

ASSESSMENT OF KNOWLEDGE AND ACCEPTANCE OF CERVICAL SCREENING PRACTISES AMONG REPRODUCTIVE AGE WOMEN ATTENDING A PRIMARY HEALTH CENTRE IN SOUTHWEST, NIGERIA

Oluwatoyin Olawumi Adefisan¹, Adeyemi Sunday Adefisan², Babatunde Ajayi Olofinbiyi²

School of Midwifery, Ekiti State University Teaching Hospital, Ado Ekiti, Nigeria¹, Department of Obstetrics and Gynaecology, Ekiti State University, Ado Ekiti, Nigeria²

Corresponding author : Dr. Adeyemi S Adefisan Department of Obstetrics and Gynaecology Ekiti State University, Ado Ekiti, Nigeria

E-mail address: aadefisan@yahoo.com

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ABSTRACT

Background: cervical cancer which poses a global public health issue is the most common gynaecologic cancer worldwide. Cervical cancer screening with Papanicolaou (Pap) smear testing at regular intervals has been proven to be effective prevention, its uptake has been rather poor. This study aimed to determine the knowledge and the uptake of CC screening among women of reproductive age attending a Primary Health Centre.

Methods: A pretested, semi structured, interviewer guided questionnaire were administered to 216 participants to elicit their knowledge of cervical cancer, as well as their acceptance of cervical cancer screening practices.

Results: Knowledge of cervical cancer was high among respondents as 72.2% of them have heard of the condition before. Almost half (46.8%) of the respondents believed that having multiple sexual partners is a risk

factor for cervical cancer while 67(31.0%) and 80(37.0%) recognized prolonged use of oral contraceptive pills and HPV infection as risk factors respectively. Only 21.9% recognized regular screening as a method of cervical cancer prevention. Some 75.9% wanted cervical cancer screening done despite their poor knowledge of the procedure while only 5.1% had had cervical cancer screening done before.

Conclusion: The practice of cervical cancer screening is still very low amongst the study population. There is an urgent and critical need for a population-based education campaign on cervical cancer and the benefits of screening. Screening services should be incorporated into the existing primary healthcare services.

Key words: cervical cancer, human papillomavirus, pap smear,

INTRODUCTION

Cancer of the cervix is the most common gynaecological cancer worldwide and it

poses a global public health issue. Cervical cancer (CC) usually occurs in the 5th or 6th decade of life at a mean age of 54 years and it is malignant. The pre-malignant stage of the disease usually occurs in younger women below the age of 40¹. Over 70% of cervical cancer cases are linked to genital infection with human papillomavirus (HPV)-16 and 18 strains². It is estimated that approximately 500,000 new cases of cervical cancers are diagnosed annually with 80% occurring in developing countries and it is the cause of 266,000 deaths each year worldwide, it is the second most common cancer among women³. The incidence of HPV in women of the reproductive age group who are especially sexually active is high, as the major means of its spread is through sexual contact. Apart from HPV infection, other risk factors associated with carcinoma of the cervix includes multiple sexual partners, early age at first sexual intercourse, early age at first childbirth, multiparity, smoking, long term use of oral contraceptive pills, immunosuppressed states, Co-infection with human immunodeficiency virus (HIV), Chlamydia trachomatis and herpes simplex virus type-2¹. Cervical cancer screening with Papanicolaou (Pap) smear testing at regular intervals has been proven as an effective public health intervention in the prevention and subsequent reduction of the incidence, morbidity and mortality of cervical cancer⁴. Screening could be either by organized mass screening program or opportunistic screening. Organized mass screening of the populace targeting all women at risk has been shown to be more effective⁴. Cervical cancer can be prevented with immunization against HPV infection among adolescents prior to sexual debut⁵. The population-based method of screening

has greatly reduced the incidence and mortality of cervical cancer by as much as 65% in the developed world over the last 40 years. Opportunistic screening that targets smaller proportion of women is the most commonly practiced method in Nigeria. Some studies have reported very low levels of uptake of Pap smear even in areas where the screening test are available¹⁻¹². Wide variation exists between awareness of cervical cancer and uptake of cervical cancer screening such as Pap smear test⁶⁻⁹. Several factors have been shown to influence the uptake of Pap smears. Recommendation by doctors or nurses, fear of cervical cancer and test affordability have been shown to increase the uptake of Pap smear test^{8,11}. Conversely, lack of awareness of cervical cancer, indecision about test, fear of side effects, cost, and accessibility have been identified as barriers to the uptake of Pap smear^{8,11}. The attitude of health care providers also plays a significant role in accepting to do cervical cancer screening⁸.

The uptake of cervical cancer screening is relatively low in Nigeria compared with other more developed countries. In a study conducted among civil servants in Delta State, Nigeria, Okwe et al⁸ found out that only 10% of the respondents had ever done the screening test while Okunowo et al¹¹ in Lagos, Nigeria found 37.4% Pap smear screening uptake rate among urban women.

The objectives of this study were to; (i) assess the knowledge of cervical cancer screening among women of reproductive age group attending Primary Health Centre, Enuwa, Ile-Ife. (ii) elicit barriers to cervical cancer screening among them (iii) determine the uptake of cervical cancer screening among these women.

METHODS

This cross-sectional survey was done between August and September 2016 at Primary Health Centre, Enuwa, Ile-Ife, Osun State, Nigeria. This health Centre is located in Ife Central Local Government (LGA) which is one of two LGAs in Ile-Ife. The facility enjoys huge patronage from within and outside the community. It renders primary care services ranging from antenatal care, delivery services, postnatal care, family planning, immunization, laboratory services, and medical outpatient clinic. The facility comprised of health workers of different categories; medical officers, nurses, community health officers and community health extension workers. Ile-Ife is one of the major cities in Osun State in Southern Nigeria with a population of mostly Yoruba speaking Christians. The city is home to two universities (Obafemi Awolowo University and the privately-owned Oduduwa University), one polytechnic, one television station (Nigerian Television Authority), and two radio stations. There are teaching hospital, a Comprehensive Health Centre and four Basic Health Centres serving the population within Ile-Ife and its environs. Permission for the study was obtained from the Ife central LGA authority

The sample size for this study was calculated using the formula below according to Araoye MO¹³, with 16% having good knowledge of cervical cancer screening in this environment Feyi-Waboso PA¹⁴: $n = Z^2(1-p)p/d^2$ where n=minimum sample size, z=standard normal variance=1.96 at 95% confidence interval, d=Absolute standard error=0.05, p=prevalence=16%. Using the above formula, the calculated sample size was approximately 206. Then 5% of the

calculated sample size was added to compensate for non-responders. Therefore, Two hundred and sixteen clients were recruited.

Women of the reproductive age group of 19 to 49 years attending the Primary Health Centre participated in this study. A convenience sampling technique was used whereby consecutive consenting women who met the inclusion criteria were recruited for the study. Women who were too ill or those that did not consent to the study were excluded. The study instrument was a pretested, semi-structured, interviewer-guided questionnaire. The questionnaire consisted of three parts that included socio demographic information, knowledge of cervical cancer, and acceptance of cervical cancer screening practices. The questionnaire contained both open- and close-ended questions. The questions were translated into Yoruba by a trained research assistant for those who could not fully understand the English Language. The study participants also gave informed consent after the details of the study were explained to each of them and voluntary participation solicited.

Data were analyzed using the SPSS software (version 18). Descriptive tables and inferential chi-square tests were used where relevant with statistical significance set at $p < 0.05$.

RESULTS

From the two hundred and twenty-five questionnaires administered within the study duration, two hundred and sixteen (96%) were correctly completed and the analysis was based on them. The socio-demographic characteristics of the respondents are shown in table 1. Two (1.0%) of the respondents were older than 46 years while most of them, 123(57.0%)

were between the ages of 26-35 years. The majority, 126 (75%) were married, Christians (56.0%), and of Yoruba ethnicity (90.0%). Less than 20% of the respondents had tertiary education while the majority (64.8%) had no form of formal education or primary education. Knowledge of cervical cancer and its predisposing factors are depicted in table 2. Knowledge of cervical cancer was high among respondents as 72.2% of them have heard of the condition before. Almost half (46.8%) of the respondents believed that having multiple sexual partners is a risk factor for cervical cancer while 67(31.0%) and 80(37.0%) recognized prolonged use of oral contraceptive pills and HPV infection as risk factors respectively (table 2). Table 3 showed the knowledge of cervical cancer prevention among the study population. The majority (70.4%) believed cervical

cancer cannot be prevented while a paltry 19.9% of the respondents were aware of cervical cancer screening. Only 21.9% recognized regular screening as a method of cervical cancer prevention. Table 4 shows the respondents' acceptance of cervical cancer screening. The majority, 164 (75.9%) wanted cervical cancer screening done despite their poor knowledge of cervical cancer screening while only 11(5.1%) of the respondents had had cervical cancer screening done.

Table 5 shows the reasons the respondents gave for not doing the cervical screening tests. Lack of awareness of the test (51.2%) and where to get the test done (23.9%) were the main reasons for not doing the test. Other reasons included fear of detecting cervical cancer and the cost of the test while others believed that the test is embarrassing and painful.

Table 1: sociodemographic characteristics of respondents

Variables	Frequency (n=216)	Percentage (%)
Age Range		
16-25	74	34.0
26-35	123	57.0
36-45	17	8.0
46-49	2	1.0
Marital status		
Married	162	75.0
Single	46	21.3
Widow	4	1.9
Separated	4	1.9
Educational Status		
No formal education	40	18.5
Primary education	100	46.3
Secondary education	46	21.3
Tertiary education	30	13.9
Occupation		

Artisan	69	32.0
Trading	63	29.0
Nursing	4	2.0
Civil servant	43	20.0
Schooling	37	17.0
Religion		
Christianity	121	56.0
Islam	95	44.0
Ethnicity		
Yoruba	195	90.0
Igbo	13	6.0
Hausa	4	2.0
Others	4	2.0

Table 2: Knowledge of cervical cancer (n=216)

	Frequency	percentage
Ever heard about cervical cancer?		
Yes	156	72.2
No	60	27.8
Awareness of risk factors for cervical cancer*		
Multiple sexual partners	101	46.8
HPV infection	80	37.0
Prolonged use of oral contraceptives	67	31.0
Early age at first intercourse	84	38.9
Having many children	30	13.9
Poor hygiene	50	23.1
Cigarette smoking	42	19.5

*Multiple responses

Table 3: Knowledge of cervical cancer prevention

	Frequency	Percentage
Can cervical cancer be prevented?		
Yes	64	29.6
No	152	70.4
Are you aware of cervical cancer screening methods?		
Yes	43	19.9
No	173	80.1
Methods of prevention of cervical cancer (n=64)		
Regular Cervical cancer screening	14	21.9
Avoid multiple sexual partners	29	45.3
Avoid early sexual intercourse	10	15.6
HPV vaccination	8	12.5

Avoid smoking	3	4.7
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Table 4: Acceptance of respondent of cervical cancer screening

	Yes	No	Undecided
	N (%)	N (%)	N (%)
Have you ever had cervical cancer screening test done?	11(5.1)	205(94.9)	
Will you like to have cervical cancer screening done?	164(75.9)	17(7.9)	35(16.2)

Table 5: Respondents main reasons for not doing cervical cancer screening (N=205)

	Frequency	Percentage (%)
The test is painful	9	4.4
It is expensive	12	5.9
The process of doing the test is embarrassing	14	6.8
I am not aware of the test	105	51.2
I am afraid that cervical cancer may be detected	16	7.8
I don't know where to get the test done	49	23.9

DISCUSSION

This research work was conducted to determine the awareness of cervical cancer and cervical cancer screening uptake among the attendees of a primary health center in a semi-urban region of southwestern Nigeria. The majority (72.2%) of the respondents expectedly were aware of cervical cancer. This is similar to previous studies^{1,3-8} but higher than cited by others^{2,10-12}. Kahesa et al¹⁰ reported CC awareness of 52.8% in Tanzania while Idowu et al¹², Toye et al², and Okunowo et al¹¹ each reported an awareness rate of 67% from Ilorin and Lagos, Nigeria respectively.

The knowledge of risk factors for CC was generally poor among our study population

with only 37% recognizing HPV as a causative factor. This is similar to the findings of Okunowo et al⁴ that reported 15.6% knowledge of risk factors whereas 86% of the respondents knew HPV as a cause according to Lo et al⁵. This difference can be attributed to the study population as Lo et al sampled school teachers whose general knowledge is superior. The awareness of CC screening methods was also low in this study population. This is a sharp contrast from other studies^{1,5,11,12}.

The majority of the urban women in our study had a low CC screening uptake despite their relatively good awareness of the disease. This is similar to the findings in many urban centres^{3,4,6,7,9,11,12,15,16}. Owoeye et al¹ surprisingly reported a 50.6% uptake

of CC screening amongst female staffs of Niger Delta University in Nigeria while Eze et al¹⁷ reported abysmally low screening uptake of 0.6%. This low CC screening uptake is not surprising, because cervical cancer screening in many resource-poor countries has been largely opportunistic in nature. Despite the availability of these services in these centers, the uptake of cervical cancer screening has consistently remained low, resulting in low screening rates and defective cervical cancer screening practice. Reasons adduced for the low screening uptake in our study population included lack of awareness, fear of detecting cervical cancer, cost, and lack of knowledge of centers offering screening services. These reasons are not different from what obtains in another resource-poor countries^{1,3,4,11,16,17}. This underscores the need for awareness of cervical cancer and its prevention among the study population.

CONCLUSION

The practice of cervical cancer screening is still very low amongst women of the reproductive age group in Ile Ife. There is an urgent and critical need for a population-based education campaign on cervical cancer and the benefits of screening. Screening services should be incorporated into the existing primary healthcare services.

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