



Inhibitors Of Cervical Cancer Screening Among Women In Rivers State, Nigeria

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ABSTRACT

This study investigated the inhibitors of cervical cancer screening among women in Rivers State. The descriptive research design was adopted with a population consisting of 3,762,393 women in Rivers State. A sample size of 880 was selected using multi-staged sampling procedure. The instrument for data collection is a self-structured questionnaire titled “Factors Associated with Cervical Cancer Screening Questionnaire (FACCSQ)” with a reliability coefficient of 0.73. Data collected were coded and analyzed with the aid of the Statistical Product for Service Solution (SPSS) version 23.0 and analyzed using percentage and Chi-square at 0.05 alpha level. The result of the study showed that, to a high extent, the factors associated with cervical cancer screening among the women were lack of access to screening services (70.5%), non-recommendation of screening by health workers (68.5%), and poor knowledge (90.0%). The tested hypotheses revealed that the variables that were significantly associated with cervical cancer screening were: lack of access to screening services ($\chi^2 = 20.02$, $df = 1$, $p = 0.00$), and lack of knowledge ($\chi^2 = 2.88$, $df = 1$, $p = 0.04$). It was concluded that, the factors associated with cervical cancer screening were: lack of access to screening services, and lack of knowledge. It was recommended among others that, the primary health care board should adapt cervical cancer screening package by integrating it with other reproductive health services like antenatal and postnatal care services, so that women can access the screening upon getting to any primary healthcare facility.

Keywords: Cancer, Cervix, Factors, Screening, Women

INTRODUCTION

The high burden of cervical cancer in developing countries, like Nigeria, is due both to a high prevalence of HPV infection and the lack of effective cervical cancer screening programmes (Ndikom & Ofi, 2012). In cases where effective screening programmes are available, negative health-seeking behavior of the populace have led to poor utilization of such services. The World Health Organization (WHO, 2014) noted that, screening can detect cervical cancer in women at an early stage when the cancer can still be successfully treated. Positive outcomes in terms of the quality of the healthcare facilities and services can also be achieved through implementation of a prevention programme: these may include improved infrastructure, updated training of health-care providers, increased awareness of women’s reproductive health, and establishment of a quality control and quality assurance programme.

Cervical cancer screening presents an excellent opportunity for this otherwise fatal condition to be cured by early detection and treatment, thus reducing morbidity and mortality from this disease (Akwaowo & Vanni, 2015). The screening tests for cervical cancer include Papanicolaou (Pap) smear test, HPV DNA test, cytology, and visual inspection with acetic acid (particularly in low-resource settings); while preinvasive disease of the cervix is treated by ablative methods which include destruction of abnormal tissue by burning or freezing (cryotherapy) and surgical removal of abnormal tissue (WHO, 2017). Screening procedures include routine Pap smear, visual inspection with acetic acid (VIA), and visual

inspection with Lugol's iodine (VILI) (Akwaowo & Vanni, 2015). Cervical cancer usually develops slowly, taking 10-20 years from early pre-cancer to invasive cancer, so cervical cancer is rare before the age of 30. Screening younger women will detect many lesions that will never develop into cancer, which will lead to considerable overtreatment, and is thus not cost-effective. Cervical cancer screening should not start before 30 years of age. Screening women between the ages of 30 and 49 years, even just once, will reduce deaths from cervical cancer. Cervical cancer screening is recommended for every woman in this target age group but this may be extended to younger ages if there is evidence of a high risk for CIN2+ (WHO, 2014). However, certain factors are associated with the screening. Lack of knowledge about the disease, lack of familiarity with the concept of prevention, the geographical and economic inaccessibility of care, the poor quality of services, culture and lack of support from husbands and families are some factors associated with cervical cancer screening (Bhagwan et al., 2017). In developing countries high incidence of cervical cancer result due to lack of awareness and knowledge about cervical cancer.

Inadequate knowledge about cervical cancer and lack of familiarity with the concept of prevention was identified as one of the barriers to cervical cancer screening (Nene et al., 2017). Some researchers have found that barriers to cancer screening among Africa women include lack of awareness of screening guidelines, lack of information on where and how to receive screening, and beliefs about the diagnosis of cancer (Becker-Dreps et al., 2010; Nnodu et al., 2010). Studies conducted by Abotchie and Shokar (2019) and Adanu et al. (2010) have suggested that women did not have adequate information on what cervical cancer screening was about as well as local screening initiatives. Inadequate knowledge can give rise to misconceptions which could lead to unnecessary fear about the screening outcome.

Accessibility is a key determinant of women participation in any health programme including cervical cancer screening. Access to reproductive health in general and cervical cancer screening in particular in our and many other settings is a prominent barrier to its utilization or uptake (Daley et al., 2011; Gu et al., 2012; Ghebre et al., 2015). Accessibility could be both physical (proximity) and financial accessibility, but the latter being more effective because, no matter how closely located a healthcare service is, it is only those who have the financial capabilities that can afford it. Economic inaccessibility of care was seen as a major hindrance to cervical cancer screening (Nene et al., 2017). Studies from Brown et al. (2011) and Nolan et al. (2014) suggested that concerns about cost of health care services may inhibit receipt of cervical cancer screening among Africa women. Quentin et al. (2011) argued that the high cost of screening and treatments were important barriers toward seeking cervical cancer screening tests. In a similar vein, Mupepi et al. (2011) noted that, absence of affordable healthcare was a barrier to services utilization.

Late presentation of cervical cancer has been one of the leading cause of the high morbidity and mortality associated with it among women. Due to the asymptomatic nature of cervical cancer, some patients may be treating other infections at the very early stage while the cells are fast proliferating to become more aggressive and deadly at the late stage; this would have been prevented if women avail themselves for cervical cancer screening. Poor uptake of the cervical cancer screening ensures that asymptomatic patients present to health facilities at the late stage, which is more expensive to treat, decrease chances of recovery, increases pain, and increase chance of death from it. Efforts have been made by both government and non-governmental organization to have mass screening by launching the free cervical cancer screening programme but, several women have refuse to present themselves for the screening. This is indicative of the fact that there are factors hindering its uptake. Such factors may be peculiar to certain locations and population. Though, scholars have made effort to investigate such factors in different places but, there is paucity of studies revealing such factors associated with cervical cancer screening among women in Rivers State. Therefore, this study investigated the factors associated with cervical cancer screening among women in Rivers State. The study provided answers to the following research questions:

1. To what extent does lack of access to screening services constitute a factor associated with cervical cancer screening among the women?

2. To what extent does non-recommendation of screening by health workers constitute a barrier to cervical cancer screening among the women?
3. To what extent does lack of knowledge of cervical cancer constitute a barrier to cervical cancer screening among the women?

Hypotheses

The following hypotheses guided the study and were tested at 0.05 alpha level:

1. There is no significant association between lack of access to screening services and cervical cancer screening among the women.
2. There is no significant association between non-recommendation of screening by health workers and cervical cancer screening among the women.
3. There is no significant association between knowledge of cervical cancer and cervical cancer screening among the women.

METHODOLOGY

The descriptive research design was adopted for the study with a population consisting of 3,762,393 women in Rivers State. A sample size of 880 was selected using multi-staged sampling procedure. At the first stage cluster sampling techniques was used to place the local government areas in three different clusters. In each of the eight local government areas, one hundred and ten respondents were purposively selected. Simple random sampling technique was then adopted to select two communities where the study will be carried out. This made the sample size to be eight hundred and eighty (880) respondents which was non-proportionately distributed to the eight Local Government Areas that made up the Rivers State. The instrument for data collection is a self-structured questionnaire titled “Factors Associated with Cervical Cancer Screening Questionnaire (FACCSQ)” with a reliability coefficient of 0.73. Data collected were coded and analyzed with the aid of the Statistical Product and Service Solution (SPSS) version 23.0 and analyzed using percentage and Chi-square at 0.05 alpha level.

Table 1: Frequency and percentage distribution on the extent to which lack of access to screening services constitute a factor associated with cervical cancer screening among the women

SN	Items	LE	HE	Remark
1	Cervical cancer screening services are easy to reach	235(28.8)	582(71.2)	HE
2	The close distance from my residence to the screening centre makes it easy for me to undergo it	195(23.9)	622(76.1)	HE
3	The screening service providers can even come around if need be	173(21.2)	644(78.8)	HE
4	Undergone the screening because the centre is located far away	314(38.5)	503(61.5)	HE
5	The screening is not limited to any time and place so I find it very easy to undergo it	290(35.5)	527(64.5)	HE
Grand total		241(29.5)	576(70.5)	HE

Guide: $\geq 50\%$ is HE while $< 50\%$ is LE. Key: HE = high extent, LE = low extent

Table 1 revealed the percentage distribution of the extent to which lack of access to screening services constitute a factor associated with cervical cancer screening among the women. The result established that the grand total 576(70.5%) was greater than the average indicating a high extent. Thus, the extent to which lack of access to screening services constitute a factor associated with cervical cancer screening among the women was high.

Table 2: Frequency and percentage distribution on the extent to which non-recommendation of screening by health workers constitute a factor associated with cervical cancer screening among the women

SN	Items	LE	HE	Remark
1	There is no need for a woman to undergo the screening if it was not recommended to her personally by a healthcare provider	122(14.9)	695(85.1)	HE
2	A woman aged from 30 years and above does not need any recommendation before undergoing the test	358(43.8)	459(56.2)	HE
3	It is not proper to screen without written note from a health provider to do so	239(29.2)	578(70.8)	HE
4	Healthcare workers should always recommend the test for women, especially childbearing women	311(38.1)	506(61.9)	HE
Grand total		257(31.5)	560(68.5)	HE

Guide: $\geq 50\%$ is HE while $< 50\%$ is LE. Key: HE = high extent, LE = low extent

Table 2 revealed the percentage distribution of the extent to which non-recommendation of screening by health workers constitute a barrier to cervical cancer screening among the women. The result established that the grand total 560(68.5%) was greater than the average indicating a high extent. Thus, the extent to which non-recommendation of screening by health workers constitute a factor associated with cervical cancer screening among the women was high.

Table 3: Percentage distribution showing knowledge of cervical cancer and cervical cancer screening among the women

Knowledge of cervical cancer	Cervical cancer screening		Total	Decision
	Yes	No		
Poor	32(10.0)	287(90.0)	319(100)	High Extent
Good	70(14.1)	428(85.9)	498(100)	
Total	102(12.5)	715(87.5)	817(100)	

Table 3 showed the percentage distribution showing knowledge of cervical cancer and cervical cancer screening among the women. The result revealed that, among those who had poor knowledge, majority (90.0%) did not undergo the cervical cancer screening, indicating a high extent to which lack of knowledge constitute a barrier. Thus, the extent to which lack of knowledge of cervical cancer constitute a barrier to cervical cancer screening among the women was high.

Table 4: Summary of Chi-square test showing significant association between lack of access to screening services and cervical cancer screening among women in Rivers State

Lack of access to services	CC Screening		Total F(%)	df	χ^2	p-value	Decision
	Yes F(%)	No F(%)					
High extent	57(9.4)	548(90.6)	605(100)	1	20.02	.00*	H ₀ rejected
Low extent	45(21.2)	167(78.8)	212(100)				
Total	102(12.5)	715(87.5)	817(100)				

*Significant; p<0.05

Table 4 revealed the Chi-square test of significant association between lack of access to screening services and barrier to cervical cancer screening. The result showed that lack of access to screening services was a significantly associated with cervical cancer screening ($\chi^2 = 20.02$, df = 1, p = 0.00) as the p-value was lesser than 0.05. Thus, the null hypothesis which stated that, there is no significant association between lack of access to screening services and cervical cancer screening among women in Rivers State was rejected.

Table 5: Summary of Chi-square significant association between non-recommendation by health personnel and cervical cancer screening among women in Rivers State

Non-recommendation by health personnel	CC Screening		Total F(%)	df	χ^2	p-value	Decision
	Yes F(%)	No F(%)					
High extent	62(11.8)	464(88.2)	526(100)	1	0.65	.42*	H ₀ Not rejected
Low extent	40(13.7)	251(86.3)	291(100)				
Total	102(12.5)	715(87.5)	817(100)				

*Not Significant; p>0.05

Table 5 revealed the Chi-square test of significant association between non-recommendation by health personnel and cervical cancer screening. The result showed that non-recommendation by health personnel was not a significant associated with cervical cancer screening ($\chi^2 = 0.65$, df = 1, p = 0.42) as the p-value was greater than 0.05. Thus, the null hypothesis which stated that, there is no significant association between non-recommendation by health personnel and cervical cancer screening among women in Rivers State was not rejected

Table 6: Summary of Chi-square test of significant association between knowledge of cervical cancer and cervical cancer screening among women in Rivers State

Knowledge of cervical cancer	CC Screening		Total F(%)	df	χ^2	p-value	Decision
	Yes F(%)	No F(%)					
Poor	32(10.0)	287(90.0)	319(100)	1	2.88	.04*	H ₀ rejected
Good	70(14.1)	428(85.9)	498(100)				
Total	02(12.5)	715(87.5)	817(100)				

*Significant; p<0.05

Table 6 revealed the Chi-square test of significant association between knowledge and cervical cancer screening. The result showed that knowledge of cervical cancer was significantly associated with cervical cancer screening ($\chi^2 = 2.88$, df = 1, p = 0.04) as the p-value was lesser than 0.05. Thus, the null hypothesis which stated that, there is no significant association between knowledge of cervical cancer and cervical cancer screening among women in Rivers State was rejected

DISCUSSION OF FINDINGS

The result established that the extent to which lack of access to screening services constitute a barrier to cervical cancer screening among the women was high (70.5%), and lack of access to screening services was a significant barrier to cervical cancer screening ($\chi^2 = 20.02$, df = 1, p = 0.00). The finding of this study is akin to that of Ali-Rasasi et al. (2014) which revealed that, one of the factors which to a high extent, was a barrier to cervical cancer screening among women was the cost of service. The finding of this study is also in consonance with that of Amoran and Toyobo (2015) which revealed that, to a high extent, affordability was barrier to cervical cancer screening among women was the cost of service.

The result showed that the extent to which non-recommendation of screening by health workers constitute a barrier to cervical cancer screening among the women was high (68.5%) however, non-recommendation by health personnel was not a significant barrier to cervical cancer screening ($\chi^2 = 0.65$, df = 1, p = 0.42). The finding of this study is akin to that of Ali-Rasasi et al. (2014) which revealed that, one of the factors which to a high extent, was a barrier to cervical cancer screening among women was the cost of service. The finding of this study is also in consonance with that of Amoran and Toyobo (2015) which revealed that, to a high extent, non-recommendation by health care workers was barrier to cervical cancer screening among women.

The result revealed that, among those who had poor knowledge, majority (90.0%) did not undergo the cervical cancer screening, indicating a high extent to which lack of knowledge constituted a barrier; and knowledge was a significant barrier to cervical cancer screening ($\chi^2 = 2.88$, df = 1, p = 0.04). This finding is encouraging because knowledge has been identified as a prerequisite for any health practice; though, in some cases, knowledge does not translate automatically to practice but, it a very good factor which play a role whenever it comes to the practice or utilization of any health care services including cervical cancer screening services. The finding of this study is also similar to that of Bansil et al. (2015) which showed that only 11% women had adequate knowledge about cervical cancer screening and that the lack of knowledge was mainly due to lack of population-based screening programs. The similarity found between the two studies can be explained by the fact that the previous study was carried out among female health care workers who are expected or seen as custodian of knowledge of vast health issues whereas the present study was carried out among women attending antenatal clinics which implies that, the health care workers who are knowledgeable about cervical cancer screening may have been

committed to making such information available to the antenatal women hence, the similarity between the two studies. However, the findings of this study is at variance with several other studies. The finding of this study is at variance with that of Al-meer et al. (2011) which showed that the respondents who are women visiting primary health care in Qatar had poor knowledge of cervical cancer screening which was a barrier to their uptake of the cervical cancer screening.

CONCLUSIONS

Based on the findings of the study, it was concluded that the factors associated with cervical cancer screening were lack of access to screening services, and lack of knowledge. The above situation point to the need for educational and other intervention targeted at overcoming identified factors.

RECOMMENDATIONS

The following recommendations were made based on the conclusions of the study:

1. The primary health care board should adapt cervical cancer screening package by integrating it with other reproductive health services like antenatal and postnatal care services, so that women can access the screening upon getting to any primary healthcare facility.
2. Also, Health personnel specifically gynecologists, and midwives should as part of their consultation ask every woman (of the screening age) they come across, to know if they are screened but, if not screened then, they should recommend the screening to them.
3. Health educators should establish a sustainable awareness campaign about cervical cancer screening through the media and other channels of communication, to help women become more knowledgeable about cervical cancer screening benefits.

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