ATTITUDE AND PRACTICE OF CERVICAL CANCER SCREENING AMONG NURSES IN UNIVERSITY OF BENIN TEACHING HOSPITAL, BENIN CITY EDO STATE NIGERIA

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ABSTRACT

Cervical cancer remains a major cause of morbidity and mortality among women globally and in Africa. Its outcome can be improved through screening. Despite its high burden, low level of practice of cervical cancer screening has been reported among nurses. The aim of the study was to determine the attitude and practice of cervical cancer screening (CCS) among nurses in University of Benin teaching hospital Benin City Edo State. A descriptive cross-sectional study design was used for this study. 298 respondents was determined by Taro Yamane formular and the 298 respondents were selected using a simple random sampling technique. An interviewer administered questionnaire with reliability index of 0.8 was used to collect data from respondents. Data was analysed using IBSM SPSS version 20.0. presented in the descriptive statistics in form of frequencies, percentages and mean including inferential statistics were also used. P was set at 0.05 at 95% CI. The demographic characteristics of this study conclude that majority of respondents are within the ages of 20 -40years (51.4%), from Edo ethnic group (74.8%) and Christian by religion (96.3%). The result also show that majority of the respondents' highest academic qualification is Diploma (basic/post-basic professional qualifications) (51.7%), 1 to 10years of Experience (52%) and married (71.4%) with 1–3 number of children (38.8%). Finding of this study shows that the attitude of respondents about cervical cancer screening is positive ($\bar{x}$=3.26), but the practice level is very low (30%). Hypothesis tested shows that there is no statistically significant relationship between years of experience and practice of cervical cancer screening among nurses in the University of Benin Teaching Hospital (UBTH), Benin City (P = 0.607). In conclusion, the study reported high attitude towards cervical cancer screening and poor practice of cervical cancer screening among nurses.

Keywords: Attitude; Practice; Cervical Cancer Screening; Nurses.

INTRODUCTION

Cervical cancer is one of the deadliest and highly preventable of human cancers yet it continues to be one of the commonest causes of cancer deaths (Sung et al., 2021). Globally, it is estimated that cervical cancer causes over 342,000 deaths in year 2020 while 604,000 new cases are reported worldwide and about 90% of the new cases and deaths worldwide in 2020 occurred in low- and middle-income countries (Sung et al., 2021). In Africa, it accounts for about 22% of all female cancers. The estimated daily lost from cervical cancer in sub-Saharan Africa is 641 years per 100,000 women (WHO, 2022). According to Balogun (2021), there were 31,955 new cervical cancer cases in West Africa in 2018, and Nigeria accounted for almost half (14,943). There were also 10,403 deaths (28 deaths every day) from cervical cancer in the country in the same year. Cervical cancer has been well controlled in developing countries (HICs), mainly because of cervical screening initiatives and effective cancer treatment services, it remains the most common cause of cancer related death among women in 42 countries including South Africa, most of which are LMICs (Ncane, 2023). All cases of cervical cancer are caused by certain types of human papillomavirus (HPV) which is the most common viral infection of the reproductive tract (World Health Organization, 2022).

Screening is an effective tool for early detection of cervical cancer. Cervical cancer screening detects precancerous cell transformations on the cervical mucosa that could progress to cervical cancer if not managed on time or appropriately (Ncane, 2023). This can be done using pap smear cytology-based screening method (Canfell,

2020; Hopkins, 2021). It was reported that less than 9% of eligible Nigerian women have been able to access cervical cancer screening services despite the increasing burden of the disease (Ekwenife, 2017). Studies have shown that integrating knowledge and awareness programmes with educational interventions of cervical cancer screening will go a long way in early detection, reducing mortality and morbidity (Ncane, 2023; Mbulawa, 2021). Negative attitude towards cervical cancer screening have been reported among nurses despite knowledge of their susceptibility to HPV (Eke, 2021; Chibuike et al., 2019). Moreso, previous studies have reported poor cervical cancer screening practice among health workers (Chitha, 2023; Winta, 2024; Okolie, 2024; Pegu et al., 2017; Gebreegziabher et al., 2016). Poor awareness, low-risk perception, poverty, lack of female providers, fear of positive screening result and sociocultural norms contribute immensely to poor uptake of CCS services among Nigerian women (Okolie, 2022; Onyenwenyi, 2018). Nurses play a key role in educating women about cervical cancer so as to reduce cervical cancer incidence. There is limited study on cervical cancer screening among nurses in the study location. This study will add to pool of knowledge in improving health outcomes since female nurses are also at risk of developing cervical cancer, regardless of their profession, and must also adhere to the established prevention measures (Okolie, 2015). The aim of this study is to assess the attitude and practice of cervical cancer screening among nurses in university of Benin teaching hospital Benin City Edo State.

METHODOLOGY

Design: A descriptive cross-sectional study design was used for this study.

Setting: This study was conducted at the University of Benin Teaching Hospital (UBTH), Benin City, Edo State, Nigeria which is located in Ugbowo quarter of Egor LGA of Edo State, South-South, Nigeria. This setting was chosen because it has the highest number of practicing nurses in the state. It is a referral center, established in 1973 and it is made up of different departments which are grouped into academic institutions, clinical and non-clinical departments. The clinical department consisted of seven main departments (Medical, Surgery, Obstetrics & Gynaecology, Theater, Accident & Emergency, Clinic, and Paediatric). Other departments include Radiology, Physiotherapy, Pharmacy, Chemical Pathology, and Haematology. The state is bounded in the south by Delta state, East by Kogi State, and north by Ondo State. The state is made up of three senatorial districts, namely: Edo North, Edo South (where University of Benin Teaching Hospital is located), and Edo Central. The districts are further subdivided into 18 Local Government Areas (LGA).

Population: This study was carried out among female nurses in University of Benin Teaching Hospital (UBTH), Benin City, Edo State, Nigeria. Total population is 811

Sample Size Determination: The sample size of 298 was determined using Taro Yamane formular.

Sampling Technique: 298 female nurses were selected using a simple random sampling technique from the 811 population of female nurses in the hospital.

Instrument: An interviewer administered questionnaire was used to collect data for this study after it underwent pretesting. The questionnaire was divided into four parts to elicit response from the respondents. Open and closed ended questions were asked by trained research assistants. The face and content validity was done to validate the questionnaire while reliability was ascertained using Cronbach's alpha reliability (0.862).

Data Analysis: The raw data retrieved were coded and imputed into a computer for easy analysis using Statistical Package for Social Science (SPSS) version 22.0. Descriptive data were expressed as percentages, frequency counts, and mean $\pm$ standard deviation. A scoring system was developed for section B,

being 5-piont Likert scaled questions; the grand mean of the items was estimated. Mean score of 3 was considered as the cut-off mark. Therefore, grand mean above ≥3, was inferred as positive attitude while less than 3, was inferred as negative attitude. Also, a scoring system was developed for section D, each correct answer/positive response carried 1 mark while zero for any wrong answer/negative response. Respondents' total scores were converted to percentages and categorized as follows ≤ 50% = poor practice while ≥ 50% = high practice. Hypothesis was tested using Person chi-square at 5% level of statistical significance. Data were presented in words and frequency distribution tables. $P < 0.05$ was considered the level of significance for all measured variables.

Ethical clearance was gotten from the Ethics and Research Committee of the University of Benin Teaching Hospital for approval (ADM/E2022/A/VOL.II/141735161). The participants were made to give consent before they were enlisted to participate in the study.

RESULTS

In this study, 294 out of 298 copies of the questionnaires distributed were retrieved filled, giving the response rate of 98.7%. The response rate recorded in this study is comparable to (98.6%) that was reported among health worker from Ahmadu Bello University Teaching Hospital (ABUTH), Zaria, Nigeria by Oluwafumbi et al. (2016).

Table 1 showed more than half 151 (51.4%) of the respondents falls within the age range 20-40years while the others 143(48.6%) are above 40years. The mean ± SD age of the respondent is 35.48 ± 5.928. Edo ethnicity was majorly represented 220(74.8%) followed by others (which include Urhobo, Ijaw etc.) 33(11.2%). Ibo 22(7.5%), Yoruba were 15(5.1%) while Hausa were 4(1.4%). Majority were Christians 283(96.3%) while 11(3.7%) were Muslims. With respect to academic qualification, 168(57.1%) had diploma (equivalent to basic/post-basic nursing qualifications), 115(39.1%) had first degree while 11(3.7%) had second degree. Those that were married and those with 1-3children were more 218(74.1%) and 114(38.8%) respectively. Those with working years of experience within 1-10years were more 153(52.0%). The mean ± SD years of experience is 10.15 ± 5.454. The demographic characteristics of this study conclude that majority of respondents are within the ages of 20 -40years (51.4%), from Edo ethnic group (74.8%) and Christian by religion (96.3%). The result also shows that majority of the respondents' highest academic qualification is Diploma (basic/post-basic professional qualifications) (51.7%), 1 to 10years of Experience (52%) and married (71.4%) with 1–3 number of children (38.8%).

Table 4.1: Showing social-demographic characteristics of the respondents (n = 294).

Variable	Tenets	Frequency	Percent
Age	20-40years	151	51.4
	>40years	143	48.6
	Mean ± SD = 35.48 ± 5.928.		
Ethnic group	Hausa	4	1.4
	Yoruba	15	5.1
	Ibo	22	7.5
	Edo	220	74.8
	Others	33	11.2
Religion	Christianity	283	96.3
	Islam	11	3.7
Highest academic qualification	Diploma (basic/post -basic professional qualifications)	168	57.1
	First Degree	115	39.1
	2nd degree	11	3.7
Year of Experience	1-10	153	52.0
	11-20	77	26.2
	>20years	64	21.8
	Mean ± SD = 10.15 ± 5.454		
Marital status	Single	76	25.9
	Married	218	74.1
Number of children	None	97	33.0
	1-3	114	38.8
	>3	83	28.2

Table 2 showed that the general attitude of the respondents towards cervical cancer screening was good (grand mean > 3) from responses gotten in the table below. This study indicate that the attitude of respondents is positive ($\bar{x}$= 3.26)

Table 2: Showing Attitude Towards Cervical Cancer Screening Among the Respondents

S/N	Variables	SD (%)	D (%)	U (%)	A (%)	SA (%)	Mean	SD
1.	Cervical cancer screening (CCS) is for health workers in obstetrics and gynecology unit only	3 (1.0)	4 (1.4)	65 (22.1)	213 (72.4)	9 (3.1)	3.75	.581
2.	CC is not serious conditi on that any learned woman should worry about	13 (4.4)	76 (25.9)	3 (1.0)	197 (67.0)	5 (1.7)	3.36	1.024
3.	CCS is Only for women with family history of the disease	12 (4.1)	8 (2.7)	123 (41.8)	76 (25.9)	75 (25.5)	3.66	1.019
4.	Women with good genital h ygiene and one sexual partner do no need CCS	13 (4.4)	65 (22.1)	67 (22.8)	134 (45.6)	15 (5.1)	3.25	1.000
5.	Subjecting oneself to CCS amounts to debasing one's womanhood	9 (3.1)	72 (24.5)	118 (40.1)	71 (24.1)	24 (8.2)	3.10	.964
6.	CCS is valuable and should be made compulsory for all female healthcare practitioners	6 (2.0)	110 (37.4)	63 (21.4)	86 (29.3)	29 (9.9)	3.07	1.068
7.	It is better to be ignorant of the disease than to go in search of it by undergoing screening	9 (3.1)	70 (23.8)	61 (20.7)	147 (50.0)	7 (2.4)	3.25	.947
8.	Medical Professional have known everything harmful CC	9 (3.1)	62 (21.1)	106 (36.1)	64 (21.8)	53 (18.0)	3.31	1.087
9.	Women with strong religion and faith do not need CCS	6 (2.0)	67 (22.8)	70 (23.8)	146 (49.7)	5 (1.7)	3.26	.899
10.	Risk of CC is very low among nurses	4 (1.4)	146 (49.7)	3 (1.0)	102 (34.7)	39 (13.3)	3.09	1.194
11.	I would like to study more about CCS	32 (10.9)	85 (28.9)	68 (23.1)	100 (34.0)	9 (3.1)	2.89	1.086
12.	I look forward to being screen for CC	5 (1.7)	106 (36.1)	61 (20.7)	86 (29.3)	36 (12.2)	3.14	1.093
13.	I will subject myself for further investigation if I test positive	9 (3.1)	72 (24.5)	69 (23.5)	138 (46.9)	6 (2.0)	3.20	.938
	Grand mean ± SD						3.26	.992

Table 2b revealed that majority 271 (92.2%) of the respondents demonstrated positive attitude towards cervical cancer screening while only 23(7.8%) demonstrated negative attitude.

Table 2 b: Showing composite of respondents' attitude towards cervical cancer screening

Attitude	Mean Score values	Frequency	Percent
Positive		271	92.2
Negative	<3	23	7.8
Total		**294**	**100**

Table 3 showed that almost all the respondents 270 (91.8%) HPV DNA test are preferred method of detecting HPV strain that cause cervical cancer while 248(84.4%) were aware that the study institution carryout the screening test. However, only 32(10.9%) had undergone that screening test out of which 18(6.1%) did Pap smear screening test, 10(3.4%) did VIA/Lugol's iodine (VILI) screening test while 4 (1.4%) tested for HPV DNA. Only 12(4.1%) had done the screening within the last three years. Finding shows that the practice level of cervical cancer screening among the respondent is very low (30%)

Table 3 Showing Practice Level of Cervical Cancer Screening Among the Respondents

Variable	Tenets	Frequency	Percent
HPV DNA test are preferred method of detecting HPV strain that cause cervical cancer	Yes	270	91.8
	No	24	8.2
Have you ever undergone any form of cervical cancer screening before screening technique(s) undertaken	Yes	32	10.9
	No	262	89.1
	Pap smear	18	6.1
	Testing for HPV DNA	4	1.4
	VIA/Lugol's iodine (VILI)	10	3.4
	Colposcopy	-	-
	Pap smear and VIA	-	-
Screening in the last three years	Yes	12	4.1
	No	20	6.8

This means there is no statistically significant relationship (P = 0.607) between years of experience and practice of cervical cancer screening among nurses in the University of Benin Teaching Hospital (UBTH), Benin City.

Table 5: Relationship between experience and the practice of cervical cancer screening

	Tenets	Cervical cancer screening		Total(%)	df	χ^2	P	Decision
		Yes (%)	No (%)					
Years of experience	1-10years	14(9.2)	139(90.8)	153(100)	2	.997	.607	Don't reject Ho
	11-20years	10(13.0)	67(87.0)	77(100)				
	>20years	8(12.5)	56(87.5)	64(100)				
Total		32	262	294				

DISCUSSION OF FINDINGS

Cervical cancer remains a major cause of morbidity and mortality among women globally. Early screening for cervical cancer is a key intervention in reducing maternal deaths. Health care workers have a significant contribution to improve cervical cancer screening practice among women. This study evaluated attitude and practice of cervical cancer screening among nurses in University of Benin Teaching Hospital, Benin City.

The demographic characteristics of this study conclude that majority of respondents are within the ages of 20 -40years, from Edo ethnic group and Christian by religion. The result also shows that majority of the respondents' highest academic qualification is Diploma (basic/post-basic professional qualifications), 1 to 10years

of Experience and married with 1 – 3 number of children. This age this study is consistent with the finding of Oluwafumbi et al. (2016), but at variance to a study in Southern Ethiopia by Dulla et al. (2017). Demographic factors can influence and affect cervical cancer screening uptake by nurses and statistically significant association has been found between socio-demographic factors such as: age, education and marital status and cervical cancer screening (Tobin, 2024).

This study indicate that the attitude of respondents is positive. This study is similar to Pegu, et al. (2017) who reported positive attitude among their respondents. This study is in contrast to Eke, (2021) & Chibuike et al., (2019) whose respondents had negative attitude in Benin City Edo State.

Finding shows that the practice level of cervical cancer screening among the respondent is very low. This study is consistent with Pegu, et al. (2017) who reported that none of their respondents had undergone cervical cancer screening themselves in a tertiary care hospital of Uttarakhand, India. This study is in line with Eze and Obiebi (2019) who reported that only 11.0% of their respondents had screened for cervical cancer. This study is similar to Oche et al. (2013) who observed poor screening rate (10.0%) from Sokoto and Rahman and Kar (2015) who indicates that only few of their respondents go for cervical screening (11.9%) in India. Furthermore, Omorogbe and Ehizemwogie (2019) reported that cervical screening among female students in school of basic medical sciences, University of Benin, Nigeria is very low (18.7%). This study is not at variance with the findings of Arulogun and Maxwell (2012) who reported that staff nurses were four times less likely to utilize cervical screening services than the Assistant Directors of Nursing.

Implications of Findings for Nursing Practice

The female healthcare professionals are key players in the health sector as health educators and health promoters. Policies to improve cervical cancer screening uptake in training institutions and across health institutions is important to address gaps that exist. The gap in practice will help policy makers in establishing periodic screening tests for nurses at institutional level due to their susceptibility to cervical cancer. Overall, this will help female nurses relate better with women's experiences and be better suited to meeting their needs.

LIMITATIONS OF STUDY

This was a quantitative study which might have been influenced by recall bias, and it did not explore potential reasons for poor practice and positive attitude.

CONCLUSION

In conclusion, this study reported a positive attitude of nurses towards cervical cancer screening. Despite the positive attitude, the practice was relatively low among them. There is a necessity for rigorous and far-reaching sensitization of female nurses about the need for cervical cancer screening through training and re-training in order to reduce risk of exposure to it.

RECOMMENDATIONS

Following the outcomes of the study, the considerations and implications drawn from it, the following recommendations were made;

1. There is need for mandatory cervical cancer screening biannually for nurses at low or no cost for them.
2. Nursing training institutions should integrate cervical cancer screening as core preadmission test and also create awareness periodically

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