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Knowledge of Cervical Cancer and Awareness of It's Screening among Women of Childbearing Age in Ilishan-Remo Community, Ogun State

Zorto Dwamo Philip
MBBS, MPH, Univeristy of Maiduguri, Benue State University PhD, Texila American University

Olalotiti Lawal, Modupe Oluwafunmilola
Ph.D in Health Care Management (Irish University Business School, London-UK)

Adediji Peter Olaoluwa
University of Ilorin, Kwara State (Dept. of Epidemiology and Community Health)

Micheal Okechukwu Okafor
University of Ibadan (MPH Field Epidemiology)

Folahanmi Tomiwa Akinsolu
Lead city University, Ibadan Nigeria Institute of Medical Research, Lagos

Ayinde Abayomi Oluwasegun
University of Ibadan (Public Health, Epidemiology)

Titilpoe Olatorera Akinleye
Oyo State Ministry of Health

Abstract: With an expected 14,943 new cases and 10,403 fatalities from cervical cancer in 2020 alone, Nigeria faces a serious health crisis. Cervical cancer screening knowledge and awareness among Nigerian women are usually low, according to studies; this low level of awareness is caused by a number of factors, including cultural beliefs, religious practices, and limited access to healthcare services.This study therefore was designed to investigate the knowledge of cervical cancer and awareness of cervical cancer screening among women of childbearing age in Ilishan-Remo community, Ogun state, Nigeria.

The study employed a descriptive cross-sectional study design, and convenience sampling technique was used to select 289 women of childbearing age in Ilishan-Remo Community. A pre-tested questionnaire adapted with reliability of score of 0.86. Level of knowledge of cervical cancer was assessed using a 20-point scale categorized into poor (<8), moderate (8-14), and good (>14). Data were analyzed using descriptive and inferential statistics of Pearson product moment correlation coefficient set at a significance level of 0.05.

According to the study, 41.9% of respondents had a strong understanding of cervical cancer, and 39% were aware that cervical cancer screening is on the low side. The study's findings showed

that although there is good knowledge about cervical cancer, there is little awareness of its screening. There is a significant relationship between age of women and knowledge of cervical cancer among women of child bearing age in Ilishan-Remo, Ogun State. (r=0.676, p=0.00 <0.05). The study also showed that there is a significant relationship between level of education of women and awareness about cervical cancer among women of childbearing age in Ilishan-Remo (r=0.831, p=0.00 <0.05).

In conclusion, cervical cancer is a significant health issue, and awareness of its screening and prevention is crucial among women of childbearing age. There was generally fair knowledge of cervical cancer and its screening; and very poor awareness and screening practice. There is, therefore, an urgent need to improve women´s knowledge of cervical cancer and address the identified barriers in order to improve screening practices of the women. Efforts should be made to improve education and access to healthcare services, including screening and vaccination programs. Therefore, a targeted awareness and enlightenment of the public on cervical cancer screening is highly recommended to ensure early detection which guarantees good treatment outcomes.

Keywords: Knowledge, Awareness, cervical cancer, women of childbearing age, cervical cancer screening.

INTRODUCTION

Cervical cancer is a leading cause of death among women worldwide. It is a preventable disease that can be detected early through regular screening. Despite this, many women of childbearing age remain unaware of the importance of cervical cancer screening. This concept note aims to explore the knowledge of cervical cancer and awareness of its screening among women of childbearing age. (World Health Organisation, 2013). Cervical cancer is caused by the human papillomavirus (HPV) and is the fourth most common cancer among women globally. In many low-income countries, cervical cancer is the leading cause of cancer-related deaths among women. However, cervical cancer is preventable, and its incidence can be reduced through regular screening and vaccination against HPV. (Ayinde abayomi 2023).

90% of the 270,000 deaths in low- and middle-income nations in 2015 were due to cervical cancer. Women in developing nations made up more than 80% of cervical cancer instances. The high risk groups were in Africa, Latin America, and Asian nations like India, Thailand, Philippines, and Korea. (Amosu, Degun, & Thomas, 2011).

With an Age Standardized Incidence Rate of 29.0 per 100,000, cervical cancer is the second most prevalent cancer among Nigerian women, following breast cancer, which has an Age Standardized Incidence Rate of 30.3 per 100,000 and 36.0 per 100,000, respectively. (GLOBOCAN, 2010). About 30 to 40 million Nigerian women over the age of 15 are at danger of developing cervical cancer. Most significantly, 9659 deaths from the disease were reported each year, with over 14,550 women receiving diagnoses. (WHO 2010; Amosu, Degun & Thomas, 2011).

A malignant neoplasm of the uterus' cervical region known as cervical cancer occurs when the cervix's cells develop abnormally and start to grow uncontrollably, eventually creating tumors. (Kumar, Abbas & Mitchell, 2007). Early detection and treatment of the precancerous stage are essential to reducing cervical cancer mortality and morbidity because it is frequently associated with high mortality and morbidity when advanced and the prognosis is very bad. (Kumar, Abbas & Mitchell, 2007).

Early marriage or early initiation into sexual activity, multiple male sexual partners who have also had multiple lovers, early initiation into sexual activity with uncircumcised males, and long-term oral contraceptive pill use have all been linked to increased risk of cervical cancer. (Jedy-Agba, Curado & Igbinoba, 2012).

More than 75% of cancer cases can be prevented through cervical cancer screening in women who attend regularly (Amosu, Degun & Thomas, 2011). Death rate has dropped in countries such as United States of America, due to regular cervical cancer screening and treatment that is available and accessible (Jedy-Agba, Curado & Igbinoba, 2012). The level of awareness on cervical cancer in Nigeria is still very low, less than 5% of Nigerian women were aware of cervical cancer and less than 1% of Nigerian women had ever attended cervical cancer screening in their lifetime (Olaleye, 2013). The low awareness of cervical cancer and women participation in screening exercise have been associated with so many factors such as their educational level, occupation, religious beliefs, socio-economic status, cultural, and also the unfriendly environment provided by health care providers (Balogun, 2012).

According to recent reports, the Federal Government recently spent $9 million on screening equipment, upgraded 20 active hospital-based cancer registries, trained medical staff, and launched extensive awareness campaigns on the advantages of early screening in order to provide Nigerians with access to quality health care screening services. (WHO,2012). The problem associated with cervical cancer is not just limited to the women, but the family as a whole is affected. The economic effect of being affected with cervical cancer is enormous because it diverts the economic resources meant for family needs and children's education to managing cervical cancer which is costly (Ohaeri & Ingwu, 2015).

SIGNIFICANCE OF THE STUDY

The results of this survey will show how much people know and care about cervical cancer screening. By creating an awareness program that is targeted to providing the right information, which will in turn lead to the modification of behavior and prevention from cervical cancer, the research will aid in increasing the uptake of cervical cancer screening among women of childbearing age. The data gathered will aid in the planning and execution of necessary interventions that will give women access to cervical cancer screening services in their communities and adequate information about the disease.This study may enhance the present body of knowledge by providing current information regarding the knowledge of cervical cancer, awareness of cervical cancer screening and form a basis for future research studies.

OBJECTIVES OF THE STUDY

Broad objective:

This is to determine the level of knowledge of cervical cancer and awareness of cervical cancer screening among women of childbearing age in Ilishan-remo community, Ogun state.

Specific objectives:

1. To determine the socio-demographic characteristics of women of childbearing age in Ilishan-remo community, Ogun state
2. To determine the level of knowledge of cervical cancer among women of childbearing age in Ilishan-remo community, Ogun state.
3. To determine the level of awareness of cervical cancer screening among women of childbearing age in Ilishan-remo community, Ogun state.

Research question

1. What are the socio-demographic characteristics of women of childbearing age in Ilishan-remo community, Ogun state?
2. What is the level of knowledge of cervical cancer among women of childbearing age in Ilishan-remo community, Ogun state?
3. What is the level of awareness of cervical cancer screening among women of childbearing age in Ilishan-remo community, Ogun state?

Research Hypotheses

1. **Ho-** There is no significant relationship between respondent's age and knowledge of cervical cancer among women of childbearing age in Ilishan-Remo, Ogun state
2. **Ho-** There is no significant relationship between level of education of women and awareness about cervical cancer among women of childbearing age in Ilishan-Remo, Ogun state.

MATERIAL AND METHODS.

RESEARCH DESIGN

A descriptive cross sectional study design was used to determine the knowledge of cervical cancer and awareness of cervical cancer screening among women of childbearing age in Ilishan-remo, Ogun state.

RESEARCH SETTINGS

This study was carried out among women of childbearing age in Ilishan-remo, Ogun state. Ilishan-Remo is located 8 km north-east of Sagamu, along the Benin-Sagamu Expressway**.** Ilishan Remo is situated in Ogun State, one of the 36 states in Nigeria. Ilishan-Remo is located 8 km north-east of Sagamu, along the Benin-Sagamu Expressway. A study by Nwaomah, Audu, and Dickson (2010), revealed that Ilishan Remo, the fourth largest of the thirty-three towns in Remo Division of the State, is one of the first five towns (Akarigbo, Elepe, Alalisan, Alara and Alado) that resulted from the migration from Iremo quarters in Ile-Ife between 1400 and 1438 A.D, and one of the 33 towns made up of the ethnic group called Remo in Yoruba land popularly called Remo metalelogbon. One of the prominent places in Ilishan-Remo includes, Babcock University, which is a private Christian co-educational Nigerian university owned and operated by the Seventh-day Adventist Church in Nigeria.It is a part of the Seventh-day Adventist education system, the world's second largest Christian school system.

TARGET POPULATION

The target population for study was composed 289 of the different age groups of women of childbearing age in ilishan-remo Ogun state.

CRITERIA FOR INCLUSION

1. Respondent must be of childbearing age (15-49years)
2. Respondent must be present at the time of study.
3. Respondent must be willing and participate voluntarily.

CRITERIA FOR EXCLUSION

1. Respondent not of reproductive age.
2. Respondent not willing to participate.

SAMPLING TECHNIQUE

A convenience sampling method which is non-probability sampling was used.

SAMPLE SIZE DETERMINATION

According to the National Census Statistics obtained from Ikenne Local Government office, the population of women within the childbearing age range of 15-49, that live in Ilishan is 4366.

Sample size was calculated using the Cochran's formula (1977)

Using $N= Z^2Pq/d^2$

Where Z is a constant = 1.96

P= prevalence of cervical cancer in Nigeria according to (Ubajaka, Ukegbu, 2015) is 25%

q=1-p

d= normal deviation=0.05

Therefore, $N = \frac{(1.96)^2 \times 0.25 \times (1 - 0.248)}{(0.05)^2}$

$= \frac{3.84 \times 0.25 \times 0.752}{(0.0025)}$

=288.77

=289

The sample size for this study is 289

PROCEDURE FOR DATA ANALYSIS

Data were collected, coded, entered, cleans and analyzed using computer-based Statistical Package for the Social Sciences (SPSS) analytic tool, version 21.0. Descriptive analysis was used and data were presented in frequency tables and percentages and also inferential statistics was also used to determine the level of association between independent and dependent variables at P is set at ≤ 0.05 levels of significances. Pearson's Correlation Coefficient set at a significance level of 0.05 was used for the analysis.

ETHICAL CONSIDERATIONS

Apart, this project deals with human respondents, it is important to follow ethical principles regarding research so as to be in line with the law. Respondents were duly informed about the nature and purpose of the study, and after due explanation, they were informed about their right to refuse participation and opt out of the study if they so wish. The researcher ensured that the information given by the respondents was treated confidentially as respondents were not asked to include their name in the questionnaire rather serial numbers were used for each questionnaire. To ensure optimum confidentiality, the data received from the respondents was accessed only by the researcher. Ethical approval was obtained approval from the Babcock University Health Research Ethics Committee (BUHREC).

RESULTS

Table 1: showing demographic characteristics of respondents

Variables	Categories	Frequency	Percentage
Age	15-20years	75	26.0
	21-25years	41	14.2
	31years and above	173	59.9
Marital State	Single	85	29.4
	Married	197	68.2
	Divorced	7	2.4
Religion	Christianity	113	39.1
	Islam	176	60.9
Ethnicity	Igbo	83	28.7
	Yoruba	79	27.3
	Hausa/Fulani	93	32.2
	Other	34	11.8
Occupation	Student	33	11.4
	Trader	43	14.9
	Full housewife	18	6.2

	Employed	113	39.1
	self-employed	51	17.6
	Others	31	10.7
Level of Education	No formal education	23	8.0
	Primary school education	156	54.0
	Secondary school education	60	20.8
	Tertiary education	48	16.6
	Post-graduate	2	0.7
Number of Children	None	41	14.2
	1	150	51.9
	2	50	17.3
	3	11	3.8
	4	37	12.8
Type of Marriage	Monogamous	144	49.8
	Polygamous	145	50.2

The result of the analysis presented above showed that, over 59% of the respondents are more than 31years, while 26% are between the ages of 15-20years, 14.2% are between the ages of 21-25years. Over 68% of the respondents are married, 29.4% are single and 2.4% are divorced. Over 60% of the respondents practice the Islamic religion, 39.1% of the respondents practice the Christian religion. Less than 32% of the respondents are from the Hausa tribe, 27.3% are from Yoruba tribe, 28.7% are from the Igbo tribe, and 11.8% are from other tribe. More than 39% of the respondents are employed, 17.6% are self-employed, 10.7% are engaged in other occupation, 14.9% are traders, 11.4% schooling, 6.2% are full housewife. Majority of the respondents had primary school education, 20.8% had secondary school education, 16.6% had tertiary education, 8% had no formal education, 0.7% of the respondents had post graduate certificate. More than 51% of the respondents had 1 child, 17.3% had 2 children, 12.8% had 4 children, and 14.2% had no child. 50.2% of the respondents are from the polygamous marriage type, while, 49.8% are from the monogamous marriage.

Table 2. Knowledge of Cervical Cancer

Variables	Categories	Frequency	Percentage
Have any prior knowledge of cervical cancer disease	Yes, I do	82	28.4
	No, I don't	65	22.5
	I can't remember	100	34.6
	I will enquire	42	14.5
Source of respondents information about cervical cancer disease	Radio	41	14.2
	Television	38	13.1
	Friends	31	10.7
	Newspaper	75	26.0
	health workers	42	14.5
	Others	62	21.5
Know that toying with multiple sexual partner is a risk factor for cervical cancer disease	Yes i know	125	43.3
	No i don't know	86	29.8
	i can't remember	53	18.3
	i will enquire	25	8.7
Know that being infected with Human Papilloma Virus is a risk factor for cervical cancer disease	Yes i know	214	74.0
	No i don't know	41	14.2
	i can't remember	21	7.3
	i will enquire	13	4.5
Know that excessive smoking is a risk factor for cervical cancer	Yes i know	124	42.9
	No i don't know	31	10.7

disease	i can't remember	31	10.7
	i will enquire	103	35.6
Know that family history is a risk factor for cervical cancer disease	Yes i know	197	68.2
	No i don't know	13	4.5
	i can't remember	21	7.3
	I will enquire	58	20.1
Know that menstrual bleeding of longer duration or heavy flow are signs and symptoms of cervical cancer disease	Yes I know	124	42.9
	No I don't know	41	14.2
	I can't remember	82	28.4
	I will enquire	42	14.5
Know that pain during sexual intercourse is a sign and symptoms of cervical cancer disease	Yes I know	193	66.8
	No I don't know	72	24.9
	I can't remember	10	3.5
	I will enquire	13	4.5
Know that foul smelling vaginal discharge is a sign and symptoms of cervical cancer disease	Yes I know	76	26.3
	No I don't know	103	35.6
	I can't remember	38	13.1
	I will enquire	72	24.9
Know that cervical cancer can be prevented	Yes I know	188	65.1
	No I don't know	43	14.9
	I can't remember	40	13.8
	I will enquire	18	6.2

Based on the result of analysis showing the level of knowledge of women toward cervical cancer in Ilishan-Remo community, Ogun State which revealed that more than 34% of the respondent could not remember their prior knowledge about cervical cancer disease, 28.4% could remember their prior knowledge of cervical cancer,22.5% did not have any prior knowledge about cervical cancer disease. Majority of the respondents reported newspaper as the major source of information about cervical cancer, 21.5% reported other sources of information about cervical cancer, 14.2% reported radio as major source of information about cervical cancer, 10.7% reported friends, and 14.5% reported health workers. Majority of the respondents know that toying with multiple sexual partner is a risk factor for cervical cancer, 29.8% reported they are not aware. Over half of the respondents are aware that been infected with HPV is a risk factor for cervical cancer, 14.2% are not aware. Over 42% of the respondents knew that excessive smoking is a risk factor for cervical cancer while 35.6% said they would enquire. Over 68% of the respondent knew family history is a risk factor for cervical cancer while 20.1% said they would enquire. Over 42% reported that menstrual bleeding of longer duration or heavy flow are signs and symptoms of cervical cancer while 28.4% reported they can't remember. More than 66% of the respondents reported they are aware that pain during sexual intercourse is a sign and symptoms of cervical cancer, 24.9% are not aware. Over 35% of the respondents are not aware that foul smelling vaginal discharge is a sign and symptoms of cervical cancer while 26.3% are aware. Over 65% of the respondents are aware that cervical cancer can be prevented while 14.9% are not aware that cervical cancer can be prevented.

Table 3. Measurement of Knowledge of Respondents

Categorization/scaling	Frequency	Percentage
Good knowledge(>14)	*125*	41.9%
Moderate knowledge (>8-14)	*98*	32.9%
Poor (≤8)	*75*	25.2%

From the analysis of the result presented above, 41.9% had good knowledge of cervical cancer, 32.9% had moderate knowledge, while 25.2% had poor knowledge.

Table 4 Testing of Research Hypotheses

Ho1 There is no significant relationship between respondent's age and knowledge of cervical cancer

Table 4.2.1: Pearson Product Moment correlation showing the relationship between age of women and knowledge of cervical cancer among women of childbearing age in Ilishan-Remo

Variables	Mean	Standard Deviation	N	r	P	Decision
Age of women	2.9377	1.33448	298	0.676	0.00	Sig
Knowledge of cervical cancer	21.6713	4.00684				

r=0.676 p-0.00

The result of the analysis presented in table 4.2.1 showed that, there is a significant relationship between age of women and knowledge of cervical cancer among women of child bearing age in Ilishan-Remo, Ogun State. (r=0.676, p= 0.00 <0.005). The result rejected the null hypothesis while the alternate hypothesis was accepted which states that, which states that, there was a significant relationship between age of women and knowledge of cervical cancer among women of child bearing age in Ilishan-Remo, Ogun State.

Ho2 There is no significant relationship between level of education of women and awareness about cervical cancer among women of childbearing age in Ilishan-Remo.

Table 5*: Pearson Product Moment correlation showing the relationship between level of education and Awareness of cervical cancer among women of childbearing age in Ilishan-Remo*

Variables	Mean	Standard Deviation	N	r	P	Decision
Level of Education	2.4810	0.88613	298	0.831	0.00	Sig
Awareness of cervical cancer	14.4983	2.53191				

r=0.831 p-0.00

Based on the results of analysis presented in table 4.2.2 showed that, there is a significant relationship between level of education of women and awareness about cervical cancer among women of childbearing age in Ilishan-Remo (r=0.831, p=0.00 <0.05). The result rejected the null hypothesis while the alternate hypothesis was accepted which states that, which states that, there was a significant relationship between level of education of women and awareness about cervical cancer among women of childbearing age in Ilishan-Remo.

DISCUSSION OF FINDINGS

Knowledge of Cervical Cancer among Women

Women in Ilishan-remo, Ogun State, had a high level of knowledge about cervical cancer, according to the analysis's results. 41.9% of people had good knowledge of ovarian cancer. The results of the analysis corroborate those of Saad, Kabiru, Suleiman, Hadeija, and Rukaya (2013), who discovered that although there is good knowledge of cervical cancer and cervical cancer screening, there is poor knowledge of risk factors, a generally favorable attitude toward cervical cancer screening (80.4%), and low levels of screening practice (15.4%). A similar research found a correlation between knowledge and not using services for cervical cancer screening, according to Chizoma Millicent Ndikom and Bola (2012). The outcome corroborated the

American Cancer Society's (2016) results that selecting a screening facility is significantly influenced by one's knowledge of cervical cancer.

Awareness of Cervical Cancer Screening among Women

The result of the analysis showed that there was a significant good awareness about cervical cancer among women of child bearing age in Ilishan-Remo, Ogun State. The result is consistent with the findings of El-Serag (2012) that, low level of awareness about cervical cancer screening has significant impact on the morbidity rate of cervical cancer among women of reproductive age. The outcome is in line with the findings of Orubuloye (2011), who found that women living in rural areas of Nigeria are underserved and extremely susceptible to cervical cancer because there is a lack of awareness of cervical cancer screening among these women. the result corroborates the findings of Dodd,(2011) reported the importance of awareness level about cervical cancer screening suggested that perceived susceptibility and severity of the disease were attenuated by a general lack of knowledge.

Hypothesis One

The findings of hypothesis one indicated that among women of childbearing age in Ilishan-Remo, Ogun State, there was a significant correlation between age of women and awareness of cervical cancer. The result is in tandem of the findings of Mishra, (2016) found an association between age of women of childbearing age and knowledge level about cervical screening. Med scape (2017) found that the importance of age range and knowledge level about cervical cancer screening. Also Center Disease Control, (2013) corroborated the findings about the effect of age on awareness about cervical cancer screening among women residing in middle and low income economies.

Hypothesis Two

The result of hypothesis two revealed that, there was a significant relationship between level of education of women and awareness about cervical cancer among women of childbearing age in Ilishan-Remo. The result is supported with the findings of Jamal, Siegel & Ward, (2009) that level of education have significant impact on level of awareness of cervical cancer among women of reproductive age. The result is also consistent with the findings of Ezem, (2007) that educational background is associated with awareness about the important of cervical cancer screening among women of childbearing age. The result is also corroborated with the findings of Danny, (2005) that level of education have significant association with awareness of about cervical cancer among women of reproductive age in rural setting, showing that there is very low level of awareness of cervical cancer among women of reproductive age.

CONCLUSION

There is a great impact of knowledge and awareness on screening of cervical cancer among women of childbearing age has it has been recorded one of the deadliest yet most neglected type of cancer, one of the most common gynaecological malignancy in Nigeria and a leading cause of cancer associated deaths. Hence, cervical cancer screening has been excessively overlooked, the screening which is the first and important part to the diagnosis and identification of the HPV infection which progresses to cervical cancer is less priotised by many, though awareness of HPV might be increasing, yet many misconceptions remain which affects the acceptability of the vaccine and practice of cervical cancer screening, therefore further understanding about the HPV infection, the HPV vaccine, and importance of cervical cancer screening needs to be promoted. We therefore recommend that health educators and health care workers should utilize every opportunity with women to educate them on taking preventive health actions like screening services for prevention of cervical cancer.

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