

## Uptake of cervical cancer screening services among female medical practitioners in Ogun State, South-West Nigeria.

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### Abstract

**Background:** There is an increasing awareness of cancer screening services in the general population, but the uptake of the services varies.

**Objective:** To determine the uptake of cervical cancer screening services among female medical doctors as service providers.

**Methods:** This was a questionnaire-based, cross-sectional, descriptive study of female doctors practising in Ogun State, Nigeria. The questionnaires were self-administered, and convenience sampling method was used.

**Results:** A total of 85 female doctors were surveyed. A little over half of the respondents (57.6%) reported routine medical checks and 54.2% of the respondents had a check up in the last two years. Seventy percent of the respondents who had a routine medical check-up and screening for cervical cancer were within the age range 31-50 years, and there were significant relationships between age and routine medical check-up and screening for cervical cancer (p values =0.014 and 0.005 respectively. Thirty-three of the respondents (39.8%) had ever been screened for cervical cancer while only 30.1% of the respondents had been screened for cervical cancer in the last three years. The majority of the respondents (59.8%) did not approve of making cervical cancer screening a condition for social benefits.

**Conclusion:** Female medical doctors had a low uptake rate for cervical cancer screening services. The low uptake may adversely affect the cervical cancer screening campaigns targeted at the general population. Mandatory cervical cancer screening, as a prerequisite for social benefit, may improve the uptake rates for the screening services.

**Keywords:** Cervical cancer, Cancer screening, Female doctors, Medical check-up, Uptake rate

### Introduction

Cervical cancer is a condition which continues to attract attention in the reproductive health care services in the developing world, Nigeria inclusive.<sup>[1]</sup> This results from the non-inclusion of the screening services in the routine health care of

the woman and the lack of manpower for cytoscreening. The use of visual inspection method with the use of acetic acid or with Lugo's iodine was recommended for use in the developing countries. This recommendation may reduce the over-dependence on cytopathologists who are few and services are resource intensive.<sup>[2]</sup> In addition, the chemical methods have a high true positive rate, high sensitivity but low specificity compared to cytology.<sup>[3][4]</sup>

The uptake of cervical cancer screening (CCS) services refers to the proportion of women required to undergo screening in a given year

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with a positive test result.<sup>[5][6]</sup> The uptake is the most important factor in the design of any screening programme for any given particular population. Some of the factors which determine uptake for cervical cancer screening services include knowledge, attitude, educational level, age, parity and knowing a person with cervical cancer.<sup>[7]</sup> It is also plausible that, if the service provider is part of the screening population and knowing the consequences, it might significantly enhance the uptake rate

Cancer of the cervix affects an average of 12% of women worldwide, but the number doubles in Sub-Saharan African (SSA) with the prevalence of 20-25%.<sup>[8]</sup> Concerted efforts have been targeted at increasing the uptake of cervical cancer screening among different groups of women in a bid to stem the scourge of the disease. However, new cases of cervical cancer are still ten times more common in the sub-Saharan Africa compared to the other parts of the world.<sup>[9][10]</sup>

In the last three years, the Medical Women Association of Nigeria (MWAN), Ogun State branch, in conjunction with the Ogun State Government, had been organising cervical cancer screening programmes at a frequency of two to three screenings per year. Therefore, it is expected that female doctors, who are members of the Association, would take advantage of the screening provided for the general population of women. The attitude of health care workers and the uptake of cancer screening programme among health care workers may directly influence the uptake in the general population. Several studies have shown a poor uptake of cervical cancer screening services among health professionals, though a majority of them had the skills to evaluate Pap test.<sup>[11][12]</sup> However, it is important to add that only very few isolated studies focused on the uptake by female doctors.

The aim of this study was to determine the uptake of cervical cancer screening services among female doctors who also double as providers of such services.

## Methods

This study was a questionnaire-based, cross-sectional, descriptive survey of female doctors

practising in Ogun State. Total sampling technique was used. About 120 female doctors were on the nominal roll of the Medical Women Association of Nigeria, Ogun State branch.

The membership includes all the grades of medical practitioners ranging from interns to Specialist Consultants.

A total of 100 structured, self-administrable questionnaires were distributed among the members of the association. The female medical interns were excluded from the survey because they had not adequately participated in the activities and programmes of the association, given the short duration of the internship. The questionnaire was pre-tested among female doctors in a General Hospital outside Ogun State.

The questionnaires were distributed among female physicians at the various hospitals in Ogun State. The questionnaires were also distributed during MWAN General Meetings to make up for those missed at the hospitals. Permission to conduct the study was obtained from the leadership of MWAN and only consenting physicians were enrolled into the survey.

The questionnaire assessed the basic bio-data of respondents (age, marital status, religion) and the length of service in Ogun State. This section was followed by the assessment of the respondents on whether the respondents had routine medical tests, cervical cancer screening status and the method of screening used, the reason for the screening; the degree of involvement in the regular MWAN screening programmes and the willingness to vaccinate their daughters for cancer of the cervix. The data were processed using the SPSS software version 17. The data were described as frequencies and percentages and proportions were compared using the Chi-Squared test. Statistical significance was defined by p values less than 0.05.

## Results

A total of 85 questionnaires were returned properly filled. The socio-demographic characteristics of the respondents are shown in

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Table I. Majority of the respondents (75%) worked in tertiary and secondary health facilities and the distribution of the respondents according to their professional cadre were as follows: resident doctors (33; 38.8%), the specialists (26; 30.6%), medical officers (17; 20%) and the general practitioners (9; 10.6%).

A little over half (57.6%) of the respondents had a routine medical check-up, and 54.2% of these had had a medical check-up in the last two years. Routine medical check-up was the main reason for undergoing cervical cancer screening as shown in Table II.

Seventy percent of the women who had a routine medical check-up and screening for cervical cancer were within the age range 31-50 years. Table III shows the significant association between age, routine medical check-ups and screening for cervical cancer ( $p = 0.014$  and  $0.005$  respectively). On the other hand, no significant relationship between professional cadre and screening for cervical cancer was observed as shown in Table IV.

**Table I: Socio-demographic characteristics of the respondents**

Profile	Frequency	Percentage
<b>Age</b>		
21-30	9	10.6
31-40	47	55.3
41-50	23	27.1
>50	6	7.1
<b>Religion</b>		
Christianity	74	87.1
Islam	11	12.9
<b>Marital status</b>		
Married	68	80.0
Single	16	18.8
Widowed	1	1.2
<b>Duration of practice in Ogun State</b>		
< 6months	7	8.2
6 months to 1 year	6	7.1
1 to 2 years	21	24.7
>2 years	51	60.0
<b>Total</b>	<b>85</b>	<b>100.0</b>

**Table II: Reasons for Screening for Cancer of the Cervix**

Reasons	Frequency	Percentage
Gynaecological conditions	6	18.2
Opportunity of MWAN programme	1	3.0
Awareness	6	18.2
Part of routine medical check-up	17	51.5
Curiosity	1	3.0
Official demand by employer	1	3.0
Fear of cancer or death	1	3.0
<b>Total</b>	<b>33</b>	<b>100.0</b>

Thirty-three of the respondents (39.8%) have had to screen for cervical cancer at a point in time while only 30.1% of the respondents have had a screening in the last three years. About a quarter (22; 25.6%) of the respondents had previously participated in the MWAN-organized cervical cancer screening programmes.

Close to two-thirds (52; 61%) were aware of the availability of cervical cancer screening services at their place of work, 14 (16.5%) were not aware while 16 (18.8%) did not know. The three most important reasons for non-utilization of cervical cancer screening services as perceived by the respondents included poor accessibility (36; 44.4%), ignorance (25; 30.9%) and fear of adverse outcome (8; 9.9%).

**Table III: Relationship between age and frequency of routine medical check-up and cervical cancer screening**

		Age Groups (years)				Chi-Square Test	P-values
		21-30	31-40	41-50	>50		
Cervical cancer screening	Yes	0 ()	15 ()	12 ()	5 ()	18.803	0.005
	No	9 ()	29 ()	11 ()	0 ()		
Routine medical check-up	Yes	1 ()	27 ()	17 ()	4 ()	10.676	0.014
	No	8 ()	20 ()	6 ()	2 ()		

Close to a fifth of the respondents was not aware of the availability of the screening services at their respective places of work. The primary reason for non-screening among the defaulters was poor accessibility of the services as shown in Table V. Majority of the respondents (59.8%) recommended that cervical cancer screening should not be tied to a social benefit while almost all the respondents (81/82; 98.8%) agreed to vaccinate their female children against cervical cancer.

**Table IV: Relationship between professional cadres and Screening for Cervical Cancer**

	Screening for Cervical Cancer		Chi-Square Test	P-value
	Yes (n; %)	No (n; %)		
General Practitioner	3 (9.4)	5 (10.2)	8.778	0.186
Medical Officer of Health	3 (9.4)	13 (26.5)		
Resident Doctor	11 (34.4)	21 (42.9)		
Specialist/Consultant	15 (46.9)	10 (20.4)		

**Discussion**

The non-abeyance of the spread of the cancer of the cervix can be linked to the role of health professionals as promoters of the use of cervical cancer screening services.<sup>[13]</sup> The cervical cancer is the most common gynaecological cancer among African women, unlike the developed countries.<sup>[14]-[16]</sup> The main reason for the sustained rise in the incidence of this malignancy is the non-institutionalisation and utilisation of the screening services. The non-utilization borders on availability, accessibility, affordability of the services and most importantly, awareness of the need for the screening.<sup>[17]</sup> The findings in the present study also supported the known pattern of factors influencing the epidemiology of the condition.

**Table V: Reasons for non-utilization of screening services for cervical cancer**

Reasons	Frequency	Percentage
Poor accessibility	36	44.4
Cost	7	8.6
Ignorance	25	30.9
Fear of adverse outcome	8	9.9
Lack of motivation	3	3.7
Others	2	2.25
<b>Total</b>	<b>81</b>	<b>100.0</b>

Sixty percent of the respondents in the present study agreed that ignorance and accessibility were the primary constraints to the utilisation of cervical screening services. The health professionals are supposed to hold the highest level of awareness though this may vary according to job types and descriptions within the health sector.<sup>[18]</sup>

The medical doctors, by the scope of training, are expected to have a high level of awareness, but studies have shown that a high degree of knowledge does not translate to a high level of uptake of services.<sup>[19]</sup> The low uptake was corroborated in the present study where only 30.8% had had screening for cervical cancer in the preceding three years. Interestingly, this finding in Ogun State, Nigeria was 12% improvement on the uptake obtained in Enugu, Eastern Nigeria six years before the present study.<sup>[19]</sup>

The availability of the screening services was not an issue as a majority (63.4%) of the respondents had the facilities for screening at their places of work. Unfortunately, about 20% of the respondents did not know if screening services were available on their premises or not. This amounted to indifference. This observation was comparable (79.6%) though lesser than the finding from Sokoto, north-west Nigeria, among female health workers.<sup>[20]</sup>

In the opinion of the respondents, poor accessibility and ignorance were the principal reasons for not accessing cervical cancer screening services. The difficulty with accessibility in the form of finance, logistics and timing can also be circumvented by the respondents if the screening was considered a significant threat.

**Conclusion**

In the present study, female medical doctors had low uptake of screening services for cervical cancer. Interestingly, a large proportion of them claimed ignorance about the availability of the screening services within their places of work and had low involvement in the screening programmes organised by their professional

body. This may translate to weak supports for the various activities contrary to expectation. Mandatory cancer screening, as a prerequisite for some social benefit, was suggested by the respondents as this might enhance interest in the screening activities, ultimately improve the uptake of the screening services and contribute to the reduction of the prevalence of cervical cancer.

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