# Knowledge, Attitude, and Practice of Cervical Cancer Among Women of Childbearing Age in Enugu State, Southeast Nigeria

Ajegbo Uzoma Chidinma<sup>1\*</sup>, Akubue Augustine Uchenna<sup>2</sup>, Amitabye Luximon-Ramma<sup>3</sup> <sup>1</sup>Department of Public Health, Texila American University, Nicaragua <sup>2</sup>Department of Public Health and Epidemiology, Central Washington College, Enugu. Nigeria School of Health Sciences, University of Technology, Mauritius

### Abstract

Cervical cancer (CCa) is the fourth most frequent cancer in women worldwide, and the second most common cancer in women living in developing countries. The study was done to determine the knowledge, attitude, and practice of CCa prevention strategies among women of childbearing age in Enugu State, Nigeria. A descriptive cross-sectional study of 450 eligible women in Enugu State who were selected by proportionate stratified random sampling method. Data were collected electronically using KoboCollect app. Chi-square and bivariate logistic regression model for statistical significance association estimates at 95% C I and, P < 0.05 were done. The mean knowledge score was  $3.38 \pm 5.009$ out of 29 points, with only 5.1% of the respondents classified as having good knowledge. Muslims/traditionalists were 9.6 times more likely than Christians to have good CCa knowledge (95% CI OR= 2.037 - 45.394). Respondents with secondary education were 8 times less likely than those with tertiary education to have good CCa knowledge (95% CI OR 0.034 – 0.415). Majority (71.6%) of the respondents were classified as having a good attitude. Respondents with good CCa knowledge were 4.4 times more likely to have right CCa prevention attitude compared to those with poor knowledge (95% CI OR = 0.053 - 0.985). 3.8% and 8.2% of the respondents have ever screened for CCa and received HPV immunization respectively. Although the knowledge and practice were very low, the CCa prevention attitude was good. Therefore, we recommend targeted awareness and enlightenment of the public about CCa to achieve optimal timely detection and treatment.

**Keywords:** Cervical Cancer (CCa); Enugu State, KAP, Women of Childbearing Age; Southeast; Nigeria.

# Introduction

Cervical cancer is a kind of cancer that, if caught early enough, can be treated. Precancerous lesions can be detected for up to ten years before cancer occurs. In countries with good screening quality and coverage, invasive cervical cancer has decreased by as much as 90% [1]. Knowledge of the causative/risk factors, symptoms and preventive measures of cancer can make all the difference [2].

Studies conducted worldwide have shown that there is poor knowledge of both cervical and

breast cancer among women [3]. Different studies from Nigeria (23.4%) [4] and Ghana (37.0%) [5] also showed that comprehensive knowledge about cervical cancer is low. The Nigerian study found that only 40.8% of women had heard about cervical cancer. This is lower than the report of the study in Ethiopia [6] and Ghana [5] which found that 78.7% and 93.0% of women had heard about cervical cancer respectively. In the Ethiopian study, the majority of the respondents had heard about cervical cancer and only one-third (31.0%) of the

Received: 22.08.2022 Accepted: 16.09.2022 Published on: 29.12.2022 \*Corresponding Author: dr.muzoic@gmail.com respondents were found to have above-average knowledge.

Women's risk perception of cervical cancer was found by Twinomujuni in 2015 [7] to be associated with their intention to go for screening services. A review of the study by Mukama et al 2017 [8] shows that most women believed that cervical cancer was a severe disease and also that they were at risk of developing CA. There was also a strong belief that cervical cancer screening was important, and the majority knew that there was a higher chance of cure when diagnosed early. Other studies have also shown that attitudinal factors such as not feeling susceptible to cervical cancer and having limited knowledge about the disease affect uptake of services [9, 10].

Cervical cancer screening uptake varies globally, with developed countries recording a higher uptake when compared with underdeveloped countries. A survey in Britain [11] reported 91% of women have had a cervical cancer screening test at least once. The report is different from some of the studies conducted in Africa, where uptake is low. In a communitybased study in Elmina, Ghana, uptake was only 0.8% [12] and 6% in a Kenyan study [13]. This low uptake of screening services has also been highlighted by studies in Nigeria, ranging from 0% screening as reported by Balogun et al 2012 [14] and Igwilo et al 2012 [15] in Lagos and Edo states respectively, 0.7% screening in another study in Lagos [16], and 5% pap smear uptake by respondents in a Lagos study [17]. Similarly, in a study in Onitsha, a metropolitan city in Anambra, Southeast Nigeria, only 1.8% of respondents had done a cervical screening test [18]. As with uptake of cervical cancer screening, uptake of HPV vaccination is also reportedly low.

None of the respondents in the study by Olubodun [12] had taken HPV immunization and none with eligible children, had immunized their daughters. In contrast, in a study among female health care workers in Enugu, about half of the respondents with adolescent daughters had immunized their daughters [19]. Some reported barriers to uptake of cervical cancer screening services include fear of a positive cervical cancer diagnosis, and other fears related to the screening procedures and vaginal examinations [20].

Having good knowledgeable about cervical cancer and positive attitude presents an opportunity for cervical screening programmes. Cervical cancer awareness and prevention programmes should continually seek to influence women's perceptions about cervical cancer and screening. Programs should be designed to also provide treatment for those diagnosed with cancer.

Studying the knowledge, attitude, and practice of cervical cancer prevention among women is necessary to plan interventions toward reducing the menace of cervical cancer among the populace. This study will therefore document such important information which will be critical in planning community-level interventions needed to reduce the burden and mortality from cervical cancer.

### **Materials and Methods**

The study is a descriptive cross-sectional study of 450 women of childbearing age (15-49 years) in Enugu State, Nigeria. Enugu is a state in South-Eastern Nigeria, covering an area of around 8,730 km2. Enugu has an estimated projected total population of 4,411,119 based on the 2006 population census figure and is divided into 17 LGAs. For the purpose of healthcare delivery, the state is divided into seven health districts with each health district being made up of between one to three LGAs.

A proportionate stratified random sampling method was used to select six LGAs from the 17 LGAs in the state (Enugu East and Nkanu West from Enugu East district, Udenu, and Nsukka from Enugu North, and Aniniri and Oji River from Enugu West). Samples were proportionately allocated to the LGAs based on their population. A systematic sampling method was used to select eligible respondents by the research assistants and interviewed.

Data were collected electronically using interviewer-administered pretested, questionnaires the KoboCollect on app. Information elicited were socio-demographic variables, knowledge, attitude, the practice of cervical cancer prevention, and factors affecting the uptake of services. Data were analyzed using Statistical Package for Social Sciences (SPSS). Both descriptive and inferential statistics were computed. Chi-square test was conducted to explore the association between respondents' characteristics and knowledge, attitude, and practice. Factors that were found to be significant at p less than 0.05 from the bivariate analysis were entered into a binary logistic regression model.

Ethical approval was obtained from the ethical review committee of the Enugu State

Ministry of health prior to the commencement of the study.

### Results

# Demographic Characteristics of Respondents

A total of 450 respondents were interviewed during the survey period. The sample size was proportionately allocated to the six LGAs. The mean age of the respondents was  $29.63 \pm 8.4$ years (range 16-49 years), only 47.8% were married out of which 95.8% were in monogamous marriages. The mean number of lifetime pregnancies was  $1.92 \pm 2.3$  (range 0-10). Most (94.3%) had at least a secondary school education and most (89.9%) were employed. A high percentage (97.1%) of the respondents were Christians. Table 1 shows the demographic characteristics of the respondents.

Demographic chara	acteristics	Frequencies	Percentage
Age group (in	$\leq 19$ years	37	8.2
years) of	20 – 29 years	214	47.6
respondents*			27.3
	$\geq$ 40 years	76	16.9
Religion	Christianity	437	97.1
	Muslim	8	1.8
	Traditional	5	1.1
<b>Respondents'</b>	None	10	2.2
Education level	Primary	16	3.6
	Secondary	219	48.7
	Tertiary	205	45.6
Occupation	Skilled	285	63.3
	Semi-skilled	68	15.1
	Unskilled	47	10.4
	Unemployed	50	11.1
Marital status	Single (never married)	218	48.4
	Married	215	47.8
	Widowed/divorced/separated	17	3.8
Family type	Monogamous	204	95.8
	Polygamous	9	4.2
	0	213	47.3
	1-3	125	27.8

Table 1. Respondents' Demographic Characteristics

Total number of	4-6	90	20.0
lifetime	$\geq$ 7	22	4.9
pregnancy**			
Spouses'	None	5	2.3
<b>Education level</b>	Primary	13	6.1
	Secondary	102	47.9
	Tertiary	93	43.7
Spouses'	Skilled	182	85.8
Occupation	Semi-skilled	19	9.0
	Unskilled	6	2.8
	Unemployed	5	2.4

\* Mean age =  $29.63 \pm 8.4$  years. \*\* Mean number of lifetime pregnancies=  $1.92 \pm 2.3$ 

### **Cervical Cancer Knowledge**

The knowledge of the respondents about cervical cancer is shown in Tables 2. Only 46.4% of the respondents have heard of cervical cancer and family/friends/colleagues was the highest source of information mentioned by respondents (39.7%). Only 29.8% were able to mention at least one symptom of cervical cancer

while 24.4% mentioned at least one risk factor of the disease. 53.6% of the respondents believed cervical cancer disease can be treated (table 2). The mean knowledge score was  $3.38 \pm 5.009$  out of 29 points, with only 5.1% of the respondents scoring above 15 marks. These respondents were classified as having a good knowledge on cervical cancer (Figure 1).

Table 2. Proportion of Percentage Score of Respondents on Cervical Cancer Knowledge Questions

Knowledge questions	Options	Frequency	Percent
Have you heard of cervical	Yes	209	46.4
cancer?	No	241	53.6
Where did you learn about	Family, friends, neighbours, or colleagues	83	39.7
cervical cancer? (Select all that	News media	78	37.3
are applicable)	School	73	34.9
	Health facilities	69	33.0
	Social media	54	25.8
	Religious gatherings	18	8.6
	Brochures, posters, and other printed	8	3.8
	material		
What are the risk factors of	HPV infection	43	24.4
cervical cancer? (Select all that	Having partners who have multiple sexual	49	23.4
applies)	partners		
	Smoking	47	22.5
	Early Marriage	32	22.2
	Multiple sexual partners	31	14.8
	Early age at sexual intercourse	30	14.4
	HIV infection	21	10.0
	Use of birth control pills	15	7.2
	Having sexual transmitted infections	15	7.2
	Having plenty children (multiparity)	12	5.7

	Reduced body immunity	11	5.3
What are the symptoms of	Bleeding after sex	61	29.8
cervical cancer? (Select all that	Abnormal vaginal bleeding	56	26.8
applies)	Lower abdominal pain	45	22.1
	Weight loss	38	35.2
	Offensive vaginal discharge	23	11.0
How can a person prevent	Go for regular check-ups	48	23.1
cervical cancer? (Select all that	Quit smoking	45	22.0
applies)	Use of a condom during sexual	45	22.0
	intercourse		
	Vaccination for HPV	33	15.8
	Spacing children	21	15.0
	Avoid multiple sexual partners	12	11.0
Can cervical cancer be treated?	Yes	112	53.6
	No	11	5.3
	Don't know	86	41.1
How can cervical cancer be	Surgery	58	51.8
treated?	Specific drugs given at the hospital	58	51.8
	Visiting traditional doctors	9	8.0
Who should go for cervical	Everybody	61	29.2
cancer screening?	Males 21-65 years	2	1.0
	Females 21-65 years	114	54.5
	Elderly females	4	1.9
	Don't know	28	13.4
How often should they go for	Monthly	64	30.6
screening?	Yearly	46	22.0
	Every 3 – 5 years	27	12.9
	Don't know	72	34.4



Figure 1. Knowledge Level of Respondents on Cervical Cancer

# Association between Demographic Characteristics and Knowledge on Cervical Cancer

Table 3 below shows the bivariate association between cervical cancer disease knowledge level

(classified as good knowledge and poor knowledge) and demographic characteristics. Significant associations were found between religion of respondents (P=0.003), education of respondent (P=0.001) and cervical cancer knowledge.

Variables	Options	Poor Knowledge	Good Knowledge	X <sup>2</sup>	p value
Age	$\leq$ 20 years	37 (100%)	0 (0%)	3.221	0.359
	20 – 29 years	203 (94.9%)	11 (5.1%)		
	30 – 39 years	117 (95.1%)	6 (4.9%)		
	$\geq$ 40 years	70 (92.1%)	6 (7.9%)		
Number of	0	205 (96.2%)	8 (3.8%)	3.495	0.321
lifetime	1 – 3	119 (95.2%)	6 (4.8%)		
pregnancy	4-6	82 (91.1%)	8 (8.9%)		
	$\geq$ 7	21 (95.5%)	1 (4.5%)		
Religion	Christianity	417 (95.4%)	20 (4.6%)	8.909	0.003*
	Others	10 (77%)	3 (23%)		
Education	None	10 (100%)	0 (0%)	16.841	0.001*
	Primary	16 (100%)	0 (0.0%)		
	Secondary	185 (90.2%)	3 (1.4%)		
	Tertiary	185 (90.2%)	20 (9.8%)		
Marital status	Single (never married)	208 (95.4%)	10 (4.6%)	1.675	0.433
	Married	204 (94.9%)	11 (5.1%)		
	Divorced/Separated /Widowed	15 (88.2%)	2 (11.8%)	-	
Occupation	Skilled	267 (93.3%)	18 (6.3%)	2.782	0.426
	Semi-skilled	65 (95.6%)	3 (4.4.%)		
	Unskilled	46 (97.9%)	1 (2.1%)		
	Unemployed	49 (98.0%)	1 (2.0%)		

Table 3. Association between Demographic Characteristics and Cervical Cancer Knowledge Level

\*Significant variables with p<0.05

Table 4 shows the logistic regression model of predictors of cervical cancer knowledge level. It showed significant association between religion and education. Respondents practicing Muslim/traditional religion were 9.6 times more likely than Christians to have good cervical cancer knowledge (95% CI OR= 2.037 - 45.394). Also, respondents with secondary

school education were 8 times less likely than those with tertiary education to have good cervical cancer knowledge (95% CI OR 0.034 – 0.415). The educational categories for "none" and "primary" had no significant association with knowledge as a result of the data imbalance between poor and good knowledge.

Variables	Options	Odds Ratio (OR)	95% CI	P value
Religion	Others	9.616	2.037 - 45.394	0.004*
	Christianity	1	-	-
Education	None	0.000	0.000	0.999
	Primary	0.000	0.000	0.998
	Secondary	0.118	0.034 - 0.415	0.001*
	Tertiary	1	-	-

 Table 4. Logistics Regression of Knowledge Level and Demographic Characteristics

\*Significant variables with p < 0.05

### **Cervical Cancer Attitude**

Of all the respondents, 81.8% agreed that cervical cancer is deadly if not screened and treated, 80% thought that any woman can get the disease, 75.8% agreed that screening helps in preventing cervical cancer. Majority (98.2%) agreed they will go for screening if it was free and causes no harm, while 67.6% were willing to allow their children get vaccinated with HPV vaccine (table 5). Overall, the mean attitudinal score of respondents is  $7.5 \pm 2.5$  (range: 0 to 12). Majority (71.6%) of the respondents scored at least 7 and were classified as having good attitude towards cervical cancer prevention (Figure 2).

Table 5. Attitude of Respondents to Cervical Cancer

Attitude	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Cervical cancer is a deadly disease if not	1.6	1.1	15.6	51.6	30.2
screened and treated					
Any woman (including you) can get	2.9	2.7	14.4	58.7	21.3
cervical cancer					
One need not to be aware of cervical	6.4	27.8	31.6	24.0	10.2
cancer because I cannot have it at any					
exposure					
Cervical cancer cannot be transmitted	6.7	15.3	29.1	38.4	10.4
from one person to another					
One can have cervical cancer through	4.9	10.7	24.7	50.2	9.6
unsafe sexual practices					
One cannot be cured from cervical	5.8	26.4	39.3	23.3	5.1
cancer once diagnosis is made					
Screening helps in prevention of cervical	1.6	4.9	17.8	58.7	17.1
cancer					
I feel embarrassed when undergoing a	9.1	28.0	26.4	29.1	7.3
pap smear					
Screening causes no harm to the client	4.4	8.0	21.3	55.3	10.9
I would be worried if I was to have early	2.2	5.8	12.4	50.7	28.9
signs of cancer (pre-cancer lesion)					
Cervical cancer screening is not	5.3	16.9	52.9	18.9	6.0
expensive					
If screening is free and causes no harm, I	2.2	4.0	5.6	60.4	27.8
will go for screening					

Would you allow your children to be	2.7	9.8	20.0	48.9	18.7
vaccinated against HPV					



Figure 2. Attitudinal Level of Respondents on Cervical Cancer

Table 6 below shows the bivariate association between cervical cancer disease knowledge level (classified as good knowledge and poor knowledge) and attitude of respondents. Significant associations were found between attitude score of respondents (P=0.031) and cervical cancer knowledge.

Table 6. Association between Respondents' Attitude and Cervical Cancer Knowledge Level

Variables	Options	Poor Knowledge	Good Knowledge	X <sup>2</sup>	p value
Attitude	Good Attitude	126 (98.4%)	2 (1.6%)	4.645	0.031
	Poor Attitude	301 (93.5%)	21 (6.5%)		

Table 7 shows the logistic regression modelof predictors of respondents' attitude score. Itshowedslightlysignificantassociation.Respondents with poor cervical knowledge level

were 4.4 times less likely than those with good knowledge to have the right attitude towards cervical cancer prevention (95% CI OR= 0.053 - 0.985).

 Table 7. Logistics Regression of Knowledge Level and Attitude

Variables	Options	Odds Ratio (OR)	95% CI	P value
Knowledge	Poor Knowledge	0.228	0.053 - 0.985	0.048
	Good Knowledge	1		

### **Cervical Cancer Prevention Practices**

Overall, only 58.9% have ever screened for reproductive health services and only 3.8% of the respondents have ever screened for cervical cancer. Of the respondents that have screened for cervical cancer, 98.8% was done at the hospital and 43.8% have been screened more than once. Majority of the screening (81.3%) was initiated by the health worker and 87.3% of those that have been screened were satisfied with the services provided by the health workers. Only 8.2% have received HPC immunization (Table 8).

Practice questions	Options	Frequency	Percent
Have you ever screened for reproductive	Yes	265	58.9
health services like HIV, STI	No	185	41.1
Have you ever screened for cervical cancer	Yes	17	3.8
	No	433	96.2
Where did you get screened	Hospital	15	93.8
	PPMV	1	6.3
How many times have you been screened	1	9	56.3
	2	6	37.5
	4	1	6.3
When was the last time you screened?	Last one year	5	31.3
	Within the past three years	5	31.3
	More than three years ago	3	18.8
	This year	3	18.8
Who initiated the screening	Health professional	13	81.3
	Self-initiated	2	12.5
How was the attitude of the health workers	Positive	15	93.8
when you went for screening	Indifferent	1	6.3
Were you satisfied with the services	Yes	14	87.5
provided by the health workers	No	2	12.5
Have you received HPV immunization	Yes	37	8.2
	No	413	91.8
Do you have a girl child between 9 – 18	Yes	127	28.2
years	No	323	71.8
If yes, were they immunized with HPV	Yes	33	26.0
vaccine	No	94	74.0

#### Table 7. Practice of Cervical Cancer Prevention

# Reasons for not Accessing Screening Services

The reasons for not accessing cervical cancer screening services as shown in table 9 included

lack of information (71.6%), lack of readiness on the part of the respondents (21.6%) and lack of screening services (20.4%).

Reasons	Frequency	Percentage
Lack of information	322	71.6
Lack of readiness	97	21.6
Lack of screening services	92	20.4
Expensive service cost	61	13.5
Long waiting time	37	8.2
Health worker attitude	23	5.1
Hospital strike action	10	2.2
Embarrassed/fear	2	0.4

Table 8. Access to Cervical Cancer Prevention Services

### **Discussion of Findings**

### **Cervical Cancer Knowledge**

This study reported poor knowledge of cervical cancer and its prevention. Only 5.1% have good overall knowledge of cervical cancer and 46.4% of the respondents have heard of cervical cancer. This is similar to the low level of knowledge and awareness reported by various studies within and outside the Southeast Zone of Nigeria. Ojiyi & Dike [21] reported only 6% awareness of pap smear and 13.6% awareness of cervical cancer in Orlu, Feyi-Waboso et al [22] reported 16% cervical cancer awareness and pap smear services in Aba, and Obiechina and Mbamara [23] reported 26.85% in Onitsha. In a study by Eze et al [24], it was reported that less than 40% of the women were aware of cervical cancer; about 30% knew that it was preventable; 25% were aware of cervical screening; 20% had knowledge of screening centers.

Other studies also reported low knowledge among respondents [12, 15, 25].

These findings differed from results reported by studies conducted in the urban areas and among health professionals in some health institutions in Nigeria which reported high cervical cancer awareness levels (about 50.0 -90.0%). Eke et al [1] found 84.9% knowledge of cervical cancer among women of all age groups in Nnewi, Udigwe [26] reported 87% awareness of screening services. Other reports of high knowledge levels include a 52.8 % level of awareness of cervical screening in Owerri [27], 69.8% in Ilorin [28], 70% in Ibadan [29], 60.9% in Awka [30], 91% in Enugu [19], and 72.9% in Abuja [31].

The differences can be attributed to the differences in the sociodemographic characteristics of the populations studied. Various studies have shown that the awareness of cervical cancer is variable with women living in cities and female health and non-health professionals who work in health institutions showing higher levels of awareness than those living in rural areas [13, 32-35].

The low awareness rate in this study calls to question how adequate the nation's academic curriculum covers sexual and reproductive issues since over 90% of the study population received some form of formal education. There significant association was а between educational status and the knowledge of cervical cancer screening but surprisingly this did not translate into the utilization of the services. This shows how defective our educational curriculum is in terms of sexual and reproductive health issues.

### **Cervical Cancer Attitude**

The belief in personal susceptibility toward cervical cancer has been shown to be a determinant of future plans to have a Pap smear [36]. This study found that generally, 71.6% of the respondents showed a good attitude, 81.8% agreed that cervical cancer is deadly if not screened and treated, 80% thought that any woman can get the disease, and 75.8% agreed that screening helps in preventing cervical cancer. This finding supports that of Anyebe et al [37], which reported a high level of awareness of cervical cancer screening as well as a favorable attitude toward it in Zaria. In Singapore, 58.9% of women interviewed felt they were susceptible while 75.7% felt the same way in Turkey [36, 38].

Other studies found different attitudes and perceptions among their respondents. A study in Lagos [14], reported very low belief in personal susceptibility to cervical cancer as none of the women felt they were at risk of cervical cancer, even though 73.3% were inclined to be tested for cervical cancer. From a study by Agboola and Bello [20] only 16.7% of the women reported that they were susceptible to cervical cancer. This finding was also observed among health workers in Benin City in Nigeria where up to 89% of female health workers surveyed felt they were not at risk of developing cervical cancer [39].

While a good attitude toward the disease helped to influence the practice of screening, the

findings of this research were the opposite as there was a poor practice of screening even though 81.8% agreed that cervical cancer is deadly if not screened and treated.

### **Cervical Cancer Prevention Practices**

The analysis of results for the practice of women with regards to cervical cancer prevention shows that even though 58.9% of respondents have screened for reproductive health services like HIV and STI, only 3.8% of respondents have been screened for cervical cancer out of which only 43.8% have been screened more than once. Poor screening practices have been reported by other studies among the general population within the Southeast Zone, including 0.6% in Abakiliki [24], 5.2% in Enugu [45], 7.1% in Owerri [27], 8% in Aba [22], 0% in Awka [45].

The percentage of women that have been screened for cervical cancer in Nigeria has been consistently low [20,25, 32,35,33,46,47,48,40]. These poor indices have been recorded in both urban areas, rural and across various geographical locations. However, in some of the studies where the awareness levels were high, it did not translate to adequate knowledge levels or uptake of cervical cancer screening [41-44]. Poor practices of cervical cancer screening were seen in other African studies, with prevalence rates less than 15% even among those aware of the condition [4, 28, 49, 50].

Reports of studies among female health care workers were not too different as they also reported poor screening practices as reported in this study. In a study in Enugu State among female health workers, 12.8% of the respondents have undergone screening tests, with only 3.2 percent having done the screening in the preceding year [51]. Anyebe et al [37] reported a 17.15% testing rate among female health workers in Zaria, with 58.7% of the respondents reportedly screening more than once. Only 14.1% of the healthcare workers had done cervical screening in a study by [19] in Enugu. Udigwe [50] in Anambra State, Nigeria, among nurses where only 5.7% of the participants were reported to have undergone a pap smear. Only 0.3% of female professional health workers surveyed in a similar study conducted in Ilorin had ever had a screening test [28]. Other studies also showed low screening practices among female health professionals [13, 34].

The uptake of HPV vaccination was not different. From the study, only 26% of the respondents indicated that their girls between 9-18 years have been immunized with the HPV vaccine, while only 8.2% have received HPV immunization. This was slightly higher than the 3.5% HPV immunization among adults and 4% HPV immunization among girl children found in the study by Agboola and Bello [20] and 13.5% vaccination of adolescent girls against HPV reported by [52]. [25] in a poor community setting Ibadan, reported that 1.1% of women had taken the human papillomavirus vaccine before.

A higher immunization among adolescents was reported by [19] in their study among healthcare workers where 49.2% of the respondents with adolescent daughters had immunized their daughters with the HPV vaccine. This might not be unrelated to their knowledge and access to the vaccine as healthcare workers.

# Reasons for Lack of Access to Cervical Cancer Screening Service

Analysis of results from respondents' reasons for not accessing cervical cancer screening showed lack of information (71.6%), lack of readiness to screen (21.6%), and lack of screening services (20.4%) as the most reported reasons.

Respondents' lack of information at 71.6% informs the findings of Awodele et al [53] as they identified the low level of willingness by health professionals to teach other women about the importance of the screening. They added that health practitioners with accessibility to clients should serve as role models, educators, and counselors, on the knowledge and importance of cervical cancer screening. According to [27], the

most common reasons given for not doing the test were lack of awareness (46.1%), no need for it (12.5%), and fear of a bad result (11.6%). Based on findings by [30], ignorance of the existence of such a test, lack of awareness of centers where such services are obtainable, ignorance of the importance of screening, and the risk factors for the development of cervical cancer were reported as reasons for low uptake of screening services.

Other studies also found reasons in line with the above. Lack of awareness of the test, absence of symptoms, fear of the possible outcome, fear of stigma, and absence of symptoms [15, 50, 54, 55].

The reporting of fear by respondents highlights the need for effective education on the disease itself and the possible treatment options including preventive measures. The lack of confidence in available facilities by health workers who are part of the hospital system also calls for system over-haul in terms of education and confidence building.

This study found that the majority of respondents lacked information on where to access CC screening, while others are neither

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### Conclusion

The knowledge and practice among the respondents were very poor. However, they had a good attitude towards cervical cancer prevention. There is a need for targeted awareness to enlighten the public not only on cervical cancer knowledge but also on the importance of screening as recommended. This will ensure early detection which is necessary for good treatment outcomes.

### Acknowledgment

I deeply appreciate the assistance and the contribution of all that made this work possible.

# **Conflict of Interest**

The authors declare that they have no conflict of interests. This work is self-funded.

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