



# Knowledge, Perceived Risks and Factors Affecting the Utilization of Cervical Screening Services among Females in Owerri North LGA

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## Research Article

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## Abstract

**Background:** Globally, cervical cancer screening services involves procedures put in to prevent and checkmate complications in the cervix. Lack of cervical screening services can lead to cervical cancers, one of the leading causes of death in women, which begin in cells on the surface of the cervix. The objective of this study was to determine the knowledge, perceived risks and factors affecting the utilization of cervical screening services among females in Owerri North LGA.

**Methods:** A descriptive cross sectional study was employed in this research. The multi-stage simple random sampling procedure was employed to obtain a sample size of 424 respondents and a self-administered semi structured questionnaire was used to gather data for this study. The Statistical Package for the Social Sciences (SPSS) was used in the analysis of the data gotten from the study.

**Results:** The results of this study revealed that majority, 27.8% (118) of the women represented age groups between 25-34 and 45-49. For the level of knowledge of cervical screening services, most of the respondents 86.4% (366) demonstrated knowledge of cervical screening, while 13.6% (58) denied. The study also showed a good number of females, about 41.2% (175), agreed that it was risky to avoid uptake of cervical screening. Majority of the respondents reported demonstrated their approval to utilize cervix screening if offered a chance (85.9%), while 14.1% (60) denied based on results from level of

knowledge of cervical screening. 19.3% (82) reported family/husband acceptance, 18.7% (79) said “distance to facility” as some of the factors affecting the utilization of cervical screening practice. Further results for the test of a statistically significant association between socio-demographic characteristics and level of knowledge of cervical screening services, age ( $p=0.010$ ), parity ( $p=0.0008$ ), level of income ( $p=0.0092$ ) and level of education ( $p=0.0327$ ) were associated with level of knowledge of cervical screening services.

**Conclusion:** In conclusion, this study showed good knowledge of the perceived risks of cervical screening among the females but this did not translate to willingness to utilize screening and awareness campaigns must provide accurate information on cervical screening so that females can make informed choices was recommended by this study.

**Keywords:** Knowledge; Perceived Risks; Factors Utilization; Cervical Screening Services

## Introduction

Globally it has been revealed that cervical cancer screening services involves procedures put in to prevent and checkmate complications in the cervix [1]. Lack of cervical screening services can lead to cervical cancers which begin in cells on the surface of the cervix. As one of the leading causes of mortality among women, cervical cancer is the second most common cancer in women worldwide and the leading cause of cancer deaths among women in developing countries [1]. In addition, cervical cancer has relatively early onset, occurring primarily during reproductive ages, and is one of the 3 most common cancers among women under age 45 in most countries [2].

The mortality due to cervical cancer is high worldwide mainly because of absence of a functioning screening process and advanced stage of the disease at diagnosis (South African HPV advisory board, 2010). About 527,624 women are already diagnosed with cervical cancer and 265,672 die from the disease annually [3]. About; 87% all deaths from cervical cancer occurs in sub-Sahara African countries The age-standardized incidence rate for cervical cancer is much lower in developed countries at 5.0 per 100,000 compared to developing countries at 8.0 per 100,000 [4]. An important strategy towards the reduction of the incidence and mortality associated with cervical cancer is by increasing the screening rate of women that have not screened or those that screen infrequently [5]. Knowledge about cancer of the cervix and its screening is important in screening uptake. Women with low levels of knowledge about cervical cancer and its prevention are less likely to access screening services [6]. Female health workers have shown good knowledge of cervical cancer; however, cervical cancer screening attendance rates are still far from satisfactory in most countries [1,4,7,8].

Despite its proven importance, rates of attendance for screening programs vary widely, and are considerably low [1,9-11]. The low prevalence of early cervical cancer screening and limited access to its treatments largely attributed to

differences in diagnosis and subsequent mortality from the disease among high and low income countries. For instance; the screening uptake for cervical cancer in the three developing regions was only 6%, 12%, and 8.3% in South Africa, Bhutan, and Nigeria respectively [12]. World Health Organization (2014) also opines that cervical cancer is largely a preventable disease. An important strategy towards the reduction of its burden in a developing country is by early diagnosis and management of the premalignant lesions of the disease; this would be achieved via screening of women at risk [13,14]. Cervical cancer screening services among undergraduates in tertiary institutions is imperative and cervical cancer usually develops slowly, which means that most cases can be identified and managed when screening is performed regularly [15]. Cervical cancer knowledge is important because it is one of the most easily preventable forms of female cancers if early screening and diagnosis is made. Low awareness level about the disease and its risk factors, beliefs about the disease, poor access to preventive services, un-affordability of the service and current health service system can all affect decision to seek health care services for cervical cancer [16]. However, this research will provide findings on the knowledge, perceived risks and factors affecting the utilization of cervical screening services among females in Owerri North LGA.

## Methods

### Study Design and Setting

A descriptive cross sectional study was employed in this research on the knowledge, perceived risks and factors affecting the utilization of cervical screening services among females in Owerri North LGA. This study included every female adult aged 18 years and above in Owerri North LGA who gave in their consent for the study and caregivers who volunteered to provide vital information on the course of data collection relevant to the research at Owerri North LGA. The study excluded any woman at Owerri North who was attributed to be sick or admitted to the hospital, disabled or

psychologically malnourished during the course of the study and any female adult aged 18 years and above whom refused to give in their consent from the study.

### Sampling Size

The sample size was determined using the Yamene formula (1967) for sample size determination.

$$n = \frac{N}{1 + Ne^2}$$

Where:

n is the desired sample size

N is the population size (29,711)

e is margin of error (0.05)

Therefore,

$$n = \frac{N}{1 + Ne^2}$$

$$\frac{29,711}{1 + 29711 * (0.05)^2}$$

$$\frac{29,711}{75.2775}$$

n = 394.686327....., **395**

Furthermore, to account for 10% Non-Response Rate, (i.e. 90% response rate)

n = n/expected response rate

$$\frac{395}{0.90}$$

n = 438.8888889..... 439.

i.e. the total sample size for the study would be **439**.

### Sampling Technique

A Multi stage sampling technique was adopted for this study on the knowledge, perceived risks and factors affecting the utilization of cervical screening services among females in Owerri North LGA.

- **First stage:** *Selection of Communities.* Three (3) Out of the Ten (10) Communities in Owerri North were selected by the researcher using simple random sampling via balloting to give every community an equal chance of selection.
- **Second stage:** *Selection of villages.* Two (2) villages each out of the total number of villages in the selected communities respectively would be selected via simple random sampling using balloting.
- **Third stage:** *Selection of Streets,* a total of Five (5) streets each in the selected Six (6) villages were selected via simple random sampling (balloting) which gave every street an equal chance of being selected.

- **Fourth stage:** *Selection of households,* a systematic probability sampling method was used to select each household in the selected streets which gave each household an equal chance of selection.
- **Fifth stage:** *Selection of Respondents,* the researcher selected female adults from each household or any one that was present at the time of study. They were selected until the minimum sample size was reached to ensure that the appropriate number respondents were obtained.

### Data Collection

A self-administered semi structured questionnaire was used for the study on the knowledge, perceived risks and factors affecting the utilization of cervical screening services among females in Owerri North LGA. The Data tool (Questionnaire) consisted of **Five (5)** sections as follows:

- **Section A:** Consisted of information on the socio demographic Characteristics of females in Owerri North LGA.
- **Section B:** Consisted of questions on the level of knowledge of cervical screening services among females in Owerri North LGA.
- **Section C:** Consisted of Questions on the perceived risks of respondents.
- **Section D:** Consisted of questions to determine the level of utilization of cervical screening services among respondents.
- **Section E:** Consisted of questions to factors affecting the utilization of cervical screening services among respondents. The questions will be designed for easy apprehension by the respondents.

Reliability of the instrument was determined using test retest method. Copies of the questionnaire was given to females at Owerri West LGA which was outside the area of study by the researcher because this area for reliability testing shares similar characteristics with the Owerri North LGA that were used for the study. Chrombach alpha test was used to test for the reliability coefficient of the questionnaire and a reliability coefficient of 0.84 was obtained. Data was obtained the aid of Two (2) field assistants who were Hired and trained to aid the researcher in the data collection process. The purpose of the research was explained face to face to the respondents before distribution of the questionnaires to them.

### Data Analysis

The Statistical Package for the Social Sciences (SPSS) was used in the analysis of the data gotten from the study. Results were expressed in percentages, frequencies, tables and charts (Descriptive Statistics). Chi square was used to

Test the Hypothesis of the study (P=0.05).

### Ethics

A letter of introduction and ethical clearance was obtained from the Department of Public Health Ethical clearance committee in Federal University of Technology Owerri (FUTO) before the research was conducted. The purpose of the research was explained to each respondent and verbal informed consent obtained from them before inclusion into the study. Also, anonymity of the respondents was assured and ensured. The confidentiality of the information they gave was also be maintained.

### Results

#### Socio demographic Characteristics of respondents

From Table 1 below, it was posited that 27.8% (118) of the women represented age groups between 25-34 and 45-49, 19.9% (85) of the women were 35-44 years of age, 13.8% (59) were aged 50 years and above, and 10.8% (46) aged 15-24 years. 65.8% (280) of the women were of Igbo origin, 19.1% (81) reported 'others', 11.8% (50) Yoruba, and

3.4% (14) Hausa/Fulani. 65.1% (276) of the respondents were Christians, 21.9% (93) listed religions not included in the options but label 'others', 11.3% (48) Muslims and 1.8% (8) Traditional. 41.3% (175) of the women had a child, 32.2% (136) had two children, 23.5% (99) had 3 children and above, and 3.1% (13) had no children. Concerning the education level of the respondents, 37.5% (159) had attained secondary education, 27.5% (116) each for primary and informal education levels, and 7.7% (32) for women who earned tertiary education levels. Traders among the respondents totaled 34.0% (144), 28.7% (122) were students, 20.1% (85) 'others', 9.1% (39) identified as farmers, and 8.2% (35) civil servants. 40.7% (172) were not sure concerning monthly income satisfaction, 33.4% (142) were not satisfied, and 25.9% (110) of the women said "Yes". 42.5% (180) of the respondents were married, 27.8% (118) single, 19.3% (82) separated, and 10.4% (44) widowed. When the women were asked about their household level of income, 21.1% (89) reported income above 100,000, 16.8% (71) between 2,000-10,000, 16.4% (69) earned from 11,000-30,000, 15.0% (64) 1-1,000, 14.9% (63) listed 'other' income levels, 14.6% (62) earned figures from 61,000-100,000, and 1.3% (5) from 31,000-60,000.

Characteristics	Frequency (n=424)	Percentage (%)
<b>Age</b>	-	-
15-24	46	10.8
25-34	118	27.8
35-44	85	19.9
45-49	118	27.8
50 and Above	59	13.8
<b>Total</b>	<b>424</b>	<b>100</b>
<b>Ethnicity</b>	-	-
Igbo	280	65.8
Hausa/Fulani	14	3.4
Yoruba	50	11.8
Others	81	19.1
<b>Total</b>	<b>424</b>	<b>100</b>
<b>Religion</b>	-	-
Christianity	276	65.1
Muslim	48	11.3
Traditional	8	1.8
Others	93	21.9
<b>Total</b>	<b>424</b>	<b>100</b>
<b>Number of Children (Parity)</b>	-	-

None	13	3.1
1	175	41.3
2	136	32.2
3 and above	99	23.5
<b>Total</b>	<b>424</b>	<b>100</b>
<b>Education level</b>	-	-
Informal education	116	27.3
Primary	116	27.5
Secondary	159	37.5
Tertiary	32	7.7
<b>Total</b>	<b>424</b>	<b>100</b>
<b>Occupation</b>	-	-
Student	122	28.7
Farmer	39	9.1
Trader	144	34.0
Civil servant	35	8.2
Others	85	20.1
<b>Total</b>	<b>424</b>	<b>100</b>
<b>Marital Status</b>	-	-
Married	180	42.5
Single	118	27.8
Separated	82	19.3
Widowed	44	10.4
<b>Total</b>	<b>424</b>	<b>100</b>
<b>Household level of Income</b>	-	-
1-1,000	64	15.0
2,000-10,000	71	16.8
11,000-30,000	69	16.4
31,000-60,000	5	1.3
61,000-100,000	62	14.6
Above 100,000	89	21.1
Others	63	14.9
<b>Total</b>	<b>424</b>	<b>100</b>

**Table 1.0:** Socio Demographic Characteristics of the Women.

### Level of Knowledge of Cervical Screening Services among Females

Demonstrated in Table 2 below, majority of the respondents 86.4% (366) demonstrated knowledge of cervical screening, while 13.6% (58) denied. For example, see (Figure 1) below, 23.8% (87) of the respondents reported 'newspaper/magazines' as their sources of information on

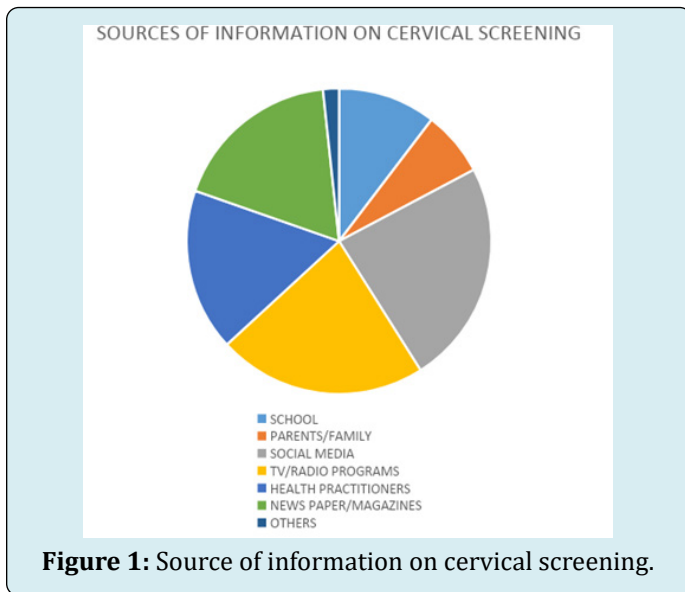
cervical screening, 22.2% (81) said "Tv/radio programs", 18.0% (66) reported social media, 17.2% (63) health practitioners, 6.9% (25) parents/family, 10.4% (38) school, and 1.7% (6) reported sources not listed but label 'others'. 64.2% (272) of the respondents reported that they agree cervical screening is performed to ensure that the cervix is free from infection, while 35.8% (152) said "No". Majority of the respondents affirmed cervical screening is diagnosed

with Pap smear as well as other procedures (74.6%), while 25.4% (108) reported otherwise. When asked if digital cervix examination is an example of a cervical screening services, 65.5% (278) replied “Yes”, while 34.5% (146) reported ‘no’. Concerning cervical screening is performed among women mostly in developing countries, 62.3% (264) thought

affirmative, while 37.7% (160) said “No”. The responses from the females in Owerri-west LGA concerning if cervical screening procedures if not adopted can cause possible onset of problems, 67.5% (286) replied “yes”, while 32.5% (138) reported “No”.

Variables	Frequency (n=424)	Percentage (%)
Have you heard about cervical screening?		
Yes	366	86.4
No	58	13.6
<b>Total</b>	<b>424</b>	<b>100</b>
What is your source of information?		
School	38	10.4
Parents/Family	25	6.9
Social Media	87	23.8
TV/Radio programs	81	22.2
Health Practitioners	63	17.2
Newspaper/Magazines	66	18.0
Others	6	1.7
<b>Total</b>	<b>366</b>	<b>100</b>
Cervical screening is performed to ensure that the cervix is free from infection		
Yes	272	64.2
No	152	35.8
<b>Total</b>	<b>424</b>	<b>100</b>
Cervical screening is diagnosed with Pap smear as well as other procedures		
Yes	316	74.6
No	108	25.4
<b>Total</b>	<b>424</b>	<b>100</b>
Digital cervix examination is an example of a cervical screening services		
Yes	278	65.5
No	146	34.5
<b>Total</b>	<b>424</b>	<b>100</b>
cervical screening is performed among women mostly in developing countries		
Yes	264	62.3
No	160	37.7
<b>Total</b>	<b>424</b>	<b>100</b>
Cervical screening procedures if not adopted can cause possible onset of problems		
Yes	286	67.5
No	138	32.5
<b>Total</b>	<b>424</b>	<b>100</b>

**Table 2.0:** Level of Knowledge of Cervical Screening Services among Females.



### Perceived Risks towards Cervical Screening Services

From Table 3 below, 41.2% (175) of the females, agreed that it is risky to avoid uptake of cervical screening, 19.0%

(81) strongly agreed, 6.1% (26) were undecided, 9.6% (41) disagreed, and 24.0% (102) strongly disagreed. 35.1% (149) of the respondents agreed that each time they screened their cervix, it felt so unpleasant and predisposed them to infections, 36.5% (155) were undecided, 9.4% (40) disagreed, 15.1% (64) strongly disagreed, and 4.0% (17) of the women strongly agreed. 28.2% (120) of the women strongly agreed they had a perception of experiencing a discharge following screening, 21.4% (91) agreed, 17.8% (76) disagreed, 26.9% (114) strongly disagreed, and 5.7% (24) were undecided.

30.3% (128) were undecided that every time they examined themselves they could not determine abnormalities making it unlikely to notice infection onset, 26.4% (112) strongly agreed, 0.6% (3) agreed, 18.8% (80) disagreed, and 23.9% (101) strongly disagreed. Over half of the respondents 'strongly disagreed' that their friends always advised them against cervix screening, 23.8% (101) disagreed, 5.8% (25) remained undecided, 10.1% (43) agreed, and 6.2% (26) strongly agreed. When the women were asked if cervical screening was a waste of time to them 28.5% (121) agreed, 27.4% (116) undecided, 17.1% (73) strongly disagreed, 14.4% (61) disagreed, and 12.6% (53) strongly agreed.

Variable	Frequency (n=424)	Percentage (%)
It is risky to avoid _uptake of cervical screening		
Strongly agree	81	19.0
Agree	175	41.2
Undecided	26	6.1
Strongly disagree	102	24.0
Disagree	41	9.6
<b>Total</b>	<b>424</b>	<b>100</b>
For me each time I screen my cervix it feels so unpleasant and predisposes me to infections		
Strongly agree	17	4.0
Agree	149	35.1
Undecided	155	36.5
Strongly disagree	64	15.1
Disagree	40	9.4
<b>Total</b>	<b>424</b>	<b>100</b>
I have a perception of experiencing a discharge following screening		
Strongly agree	120	28.2
Agree	91	21.4
Undecided	24	5.7
Strongly disagree	114	26.9
Disagree	76	17.8
<b>Total</b>	<b>424</b>	<b>100</b>
Anytime I examine myself I cannot determine abnormalities making it unlikely to notice infection onset		
Strongly agree	112	26.4

Agree	3	0.6
Undecided	128	30.3
Strongly disagree	101	23.9
Disagree	80	18.8
<b>Total</b>	<b>424</b>	<b>100</b>
My friends always advise me not to screen the cervix		
Strongly agree	26	6.2
Agree	43	10.1
Undecided	25	5.8
Strongly disagree	229	54.0
Disagree	101	23.8
<b>Total</b>	<b>424</b>	<b>100</b>
Cervical screening is a waste of time to me		
Strongly agree	53	12.6
Agree	121	28.5
Undecided	116	27.4
Strongly disagree	73	17.1
Disagree	61	14.4
<b>Total</b>	<b>424</b>	<b>100</b>

**Table 3.0:** Perceived Risks towards Cervical Screening Services.

### Level of knowledge of Cervical Screening

From Table 4 below, majority of the respondents reported demonstrated their approval to utilize cervix screening if offered a chance (85.9%), while 14.1% (60) denied. 40.7% (173) of the respondents could not remember if they had been advised by a physician to screen the cervix prior to the time of this investigation, 39.1% (166) reported 'Yes', and 20.1% (85) said "No". 56.0% (237) of the respondents could also not tell if they had screened for cervical or any infection relating to the cervix before filling the questionnaire, 33.2% (141) replied "No", and 10.9% (46) said "Yes". 28.5% (13)

of the respondents who reported 'yes' said they screened between 2-3 months ago, 27.4% (12) reported 4-6 months ago, 17.1% (8) said "6 months to a year", 14.4% (7) reported longer than one year, and 12.6% (6) reported 'in less than a month'. When they were asked concerning reasons for cervical screening, 28.5% (13) of the females each reported that they were presented with symptoms and as a result of cases in the family respectively, 27.4% (12) reported 'for prevention', and 17.1% (8) of the respondents just decided to go for the examination. 74.7% (34) of the females had never had an abnormal test result in cervical screening, while 25.3% (12) reported 'Yes'.

Variable	Frequency (n=424)	Percentage (%)
Will you utilize cervical screening if offered a chance?		
Yes	364	85.9
No	60	14.1
<b>Total</b>	<b>424</b>	<b>100</b>
Has any physician advised you to screen the cervix before?		
Yes	166	39.1
No	85	20.1
Cannot Remember	173	40.7
<b>Total</b>	<b>424</b>	<b>100</b>
Have you screened for cervical or any infection relating to the cervix before?		
Yes	46	10.9
No	141	33.2

Cannot Remember	237	56
<b>Total</b>	424	100
If YES when was that?		
less than a month	6	12.6
2-3 months	13	28.5
4-6 months	12	27.4
6 months to a year	8	17.1
longer than a year	7	14.4
<b>Total</b>	46	100
What was your reason for the cervical screening?		
Presented with symptoms	13	28.5
cases in the family	13	28.5
For prevention	12	27.4
Just decided to go for the examination	8	17.1
<b>Total</b>	46	100
Have you ever had abnormal test result in cervical screening?		
Yes	12	25.3
No	34	74.7
<b>Total</b>	46	100

**Table 4.0:** Level of level of knowledge of Cervical Screening.

### Factors Affecting the Utilization of Cervical Screening Among Females

Table 5 below demonstrated the factors affecting the utilization of cervical screening practice among women in

this survey. 19.3% (82) reported family/husband acceptance, 18.7% (79) said "distance to facility", 13.8% (58) reported lack of information, 13.3% (56) financial constraints, 11.3% (48) behavior of health workers, 10.0% (42) cultural related factors, and 0.5% (2) said "religious factors".

Variable	Frequency (n=424)	Percentage (%)
<b>Which of the following related as possible factors affecting your Utility of cervical screening</b>		
Family/Husband Acceptance	82	19.3
Cultural related factors	42	10.0
Distance to facility	79	18.7
Financial Constraints	56	13.3
Lack of Information	58	13.8
Religious Factors	2	0.5
Behavior of Health workers	48	11.3

**Table 5.0:** Factors Affecting the level of knowledge of Cervical Screening among Females.

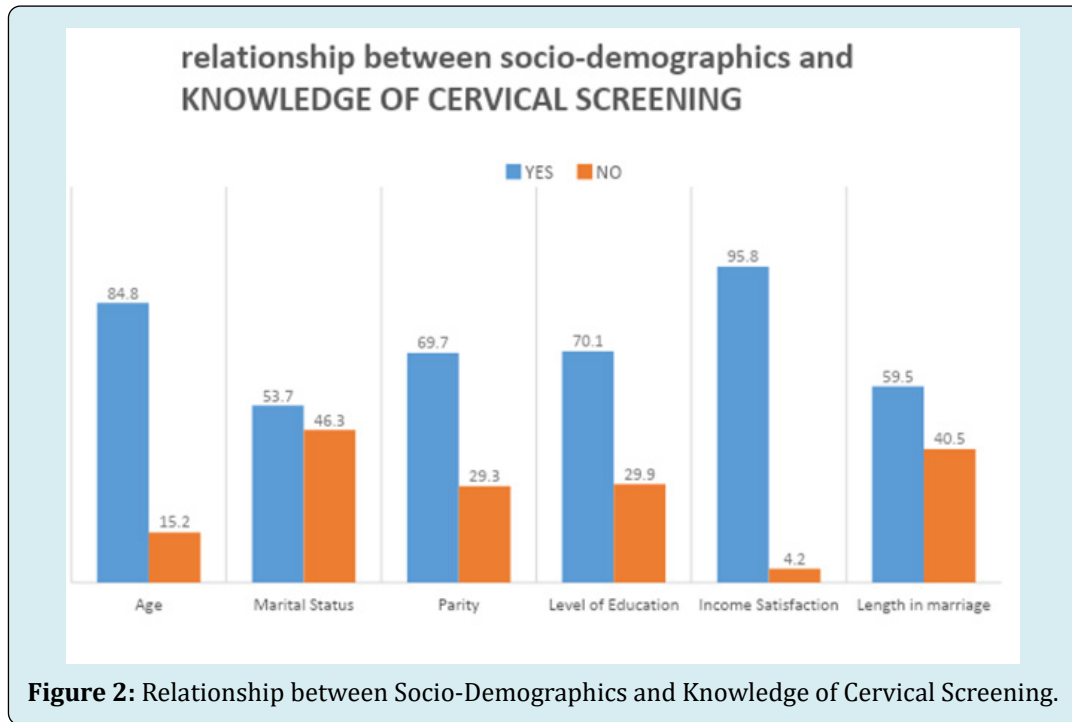
### Association between the level of knowledge of cervical screening services and the Socio demographic characteristics of females

Table 6 below showed the results for the test of a statistically significant association between socio-demographic characteristics and level of knowledge of

cervical screening services among females in Owerri-West Local Government Area, Imo State (see Figure 2 below). There was a statistically significant association between age of women and level of knowledge of cervical screening services ( $p= 0.010$ ). Given the association between marital status of females and level of knowledge of cervical screening services among women in the study population ( $p=0.300$ ), there

was no significant association. On the hypothesis between number of children (parity) and level of knowledge of cervical screening services among women in primal population. There was also a statistically significant association ( $p=0.0008$ ). Given the association between level of income of women and level of knowledge of cervical screening services in the study population, there was a statistically significant association

( $p=0.0092$ ). There was a statistically significant association between level of education and level of knowledge of cervical screening services in the study population ( $p=0.0327$ ). Finally, there was no statistically significant association between occupation and level of knowledge of cervical screening services in the study population ( $p=0.127$ ).



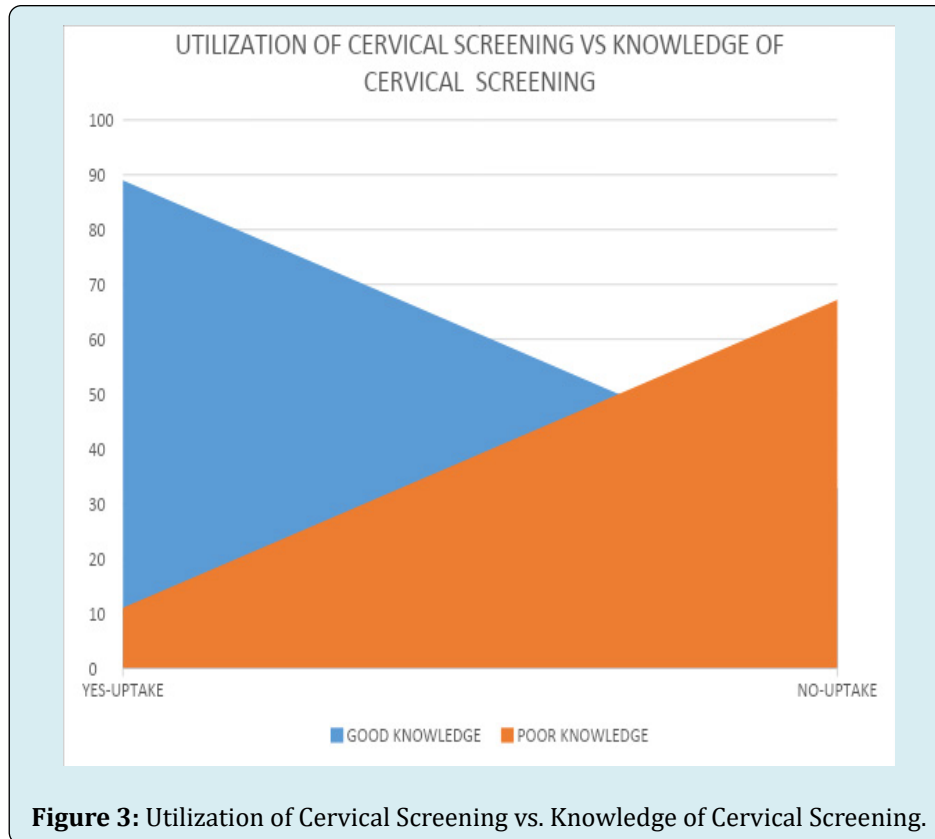
Socio Demographics	Level of knowledge of cervical screening services		X2	P-value	Decision
	Yes (%)	No (%)			
Age	84.8%	15.2%	12	0.010	S
Marital Status	53.7%	46.3%	2	0.300	NS
Number of Children (Parity)	69.7%	29.3%	3.33	0.0008	S
Level of income	95.8%	4.2%	8.57	0.0092	S
Level of Education	70.1%	29.9%	17	0.0327	S
Occupation	59.5%	40.5%	1.97	0.127	NS

**Table 6.0:** Association between the Level of knowledge of cervical screening services and the Socio demographic characteristics of Females.

### Association between the utilization of cervical screening services and the knowledge of cervical screening services among females

Table 7 below showed the results for the test of a statistically significant association between knowledge

of cervical screening and utilization of cervical screening among female females. There was a statistically significant association between good knowledge and utilization of cervical screening among females ( $p= 0.00532$ ) (see Figure 3 below).



Utilization of cervical screening	Knowledge of cervical screening		X <sup>2</sup>	P-value	Decision
	Good Knowledge (%)	Poor Knowledge (%)			
Yes	89.0%	11.0%	0.2376	0.00532	<i>Sig</i>
No	32.8%	67.2%			

**Table 7:** Association between the level of utilization of cervical screening services and the knowledge of cervical screening services among females.

## Discussion

Based on the findings of this study on the socio demographic characteristics of the respondents, it revealed that 27.8% of the females were in the age range of 25-34 years. This finding goes in consistent with a statement in a publication by Oche, et al. [7] that females in a cervical survey conducted among participants in Benue, had a mean age of 30 years. Further findings of the study showed that the respondent's majority were Christians (65.1%) and of Igbo origin (65.8%). This could be due to the fact that the study was conducted in the south-eastern part of Nigeria predominated by people of Igbo and Christian origin.

Findings from this study posited based on the level of knowledge towards cervical screening among females, 'Yes' responses received were 85.8% and 14.2% negative. This corroborates with previous findings on the knowledge of

cervical screening. In the study, 23.8% of the females listed 'social media' as their source of information on cervical screening. This could be due to several media campaigns and awareness on cervical. Additionally, 53.0% of the respondents correctly affirmed family history of cervical is a risk for cervical screening strategies. This is however in contrast with a study by Ferlay, et al. [1], conducted in Uganda. From this study, it was revealed that 64.2% accepted that cervical screening is performed to ensure that the cervix is free from infection and 74.6% accepted cervical is diagnosed with Pap smear. A research article by Bruni, et al. [3] revealed figures which corroborate this finding. Further investigation showed that 35.8% did not agree. Ndikom CM, et al. [8] revealed figures which demonstrated otherwise. This could be due to lack of formal knowledge on cervical screening. The females also obliged that digital cervix examination is used for cervical screening (65.5%), and 62.3% of the respondents accepted that cervical screening is higher

among women in developing countries. A survey conducted among women in Anambra suggested similar responses [1]. Concerning the perceived risks towards cervical screening, study showed that 41.2% of the females correctly 'agreed' that it was risky to avoid up taking cervical screening, the next common response included 19.0% of the female females who 'strongly agreed'. Similar findings on the perceived risks of cervical screening among women in Sudan suggested that over half of the respondents 'agreed' to the importance of cervical screening. Additionally, a study by Awodele, et al. [9], conducted in an Ibadan medical facility revealed that 29.5% of the midwives in a survey emphasized the advantages associated with cervical screening uptake. The females 35.1% of the respondents agreed that each time they screened their cervix, it felt so unpleasant and predisposed them to infections, although further investigation revealed that 36.5% were undecided. A statement in a publication by Tarney, et al. [10] corroborates this finding but goes against an observation by NCI [11]. This study showed that 30.3% of the females were undecided that every time they examined themselves they could not determine abnormalities making it unlikely to notice infection onset. The reason for the prevalence of this reply could be due to lack of proper enlightenment on cervical screening among relevant population. 28.5% of the females 'agreed' that cervical screening was a waste of time to them. A study according to Tanturovski, et al. demonstrated similar figures concerning misconceptions on cervical screening [17].

85.9% of the females demonstrated their approval to utilize cervix screening if offered a chance. The points out the lackadaisical attitude towards cervical screening among respondents. Although 56.0% of the respondents could also not remember if they had screened for cervical or any infection relating to the cervix during this study, 33.2% reported otherwise. A study by Mlange, et al. [18] corroborates this finding. This study revealed that 74.7% of the females had never had an abnormal test result in cervical screening as supported by several studies [19].

The finding of the study revealed that the commonest factor affecting their utilization of cervical screening was 'family/husbands acceptance' (19.3%). This goes in consistence with a study by Behnamfar, et al. [20] on the utilization of cervical screenings. Another study goes contrary to this finding and suggests that 26.6% of women who underwent cervical screenings listed affecting factors such as financial constraints, followed by distance to facility [3]. Findings from this study regarding the association between Socio-demographic characteristics and utilization of cervical screening among females revealed that Age is significantly associated with utilization of cervical screening among females ( $p = 0.010$ ). Study shows that older women groups utilized cervical screenings relative to younger

groups. This goes in line with a study by Mwaka, et al. [21] which found age to be associated with utilization of cervical screening ( $p = 0.00271$ ). Further investigation into the study demonstrated that marital status is also significantly associated with the utilization of cervical screening ( $p = 0.300$ ) [22]. There was no significant association. This implies that women who wanted to utilize screenings did, irrespective of their marital status. Also, from the study among females in Owerri-west, it was posited that there was a significant association between number of Children (Parity) and utilization of cervical screening among females in the study population ( $p = 0.0008$ ). Considering the hypothesis between level of income of females and utilization of cervical screening, there a significant association ( $p = 0.0092$ ). This goes in consistence to a previous study by Tanturovski, et al. [17]. This informs that females with better level of income are more likely to utilize cervical screenings. This study also indicates that females with higher level of education were significantly involved in cervical screening than those with low levels of education. Females without any formal education level barely came in for screening. This indicates that more enlightened a patient is, the more possible they are to undertake cervical screenings. Hence level of education of females and utilization of cervical screening are significantly associated ( $p = 0.0327$ ). A preceding study by Mlange, et al. [18] confirms this finding. Findings of this study showed an association between knowledge of cervical screening and utilization of cervical screening among female females ( $p = 0.00532$ ). This implies that females who were well informed know the importance and would easily seek cervical screening as opposed to those who lacked information. A study by Ovalle, et al. [19] corroborates this finding.

## Conclusion

In this study, it was discovered that age, educational level, level of income, marital status and knowledge were all related with utilization of cervical screening among the females. Findings from this study establish that even though a number of females showed considerable knowledge of cervical screening, several others are deficient of relevant information and is a challenge. Overall, study showed good knowledge of the perceived risks of cervical screening among the females but this did not translate to willingness to utilize screening. This study emphasizes that there is a need for the state health system to address the perceived factors affecting cervical screening utilization where it may, encourage awareness campaigns and implement health policies to support utilization of cervical screening among females in Owerri-west.

The study recommends that awareness campaigns must provide accurate information on cervical screening so that females can make informed choices. Also, emphasis must

be made on the importance and effectiveness of cervical screening and treatment when detected. Thus, information is important, but must be combined with prescriptive information about how to take preventive action. Accessibility to screening facilities must as well be improved and policies, implemented, to accommodate low income earners and encourage cervical screening.

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