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### Assessment of Awareness, Attitude and Practice of Cervical Cancer Screening and Prevention of Cervical Cancer among Azikoro Women

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#### Abstract

**Background:** Cervical cancer is an important public health problem caused by Human Papilloma virus. It is one of the most frequent cancers among women, causing morbidity and mortality. An estimated 468,000 new cases are diagnosed each year, with 80% of these instances occurring in emerging and underdeveloped nations. Though it is a preventable disease most women with cervical cancer present in an advance stage due to lack of awareness, poor attitude towards cervical screening and low uptake of human papilloma virus (HPV) vaccines among females. This study examined the extent of awareness, attitude and practice of cervical cancer screening as well as prevention of cervical cancer among women in Azikoro community.

**Methods:** A descriptive cross-sectional study was conducted; data was collected from 350 respondents in Azikoro community using a semi structured questionnaire interviewer administered and analyzed using the statistical package for social science (SPSS) version 21. The study population comprised women between the ages of 15 to 65 years in different households and shops in Azikoro community.

**Results:** The results of the study showed low level of awareness of cervical cancer (43.1 %) and even much lower level of awareness of cervical cancer screening (28.6 %). On assessment of attitude to screening, 2.1% had performed cervical cancer screening with the highest screening type being

Pap smear. Hindrance to cervical cancer screening was acknowledged by the women to be caused by financial constraints, fear of the procedure and its out come as well as lack of awareness in general, about 1.4 % of the women have been immunized as revealed by this study which is low and thus increases the risk percentage of women of Azikoro community. Although there was low level of practice of cervical cancer vaccination, 93.7 % showed willingness to be vaccinated if the vaccine is made available and. Further more 93.1 % were willing to allow their daughters to be immunized. We recommend that there should be more awareness campaign about cervical cancer, screening and vaccination by the Government and other health organization on the need and merit of screening and vaccination.

**Conclusion:** The study revealed moderately low level of awareness of cervical cancer among women in Azikoro community, however, awareness of cervical cancer screening and attitude to cervical cancer screening was very poor. There was low incidence of human papilloma virus vaccination however a high level of willingness to be vaccinated was expressed by the respondents if vaccines were made available and free. Traditional and spiritual homes have a strong influence of the health seeking behaviour among the respondents.

**Keywords:** Cervical, Cancer, Screening, Attitude, Practice, Prevention

#### Introduction

Cervical cancer is one of the commonest cancers among women which cause morbidity and mortality worldwide. Though cervical cancer is preventable, most of the women with cervical cancer present in late stages as a result of lack of knowledge

and poor attitude to cervical cancer screening among females<sup>[1]</sup>. Globally, cervical cancer is an important public health problem. It is estimated that 468,000 new cases are recorded annually where 80 % of the cases occur in developing and underdeveloped countries<sup>[1]</sup>. It is mainly caused by Human Papilloma Virus (HPV) usually of the variants of types 16,18, are responsible for approximately 70 % of cervical cancer cases in all countries around the world<sup>[2]</sup>. Cervical cancer results from persistent infection of these HPV strains. The prevention and early diagnoses has markedly reduced morbidity and mortality due to cervical cancer in Nigeria and other developing countries due to introduction of Pap smear. This decreased the death rate of cervical cancer to about 80 %<sup>[1]</sup>.

Low socioeconomic group, cigarette smoking; both active and passive, increases the risk of cervical cancer (passive smoking has lesser extent), oral contraceptives; long term use of oral contraceptives is associated with increased risk of cervical cancer, multiple pregnancy, multiple sexual partners, early age of coitus, high risk male sexual partners i.e. promiscuous males with previous multiple sexual partners, male with penile condyloma and males with previous spouse with HPV infection, HIV infection and immune suppression are said to be risk factors of cervical cancer<sup>[3, 4]</sup>. The most important risk factor in developing countries is infrequent cervical screening or lack of accessible cervical screening services<sup>[5]</sup>.

It is believed that almost all women may be infected with HPV in their lifetime, but in most cases, HPV infections will be cleared by the body's immune response without treatment<sup>[6]</sup>. HPV infections may lead to cervical cancer and may be completely asymptomatic in the early stage; women can live in a precancerous state for 10–15 years without any symptoms<sup>[7]</sup>. Cervical cancer is a preventable and treatable disease; screening of precancerous lesions and vaccination against cervical cancer would go a long way in reducing its incidence, morbidity and mortality rates. The WHO recommends a comprehensive cervical cancer prevention and control programme which includes three interdependent components consisting of primary, secondary and tertiary prevention. The primary prevention aims at reducing the risk of HPV infection with the following interventions; vaccinations for girls aged 9–13 years (or the age range referred to in national guidelines) before they initiate sexual activity. Healthy sexuality education for boys and girls, tailored as appropriate to age and culture, with the aim of reducing the risk of HPV transmission (along with other sexually transmitted infections, including HIV) with essential messages such as delay of sexual initiation, and reduction of high-risk sexual behaviour; condom promotion or provision for those who are sexually active. Male circumcision where relevant and appropriate<sup>[8]</sup>.

Secondary prevention involves screening for and early treatment of precancerous stage of cervical cancer the interventions include:

Counselling and information sharing as well as screening for all women aged 30–49 years (or ages determined by national standards) to identify precancerous lesions, which are usually asymptomatic; treatment of identified precancerous lesions before they progress to invasive cancer. For women who have received an HPV vaccination, it is important to continue screening and treatment when they reach the target age<sup>[8]</sup>.

As pertaining tertiary prevention The public health goal is to

decrease the number of deaths due to cervical cancer with interventions such as; A referral mechanism from primary care providers to facilities that offer cancer diagnosis and treatment, accurate and timely cancer diagnosis by exploring the extent of invasion, treatment appropriate to each stage, based on diagnosis. For early cancer, if the cancer is limited to the cervix and areas around it (the pelvic area), treatment can result in cure; provide the most appropriate available treatment and offer assistance with symptoms associated with cancer or its treatment. For advanced cancer, If the cancer involves tissues beyond the cervix and pelvic area and/or metastases, treatment can improve quality of life, control symptoms and minimize suffering; provide the most effective available treatment and palliative care in tertiary facilities and at the community level, including access to opioids<sup>[8]</sup>.

Developed countries like America, where cervical cancer screening and Human Papilloma Virus vaccination programs are well established, have shown a decline in annual incidence by up to 75% or more over the past 50years<sup>[9]</sup>.

The major screening techniques include:

Papanicolaou smear (PAP smear), Visual inspection using acetic acid, HPV (DNA) tests, Colposcopy, Cervicography, Speculoscopy, PAP-NET, Computerized devices e, g troscan. Visual inspection using acetic acid (VIA) and HPV tests (serology) have been said to be cost-effective for low-resource countries. The visual inspection with acetic acid (VIA) or visual inspection with Lugol's iodine (VILI) is said to be the most feasible, and WHO-approved, strategy for cervical cancer screening in low resource settings<sup>[10]</sup>. After applying acetic acid or Lugol's iodine directly on the cervix, precancerous and cancerous lesions turn white, making them visible to the naked eye. This method highly sensitive among sexually active women.<sup>10</sup> This gives immediate result, thus women who screen positive for precancerous lesions can easily be offered treatment during the same visit if the health facility has the capacity. This actually is why it is said to be cost-effective, affordable, and an ideal first-line treatment for Carcinoma Invasive Neoplasms of any grade when the cervical. This is also called the '**screen and treat method**'<sup>[10]</sup>. This 'screen and treat' strategy can avoid the burden of costly follow up visits, significant delays in treatment, and loss to follow up.

Worldwide, cervical cancer is both the 4<sup>th</sup> most common cause of cancer and deaths from cancer in women. It's the second most common cause of female-specific cancer after breast cancer, accounting for around 8 % of both cancer cases and total cancer deaths in women<sup>[11]</sup>. About 80% of cervical cancers occur in developing countries. according to World Health Organization in 2010, the annual number of new cases of cervical cancer in Nigeria was 14,550/100,000 women per year<sup>[12]</sup>. It kills about 80,000 Nigerian women every year<sup>[13]</sup>. There are about 2 million cancer cases recorded in Nigeria with 100,000 new cases recorded annually of which about 25 percent are cancer of the cervix<sup>[14]</sup>. Nigeria has a population of 40.43 million women aged 15 years or older who are at risk of developing cervical cancer<sup>[15]</sup>. It is worth noting that cervical cancer comes with its associated psychological, social and financial implication on individuals, families, communities and the nation at large. The World Health Organization projects a 25% percent increased mortality from cervical cancer in Nigeria in the next decade in the absence of intervention<sup>[12]</sup>. The

problem identified is that more than 50 % of rural women in Nigeria have not been exposed to cervical cancer screening and there is lack of knowledge regarding risk factors related to cervical cancer and the screening for and prevention of cervical cancer.

A study made by WHO revealed that most African women, Nigeria inclusive now experience cervical cancer at an earlier age than their mothers. This could be due to early sexual exposure and early age of coitus. These findings are contrary to accepted moral and cultural values [2]. Further more with the increase in the incidence of cancers generally in the Niger delta it has become imperative that a study be done on cervical cancer screening using a sub-urban community as a case study. Azikoro happens to be a sub-urban community that plays host to a Health care Facility.

Pap smear as one of the methods of screening has not been as effective in developing countries this is owing to the fact that these countries have an impoverished health care infrastructure, with most women being uninformed, who get lost to follow up and a lengthy turnaround time to get result as well as a lack of awareness to other screening methods. This study therefore aims at contributing to improving the awareness levels on cervical cancer screenings so as to further assist in improving the effectiveness of pap smear screening and other methods of cervical cancer screening. The aim of this study is to assess cervical cancer screening awareness and practice as well as uptake of HPV vaccination among women in Azikoro community.

## Method

### Study Area Location

The area used in this study is Azikoro community in Yenagoa local government area (LGA) of Bayelsa State. Yenagoa, is the capital city of the state. Its coordinates are 5<sup>o</sup>02'N 6<sup>o</sup>20'E/ 5.033<sup>o</sup>N 6.333<sup>o</sup>E. The predominant occupations of the people are civil servants, traders, farmers and fishing. The community hosts a Comprehensive Primary Health care facility.

### Study Design

A descriptive cross sectional study design (interviewer based questionnaire) was used to determine the Knowledge attitude and practice towards cervical cancer screening among the women in Azikoro community.

### Study Duration

This study lasted for a period of six months. Beginning from October 2020 to march 2021. though the period for data collection was about 2 weeks.

### Study population

The study population comprised women between the ages of 15 to 65years in different households, market, religious centers and schools in Azikoro community.

### Demographics

Respondents were adult women who were between ages of 15 to 65years.

### Inclusion criteria

Adult women between the ages of 15 to 65 years were recruited as respondents.

### Exclusion criteria

Women who do not reside in azikoro village and who were on visit to azikoro.

## Sample size determination

WHO step guild was adopted in calculating the appropriate and minimum sample size as shown below;

$$n = \frac{(z^2pq)}{d^2}$$

Where n = sample size

q= 1- p

z= confidence level

d= margin of error

p= prevalence

Where Z = 1.96

p= 0.804 (prevalence 80.4%. study attitude towards cervical cancer screening done in Kaduna) [15].

q=1-p

q =1-0.804

q=0.196

Therefore,

$$n = \frac{(1.96^2 \times 0.804 \times 0.196)}{0.05^2}$$

$$n = \frac{0.6054}{0.0025}$$

$$n = 242$$

Minimum sample size for this study is 242 10% of the minimum sample size was added to account for non response

$$\frac{10 \times 242}{100} = 24.2$$

That is the study sample size for women in Azikoro will be 242+25=267

How ever to increase the representativeness of the study, total population of 350 of the study participants was used.

### Sampling technique

Multi staged sampling technique was used to sample the house-holds in Azikoro community.

#### Stage one

Using the community health center at Azikoro as a reference point the houses in the community was divided into three groups; houses around the health centre, houses before the health center and houses after the health center location.

#### Stage two

Houses from each group were selected at intervals of two. Houses with respondents who were unresponsive or houses without eligible respondent were skipped with the next nearby house chosen.

### Data collection

#### Tools / Instrument of data collection

The research instrument is a semi structured questionnaire which was used to collect information from respondents. Its divided into four sections;

- a. Biodata
- b. Awareness of cervical cancer and cervical cancer risk factors
- c. Awareness of cervical cancer screening
- d. Attitude towards cervical screening and prevention
- e. Preventive practice to cervical cancer.

**Validation**

This study was pretested using women in Obunagha to ensure that our questionnaires are adequately understood.

**Training of research assistants**

This was not done, however the members of the group shall met regularly and with our supervisor to discuss our various findings.

**Method of Administration of Questionnaire**

The method that was used is interviewer administered questionnaire.

**Data Analysis**

SPSS version 21 was used.

**Ethical consideration**

Ethical Approval was obtained from the ethics committee of Niger Delta University Teaching Hospital (NDUTH). Informed consent was obtained from the participant with confidentiality duly ensured.

**Study Challenges**

- a. Female respondents feeling shy or embarrassed when discussing to male researchers. This was taken care of by using a female interviewer who was part of the research team.
- b. High cost of transportation to and from the the research area. This was resolved by residing at one of the research team members residence in Azikoro community.
- c. Superstitions among some respondents who felt cervical cancer was not their portion and talking about cervical cancer could attract it to them.

**Work plan**

S. No	Activities	Date	By Whom
1	Selection of topics	Week 1	All members of group + supervisor
2	Meeting with supervisors for correction	Week 2	All members of the group and supervisor
3	Group meetings	3times weekly From week 3	All members of the group
4	Writing of proposal	Week 5	All members of the group
5	Administration /retrieval of questionnaire	Week 6 to week 9	All members of the group
6	Data analysis	Week 10	All members of the group
7	Report writing	Week 11	All members of the group with supervisor

**Results**

A total of 350 questionnaires was interviewer administered to women in azikoro community and the response rate was 100%.

From the Tables (1 and 2), 34% of the respondents were within the age range of 15-24 years. 48.6% of the respondents single while 42.9 % were married, 85.3% of those married were of the monogamous setting. 34.3% of the respondents were students. 38.3% of respondents had

secondary level education and 31.1% had tertiary level of education. 82.3% of respondents were sexually active. 99.4% of the respondents were Christians.

From the Tables (3, 4, 5, 6 and 7) 43.1 % of the respondents have heard of cervical cancer but only 22.6 % of the respondents were aware of the risk factors. Schools social media and Tv/ radio proved to be the major source of information with 32.9 %, 22.8 %, 16.5 % respectively; 26 % were aware that cervical cancer is a sexually transmitted disease, 26 % are aware that other sexually transmitted disease can be a predisposing factor 18.6 % know that early marriage and early sexual exposure can predispose to cervical cancer. 17.7 % of the respondents know that polygamy and serial monogamy are predisposing factors..53.4 % know that tobacco smoking can predispose to cervical cancer. 34.9 % are of the opinion that having multiple sexual partners can be a risk factor. Only 22.3 % are aware of cervical cancer vaccine.

**Table 1:** Social-demographic characteristics of respondents

	Frequency	Percentage
<b>Age</b>		
15-24	119	34.0
25-34	108	30.9
35-44	90	25.7
45 and Above	33	9.4
Total	350	100
<b>Relationship Status</b>		
Single	170	48.6
Married	150	42.9
Widowed	9	2.6
Divorced	5	1.4
Cohabiting	16	4.6
Total	350	100
<b>If married what type?</b>		
Monogamy	128	85.3
Polygamy	22	14.7
Total	150	100

**Table 2:** Social-demographic characteristics of respondents continues

<b>Occupation</b>		
Artisans	52	14.9
Civil servants	64	18.3
Traders	102	29.1
Fishing	2	0.6
Farming	1	0.3
Students	120	34.3
Others	9	2.6
Total	350	100
<b>Religion</b>		
Christianity	348	99.4
Islam	2	0.6
Traditionalist	0	0
Others	0	0
Total	350	100
<b>Level of Education</b>		
Primary completed	36	10.3
Primary-uncompleted	10	2.9
Secondary completed	134	38.3
Secondary uncompleted	49	14.0
Tertiary	109	31.1
None	12	3.4
Total	350	100
<b>Sexually active</b>		
Yes	288	82.3
No	62	17.7
Total	350	100

**Table 3:** Awareness of cervical cancer and its risk factors

	Frequency (N = 350)	Percentage%
Have heard about cervical cancer?		
Yes	151	43.1
No	182	52.0
Don't know	17	4.9
Total	350	100
Have you heard about cervical cancer risk factors?		
Yes	79	22.6
No	225	64.3
don't know	46	13.1
Total	350	100

**Table 4:** Awareness of cervical cancer and its risk factors

	Frequency N = 350	Percentage %
<b>If yes, where?</b>		
Social media	18	22.8
Parents/relations/friends	3	3.8
School	26	32.9
Newspaper	0	0
Women magazine	3	3.8
TV/radio	13	16.5
Internet	7	8.9
Somewhere else	9	11.4
Total	79	100
Are you aware that cervical cancer is a sexually transmitted disease		
Yes	91	26
No	245	70
don't know	14	4
Total	350	100

**Table 5:** Awareness of cervical cancer and its risk factors

	Frequency N = 350	Percentage %
Are you aware that other sexually transmitted infection can increase the risk of cervical cancer		
Yes	91	26
No	186	53.1
Don't know	73	20.9
Total	350	100
Do you know that early marriage and early age of sexual exposure can predispose to cervical cancer		
Yes	65	18.6
No	204	58.3
Don't know	81	23.1
Total	350	100

**Table 6:** Awareness of cervical cancer and its risk factors

	Frequency N = 350	Percentage%
Do you know polygamy and serial monogamy can be a risk factor for cervical cancer		
Yes	62	17.7
No	197	56.3
don't know	91	26
Total	350	100
Do you know smoking of tobacco based products can predispose to cervical cancer		
Yes	187	53.4

No	77	22
don't know	86	24.6
Total	350	100
Do you think having multiple sexual can predispose to cervical cancer		
Yes	122	34.9
No	96	27.4
don't know	137	37.7
Total	350	100

**Table 7:** Awareness of cervical cancer and its risk factors

	Frequency N = 350	Percentage%
Do you know about cervical cancer vaccine		
Yes	78	22.3
No	236	67.4
Don't know	36	10.3

From the Table 8 below, 31 respondents (28.7%) of those aged 25 to 34 had the highest level of awareness of cervical cancer risk factors compared to 4 respondents of 12% of age 45 and above

**Table 8:** Age -knowledge of cervical cancer risk factors Cross tabulation

		Have you heard about cervical cancer risk factors			Total
		Yes	No	Don't know	
Age	15-24	28	79	12	119
	25-34	31	64	13	108
	35-44	16	63	11	90
	45 and above	4	19	10	33
Total		79	225	46	350

**Table 9:** Level of education and awareness of cervical cancer Cross tabulation

		Have you heard of cervical cancer			Total
		Yes	No	Dont know	
What is your level of education	Primary completed	13	22	1	36
	Primary uncompleted	3	5	2	10
	Secondary completed	46	79	9	134
	Secondary uncompleted	7	39	3	49
	Tertiary	75	32	2	109
	None	7	5	0	12
Total		151	182	17	350

From the above table 109 respondents of 350 had tertiary level of education and 75 of these respondents (68%) were aware of cervical cancer as opposed to 10 respondents of 350 who had incomplete primary level of education, with only 3 out of the 10 (30%) aware of cervical cancer.

**Table 10:** Level of education and awareness of risk factors Cross tabulation

		Have you heard about cervical cancer risk factors			Total
		Yes	No	Don't know	
What is your level of education	Primary completed	4	28	4	36
	Primary uncompleted	1	5	4	10
	Secondary completed	22	99	13	134
	Secondary uncompleted	3	40	6	49
	Tertiary	47	46	16	109
	None	2	7	3	12
Total		79	225	46	350

From the above results 47 out of 109 respondents who had tertiary level of education showed to be more knowledgeable about cervical cancer risk factors.

**Table 11:** Level of education and awareness of cervical cancer vaccine crosstabulation

		Do you know about about cervical cancer vaccine			Total
		Yes	No	Don't know	
what is your level of education	Primary completed	11	21	4	36
	Primary uncompleted	1	5	4	10
	Secondary completed	19	102	13	134
	Secondary uncompleted	2	42	5	49
	Tertiary	41	58	10	109
	None	4	8	0	12

**Table 13:** Source of information for cervical cancer screening method Crosstabulation

	Source of information							Total
	Social media	Parent/Relation/Friends	School	Newspaper	TV/Radio	Internet	Some where else	
Have you ever heard of cervical cancer screening	26	9	27	1	18	10	9	100
Total	26	9	27	1	18	10	9	100

From the above results school, social media and Tv/radio were the major source of information of cervical cancer screening with frequencies of 27,26,18 respectively.

**Table 14:** Awareness of screening methods

Screening method	frequency
Papsmear	93
Pap net	6
Colposcopy	8
Cervical visual aid inspection	10

We had earlier established in Table 13 that 100 respondents were aware of cervical cancer screening. From the table above 93 out of the 100respondents knew about papsmear screening.

**Table 15:** Health seeking behaviour women following onset of symptoms of foul smelling abnormal vaginal discharge with pain and bleeding during intercourse (cervical cancer symptoms)

	Frequency	Valid Percent
One to three days	204	58.3
Four to five days	26	7.4
One week	61	17.4
Two weeks	7	2.0
One month	16	4.6
Three months	1	0.3
Twelve months	1	0.3
Never	1	0.3
Don't know	33	9.4
Total	350	100.0

From the above results school, social media and Tv/radio were the major source of information of cervical cancer screening with frequencies of 27, 26,18 respectively.

We had earlier established in Table 13 that 100 respondents were aware of cervical cancer screening. From the table above 93 out of the 100respondents knew about papsmear screening.

Total	78	236	36	350
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From the above results 41 out of 109 respondents who had tertiary level of education showed they were aware of cervical cancer vaccine.

**Table 12:** Awareness of cervical cancer screening

	Frequency	Percent
Yes	100	28.6
No	250	71.4
Total	350	100.0

From the result above 100 (28.6 %) of respondents were aware of cervical cancer screening'

**Table 16:** Attitude of women to seeking other alternatives before coming to the hospital such as prayer houses and traditional healers

	Frequency		Percent	
	Yes	No	Total	Total
Those who would seek attention	141	209	350	100.0

From the above table 40.3 % of the respondents would visit other alternatives other than seeking medical care.

**Table 17:** Barriers to screening for cervical cancer

Hindrance	Frequency	Percentage
Would be too embarrassed	74	21.1
Would be too scared	82	23.4
Doctor would be difficult to talk to	19	5.4
Would be difficult to make an appointment with the doctor	8	2.3
Would be too busy to make time to go to the doctor	14	4
Have too many other things to worry about	15	4.3
Would be difficult for me to arrange transport to get screened	63	18
Would be worried about what the doctor might find	56	16
Would not feel confident talking about my symptom with the doctor	27	7.7
Might not be able to see a female doctor	31	8.9
Would worry about not being taken seriously	9	2.6
Need to take permission from husband	29	8.3
Husband would not grant permission	8	2.3
Parents would never permit	6	1.7

**Table 18:** Barriers to screening for cervical cancer

Others	Frequency	Percentage
1. financial constraint	81	23.1
2. I would want to observe for any change first	1	0.3
3. Pap smear looks terribly painful and invasive	1	0.3

From the above Tables (17 and 18) being too scared was a barrier to 23.4% of the respondents while 23.1 % cited financial constraint as a barrier from accessing cervical cancer screening.

**Table 19:** Attitude to prevention of cervical cancer risk factors

Prevention of cervical cancer	Frequency	Percentage
Abstinence	193	55.1
Use of condom(barrier contraceptive)	227	64.9
Faithfulness to one partner	209	59.7
Monogamy	198	56.6
Avoidance of smoking and use of tobacco based products	279	79.7
Sex education	292	83.4
Female education and empowerment	304	86.9

From the above table, 304 respondent think that female empowerment and education can go a long way in preventing cervical cancer and 279 respondents are of the opinion that avoidance of smoking can reduce cervical cancer

**Table 20:** Attitude to cervical cancer screening

		Frequency	Percent	
<b>Do you think papsmear screening is expensive</b>	Yes	145	41.4	
	No	72	20.6	
	Don't know	133	38.0	
Total		350	100.0	
Do you think papsmear is painful	Yes	105	30.0	
	No	92	26.3	
	Don't know	153	43.7	
Total		350	100.0	
Have you performed any cervical cancer screening	Papsmear	Yes	6	1.8
		No	343	98.2
	Visual aid inspection	Yes	1	0.3
		No	349	99.7
	Colposcopy	Yes	0	0
		No	350	100
papnet	yes	0	0	
	no	350	350	
Result out comes for screening were all negative				

The table above shows that 41.1% of the respondents considers pap smear screening to be expensive.. 30% have the notion that pap smear is painful.A total of 7(2%) respondents had done cervical cancer screening and 6 out the 7 did pap smear screening while 1 did visual aid inspection.

**Table 21:** Uptake of cervical cancer vaccination

		Frequency	Percent
<b>Do you think cervical cancer vaccine is safe</b>	Yes	242	69.1
	No	18	5.1
	Don't know	90	25.7
Total		350	100.0
Do you think cervical cancer vaccine is effective	Yes	56	16.0
	No	49	14.0
	Don't know	245	70.0
Total		350	100.0
Have you ever been vaccinated for cervical cancer	Yes	5	1.4
	No	345	98.6
Total		350	100.0
If vaccine was available would you participate	Yes	328	93.7
	No	22	6.3
Total		350	100.0
Would you allow your	Yes	326	93.1

daughter to be vaccinated	No	24	6.9
Total		350	100.0

From the above table 69.1% thinks cervical cancer vaccine if available would be safe, 70% of the respondents do not know whether cervical cancer vaccine is effective in the prevention of cervical cancer, 93.7% of the respondents declared interest to get vaccinated if vaccine is made available. Only 93.1% of the respondents said they would allow their nine year old daughters to be vaccinated.

**Table 22:** Cross tabulation between number of vaccine doses received with place of vaccination

	Where was the vaccination carried out			Total
	fsp(cultural centre,yengoa)	in school	Manchester u.k	
Doses	1	0	1	1
	2	2	0	2
Total		2	1	2
				5

From the table above 5 (1.43 %) of the respondents have gotten vaccinated. One (1) of the vaccinated respondents got vaccinated in school and had only one dose, 2 got vaccinated at cultural center in yengoa and got 2 doses and another 2 got vaccinated at manchester in U.K and got 2 doses.

**Table 23:** Other Reasons given for not participating in papsmear screening

	Frequency	Percent
Absence of symptoms	40	11.4
Absence of symptoms and lack of awareness	1	0.3
Don't know if there is a female doctor available for screening	1	0.3
Financial constraint	2	0.6
Haven't had the opportunity	2	0.6
I can't really say why	23	6.5
I don't see the need	4	1.1
It is not available in my centre/facility	1	0.3
Lack of awareness	273	78
No motivation	1	0.3
No need for it	1	0.3
No time and money and also shy	1	0.3
Total	350	100.0

From the table above 78% of the respondents stated lack of awareness as a reason for not getting screened 11.4 % of respondents gave absence of cervical cancer symptoms as a reason for not getting screened while 6.5% of respondent could not really give a reason for not getting screened

### Discussion

A descriptive cross sectional study design (interviewer based questionnaire based) study to assess the awareness, attitude and practice of cervical cancer screening and prevention of cervical among women in Azikoro community. A total of 350 questionnaires was administered and all 350 questionnaires were retrieved.

From this study 43.1 % had heard of cervical cancer, 22.6 % have heard of its risk factor. 28.6 % were aware of cervical cancer screening which was less than a study done in Sabon gari local government of kaduna, where a study involving 260 women between the ages of 15 and above who were shop owners / attendants had 43.5 % awareness level on cervical cancer screening. This could be as a result of a higher prevalence of cervical cancer and its risk factors

recorded in the northern Nigeria [15], which could have resulted in higher level of awareness of cervical cancer screening. However this study had a higher awareness level when compared with a study done in Ogun state which had 4.8 % awareness level [5]. This could be attributed to the fact that we had more respondents with tertiary level of education due to the an ongoing academic staff union of university (ASUU) strike and the Covid 19 pandemic which resulted in more workers and students being at home as at when the study was conducted. It was also observed that the major sources of information on cervical cancer screening for our respondents were school 27 %, social media 26 % and tv/ radio media 18 % this of course may be due to the fact that we had more respondents between the ages of 25 to 34 years. Also on awareness of cervical cancer vaccine 22.3 % were aware of cervical cancer vaccines which is similar to a study in China which showed 20 % level of awareness [16].

On assessment of the attitude to screening of cervical cancer 2.1 % of the respondent had performed cervical cancer screening which is lower when compared to a study done at Nnamdi Azikiwe teaching hospital which showed 5.7 % of women who had performed cervical cancer screening [16] and a study done in Remo district in Ogun state which showed 8.7 %. this is due to the fact that 78 % of our respondents cited lack of awareness of the screening as their reason for not participating [17]. From our study 58.3 % of our respondents indicated that they would seek some form of medical attention following onset of symptoms within one to three days while 17.4 % would seek attention within one week which amounted to 75.7 % of our respondents. However it was observed that 48% of our respondents indicated that they would consult an alternative care(traditional healers and religious centers before presenting at a health care facility. It can be inferred therefore that religious centers and traditional healers hold a significant sway in Azikoro community and that those who would go to the hospital within one week might visit an alternative care first before presenting.

On evaluating the hindrances to cervical cancer screening, It was noticed that 23.4 % of our respondents reported being scared of the procedure, 23.1 % reported financial constraint a barrier, 16 % of our respondents cited being afraid of test findings as an hindrance to participating in cervical cancer screening which is keeping when compared to a study done in Nnewi south east in Nigeria which had 15 % of the respondents citing being afraid of test findings as an hindrance to participating in cervical cancer screening [18].

On assessment of the practice of cervical cancer prevention and vaccination it was observed that only 1.4 % of the respondents had been immunized which is higher compared to a study done in an urban slum in Lagos among women of reproductive age which had 0 % [15]. This could be attributed to the fact that the study done in Lagos was characterized by women from a slum and may be of lower educational and socioeconomic status when compared to women in Azikoro community. Despite the low level of vaccination majority of the women 93.7 % showed willingness to be vaccinated if the vaccine is made available and free which is in keeping with the study done in Lagos which had 93.8 % [15]. Further more from our studies 93.1 % were willing to allow their daughters to be immunized which is higher when compared to a study done in Abakaliki which had 89.1 % [19]. This might be due to the presence of a health center at Azikoro

community which actively renders immunization services for vaccine preventable diseases in children leading to a high awareness level and acceptability of vaccines among mothers for their children. While a large number of our respondents are willing to be vaccinated 16 % of them feels that it is effective while 70 % do not know if the vaccine would be effective or not however when compared with a study done in the United States which had 62.8 % believing that cervical cancer vaccine offers protection against cervical cancer [20], our results showed that our respondents had a lower percentage of those who felt it was effective. This could be attributed to the low knowledge base about cervical vaccine among women in our study.

## Conclusion

From our study,there is a moderately low level of awareness of cervical cancer among women in Azikoro village,which was highly contributed by the impact of school, social media and Tv/radio in awareness creation to the public.however,awareness of cervical cancer screening and attitude to cervical cancer screening is very poor.Thus making the awareness of the preventive measure to cervical cancer screening relatively low compared to the awareness level of cervical cancer itself.

## References

1. Arbyn M, Anttila A, Jordan J, Ronco G, Schenck U, Segnan N, *et al.* European Guidelines for Quality Assurance in Cervical Cancer Screening. Second Edition—Summary Document. *Ann Oncol.* 2010; 21(3):448-458.
2. Clifford G, Franceschi S, Diaz M, Muñoz N, Villa LL. HPV type-distribution in women with and without cervical neoplastic diseases. *Vaccine.* 2006; 24:S26-34.
3. Al-Naggar RA, Low WY, Isa ZM. Knowledge and barriers towards cervical cancer screening among young women in Malaysia. *Asian Pac J Cancer Prev.* 2010; 11(4):867-873.
4. Bayrami R, Taghipour A, Ebrahimipour H. Personal and socio-cultural barriers to cervical cancer screening in Iran, patient and provider perceptions: A qualitative study. *Asian Pac J Cancer Prev.* 2015; 16(9):3729-3734.
5. Abiodun OA, Fatungase OK, Olu-Abiodun OO, Idowu-Ajiboye BA, Awosile JO. An assessment of women's awareness and knowledge about cervical cancer and screening and the barriers to cervical screening in Ogun State, Nigeria. *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS).* 2013; 10(3):52-58. e-ISSN: 2279-0853, p-ISSN: 2279-0861
6. Wen Y, Pan XF, Zhao ZM, Chen F, Fu CJ, Li SQ, *et al.* Knowledge of human papillomavirus (HPV) infection, cervical cancer, and HPV vaccine and its correlates among medical students in Southwest China: A multi-center cross-sectional survey. *Asian Pac J Cancer Prev.* 2014; 15(14):5773-5779.
7. Liu T, Li S, Ratcliffe J, Chen G. Assessing knowledge and attitudes towards cervical cancer screening among rural women in Eastern China. *IntJ Environ Res Public Health.* 2017; 14(9):967.
8. World Health Organization. *Comprehensive Cervical Cancer Control: A Guide to Essential Practice*, 2nd ed.;World Health Organization: Geneva, Switzerland, 2014.
9. Scarinci IC, Garcia FA, Kobetz E, Partridge EE, Brandt



- HM, Bell MC, *et al.* Cervical cancer prevention: new tools and old barriers. *Cancer: Interdisciplinary Int J Am Cancer Society.* 2010; 116(11):2531-2542.
10. Joshi S, Kulkarni V, Darak T, Mahajan U, Srivastava Y, Gupta S, *et al.* Cervical cancer screening and treatment of cervical intraepithelial neoplasia in female sex workers using “screen and treat” approach. *Int J women's health,* 2015, 477-483.
  11. Mohammed A, Ahmed SA, Oluwole OP, Avidime S. Malignant tumours of the female genital tract in Zaria, Nigeria: Analysis of 513 cases. *Ann Afr Med,* 2006, 93-96.
  12. World Health Organization. National Cancer Control Programme. World Health Organization. Prevalence rate of cervical cancer in Nigeria. Available at World Health organization media, 2010.
  13. Maliti K. The menace of cervical cancer. Retrieved 15, June 2013 from: <http://www.thisdaylive.com/articles/the-menace-of-cervical-cancer/137197/>, [accessed, June 15<sup>th</sup>, 2018].
  14. Ujah I. Experts make case for Cancer care and management in Nigeria, 2013.
  15. Olubodun T, Odukoya O. Balogun M.R. knowledge attitude and practice of cervical cancer prevention among women residing in an urban slum in Lagos, south west, Nigeria *Pan Afr Med J.* 2019; 32:130.
  16. Udigwe GO. Knowledge, attitude and practice of cervical cancer screening (Pap smear) among female nurses in Nnewi, South Eastern Nigeria. *Niger J. of Clin Pract.* 2006; 9(1):40-43. [ir.muhas.ac.tz:8080/.../ 1/the%20knowledge,%20attitude,%20...](http://ir.muhas.ac.tz:8080/.../1/the%20knowledge,%20attitude,%20...) [accessed May 11, 2018].
  17. Adefuye PO. Knowledge and practice of cervical cancer screening among female professional health workers in a sub-urban district of Nigeria. *Nig Med Practitioner.* 2006; 50(1):19-22.
  18. Ning YE, Liu Y, Xu XY, Zhang XY, Wang N, Zheng LQ. Knowledge of Cervical Cancer, Human Papilloma Virus (HPV) and HPV Vaccination Among Women in Northeast China. *J Cancer Educ.* 2020; 35(6):1197-1205.
  19. Azuogu BN, Umeokonkwo CD, Azuogu VC, Onwe OE, Okedo-Alex IN, Egbuji CC. Appraisal of willingness to vaccinate daughters with human papilloma virus vaccine and cervical cancer screening uptake among mothers of adolescent students in Abakaliki, Nigeria. *Niger J Clin Pract.* 2019; 22(9):1286-1291.
  20. Weiss TW, Rosenthal SL, Zimet GD. Attitudes toward HPV Vaccination among Women Aged 27 to 45. *ISRN Obstet Gynecol.* 2011; 670318.