Awareness and Acceptance of Cervical Cancer Screening among Women of Child-Bearing Age Attending Ante-Natal Clinic in State Specialist Hospital Akure

Edward, M.I. [1], Buhari, R.A.[2], Ajibade, S.O.[3], Makanjuola, O. J. [4],

[1]Faculty of Nursing Sciences, University of Medical Sciences, Ondo, Ondo State
[2]Cedercrest Hospital Limited, Gudu, Apo, Abuja
[3]Department of Nursing Science, University of Medical Sciences,
Akure Campus, Ondo State, Nigeria
Corresponding Author: Edward, M.I.
Corresponding Email: edwardmaryidowu@yahoo.com

Abstract

The burden of cervical cancer is significantly high among women population despite the fact that cervical cancer is preventable. The study was conducted to assess the awareness and acceptance of cervical cancer screening among women of child-bearing age attending Ante-natal Clinic in State Specialist Hospital, Akure. A descriptive cross-sectional research design was used and data was collected using a structured questionnaire, 200 women were selected for the study selected using simple random technique. The result showed that majority 84% of respondents have heard of cervical cancer screening. The finding further revealed inadequate awareness on cervical screening. The level of acceptance of cervical cancer screening is generally poor. There is no statistically significant relationship between patients' awareness of cervical cancer screening and acceptance of the screening of cervical cancer at 0.05 level of significance, $\rho = .446$, $\rho > .05$. Therefore acceptances of cervical screening strategies should be put in place.

Keywords: *Cervical cancer, Awareness, Acceptance, Screening, Strategies*

Introduction

Cervical cancer is the second most common cancer among women worldwide. Worldwide, cervical cancer accounts for about 500,000 new diagnoses and 273,000 deaths every year, of the new cases, 80% occur in the developing countries (Shafi, 2012). According to Lindsey, Rebecca., Elizabeth, and Ahmedin, (2016), cervical cancer is the third leading cause of cancer-related death in females in Low and Middle-income countries (LMICs), but is rare in high-income countries (HICs). According to American College of Obstetricians and Gynaecologists (2019) women aged 21–29 years should have a Pap test alone every 3 years. HPV testing is not recommended, women aged 30–65 years should have a Pap test and an HPV test *(co-testing)* every 5 years (preferred). It is also acceptable to have a Pap test alone every 3 years.

The knowledge and awareness of cervical cancer were in general low and screening acceptance was associated with having knowledge of cervical cancer, its risk factors and, its prevention (Ifemelumma, Anikwe, Okorochukwu, Onu, Obuna, Ejikeme, & Ezeonu, 2019). According to Omonua, Isah, and Agida, (2019)., in Nigeria the magnitude of the problem has been under-recognised and under prioritised compared to competing

for health priorities such as HIV/AIDS, tuberculosis and malaria. This is due to lack of epidemiological data and poor awareness, lack of human and financial resources, non-existent cancer service policies and lack of political self-will to address the complex problem. The only available activity has been to use opportunistic screening of those women who come to the health units for other reasons and screening of these women then becomes the responsibility of the medical worker who should know those eligible. The level of awareness and utilisation of cervical cytology services among women in Nigeria is unclear as there is no reliable population-based cancer registry or prevention programme database, and very few regional-based studies have been reported in the country (Sowemimo, Ojo & Fasubaa, 2017).

According to Abiodun, Oluwasola, Durodola, Ajani, Abiodun, & Adeomi (2017), the most important barrier to the reduction of cervical cancer burden is lack of awareness about the disease and its preventive measures. Many other reasons for low participation of cervical cancer screening which include: ignorance of the existence of such test, ignorance of importance of screening or lack of risk awareness and the risk factors to the development of cervical cancer, absence of symptoms and lack of awareness of centres where such services are obtainable, and lack of motivation to get screened (Aniebue & Aniebue, 2010). In addition, the barriers to screening included fear the most important barrier to the reduction of cervical cancer burden is lack of need for a pelvic exam, fear of disease and death associated with cervical cancer Oketch, Kwena, Choi, Adewumi, Bukusi & Huchko(2019).

The researcher observed that the cervical cancer prevention programme in State Specialist Hospital, Akure has recorded a low degree of success, and limited to an opportunistic screening until the establishment of oncology unit in the hospital in 2010. What has been the norm is that women are screened when they attend for other gynaecological complaints during clinic visits and consultations. Centre for oncology in State Specialist hospital has recorded low utilisation of cervical cancer screening service since the inception of the programme and no known awareness programme has been recorded to this effect. There is a dearth of information of literature that revealed studies done on awareness and acceptance of cervical cancer screening in Ondo State. Based on this gap, the study intends to assess the awareness and acceptance of cervical cancer screening among women of child-bearing age in Akure South local government area of Ondo State.

Research Questions
What is the level of cervical cancer screening and awareness among the respondents?
What is the level of acceptance of cervical cancer screening?
What are the barriers to cervical cancer screening?

Hypothesis
There is a no significant relationship between level awareness and acceptance of cervical cancer screening among the respondents.

Methods and Materials
Research Design
This is a descriptive cross-sectional research design; it was aimed to identify the awareness and acceptance of cervical cancer screening among women of child-bearing age attending an ante-natal clinic in State Specialist Hospital, Akure.

Study Population
The target population are women of child-bearing age attending an ante-natal clinic in State Specialist Hospital

Sampling
The sample size for this study was calculated using Solvin's formula. The sample size for this study was calculated using Solvin's formula
$n=N/(1+Ne^2)$
Where n=sample size, N=total population (400), e=level of significance usually 0.05

n=400/1+(400x0.05)^2
n=400/1+400x0.0025
n=400/1+1
n=400/2
n= 200
Simple random sampling technique was used and the total of 200 respondents was selected for the study.

Instrument and Method of Data Collection
A structured questionnaire was used for data collection. The data was collected through the administration of the questionnaire to the respondents after a clear explanation of the purpose of the study.

Ethical Consideration
Permission was sought and obtained from the Hospitals Management Board research committee to conduct the research, and the consent of respondents was gained before administering the questionnaires.

Results
Table 1: Socio-Demographic Data (n=200)

Variables	Frequency	Per centage
Ages (Years)		
18-20	60	30.0
21-30	77	38.5
31-40	53	26.5
41-50	10	8.0
Religion		
Christianity	165	82.5
Islam	35	17.5
Marital status		
Married	170	85
Unmarried	30	15
Age of first menstruation		
10-12yrs	91	45.5
13-15yrs	86	43
16-18yrs	23	11.5
Age at sexual debut		
14-19	32	16
20-24	80	40
25-30	24	12
Can't Remember	64	32

The tables 1 above revealed that majority of the respondents 38.5% were between the ages of 21-30, while only 8% were between the ages of 41-50. The majority, 165(82.5%) of the respondents are Christians while only 35(17.5%) were Muslims. Concerning the marital status, majority 170(85%) were married while 30(15%) were unmarried. In relation to age at first menstruation, 91 of the respondents representing 45.5% experienced their first menstruation between the ages of 10-12 years, while 23 representing 11.5% experience theirs at 16-18 years. Eighty (40%) of the respondents had sexual debut between the age of 20-24years, 24 (12%) of the respondents had first sexual intercourse between the age of 25-30years.

Table 2: Distribution of the Respondents according to the Awareness of Cervical Cancer Screening (n=200)

Variables	Frequency	Per centage	Level of Awareness
Respondents who have heard of cervical cancer screening			
Yes	168	84	Adequate
No	32	16	Inadequate
Source of information about cervical screening			
Television and radio	84	42	
Health care provider	24	12	
Friends	18	9	
Magazines	10	5	
Family	16	**8**	
Internet	18	9	
Doctors	30	15	
Awareness of the screening procedure			
Pap's smear	80	40	Adequate
Visual inspection of cervix	34	17	Inadequate
Visual inspection of cervix with lugol's iodine	60	30	Adequate
Liquid based cytology	26	13	Inadequate
Awareness of those expected to go for screening			
All women of child bearing age	35	17.5	Inadequate
Only women with multiple sex partners	81	40.5	Adequate
Only women with symptoms of cancerous cervix	57	28.5	Moderate
Women in polygamous family	27	13.5	Inadequate
Awareness of how often should cervical screening is done?			
Once every year	120	60	Inadequate
Once in three years	68	34	Adequate
Once in five years	12	**6**	Inadequate

60-100 = Adequate,   40-59 = Moderate,   1-39 = Inadequate

In table 2 above, majorities 168 (84%) of respondents have heard of cervical cancer, while 36 (16%) of respondents have not heard of cervical cancer; this is adequate. The major source of information about cervical cancer was from television and radio which represents 42%, while 5% heard through magazines. On awareness of screening procedure, the respondents' awareness is adequate. The awareness of those expected to go for screening is however inadequate. In addition, the respondents' awareness of how often cervical cancer should be done is also inadequate.

Table 3: Distribution of the Respondents according to the Acceptance of Cervical Cancer Screening (n=200)

Variables	Yes	No	Level of Acceptance
Do you go for test on your own	54	146	Poor
Is it important to go for cervical screening test?	136	64	Good
Would you encourage your friends to go for a Cervical cancer screening?	84	116	Poor

* 50-100 = Good, Below 50 = Poor

Table 4 revealed that only 27% went for a cervical screening test on their own this indicates a poor level of acceptance. The level of acceptance regarding the importance of going for cervical screening is good; however, the majority of respondents did not accept to encourage friends to go for cervical cancer screening. This level of acceptance is also poor.

Table 4: Barriers to Cervical Cancer Screening

Barriers	Strongly agree	Agree	Disagree	Strongly Disagree
High cost	92(46%)	60(30%)	28(14%)	20(10%)
Non availability of cervical cancer screening centre	51 (25.5%)	30(15%)	28(14%)	91(45.5%)
Lack of awareness	66 (33%)	72 (36%)	30 (15%)	32 (16%)
Religions encourages cervical Cancer screening	44 (22%)	38 (19%)	60 (30%)	58 (29%)

The table above highlighted barriers confronting women and preventing them from going for cervical cancer screening. From table 4, it is clearly stated that 44% and 38% strongly agreed and also agreed respectively that there are barriers to cervical screening whereas 46% and 30% strongly agreed and agreed respectively that high cost could be a barrier. But on the other hand, 91 of the respondent representing 45.5% strongly disagreed that non availability of the screening centre can be a hindrance. 36% agreed that lack of awareness could be a barrier, while 30% disagreed that religion encourages cervical cancer screening.

Hypotheses Testing:
There is no significant relationship between levels of awareness and acceptance of cervical cancer screening among the respondents.

Table 5: Relationship between Respondents' Level of Awareness and Acceptance of the Screening

	Respondents' Awareness		X^2	Df	p-value
Level of acceptance	Adequate	Inadequate			
Good	35	5			
Poor	132	28	0.581	1	.446
Total	167	33			

From Table V, it was observed that no statistically significant relationship exists between awareness and acceptance of cervical screening among the respondents as the chi-square value, $X^2(1) = 0.581$, $\rho = .446$, $\rho > .05$.

Therefore, the hypothesis that stated that there was no significant relationship between awareness of cervical cancer screening and acceptance of cervical cancer screening among the respondents is with this accepted.

This finding suggests that those respondents who heard about cervical cancer screening were not ready to accept the screening services..

Discussion

The findings from this study it showed more than three-quarter of respondents has heard of cervical cancer.. The uptake of preventive cervical cancer services is greatly affected by knowledge. This finding is in agreement with Owoeye (2013) in whose study the majority of the respondents were aware of cervical cancer. This could be a result of the fact that they come to the hospital for antenatal services wherein series of health talks have been given by nurses each time they come to antenatal clinic. This result indicated that the awareness is adequate. This result supported the findings of Obaseki and Nwafor, (2012) on prospective study involving all females that came for cervical cancer screening performed in University of Benin Teaching Hospital (UBTH) between August 2008 to July 2012 which revealed that a high number of women turned out for screening which indicated a heightened awareness of cervical cancer. The major sources of information about cervical cancer were from television and radio.

The result further revealed that awareness of the screening procedure is also adequate. This is also in line with a study conducted by Ali and others in 2009 on knowledge and awareness about cervical cancer and its prevention among interns and Nursing staff in a Hospital in Pakistan which revealed that 37% of respondents recognised Pap smear as a screening test. On the other hand, the study contrasts the study of Isara, et al (2013) on knowledge and practice of cervical cancer screening among female medical students of the University of Benin, Benin City Nigeria. The majority (70%) were aware of pap's smear screening test.

However, the awareness of those expected to go for screening and on how often cervical cancer should be done is however, inadequate.

This may not be in connection with the fact that these pregnant women are selective in the information they heard and retained. This is because any time they come to the clinic, they are only interested in the pregnancy-related health talk. Hence they did not retain the health information regarding the who to go for cervical screening and how often it should be done.

The study further revealed that only less than one-quarter of the respondents went for a cervical screening test on their own this indicates a poor level of acceptance. The level of acceptance regarding the importance of going for cervical screening is good; however more than half of the respondents did not accept to encourage friends to go for cervical cancer screening. This results may not be unconnected with the fact that less attention is paid to cervical screening services like that of HIV/AIDS. This because the problem is under-recognised. This finding is agreement with the findings of Dhendup and Tshering (2014) on the study on cervical cancer knowledge and screening behaviours among female university graduates of year 2012 attending national graduate orientation programme, Bhutan in which just 6% of the respondents reported undergoing Pap test at least once and 94% reported as never having done Pap test. It was also discovered in the same study that the level of acceptance is also poor.

This study further revealed that less than half of the respondents strongly agreed that high cost could be a barrier; in addition, less than half of the respondents agreed that lack of awareness could be a barrier while about one-quarter of the respondents disagreed that religious encourage cervical cancer screening. These results imply that none of the listed barriers are the attributed reasons for why cancer screening is not accepted. The main cause is resident in the respondents. The main reason may be as a result of the perceived belief of the respondents that they are less at risk because they are still bearing children and that they are not likely to have cervical cancer

when they are bearing children. On the other hand, the barrier may be as a result of lack of adequate information about where the cancer screening services are available. This finding is supported by Abiodun *et al*., (2017) who reported that the most important barrier to the reduction of cervical cancer burden is lack of awareness about the disease and its preventive measures.

The findings on the relationship between respondents awareness about the screening and the acceptance of the screening reveal that no statistically significant relationship exists between patients awareness about cervical cancer screening and acceptance of the screening of cervical cancer at the .05 level of significance $\rho = .446$, $\rho > .05$. This finding is in agreement with the findings of Owoeye and Ibrahim (2013) that revealed that awareness of cervical cancer screening was higher among students than the staff of Niger Delta University, though the practice of cervical cancer screening was low in both staff and students.
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Conclusion

The study assesses the awareness, acceptance and barrier to cervical cancer screening among women of child-bearing age in State Specialist Hospital, Akure. The findings revealed that women of child-bearing age have adequate awareness of cervical cancer but acceptance of the cervical cancer screening was poor. There is no relationship between awareness and acceptance of cervical cancer screening.

Recommendations

Acceptances of cervical screening strategies should be put in place, such as:

i. More awareness campaigns should be embarked upon by the government through health agencies to inform the public generally about risk factors associated with cervical cancer and benefit early screening

ii. The screening should be made relatively cheap and centres accessible for every

woman in the urban and rural area of Ondo State and Nigeria at large.
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Conflict of Interest
None

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