



Awareness and barriers to cervical cancer prevention among the female students in a Tertiary institution South East of Nigeria

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Abstract

Sexually transmitted infection with human papilloma virus (HPV) is fundamental to the development of carcinoma of the cervix. HPV prevalence increases with multiple sexual partners and poor genital hygiene. Despite this fact, very few women receive screening services in Africa. Although there is no national cancer registry, reports from retrospective review of biopsy results have shown that cervical cancer is the most prevalent cancer among women in the country followed by breast cancer. The purpose of the study is to assess the level of awareness and barriers to cervical cancer prevention among the female students in a Tertiary Institution South East of Nigeria. A descriptive survey design was used to determine the current knowledge, attitude and practice of cervical cancer prevention among the students. The targeted population is estimated to be 857 while a sample of 273 students was selected using stratified random sampling technique. The Researchers designed questionnaire which was validated and with a reliability of 0.82, was self administered to participants after obtaining ethical approval. 100% return was made. Data were analyzed using descriptive analysis and result was presented using tables and graphs. Majority have heard of cervical cancer screening. Knowledge was equally good but attitude and practice were very poor. Main reason for non practice was apathy. There is therefore need for medical workers to increase awareness on benefits of cervical screening for cancer and seriousness of the disease if diagnosed late.

Keywords: Awareness, barriers, cervical cancer ,HPV,prevention, female students in a Tertiary Institution South East of Nigeria

Introduction

Sexually transmitted infection with human papilloma virus (HPV) is fundamental to the development of carcinoma of the cervix. HPV prevalence increases with multiple sexual partners and poor genital hygiene (Ferlay *et al.*, 2010). Of the 100 HPV types, 16 and 18 have been categorized as high-risk types for cervical cancer, while the rest are low-risk types. Cervarix® made by Glaxo SmithKline (GSK) is a bivalent vaccine that protects against HPV strains 16 and 18, and Gardasil® by Merck is a quadrivalent vaccine that protects the individual against HPV strains 16, 18, 6 and 11 (Beibei *et al.*, 2011). HPV types 16 and 18 are said to account for approximately 70% of all cervical cancer cases in India. Developing the vaccine against human papillomavirus (HPV) types 6, 11, 16 and 18 which cause a variety of lesions is regarded as a scientific breakthrough and received the Centre of Disease Control (CDC) approval.

Cervical cancer is the leading cause of death from cancer in women in developing countries. About 490,000 women develop cervical cancer yearly and 230,000 women die yearly of this disease. But a vaccine which fights against the virus that predispose or that cause this cancer has been produced. The large scale studies that have examined the vaccine depicted that it is well received and prevents a chronic HPV infection and associated cancers (Ferlay *et al.*, 2010).

Cervical cancer is a deadly disease once it reaches the invasive stages, though of all the female genital tract cancers, it is the only preventable cancer if detected early. Population-based screening with Pap smear is an important secondary preventive measure for cervical cancer that leads to a high-cure rate among cervical cancer patients. A recent qualitative study (Mukakalisa *et al.*, 2013) reported a low level of knowledge of cervical cancer and cervical cancer prevention among children, parents, teachers, community leaders and even health service providers of four developing countries (India, Peru, Uganda and Vietnam). Very similar results, i.e. poor knowledge regarding cervical cancer, were found in several studies conducted in other

countries in the world. The present study was carried out among the female students in Faculty of Health Sciences & Technology in Okofia community in order to assess their awareness and barriers to cervical cancer prevention.

Aim

The purpose of the study is to assess the level of awareness and barriers to cervical cancer prevention among the female students in Faculty of Health Sciences and Technology in Okofia community, Otolu Nnewi.

Specific objectives

1. To determine the level of awareness of cervical cancer prevention among the female students in Faculty of Health Sciences and Technology in Okofia community.
2. To find out their views towards cervical cancer preventive measures
3. To determine the practice of cervical cancer prevention among the female students in Faculty of Health Sciences and Technology in Okofia community.
4. To find out the barriers to cervical cancer prevention.

Research Methodology

Research Design

In this study, a descriptive survey design was used to determine the current knowledge, attitude and practice of cervical cancer prevention among student of Faculty of Health Science, Nnamdi Azikiwe University, Nnewi campus in Okofia Community. This design was used because it allows for systematic collection and presentation of data as they occur in their natural situation, as well as interpretation and reporting of facts about the subjects with little or no control.

Area of Study

This study was carried out at the College of health and Science Technology, Okofia, Nnewi, Nnewi North Local Government Area, Anambra State.

Population of Study

The population of study consists of all female students in Faculty of Health Science and Technology, Nnamdi Azikiwe University, Nnewi Campus. The target population was estimated to be 857.

Sample And Sampling Technique

A sample of 273 students was selected. The sampling technique used was stratified random sampling. Students of Faculty of Health Science were stratified according to their department and sample was selected proportionately according to the population of each department.

Instrument for Data Collection

The data for this study was collected by the use of questionnaire composed of structured questions covering the content adequately in line with the stated objectives of study. The questionnaire is divided into two sections

Section A includes items on demographic data. Section B includes items on current knowledge and practice of cervical cancer prophylaxis. It was self administered, distributed through group administration because it maximizes the number of completed questionnaires and allows the researcher to clarify any possible

misunderstanding about the items. On the spot collection of the instrument was also done.

Method of Data Collection

The questionnaire will be self administered to the respondent. The items on the questionnaire will be explained to them when need be. The questionnaire will be administered and collected immediately to avoid loss.

Method of Data Analysis

Responses to the questionnaire from the subjects were tailed and arranged in the frequency distribution table. They were converted into percentages and deductions were made from them. The data were outlined and presented in form of tables.

Ethical Consideration

The following ethical considerations were utilized:

- Confidentiality was assured to the respondents.
- The respondents were allowed to voluntary decide to participate.
- the respondents were courteously approached. Disrespectful or insulting question were not asked.

Data presentation and analysis

The level of awareness on cervical cancer prevention.

Table 1:- showing respondents response on the awareness of cervical cancer prevention.

RESPONSES	FREQUENCIES	PERCENTAGES (%)
Yes	61	79.2%
No	16	20.8%

Result: 62 (79.5%) of the respondents have heard of cervical cancer prevention while 16(20.5%) said that they have not heard about cervical cancer prevention before.

Table 2:- Showing respondents response on where they heard it from.

RESPONSES	FREQUENCIES	PERCENTAGES (%)
Hospital	15	21.4%
Books	22	31.4%
Friends	19	27.1%
Mass media	14	0.2%

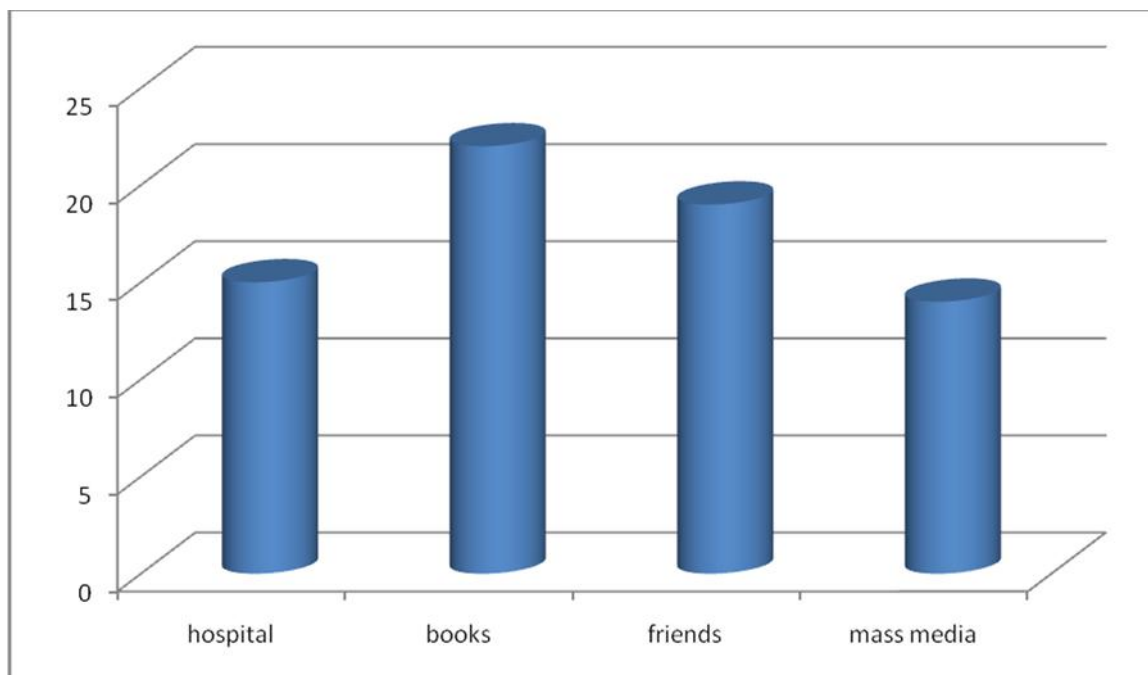


Fig 1: A bar chart showing respondents response on where they heard it from.

Results: The above table showed that 15 (21.4%) of the respondents heard it from the hospital, 22(31.4%) heard it from books, 19(27.1%) of the

respondents heard it from friends and 14(0.2%) heard it from the media.

Table 3: showing respondents' views on cervical cancer prevention

RESPONSES	FREQUENCIES	PERCENTAGES(%)
Intake of drugs to treat cervical Cancer	7	8.9%
The use of radiotherapy to treat Cervical cancer	6	7.5%
The use of HPV vaccines, cervical Screening & other relative measures To prevent cervical cancer	53	67.9%
Don't know	14	17.9%

Result: 7 (8.9%) of the respondents said that cervical cancer prevention involves the use of drugs to treat cervical cancer, 6(7.5%) of the respondents said that it's the use of radiotherapy to treat cervical cancer, 53(67.9%) of the

respondents said it's the use of HPV vaccines, cervical screening & other relative measures to prevent cervical cancer and 14(17.9%) of the respondents don't know.

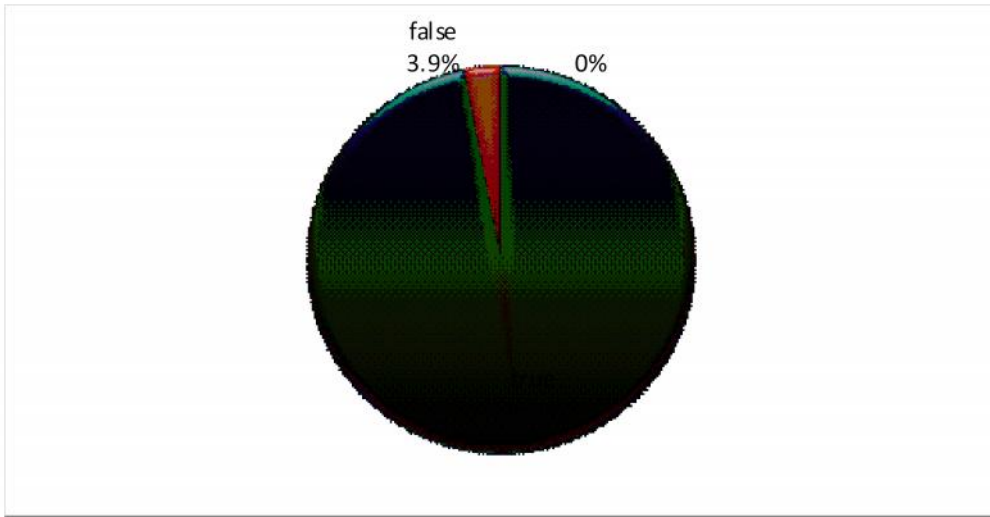


Fig 2: showing respondents views on the results cervical cancer prevention on cervical cancer

Table 4:- showing respondents response on cervical cancer prevention.

RESPONSES	FREQUENCIES	PERCENTAGES (%)
True	68	88.3%
False	9	11.7%

Result: 68(88.3%) of the respondents affirmed that cervical cancer prevention can stop cancer from occurring while 9(11.7%) said that cervical

cancer prevention cannot stop cancer from occurring.

Table 5:- showing respondents response on cervical cancer in relation to age

RESPONSES	FREQUENCIES	PERCENTAGES (%)
True	74	96.1%
False	3	3.9%

Result: 74(96.1%) of the respondents affirmed that a person of their age can have cervical cancer

while 3(3.9%) said that a person of their age cannot have cervical cancer.

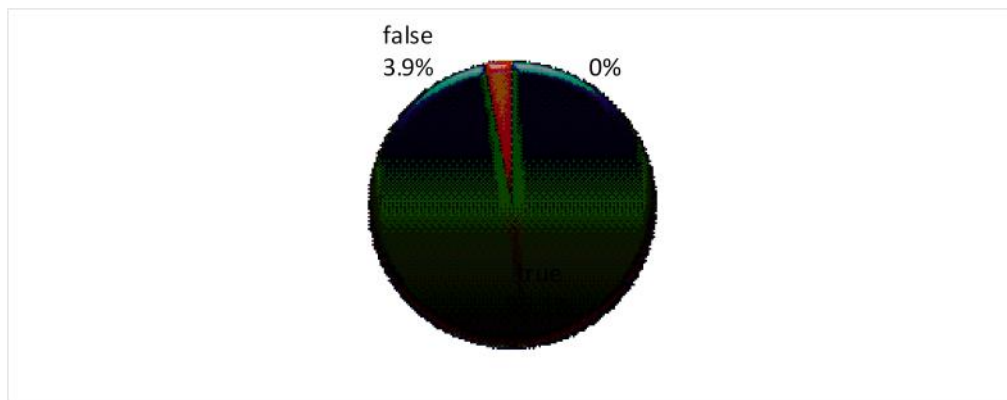


Fig 3:- A pie chart showing respondents response on cervical cancer in relation to age

Table 6:- showing respondents response on the personnel that administers some cervical cancer preventive measures such as screening and vaccines

RESPONSES	FREQUENCIES	PERCENTAGES (%)
True	68	88.3%
False	9	11.7%

Result: 68(88.3%) of the respondents indicated truthfulness in the statement that cervical cancer preventive measures such as screening and vaccines are administered by a trained doctor or nurse while 9(11.7%) indicated false to the statement.

Table 7: showing respondents opinion on cervical cancer prevention in relation to knowledge

RESPONSES	FREQUENCIES	PERCENTAGES (%)
True	64	94.1%
False	4	5.9%

Result: 64(94.1%) of the respondents affirmed that they embark on cervical cancer prevention only with good knowledge while 4(5.9%) indicated false to the statement.

Table 8: Showing respondents opinion on cervical cancer prevention in relation to manifestation of symptoms.

RESPONSES	FREQUENCIES	PERCENTAGES (%)
True	20	29%
False	49	71%

Result: 20(29%) of the respondents affirmed that they embark on cervical cancer prevention only with manifestation of symptoms while 49(71%) indicated false to the statement.

Table 9: Showing respondents opinion on cervical cancer prevention.

RESPONSES	FREQUENCIES	PERCENTAGES (%)
True	14	20.6%
False	54	79.4%

Result: 14(20.6%) of the respondents affirmed that there is no need for embarking on cervical cancer prevention because they are not susceptible while 54(79.4%) indicated false to the statement.

Table 10: Showing respondents opinion on practice of cervical cancer preventive measure.

RESPONSES	FREQUENCIES	PERCENTAGES (%)
Yes	5	6.9%
No	67	93.1%

Result: 5(6.9%) of the respondents said that they have taken the vaccines and screening while 67(93.1%) indicated that they have not taken the vaccines or gone for the screening.

Table 11: Showing respondents opinion on the frequency of cervical cancer preventive measure.

RESPONSES	FREQUENCIES	PERCENTAGES (%)
Just once	1	0.013%
Yearly	1	0.013%
Every 2-5 years	1	0.013%

Result: 1(0.013%) of the respondents said that they have taken the vaccines and screening just once, 1(0.013%) of the respondents said they take it yearly while 1(0.013%) indicated that take it every 2-5 years.

Table 12: showing respondents opinion on reasons for non-participation in cervical cancer prevention

RESPONSES	FREQUENCIES	PERCENTAGES (%)
No symptoms	19	27.5%
Ignorance	22	31.9%
No reasons	25	36.2%
Busy schedule	3	0.043%

Result: 19(27.5%) of the respondents said that they don't participate cervical cancer preventive measures, 22(31.9%) dont participate because of ignorance, 25(36.2%) don't participate because they have no reasons and 3(0.043%) said that they do not participate because of their busy schedule.

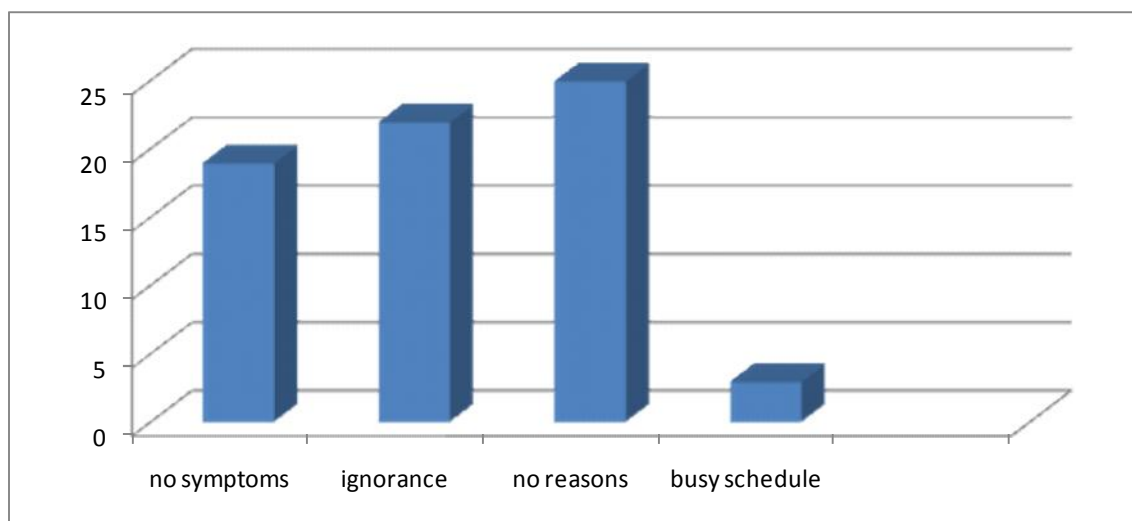


Fig 3: A bar chart showing reasons why respondents don't participate in cervical cancer prevention.

Discussion

The results of the findings revealed that the female students in faculty of health sciences and technology, college of health sciences, okofia, nnewi have a relative high level of awareness of cervical cancer prevention because majority of the respondents 79.5% have heard about cervical cancer preventive measures, majority (31.4%) of

them heard it from books and majority of the respondents (67.9%) gave a correct description of cervical cancer preventive measures. The results indicated that there was a low level of awareness among the women in which only 15.5 percent of the women who participated in the study were aware of availability of cervical preventive measure.

The poor awareness of cervical cancer screening and prevention resulted in poor attendance at cervical screening programs. This result was also similar to findings in Uganda, where women in Nigeria did not believe that they were at risk for cervical cancer (Nwankwo *et al.*,2011). The proportion increased from 7% in those with lower than college level of schooling, to 14% and 24% in those with college and university schooling level, respectively (P for trend = 0.0006). No significant differences by sex (P = 0.7) or age group (P = 0.1) were observed on this issue. However, the proportion of women who had heard about HPV was significantly higher among those with at least one Pap test. The result of the findings states that the female students in Okofia are aware of the cervical cancer prevention and its measures.

Majority of the respondents 67.9% gave a correct definition of cervical cancer prevention while majority 76.5%, 95.1% and 83.1% indicated truthfulness to the statements on cervical prevention measure can prevent cervical cancer, person of their respective ages can take the preventive measures and administering of the vaccines and screening are done by experienced doctor or nurse respectively which were correct. The result of this study contradicts the study by (Maukalis, 2013) which showed very low rate of participation in cervical screening programs and prevention measures among women: only 20.2% of the national representative sample reported they had ever had cervical cancer screening and prevention. Approximately half of the women (46.3%) had never heard of the test before the interview.

An analysis of different aspects of needed information revealed that 48.1% were not aware of the purpose of the test, nor did they know that cervical cancer is a preventable form of cancer (46.8%); about one quarter of the women who had heard about it believed the test must be repeated every 6 months and the same proportion thought that the test should be requested only when symptoms appear. The need for knowledge about Pap screening and cervical cancer prevention emerged as a strong theme in qualitative interviews. Most of the women did not see the

Pap test as a test for health maintenance and disease prevention, but as a test for diagnosing the cause of gynecological pathology.

The majority of the respondents 93.1% indicated that they have not taken any prophylactic vaccines or the cervical screening before. The majority of the respondents 36.2% said they have no reason for not taking these prevention measures. The uptake of screening remains low in developing countries due to lack of basic knowledge among women.

It is surprising that despite good awareness on measures of prevention there is poor practice among them. Maybe the reason for the poor practice is the location of health facilities and logistics for the cervical cancer prevention services or shortage of hospital facilities that offer these services. However the practice of cervical cancer prevention among the female students in faculty of health sciences is poor.

Conclusion

Based on the findings, the researcher concludes that the female students in Okofia have good awareness on cervical cancer prevention, with positive views on cervical cancer prevention but practice of cervical cancer prevention among female patients is very poor with only 7%.

There should be special needs for health educations which can be done for women, mainly in the hospital settings. There should be proper screenings of the female patients and prompt interventions, including counseling of the young women on the risk factors and causes of cervical prevention. There should be provision of seminars, workshops in the hospital and IEC materials on notice boards concerning cervical cancer prevention; this is so to enhance the awareness of cervical cancer prevention among the women. Government should build and open up functional health centers in the villages, so as to enable women to take their screenings and vaccines.

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