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Knowledge and Acceptability of Cervical Cancer Screening Among Ante-natal Women in A Tertiary Health Institution in North-Central Nigeria

Changkat Lucky Lohnan[1], Oboyi Salome Eneadanu[2], Momoh Christiana Mary[1], Bawa Dogara Bure[2], Yonah Esther Warit[3]

[1]Department of Obstetrics and Gynaecology, Federal University Teaching Hospital, Lafia, Nasarawa State
[2]Department of Obstetrics and Gynaecology, Federal Medical Centre, Makurdi, Benue State
[3]Department of Public Health, Ministry of Health, Nasarawa State.

Corresponding Author:
Dr. Changkat Lucky Lohnan
Department of Obstetrics and Gynaecology Federal University Teaching Hospital,
Lafia, Nasarawa State, Nigeria.

Abstract

Background: Cervical cancer is the most common female cancer in the developing countries. Worldwide, about half a million women acquire the disease annually and about two-third are from the developing countries. The high rate of prevalence with its associated morbidity and mortality in our environment has made cervical cancer a public health problem. Fortunately, it is a preventable cancer and screening can lead to detection of premalignant lesion and early stage of the disease thus preventing its occurrence and reducing the morbidity and mortality associated with the condition. This study was undertaken to assess the knowledge and acceptance of cervical cancer screening among women attending antenatal clinic at the Federal Medical Centre, Makurdi, North Central Nigeria.

Methods: This study was a cross-sectional survey of 345 among women attending antenatal clinic at the Federal Medical Centre, Makurdi, North Central Nigeria. The Knowledge and willingness to accept cervical screening by these women were assessed using a self- administered structured questionnaire.

Results:Three hundred and forty five (345) women answered the questionnaire and majority of respondents were between the ages of 25-29. Majority, 87(25.2%) were housewives. 176(51.0%) had secondary education while 105(30.4%) had tertiary education.

This study revealed that majority of the respondents has a substantial awareness and knowledge of Cervical Cancer screening (68.4%). While 47.5% were ready to undergo Cervical Cancer screening and 66.1% will tell their family members to go for screening.

Conclusion: As the knowledge and acceptability of cervical cancer screening was high, more facilities could be made available, accessible, and affordable. Also, health education to improve awareness of cervical cancer screening among antenatal women can improve awareness and uptake of the screening procedure.

Keywords: Acceptability, Cervical Cancer, Knowledge, Nigeria, Screening.

Introduction

Over the years, cervical cancer (CC), an extant lethal disease, has negatively impacted several women, yet not all women are informed of the possible dangers of not getting screened. Globally, Cervical cancer is second only to breast cancer as the most common female malignancy in both incidence and mortality.[1,2] It is the most common gynaecological malignancy in developing countries.[3] Annually, Africa records 20% of the new CC cases worldwide, and CC is the leading cause of cancer deaths among females in sub-Saharan Africa. It is the leading cause of cancer related death in developing countries[4] accounting for 528,000 new diagnosis and 266,000 deaths every year worldwide,[3] Of the new cases 80- 85 percent occur in the undeveloped countries and in some of these countries it is the commonest cancer in women.[1-3,5] It is a

leading public health issue especially in developing countries.[1]

Fortunately, cervical cancer progresses from precursor lesions called premalignant lesions. Premalignant lesions of the cervix and cervical cancer is a potentially preventable and curable disease and is considered a sexually transmitted disease.[6,7] Highly oncogenic strains of the human papilloma virus (HPV) which is a sexually transmitted infection has been identified as a necessary cause.[8,9] Oncogenic strains of HPV has been seen in 99.7% of cases of cervical cancer.[9]

Early coitarche, early marriage, high parity, multiple sexual partners, immunosuppression, cigarette smoking, race, age and low socio-economic status are some of the risk factors for cervical cancer.[8]

Early screening often detects these premalignant lesions which can be treated before advancing into cancer. When cancer of the cervix is found early before progressing to the invasive level, the probability of treating it is high.[10] In a study conducted in England, Landy et al[11] revealed that the mortality rate of CC would be 5.3 times higher in the absence of screening, while regular screening will make the mortality rate 65% lower. Similarly, various other studies showed that CC screening resulted in a decline in the incidence and mortality rate of CC by up to 90%.[12] Furthermore, a study reports that between 50% and 90% of women who die or are diagnosed with CC have not been screened for CC.[13]

Screening for the precursor lesions of the cervix has been in use for a long time in the industrially advanced countries.[8] The screening test has led to a marked reduction in cervical cancer death rate by about 70%.[8] The main screening test, the Pap smear, developed by George Papanicolaou in 1943 has been the gold standard for the detection of premalignant and indeed early malignant lesions of the cervix.[8] Others are visual inspection of the cervix with acetic acid, visual inspection with magnification, colposcopy and liquid based cytology methods.[8] Potential benefits of cervical cancer screening include; detection of a disease at its pre-invasive state, improved prognosis for treated cases, reduced morbidity after treatment of the screened cases, reassurance of those with negative tests and cost effective use of healthcare resources.[8]

Despite the proven benefits of CC screening, Nigeria only has accidental and unevenly distributed CC screening services, reaching less than 9% of women needing the services.[14] In addition to Nigeria's weak health system and lack of cervical cancer control policy, previous studies have also recognised that lack of awareness, trivialisation of CC, poverty, a low number of female providers, concern for positive screening results and sociocultural norms contribute significantly to poor uptake of CC services, HPV test and pap smear in Nigeria.[15]

Although Abiodun et al[16] noted that the awareness and knowledge of CC and screening were very low, recent data on these variables are limited in this State. Additionally, it is essential to understand the knowledge and acceptability of CC screening and its associated factors among this population, as they are at a high risk of contracting HPV infection.[17] Having this understanding will help develop tailored interventions to address the gaps that might be identified in the knowledge and awareness.

Materials and Methods

This descriptive cross-sectional survey was conducted to assess the knowledge and acceptability of cervical cancer screening among women attending antenatal clinic at the Federal Medical Centre Makurdi, North central Nigeria from January to July 2023. Participants were made to complete a questionnaire on the knowledge and acceptance of cervical cancer screening. The questionnaires were both self and provider administered in order to be able to clarify gray areas. The self-administered questionnaires were checked for completeness at return. The results were analyzed and presented in tables as frequencies and percentages.

Results

Three hundred and fourty-five women attending the antenatal clinic of the Federal Medical Centre, Makurdi answered the questionnaire.

Table 1: Socio-demographic variables

Respondents (N) = 345			
Demographic	**Category**	**Frequency (F)**	**Percentage (%)**
Age	Less than 20	25	7.2

	20-24	108	31.3
	25-29	168	48.7
	30-34	40	11.6
	35 and above	4	1.2
Educational Status	Informal	6	1.7
	Primary	58	16.8
	Secondary	176	51.0
	Tertiary		
Marital status	Married	329	95.4
	Single	12	3.5
	Divorced/separated	4	1.2
Occupation	Housewife	87	25.2
	Civil Servants	79	22.9
	Business	49	14.2
	Farmers	63	18.3
	Others	67	19.4

Table 1 showed that 168(48.7%) of the respondents were between the ages of 25-29. Eighty-seven (87) accounting for (25.2%) of the respondent were housewife while 79(22.9%) were civil servants. 176(51.0%) had secondary education while 105(30.4%) had tertiary education.

Table 2. Knowledge level of Cervical Cancer screening.

Variable	Yes Frequency (%)	No Frequency (%)	I don't Know Frequency (%)

Knowledge of CC screening	228 (66.1%)	109 (31.6%)	8 (2.3%)
Information on CC screening from health worker	168 (48.7%)	153 (44.3%)	24 (7.0%)
Benefits of CC Screening	245 (71.0%)	16 (4.6%)	84 (24.3%)
Knowledge of category of women to be screened	113 (32.8%)	42 (12.2%)	190 (5.1%)
Awareness of schedule of screening	211(61.2%)	66 (19.1%)	68 (19.7%)

Table 2 showed that 228 (66.1%) of the respondents had heard about Cervical Cancer screening and said yes to the question regarding the Pap smear as a method of Cervical Cancer screening. Around two-thirds (61.2%) had good knowledge of the schedules of the screening while 245 (71.0%) said that screening for cervical cancer would be beneficial.

Table 3. Level of acceptability of CC screening.

Variable	Strongly agree	Agree	Undecided	Disagree	Strongly Disagree
Readiness to take cervical screening test	58 (16.8%)	106 (30.7%)	99 (28.7%)	62 (18.0%)	20 (5.8%)
I am scared of being diagnosed with CC	40 (11.6%)	88 (25.5%)	101 (29.5%)	62 (18.0%)	54 15.7%)
I feel the screening is embarrassing for me	10 (2.8%)	65 (18.8%)	98 (28.4%)	84 (24.3%	88 (25.5%)
Recommending CC Screening to other family members	83 (24.1%)	145 (42.0%)	95 (27.5%)	20 (5.8%)	2 (0.6%)

Table 3 showed that 164 (47.5%) of the respondents are ready to do a cervical cancer screening test, 99 (28.7%) were undecided while 228 (66.1%) are willing to tell their family members to take the test.

Discussion

This study aimed to assess the level of knowledge and acceptability of CC screening among the women attending antenatal clinic at the Federal Medical Centre, Makurdi. Majority (68.4%) of the respondents had a high level of knowledge of CC screening. Similarly, Neji et al[18] evaluated knowledge, attitude, and practice of CC screening among women in a tertiary institution in Calabar and found that 166 students (97.08%) have heard of CC screening, while five students (2.92%) have never heard of CC screening. This is similar to the findings of this study. Furthermore, Anyebe et al[10] examined the knowledge and practice of CC screening amongst nurses at Ahmadu Bello University Teaching Hospital Zaria and the study found that 86.7% of their respondents had high knowledge of CC screening; it equally revealed that most of the women have heard about CC screening, and about 78.5% know that CC screening is done by a licensed health professional.

Unlike the current study, which showed a good level of knowledge about cancer screening among respondents, Abiodun et al[16] in a similar study conducted in Nigeria, reported an extremely poor level of knowledge. Possible factors responsible for this variation are the sociodemographic characteristics of respondents. Particularly, the respondents in the current study had majority of them having a secondary and tertiary education. On the other hand, most (42.4%) of the respondents in the study conducted by Abiodun et al[16] had only completed secondary school, which was the highest level of education in the study. Notably, knowledge of CC and Pap smear was significantly lower among outpatients with secondary education.[16]

The current study revealed that majority of the respondents had a high level of acceptability of CC screening. This was in tandem with the finding of Ezechi et al[19] who also found a high level of CC screening acceptance rate (79.8%), despite a moderate level of awareness of CC and its testing among women who were HIV-positive. Having a tertiary education, having no living child, having a recent HIV diagnosis and awareness of CC were associated with acceptance of CC screening. A cross-sectional descriptive study[20] conducted among 200 female undergraduates in the School of Basic Medical Sciences, University of Benin, showed that 86.7% of the respondents had knowledge of CC and accepted the screening.

Although our results suggest that majority of the respondents have a high level of knowledge of CC screening, 109(31.6%) of the respondents agreed that they did not have the correct information on CC screening. This highlights the need for more interventions to improve the knowledge and awareness of CC screening among this population. This gap in awareness might be one of the factors inhibiting the acceptability of CC screening. It can also be deduced that about 11.6% and 25.5% of the respondents, respectively, strongly agreed and agreed that they were scared of being diagnosed with CC, and a total of 88 respondents making up 25.5% of the respondents strongly disagreed that screening is embarrassing for them. Similarly, a study conducted among Botswana females on CC screening revealed 315 (94%) attributed CC to smoking and 301 (89.9%) to early sexual debut.[21] The study further revealed that the overall Pap smear screening rate was 92 of 335 women (27.5%). Those who perceived themselves to be at risk of contracting CC were 203 (60.6%) and are 1.8 times more likely to go for a Pap smear than those who perceived it to be safe.[21]

We found a significant knowledge of CC screening and good acceptability among women attending antenatal clinic at the Federal Medical Centre, Makurdi, Benue State, North-Central, Nigeria. A systematic review of educational interventions to promote CC screening reported that educational interventions improved the knowledge and uptake of CC screening.[22]

Conclusion

This study showed that the respondents had good knowledge of cervical Cancer screening. Similarly, they demonstrated a high level of acceptability of CC screening. However, a significant proportion was yet to be screened. Therefore, it is important to make screening facilities available where it can be easily affordable and accessible. Also, more educational interventions are warranted as over one-third of our respondents reported not having the right information on CC screening.

Declaration

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