associated Factors Among Women Aged 15–49 Years in Adigrat Town, Northern Ethiopia. It was a community-based cross-sectional study conducted from February 28 to June 30, 2019 with a sample size of 617 utilizing a multi-stage sampling technique. A structured and pre-tested questionnaire was used for data collection. Knowledge of cervical cancer screening, attitude towards

cervical cancer screening and practice towards cervical cancer screening were assessed and data was analyzed using STATA Version 11. Results showed that more than half of the respondents have heard about cancer and cervical cancer screening 487 (79.6%) and 432 (70.6%) respectively. The frequency of cervical cancer screening; more than half and once every year were 68.14% and 21.0% respectively. Source of information about cervical cancer screening; the figure below depicts from media and health workers were 347 (56.7%) and 246 (40.3%) respectively. In general 326 (53.3%) of the respondents have a positive attitude towards screening for cervical cancer, while the rest 286 (46.7%) have a negative attitude towards screening for cervical cancer.

The study Knowledge, Attitudes, and Practices of Cervical Cancer Screening Among Women Attending a Childhood Immunization Clinic in Uganda was conducted by Nuwasiima, & Navvuga, et al, (2016). It was a cross sectional survey among women aged 15 to 49 years attending a Childhood Immunization Center in Uganda. Continuous sampling was used to recruit a convenience sample to which a pre-tested questionnaire was administered; Frequency tables and distributions were used for univariate analyses and cross tabulations for bivariate analyses. A sample of 248 women were surveyed of whom only 17 (6.9%) had ever screened for Cervical Cancer 220 (88.7%) had ever heard about Cervical Cancer, 48(20%) had knowledge of the standard Cervical Cancer preventive measures, 34.5% and 10% had knowledge of at least two Cervical Cancer risk factors and symptoms respectively. 164(66.1%) women agreed that they were at risk of developing Cervical Cancer, 52.4% and 68.1% thought that unprotected sex and multiple partners were risk factors of Cervical Cancer. 98% and 90% were willing to test for Cervical Cancer if testing was free and not free respectively.

Anene-Okeke & Aluh, et al, (2019) conducted a research with the title Knowledge, Attitudes and Practice of Cervical Cancer Prevention among Student Health Professionals in Nigeria. This was a cross-sectional survey using a questionnaire conducted to assess the knowledge, awareness, and practice of cervical cancer screening among female pharmacy and medical undergraduate students in the University of Nigeria located in Enugu state and Nnamdi Azikiwe University located in Anambra state, Nigeria. Data collected were coded and entered into Microsoft Excel and then exported to SPSS (Statistical Package for Social Sciences version 2 for analysis. The result of the study shows that the students generally had a good level of awareness of cervical cancer. More than a third (36.1%) of the students had a negative attitude towards cervical cancer and only about one in eight students reported to having had a pap smear (12.54%)

A research titled Knowledge, Attitude, and Practice on Cervical Cancer and Screening Among Women in India by Neha & Bhavika, et al, (2021). Search of literature that contained information on knowledge, awareness, attitude and practice on Cervical Cancer and its screening in India published from 2012 onward till March 2020 in the electronic databases PubMed and Google Scholar were retrieved and analyzed Studies included in review concluded that in India women still lack in appropriate knowledge and attitude toward Cervical Cancer and screening techniques due to low literacy rate.

Finally a research on Knowledge, Perception and Cervical cancer screening practices among female nurses working in healthcare facilities in Lagos state, Nigeria by Omotunde & Ademola (2021). A descriptive cross-sectional design, using a multistage sample technique to select 420 nurses and a semi-structured questionnaire research tool was used. Study revealed that respondents had moderately high knowledge, moderate perception of cervical cancer screening but low screening practices. Therefore, nurses should be further resourced in promotional activities and programs through in-service training in providing informative awareness education about cervical cancer screening.

RESEARCH DESIGN

An institution based descriptive cross sectional study was used in this study as it allowed for analyses of

current prevailing information and practices within the population.

Area of study

PAMO University of Medical Sciences is a private medical university situated at No. 1, Tap Road Rivers State, Nigeria. It was established in 2017 as the first private medical university in Nigeria and founded by the former governor of Rivers State, Sir Dr. Peter Odili. The University comprises of about three (3) faculties – Clinical Sciences, Allied Health Sciences and Basic Medical Sciences and about eight (8) departments – Medical Science, Nursing Science, Medical Laboratory Sciences, Human Anatomy, Human Physiology, Biochemistry, Pharmacology and Radiology. It harbors a serene and comfortable scenery with lots of trees and greenery. The university grounds houses an auditorium, a one story administrative building, academic buildings, a refectory, three (3) student hostels, a worship center and student center, several laboratories alongside other structures utilized in learning and recreation.

Population of study

The utilized population of this study included female students of PAMO University of Medical Sciences who were at least 18 years of age and within their 2nd to 5th year of study. The total population under study was 300 females from which a sample was obtained.

Sampling / Sampling Technique

A sample of one hundred and seventy (170) female students were used for the study, this size was obtained using the Taro-Yemeni formula. The sampling technique used in this study was the simple random sampling technique.

Instrument for data collection

The instrument for data collection was a questionnaire designed and developed by the researchers. The questions generated were based on the objectives of this study to obtain required information from eligible respondents. The questionnaire was made up of five sections (i.e. A, B, C, D and E). Section A was for demographic data. Section B contained questions on knowledge on cervical cancer. Section C had data on the respondents' knowledge on cervical cancer screening. Section D was about the respondents' attitude towards cervical screening. And Section E had information on respondents' participation on cervical cancer screening

Validity and Reliability of the Instrument

The instrument was peer reviewed by the researchers and other experts. It was later tested in a sister university in a neighboring state. The instrument was tested and re-tested in a two week interval. The correlation coefficient of the data obtained in the two instances was obtained using the Pearson Product Moment Correlation Coefficient (PPMCC) as 0.8.

Ethical considerations

Informed consent was obtained from all participants and they were made to understand that participation is voluntary and there would be no consequence for non-participation. All information was kept confidential.

Demographic Characteristics of Respondents

Analysis was done on demographic profiles of respondents utilizing descriptive statistics involving frequencies and their percentages. The results of the analysis were presented in Table 1.

Table 1: Demographic Characteristics of the female students of PAMO University of Medical Sciences n = 170

Variables	Frequency	Percentage (%)
Age (years)		
18-21	32	19
22-24	121	71
25 and above	17	10
Total	**170**	**100.0**
Year of Study		
Year 2	12	7
Year 3	52	31
Year 4	78	46
Year 5	28	16
Total	**170**	**100.0**

The results on Table 1 showed that 32 (19%) of the female students utilized in this study were between ages 18-21, 121 (71%) were between ages 22-24 and 17 (10%) were age 25 and above.

A total of 12 (7%) respondents were in their 2nd year of study, 52 (31%), 78 (46%) and 28 (16%) were in their 3rd, 4th and 5th years respectively.

Analysis of Research Objectives

Objective 1: To assess the level of knowledge of cervical cancer among female students of PAMO University of Medical Sciences.

A total of fifteen items (15) were generated and administered to respondents to achieve the said objective. Analysis was done using a descriptive statistics and the table below presents the frequency and percentage for each item.

Table 2: Frequency and percentage of Female students of PAMO University of Medical Sciences knowledge of cervical cancer

Items	Frequency	Percentage (%)
Have you heard about cervical cancer		
Yes	166	98
No	4	2
If yes, what is your source of information		
School	66	40
Television/radio	10	6
Internet	47	28
Parents/guardian	15	9
Seminar	28	17

What is cervical cancer		
Cervical cancer is an abnormal replication of the cells in the cervix	160	9
Cervical cancer is bleeding of the cervix	3	2
Cervical cancer is an infection of the cervix	3	2
What are the risk factors of cervical cancer		
Menopause	8	5
HPV Infection	103	62
Family history	100	60
Obesity	80	48
What are the characteristics of cervical cancer		
Cervical cancer is curable	59	35
Early detection improves treatment outcomes	100	60
Cervical cancer cannot be cured		5
How can cervical cancer be prevented	7	
By washing the cervix with antiseptic	34	20
By limiting sexual partners and the use of condoms	126	76
By undergoing HPV vaccination	89	54
By adequate screening practices	162	97

The result in table 2 shows that 166 students (98%) said they have heard of cervical cancer while 4 students (2%) have never heard of cervical cancer. 66 students (40%) obtained information of cervical cancer from school, 10 students (6%) heard about cervical cancer through television/radio, 47 students (28%) have the internet as their source of information while 15 students (9%) and 28 students (17%) have parents/guardian and seminars as their sources of knowledge on cervical cancer.

160 students (96%) know that cervical cancer is an abnormal replication of the cells in the cervix, 3 students (2%) believe it is bleeding of the cervix or an infection of the cervix. Also 8 students (5%) believe childbirth is a risk factor of cervical cancer, 103 students (62%) said that cervical infection is a risk factor while 100 students (60%) and 80 students (48%) believe that family history and obesity are risk factors of cervical cancer respectively.

The item " characteristics of cervical cancer" had 59 students (35%) with the belief that cervical cancer is curable, 100 students (60%) believe that early detection improves treatment outcomes and 7 students (5%) believe that cervical cancer can not be cured.

Finally for the item highlighting preventive measures of cervical cancer, 34 students (20%) believed that washing the cervix with antiseptic is a preventive measure, 126 students (76%) believed that limiting sexual partners and the use of condoms prevetns cervical cancer, while 89 students (54%) and 162 students (97%) respectively were of the belief that HPV vaccination and adequate screening were preventive measures.

Objective 2: To assess the level of knowledge of cervical screening among female students of PAMO University of Medical Sciences.

Table 3: Frequency and percentage of Female student's PAMO University of Medical Sciences knowledge of cervical cancer screening.

Items	Frequency	Percentage (%)
Have you heard of cervical screening		
Yes	153	92
No	13	8
If yes, what is your source of information		
School	66	40
Television/radio	10	6
Internet	47	28
Parents/guardian	15	9
Seminar	28	17
What is cervical screening		
A test for bleeding in the cervix	24	14
A test used to detect abnormal cells in the cervix	128	77
A test for cervical infection	14	9
Do you know the pap smear and acetic acid test are		
Methods of cervical cancer screening.		
Yes	149	88
No	21	12
Are you aware that women aged 21 and above should		
be screened for cervical cancer every 3 years.		
Yes	124	73
No	46	27
Which women require cervical screening		
Sexually active women	132	77
Women with symptoms such as vaginal discomfort		
and abnormal vaginal bleeding	153	90
All women over the age of 21	130	78

Table 3 shows respondents knowledge on cervical cancer screening. 153 students (92%) have heard about cervical cancer screening while 13 students (8%) have never heard of cervical cancer screening. 66 students (40%) have the school as their source of information, 10 students (6%) selected television/radio as

sources while 47 students (28%), 15 students (9%) and 28 students (17%) have their information sources as the internet, parents/guardians and seminars respectively.

The item" what is cervical screening" had 24 students (14%) with beliefs that it is a test for bleeding of the cervix, 128 students (77%) believe it a test to detect abnormal cells in the cervix and 14 students (9%) believe cervical screening is a test for cervical infection. Also 149 students (88%) know that the pap smear and acetic acid tests are methods of cervical screening while 21 students (12%) are not aware that they are methods of screening and 124 students (73%) are aware that women aged 21 and above should be screened for cervical cancer ever 3 years while 46 students (27%) are not aware that women aged 21 and above should be screened for cervical cancer every 3 years.

Consequently, 132 students (77%) said that cervical cancer screening is for sexually active women, 153 students (90%) said that screening is for women with symptoms such as vaginal discomfort and abnormal vaginal bleeding while 130 students (78%) believe screening is for all women over the age of 21.

Objective 3: To ascertain the attitudes of female students of PAMO University of Medical Sciences towards practice of cervical cancer screening.

The responses to the four (4) items generated to realize this objective were subjected to descriptive analysis using frequencies and percentages. The data were analyzed item by item and presented on Table 4 below.

Table 4: Attitudes of students toward cervical screening in PAMO University of Medical Sciences n-170

S/N Items	True	False	No Idea
I feel cervical screening is necessary for all females 21 yearsand above	149	15	6
	(88%)	(9%)	(3%)
I feel cervical screening is painful and Embarrasssing	53	98	19
	(31%)	(58%)	(11%)
I feel screening is unnecessary and expensive	12	112	46
	(7%)	(66%)	(27%)
I feel cervical screening is for only women with Sexuallytransmitted infections	29	125	16
	(17%)	(74%)	(9%)

From table 4: 149 students (88%) believe it is true that cervical cancer is necessary for all females 21 years and above, 15 students (9%) believe the statement is false and 6 students (3%) have no idea if screening is necessary in females 21 years and above.

53 students (31%) believe that cervical screening is painful and unnecessary, 98 (58%) do not believe cervical cancer in painful and unnecessary and 19 students (11%) have no idea whether or not cervical cancer screening is painful and unnecessary.

For the item "I feel screening is unnecessary and expensive" 12 students (7%) believe the statement is true, 112 students (66%) believe it is false and 46 students (27%) have no idea whether or not cervical screening is unnecessary and expensive. Finally, 29 students (17%) believe that cervical screening is only for women

with ongoing sexually transmitted infection, 125 students (74%) are of the belief that cervical screening is not only for women with sexually transmitted infections while, 16 students (9%) have no idea whether or cervical screening is for women with sexually transmitted infections.

Objective 3: To determine cervical screening status of female students of PAMO University of Medical Sciences.

Table 5: Practice of cervical screening amongst female students in PAMO University of Medical Sciences n-170

Items	Frequency	Percentage (%)
Have you been screened for cervical cancer		
Yes	31	18
No	139	82
If yes, how often do you get screened		
Yearly	6	4
Every two years	12	7
Every five years	2	1
Others	11	6
What kind of screening did you undergo		
Pap smear	23	13
Acetic acid test	8	5

According to table 5: 31 students (18%) have been screened for cervical cancer, 23 students (13%) underwent the pap smear method of screening and 8 students (5%) underwent the acetic test while, 139 students (82%) have not undergone any form of cervical screening.

For the item "how often do you get screened" 6 students (4%) said they undergo yearly screening, 12 students (7%) undergo screening every two years, 2 students (1%) undergo screening every five years and 11 students (6%) reported screening sessions within other time frames.

Knowledge of Cervical cancer among female students of PAMO University of Medical Sciences, Port-Harcourt, Rivers State.

From the data analyzed in this study, 98% of the respondents have heard about cervical cancer of which 96% were aware of the correct definition of cervical cancer. A good knowledge on the characteristics of cervical cancer and its preventive measures was also observed from the study. These findings were not in line with the results of Olubodun et al, (2019) whose results had 13% of respondents who have heard of cervical cancer and over 90% unaware of symptoms or preventive measures. However, the results were in line with the results obtained from a study conducted in Northern Ethiopia which had an (80%) knowledge of cervical cancer (Tsegay, et al, 2019). Another study conducted among female students in the University of Gondar, College of Medicine and Health Sciences, Northwest Ethiopia by Getaneh, et al, (2021) showed fair knowledge of about 59% of respondents. This shows that the percentage of knowledgeable students in PAMO University of Medical Sciences, Rivers State Nigeria, is significantly greater than that of University of Gondar, College of Medicine and Health Sciences Northwest Ethiopia.

Finally a good knowledge on the risk factors of cervical cancer was also realized from this study this finding was not in line with Idris, et al, (2013) whose study in Kaduna State showed a generally poor knowledge of risk factors of cervical cancer.

Knowledge of Cervical Cancer Screening among female students of PAMO University of Medical Sciences, Port-Harcourt, Rivers State.

The obtained result from this study shows that 92% of respondents were knowledgeable on cervical cancer screening, a similar result of about 71% of respondents with knowledge on cervical screening was seen in a research conducted by Tsegay, et al, (2019). Findings were also in line with that of a study conducted among women attending an ante-natal clinic in Owerri, Nigeria which showed 69% knowledge of respondents on cervical cancer screening. (Dozie, et al, 2021). This shows that a general exposure to the medical environment as seen in the populations of all enlisted studies influences the knowledge of cervical cancer screening.

Attitude towards Cervical Cancer Screening among female students of PAMO University of Medical Sciences, Port-Harcourt, Rivers State.

A positive attitude towards cervical cancer screening was derived from the results of this study with 88% of respondents agreeing that cervical cancer screening is necessary for all females 21 years and above. These findings were not in line with a study conducted by Anene-Okeke, Aluh and Okorie, (2019) among female pharmacy and medical undergraduate students in the University of Nigeria located in Enugu state and Nnamdi Azikiwe University located in Anambra state, Nigeria which had over 36% of respondents with a negative attitude towards cervical cancer screening. This shows that a negative attitude towards cervical cancer screening can still be portrayed among students regardless of their study within the medical field.

Practice of Cervical Cancer Screening among female students of PAMO University of Medical Sciences, Port-Harcourt, Rivers State.

A significantly low level of practice was observed from the result of this study with only 18% of the utilized population responding to have undergone cervical cancer screening from which 13% utilized the Pap smear screening method and 5%underwent Visual inspection with Acetic acid. Findings were quite similar to that of Anene-Okeke, Aluh and Okorie, (2019) with results showing 12% of respondents who had undergone Pap smear. Another research conducted by Getaneh, Tegene and Belachew (2021) among undergraduate students in University of Gondar, College of Medicine and Health Sciences, Northwest Ethiopia had less than 1% of respondents who had undergone any form of cervical screening. This shows a generally low level of practice of cervical cancer screening among University students.

Implications of findings to nursing

The findings of this research is of great importance to nursing practice as it highlights the need for health education towards the practice of Cervical cancer screening among students. This would increase the level of early detection a great deal and improve general prognosis. It also identifies the need for increased availability of facilities conducting cervical cancer screening to promote accessibility and utilization of cervical screening services.

The study also highlights some negative attitudes towards cervical cancer screening allowing for the nurse to address such attitudes in patient counseling to enable the cultivation of positive attitudes towards cervical cancer screening.

CONCLUSION

This growing prevalence of cervical cancer and the increasing diagnosis in younger populations necessitates this study to evaluate the level of knowledge, attitude and practice of cervical cancer and screening among students as these variables significantly influence time of diagnosis and general prognosis. An adequate

level of knowledge was identified with a generally good attitude which could still be improved on with proper health education. However a very poor level of practice was noted highlighting the need for sensitization and provision of accessible, cheap and convenient screening facilities for students.

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