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DETERMINANTS OF THE UTILIZATION OF CERVICAL CANCER SCREENING SERVICES AMONG WOMEN: SOME EVIDENCE FROM NIGERIA.

KEY WORDS: Cervical cancer; cancer screening; diffusion of innovation; Human Papiloma Virus (HPV)

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ABSTRACT

This study investigates the factors affecting the utilization of cervical cancer screening services among women of childbearing age. Survey research design was adopted, and structured questionnaire was used to collect data from 235 women of childbearing age. Descriptive statistics and one-sample t test were used to analyze data. The factors affecting the utilization of cervical cancer screening services are lack of awareness of cervical cancer screening services and poor knowledge about where screening is done. The result is consistent with the diffusion of innovation theory invoked as theoretical framework for the study in which observability of cervical cancer screening and benefits is a key determinant of the voluntarily submission for screening. The study recommends that concerned stakeholders should create more awareness on cervical cancer , as early detection is crucial in winning the fight against the scourge.

INTRODUCTION

Cervical cancer undoubtedly threatens the good health and well-being of women as codified in the United Nation's Sustainable Development Goal 3 (SDG 3)[1]. Cervical cancer is prevalent among women all over the world, representing a life-threatening, ubiquitous disease. Cancer of the cervix ranks as the fourth most frequently diagnosed cancer and the fourth leading cause of cancer death in women[2,3].

In Nigeria the utilization of cervical cancer screening services is still low as most of the screenings are opportunistic where it depends on the women's initiative or healthcare providers[4,5].

This study aims to ascertain the factors affecting the utilization of cervical cancer screening services among women of childbearing age, using evidence from the University of Medical Sciences Teaching Hospital (UNIMEDTH) Akure.

Methodology

Research Design

The study adopted a quantitative research design in which numerical data were collected and analyzed quantitatively to address research questions. The survey method was adopted, using a questionnaire as the data collection instrument to collect primary data.

Population And Sample Selection

The population of the study is comprised of all women of childbearing age at the University of Medical Sciences Teaching Hospital (UNIMEDTH) Akure, Ondo State, in the southwest geo-political zone in Nigeria..

All consenting women of childbearing age who were present at the University of Medical Sciences Teaching Hospital Akure during the period of the study and were willing to participate were included while those who are critically ill on admission and those who refused to participate were excluded.

The sample size was determined from the population using Taro Yamane's formula which is stated below:

$$n = \frac{N}{1+N(e)^2}$$

n= corrected sample size, N = population size, and e= margin of error [Moe] e=0.005.

The sample size is two hundred and eighteen (218) women to be issued questionnaires in the facility. An additional 10% which is 22 was added to the sample size for attrition, this increased the sample size to 240 women that were administered questionnaires.

Method Of Data Analysis

The data were analyzed using descriptive statistics such as frequencies, percentages analysis and Mean analysis. Responses were coded as follows

Strongly Agree	(SA) = 5
Agree	(A) = 4
Undecided	(U) = 3
Disagree	(D) = 2
Strongly Disagree	(SD) = 1

One sample t-test was used as the inferential statistical tool. To draw an inference in the context of the one sample t-test, a mean value of '3' was assumed as the test value. A value of '3' on a 5-point scale was considered a threshold score for responses on an item to be accepted as valid. Thus, the total in the scale is 15/5 which is 3.0; implying that responses amounting to 3.0 and above of our mean criterion were accepted while responses below 3.0 are rejected. The test value of 3 was compared to the cluster mean for each of the constructs to ascertain statistically significant differences between expected and actual responses. A 5% significance level was assumed for concluding inferential statistics test results.

Ethical Consideration

Permission was obtained from the respondents and an explanation of the nature and significance of the study was duly given to ensure voluntary participation.

RESULTS AND ANALYSIS

Respondents' Attrition and Response Rate

From the two hundred and forty (240) copies of the study questionnaire distributed to women of childbearing age at the UNIMEDTH Akure, two hundred and thirty-five (235) copies were retrieved and nine (9) were voided due to multiple answering. The remaining Two hundred and twenty-six (226) copies were processed for analysis, representing an effective response rate of 94.17%.

Table 1: Utilization Rate Of Cervical Cancer Screening Services Among Women Of Childbearing Age

S/N	Items	Mean
1.	I am not aware of cervical cancer screening services talk more of utilization (Reverse coded)	2.96
2.	I am aware of cervical cancer screening services but have never presented myself for screening.	3.03

3.	I know about pap smear and I had voluntarily presented myself for the test.	2.91
4	My doctor recommended this test for me and I did it.	2.87
5.	I had done this test just once in my life.	2.87
6.	I had done this test more than once in my life.	2.37
7.	I normally do this test once in two years.	2.83
	Overall Mean	2.8343

With an overall Mean of 2.83 on the 5-point measurement scale (representing 56.6%), it is concluded that the utilization rate of cervical cancer screening services among women of childbearing age is low.

Table 2: Factors affecting the utilization of cervical cancer screening services among women of childbearing age

S/N	Items	5 SA	4 A	3 U	2 D	1 SD	Total	Mean	Decision
1.	I am not aware of cervical cancer screening services.	51 22.6 %	43 19.0%	42 18.6 %	42 18.6 %	48 21.2%	226 100 %	3.03	Accept
2.	I am not at risk of cervical cancer, so I don't need the screening test.	44 19.5 %	47 20.8%	44 19.5 %	43 19.0 %	48 21.2%	226 100 %	2.98	Reject
3.	I feel insecure when attempting cervical cancer screening.	43 19.0 %	43 19.0%	45 19.9 %	48 21.2 %	47 20.8%	226 100 %	2.94	Reject
4	Subjecting oneself for cervical cancer screening amount to devaluing one's womanhood.	41 18.1 %	43 19.0%	42 18.6 %	49 21.7 %	51 22.6%	226 100 %	2.88	Reject
5	I am afraid of the perceived pains involved in cervical cancer screening which is why I am avoiding it.	44 19.5 %	42 18.6%	44 19.5 %	50 22.1 %	46 20.4%	226 100 %	2.94	Reject
6.	I am afraid of being diagnosed of cancer.	45 19.9 %	47 20.8%	41 18.1 %	45 19.9 %	48 21.2%	226 100 %	2.98	Reject
7.	Cervical cancer screening services are too expensive to access.	44 19.5 %	43 19.0%	44 19.5 %	47 20.8 %	48 21.2%	226 100 %	2.94	Reject
8.	I don't know where such screening tests are done.	58 25.7 %	56 24.8%	- -	58 25.7 %	54 23.8%	226 100 %	3.02	Accept
9.	I don't think there is any benefit of such a test.	57 25.2 %	55 24.3%	- - -	56 24.8 %	58 25.7%	226 100 %	2.98	Reject
10.	The fear associated with stigmatization from friends and relatives, if tested positive, is the reason I am declining the screening services.	42 18.6 %	43 19.0%	42 18.6 %	48 21.2 %	51 22.6%	226 100 %	2.89	Reject
11.	Cervical cancer screening centres are not adequately available or enough to service the challenge.	46 20.4 %	43 19.0%	43 19.0 %	49 21.7 %	45 19.9%	226 100 %	2.98	Reject
12.	My religion forbids me to partake in the screening exercises.	41 18.1 %	41 18.1%	42 18.6 %	48 21.2 %	54 23.9%	226 100 %	2.85	Reject
13.	I don't want to expose my body to male medical practitioners.	42 18.6 %	44 19.5%	42 18.6 %	49 21.7 %	49 21.7%	226 100 %	2.91	Reject
14.	My husband did not allow me to do the cervical cancer screening test.	51 22.6 %	- -	52 23.0 %	60 26.5 %	63 27.9%	226 100 %	2.62	Reject

From the above table, it is clear that only items one and eight with the Mean values of (3.03 and 3.02 respectively) are notable determinants whereas all other items have low Mean scores below the 3.0 threshold. In other words, two factors strongly determine the utilization of cervical cancer screening services, namely lack of awareness of cervical cancer screening services (M = 3.03) and lack of knowledge of screening centres (M = 3.02).

DISCUSSION AND CONCLUSION

The utilization rate of cervical cancer screening services among women of childbearing age is low. The result confirms that the underlying reasons for the low utilization rate of cervical screening services are a lack of awareness of cervical cancer screening services and poor knowledge about where screening is done. Utilization of cervical cancer screening services and treatment of precancerous lesions is the only way of reducing mortality and morbidity associated with cervical cancer among women of childbearing age, however, the level of utilization of the screening services in Akure is still low. The outcome of this low utilization is striking because most of these women are educated and should be abreast with the dangers associated with the dreaded disease (cervical cancer) ravaging women as against the uneducated population.

Pap smear is a significant screening tool for early detection, diagnosis and effective preventive measure of cervical cancer but despite the overwhelming evidence that cancer of the cervix is almost preventable globally through organized screening and treatment of premalignant lesions, the service is still poorly utilized by women at the University of medical science teaching hospital Akure. It was revealed from the study that the major factors affecting the utilization of cervical cancer screening services among women of childbearing age at the University of medical science teaching hospital Akure are a lack of awareness of cervical cancer screening services and the location of the screening service.

This result is consistent with the findings of other studies

which revealed that lack of awareness and ignorance about the screening services among other factors gave rise to the poor utilization of the screening services by women of childbearing age[4,6]

However, considering the health implications of non-utilization of cervical cancer screening services among women of childbearing age, government and non-governmental organizations need to re-strategize on how best to sensitize women to the dangers associated with non-utilization of the screening service

In conclusion, the non-utilization of the screening service by the study participants in Akure cannot be attributed to low educational level, rather it is a lack of information as well as social and psychological factors, as a majority of the women are educated with at least secondary level of education.

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