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Uptake of Cervical Cancer Screening Among Female Medical Doctors in a Tertiary Health Care Institution, South-East Nigeria

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ABSTRACT

Background: Cervical cancer remains a major cause of mortality among women, particularly in low-resource and developing countries like Nigeria. The attitude of doctors towards the uptake of cancer screening program may directly influence the uptake in the general population.

Aim: To assess the level of uptake of cervical cancer screening amongst female medical doctors in a tertiary healthcare institution, South-east Nigeria.

Methodology: A hospital-based cross-sectional study conducted among 85 female medical doctors using systematic random sampling technique. Data was using a self-administered questionnaire. Results were analyzed using SPSS version 22. P-value <0.05.

Result: The mean age of the respondents was 34.2±8.4 years. Less than half (35.3%) of the respondents had ever undergone cervical cancer screening with majority (90%) had pap smear test done. Only 63.3% had been adherent since onset of uptake of screening. There was a statistically significant association between accessibility of services, type of facility and payment of test with screening uptake. ($\chi 2 = 64.8$, $p<0.001$, $\chi 2 = 85.0$, $p< 0.001$, $\chi 2 = 58.5$, $p<0.001$) respectively.

Conclusion and Recommendation: The uptake of cervical cancer screening among female medical doctors is low. There is need for the Medical Women's Association of Nigeria (MWAN), in partnership with NGOs to organize programs which offer cervical cancer screening exercises for her members at affordable or no cost.

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Introduction

Cervical cancer is the fourth most common cancer in women globally [1]. In 2018, approximately 570,000 cases of cervical cancer and 311,000 deaths from this disease occurred [1]. A great disparity exists between developed and developing countries concerning cervical cancer incidence and mortality [2]. Developed countries have experienced a steady decline in the incidence and mortality from cervical cancer, which is attributed to well-organized screening programs and infrastructure that provide appropriate follow-up and treatment [2]. In Nigeria, cervical cancer is the commonest malignancy affecting the female genital tract, with about 10,000 new diagnoses and over 8000 deaths occurring yearly. Also, around 36.6 million female Nigerians over 15 years are at risk of having cancer of the cervix [3].

The uptake of Cervical cancer screening services in low- and middle-income countries, particularly in Nigeria, is below average. The attitude of doctors towards the uptake of cancer screening programs may directly influence the uptake in the general population. [4]

Some studies have shown that female medical doctors' knowledge and awareness about cervical cancer and screening do not translate to uptake, as only a few of them have a good disposition towards undergoing screening [5,6,7].

Understanding the level of uptake of the screening services among female medical doctors who the society perceives as custodians of health will go a long way to ensure the development of health policies and increased participation in screening, and progressively reducing cases of cervical cancer mortality in women.

This study aims to assess the level of uptake of cervical cancer screening amongst female medical doctors in a tertiary healthcare institution, South-east Nigeria.

Materials and Methods

This study was a hospital-based cross-sectional study among Female Medical doctors who were currently working at Nnamdi Azikiwe Teaching Hospital, Nnewi, Anambra State.

Inclusion Criteria: Female Medical doctors working at NAUTH ≥ 3months who gave consent for the study.

Exclusion Criteria: Those who were not willing to participate, or not around during the period of the data collection and who have amputated cervix.

Sample Size: An 85-sample size was obtained using the Cochran formula, which accounted for a 10% non-response rate.

Sampling Technique: A systematic random sampling method was used, with a sampling interval of 2. The first participant was randomly selected by ballot.

Data Collection: Data were collected using a self-administered semi-structured questionnaire. The questionnaire assessed the sociodemographic data, which included age, marital status, and years of work experience. It also had information on uptake of cervical cancer screening, adherence of the screening service following the screening guidelines and factors that affected the uptake of cervical cancer screening.

Data Analysis: Data was analysed using the Statistical Package for Social Sciences (SPSS) version 22. Categorical variables were analysed using percentages and proportions and continuous variables were analysed using mean and standard deviation. Chi square test (or Fischer's exact, when appropriate) was used to analyse the association between categorical variables. P-value set at 0.05.

Ethical Approval: This was gotten from Nnamdi Azikiwe Teaching Hospital Ethical Committee (NAUTHEC). Informed consent was obtained before the questionnaire was administered. Information obtained from the questionnaires were used for the purpose of this study and participant's identity was kept confidential.

Results

The data used for this study were collected among 85 participants. All questionnaires were retrieved, giving a response rate of 100%.

The mean age of the participants was 34.2±8.4 years. A higher proportion (77.6%) were married, while 63.5% had practised as a doctor for more than 12 months as shown in Table 1 below.

Table 1: Socio-Demographic Characteristics of Participants

Variable	Frequency(n)	Percentage (%)
Age (years)	**n=85**	
21-30	34	40.0
31-40	30	35.3
41-50	19	22.4
51-60	2	2.4
Mean age: 34.2±8.4		
Marital status		
Single	19	22.4
Married	66	77.6
Divorced/separated	0	0
Widowed	0	0
Duration of practice as a doctor (months)		
3-6	29	34.1
7-9	2	2.4
10-12	0	0
Greater than 12	54	63.5

Out of 85 participants, 30 (35.3%) reported that they had utilized a cervical cancer screening method, majority 27 (90%) utilized the Pap smear test and 18 (60%) had their last screening ≥ 2 years. As shown in Table 2 below;

Table 2: Uptake of Cervical Cancer Screening

Variable	Frequency (n)	Percentage (%)
Ever utilized any cervical screening test	**n =85**	
Yes	30	35.3
No	55	64.7
Screening test done (n=30)		
Pap smear test	27	90.0
HPV test	0	0
Visual inspection with acetic acid	3	10.0
When the latest test was done (n=30)		

3 months	6	20.0
6 months	3	10.0
12 months	3	10.0
≥2 years	18	60.0

Majority, 25 (83.3%) of the respondents had only done the screening once, 19 (63.3%) have been screened within the last 3 years. As shown in Table 3 below;

Table 3: Adherence to Cervical Cancer Screening

Variable	Frequency (n)	Percentage (%)
Number of times screening test was take (n=30)		
1	25	83.3
2	4	13.3
3	0	0
4	1	3.3
>4	0	0
Have been screened within the last 3 years		
Yes	19	63.3
No	11	36.7

Table 4 below shows a statistically significant association between accessibility of services, type of facility and payment of test with screening uptake. ($\chi2 = 64.8$, $p<0.001$, $\chi2 = 85.0$, $p< 0.001$, $\chi2 = 58.5$, $p<0.001$) respectively

Table 4: Factors Associated with Uptake of Cervical Cancer Screening

Variables	Screened (n=30)	Not screened (n=55)	X2 (df=1)	P-value
Accessibility to screening services Yes No	 25 5	 0 55	64.8	< 0.001*
Type of screening facility Private Public	 30 0	 0 55	85.0	<0.001*
Payment made for the screening Yes No	 23 7	 0 55	58.5	<0.001*

Majority (86.7%) of the participants utilized the screening services voluntarily as shown in Table 5 below;

Table 5: Reasons For Utilization of the Screening Services

Reason for doing the test (n=30)	Frequency	percentage
Having signs and symptoms	2	6.7
Voluntarily	26	86.7
Persuasion or advice from colleagues	0	0
Others	2	6.7

Discussion

The uptake of cervical cancer screening amongst female medical doctors in NAUTH was 35.3% [8]. A similar study conducted in Saudi-Arabia found an uptake of 26.2%, while another study in Kenya observed an uptake of 41% [9].

Pap smear was the most common screening method of choice utilized by the participants. The majority (83.3%) of the participants had screened once since the onset of utilization of the screening services, as it was their first screening exercise.

A higher percentage, 63.3% of the participants who had asserted to have been screened in the last 3 years. This finding is higher than a similar study conducted by Jagun et al in 2016, where 30.1% of the participants were screened in the last 3 years.[5] This increase may be due to increased awareness over the years. The participants agreed that the cervical cancer screening services were easily accessible, were done in private establishments, and they paid for the screening services offered to them. The screening services obtained were done voluntarily. There was a statistically significant association between accessibility of services, type of facility and payment of test with screening uptake. ($\chi2 = 64.8$, $p<0.001$, $\chi2 = 85.0$, $p< 0.001$, $\chi2 = 58.5$, $p<0.001$) respectively.

Limitation of Study: This was a cross-sectional study, therefore cause and cause-and-effect connection cannot be proved. Being a hospital-based study, its findings cannot be generalized.

Conclusion and Recommendation

In this study, the uptake of cervical cancer screening among female medical doctors is low. This shows that knowledge does not translate to practice with regards to cervical cancer screening amongst female medical doctors. There is a wide knowledge-uptake gap which indirectly contributes to the increasing mortality rates in cervical cancer cases.

Therefore, there is need for the Medical Women's Association of Nigeria (MWAN), in partnership with NGOs to regularly organize programs which offer cervical cancer screening exercises for her members at affordable or no cost.

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