

**INCIDENCE OF CERVICAL CANCER AND RELATED HEALTH RISK FACTORS IN
EGBEMA, OHAJI/EGBEMA L.G.A IMO STATE**Uzoamaka Roseline Ajie¹, C.C.N. Vincent¹, Nkiru Okoroafor¹, Emmanuel Ifeanyi Obeagu*², Adanma Nwagwu Solomon¹, Anthonia Emesowum¹, Josephine Egbuchelem¹ and Clementina Ezenwuba¹¹Department of Nursing Science, Faculty of Health Sciences, Imo State University, Owerri, Imo State, Nigeria.²Department of Biomedical and Laboratory Science, Africa University, Zimbabwe.

*Corresponding Author: Emmanuel Ifeanyi Obeagu

Department of Biomedical and Laboratory Science, Africa University, Zimbabwe.

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ABSTRACT

This study ascertained cervical cancer incidence, knowledge, attitudes and barriers to Cervical Cancer screening in Egbema, Ohaji/Egbema L.G.A Imo State. The population of the study comprised 90,287 women in OhajiEgbema LGA a sample size of 438 women was drawn (determined using taro Yamane formula). The instrument used for data collection is a questionnaire used to ascertain the knowledge, attitude and barriers to uptake of cervical cancer screening while a checklist was used to determine the risk factors of cervical cancer. The major findings are that out of 156 respondents who have taken up the cervical cancer screening test, 21.20% have positive test results; demographic variables of age, marital status and level of education significantly relate to the knowledge of cervical cancer among respondents in OhaajiEgbema LGA ($p < .05$); demographic variables of age and marital status do not significantly relate to the attitude of the respondents towards cervical cancer screening ($p > .05$). Significant relationships exist between incidence of cervical cancer and related risk factors ($p < .05$ and there is a significant relationship between uptake of cervical cancer screening and knowledge of cervical cancer among women in OhajiEgbema LGA of Imo State ($p < .05$). The researcher recommends among others that women of childbearing age embrace occasional cervical cancer screening.

KEYWORDS: Incidence, cervical cancer, risk factors.**INTRODUCTION**

Cancer of the cervix uteri is the fourth most common cancer among women worldwide and the leading cause of gynaecologic cancer death in the less developed regions.^[1] Cervical cancer is cancer that starts in the cells of the cervix. The cervix is the lower, narrow end of the uterus (womb). The cervix connects the uterus to the vagina (birth canal). Cervical cancer usually develops slowly over time. Before cancer appears in the cervix, the cells of the cervix go through changes known as dysplasia, in which abnormal cells begin to appear in the cervical tissue. Over time, if not destroyed or removed, the abnormal cells may become cancer cells and start to grow and spread more deeply into the cervix and to surrounding areas.^[1]

Globally, cervical cancer is the fourth most common cancer in women, with 604 000 new cases in 2020.^[2] About 90% of the 342 000 deaths caused by cervical cancer occurred in low- and middle-income countries.^[2] The highest rates of cervical cancer incidence and mortality are in sub-Saharan Africa (SSA), Central America and South-East Asia.^[3] Regional differences in

the cervical cancer burden are related to inequalities in access to vaccination, screening and treatment services, risk factors including HIV prevalence, and social and economic determinants such as sex, gender biases and poverty.^[3] Women living with HIV are 6 times more likely to develop cervical cancer compared to the general population, and an estimated 5% of all cervical cancer cases are attributable to HIV. The contribution of HIV to cervical cancer disproportionately affects younger women, and as a result, 20% of children who lose their mother to cancer do so due to cervical cancer.^[4]

Highest incidence of cervical cancer related death occurs among middle age women about 30–40 years. Of the 273,505 deaths recorded, 80% occurred in low and middle income countries. In Sub-Saharan Africa (SSA), of the 78,897 women diagnosed with cervical cancer annually, 61,671 deaths were recorded which makes the disease one of the most prevailing cancers. In Uganda, Mali, Nigeria, and Zimbabwe, cervical cancer is the second most prevailing cancer among women aged 15–44 years. A major misconception lies in the treatment of cervical cancer which is viewed as the removal and

reinsertion of the womb and believed to cause unavoidable death. In SSA, cervical cancer is yet to be acknowledged as an important public health problem. The low awareness of the disease in Africa which cuts across different literacy levels have been reported.

The purpose of the study is to ascertain incidence of cervical cancer and related risk factors among the women of Egbema in Egbema L.G.A. Imo State.

RESEARCH METHODOLOGY

Research Design

Descriptive survey was used to ascertain cervical cancer incidence, knowledge, attitudes and barriers to towards cervical cancer and its screening among women in Egbema, Ohaji in Egbema L.G.A. Imo State.

Study Area

The research setting is Egbema I Ohaji L.G.A, Imo State which has relevant information needed for the study.

Population of Study

The study population comprises of all women in Egbema, Ohaji Egbema L.G.A. at the time of study. The target population of women was collected in the sub villages in Egbema in Ohaji L.G.A, Imo State which is of 90,287 women. (National Population of Nigeria, National Bureau of Statistic).

Sample Size and Sampling Technique

Sampling was considered because the entire population 90,287 could not be used due to time and financial constraint. The sample was obtained using Taro Yamane formula to get the sample size.

$$n = N$$

$$1 + N(e)^2$$

Where n = sample size

N = population size

e = level of significances (usually 0.05)

n = 90,287

$$\frac{1 + 90,287 (0.05)^2}{n = 90,287}$$

$$\frac{1 + 90,287 (0.0025)}{n = 90,285}$$

$$\frac{1 + 225.72}{90,287}$$

$$\frac{226.72}{n = 398}$$

$$\frac{10}{100} \times \frac{398}{1}$$

$$= 39.8 = 40$$

$$40 + 398 = 438$$

So the sample size is 438 which is 4.38% of the population.

Inclusion Criteria: The inclusion criteria for the study population are as follows: women in Egbema in Ohaji L.G.A. during the specified time frame.

The study population was chosen to provide a comprehensive understanding of the Comparative study on cervical cancer incidence, knowledge, attitudes and barriers to cervical cancer screening among women in Egbema, Ohaji in Egbema L.G.A. Imo State. By including all women in Ohaji Egbema L.G.A. the research aimed to capture a diverse representation of the target population of uptake of cervical cancer and its screening experiences and number of women.

Exclusion Criteria: The study excluded:

1. Women who refused to participate in the study.
2. Women who were unable to comprehend what the research entails.

Instrument for Data Collection

The researcher used questionnaire and check list as a tool for data collection. The instrument was arranged into two parts; Part I and part II. Part I contained the structured closed ended questionnaire and Part II is the check list for the incidence of cervical cancer. The structured closed ended questionnaire consists of four sections (A-D).

Section A: This section comprised the respondents' demographic data and other personal data required for the study

Section B: This part is made up of information about the knowledge of cervical cancer among women of Egbema L.G.A. Imo State.

Section C: Consist of Attitude towards cervical cancer screening among the women of Egbema L.G.A. Imo State.

Section D: Consist of Barrier to uptake of cervical cancer screening among women of Egbema in Egbema L.G.A. Imo State.

Part II which comprised of the check list contained structured interview question and testing screening for cervical cancer by the use of Pap smear test.

Validity of the Instrument

The instrument for data collection were constructed and submitted to the supervisor who did the proper evaluation on the organization and relevance of each item in answering research question. The supervisor made correction before administration. Both content and validity were ensured.

Reliability of instrument

The reliability is defined as the consistency which the instrument does what it is supposed to do. In checking for the reliability of the instrument, a pre- test was conducted among mothers who are not among those that were selected by the researcher in the sample to ascertain the reliability of the research instrument. A total of 20 copies questionnaires were given to 20 respondents from

Egbema Ohaji L.G.A Imo State for this purpose. The reason was to determine whether the responses were in line with the required result expected from the instrument. Then another set of same questionnaire were re-administered to the same 20 women where the responses gotten were recorded using Pearson's Product Moment Correlation Coefficient (PPMCC) as the technique for analysis. The two cores obtained from the test and re-test procedure were calculated. It yielded a high positive correlation coefficient of 0.93 meaning that the instrument is very reliable.

Method of Data Collection

Women of Ohaji Egbema met on their stipulated weekly women's meeting and introduction were made. Cervical cancer were discussed and explained to them in the way, they will understand and their consent was gotten, questionnaire was shared which they gladly received and returned back to the researcher. Women that could not

read nor fill the questionnaire were assisted while the literate ones will fill the questionnaire by themselves and all were retrieve back immediately.

Method of Data Analysis

Data will be collated and tallied before computing. The data were analyzed using descriptive statistics of frequencies and percentages and presented using tables.

Ethical Consideration

The researcher worked within the confine ethics of research by ensuring confidentiality of information obtained, which were collected from the right source. The right of the respondents were respected and protected by allowing them to opt out if they so desire. Honesty in reporting were maintained following information obtained and this were duly done after the approval from the project supervisor who ensured that the guideline will be strictly followed.

RESULTS

Table 1: Demographic data of respondents.

Variable	Category	Frequency =438	Percentage (%)
Age bracket (in years)	20-29	62	14.20
	30-39	94	12.50
	40-49	125	28.50
	50-59	63	14.40
	60 and above	94	21.50
Marital status	Single	94	21.50
	Married	155	35.40
	Widowed	94	21.50
	Divorced	95	21.60
Level of education	None	62	14.20
	Primary	96	21.90
	Secondary	124	28.30
	Tertiary	156	35.60
Monthly income (in naira)	<100,000	125	28.50
	100,000 -199,000	31	7.10
	200,000- 299,000	126	28.80
	300,000- 399,000	124	28.30
	400,000 and above	32	7.30

Data on table 1 show the demographic characteristics of the respondents. The data show that majority of the respondents are aged 40-49 years (28.50%). Majority of the respondents are married (35.40%). The data also

show that majority of the respondents are tertiary education graduates (35.60%) and majority earn 200,000 to 299,000 monthly (28.80%).

Table 2: incidence of cervical cancer and related risk factors among the women of Egbema in Egbema L.G.A. Imo State.

Variable	Options	Frequency	Percentage
Uptake of cervical cancer screening	Yes	156	35.60
	No	282	64.40
Result of screening	Positive	33	21.20
	Negative	123	78.80
Related risk factors			
Number of sex partners	One	340	77.60
	Multiple	98	22.40
Sexual partner with another partner	Yes	231	52.70
	No	207	47.30
History of STIs	Yes	299	68.30

	No	139	31.70
Smoking	Yes	59	13.50
	No	379	86.50
Exposure to secondhand smoke	Yes	287	65.50
	No	151	34.50
Long use of oral contraceptives	Yes	99	22.60
	No	339	77.40
Family history of cervical cancer	Yes	31	7.10
	No	407	92.90

Data on table 2 show the incidence of cervical cancer and its related factors. The findings show that out of 156 respondents who have taken up the cervical cancer screening test, 21.20% have positive test results. On related risk factors, data show that majority (77.60%) of the respondents have only one sex partner; history of STIs (68.30%); and exposure to second hand smoke (65.50%).

DISCUSSION

Findings from research question one (objective one) show that Out of 156 respondents who have taken up the cervical cancer screening test, 21.20% have positive test results. On related risk factors, data show that majority (77.60%) of the respondents have only one sex partner; history of STIs (68.30%); and exposure to second hand smoke (65.50%). The corresponding hypothesis reveal that significant relationships exist between incidence of cervical cancer and related risk factors ($p < .05$), i.e. women with multiple sex partners are 0.824 times likely to have cervical cancer; those with sex partners with another partner are 1.582 times likely to have cervical cancer; smoking increases the odds of having cervical cancer by 1.802 times; exposure to second hand smoke are 2.113 times likely to have cervical cancer while long use of oral contraceptives and family history of cervical cancer increases likelihood of developing cervical cancer by 2.549 and 3.009 times respectively.

Supporting the findings above are the findings of Peterson et al, (2022) who in a similar study recorded a high prevalence of the related risk factors of cervical cancer among women who have positive results for cervical cancer.^[5] In other words, there were significant relationships between related risk factors and incidence of cervical cancer.^[6-8]

CONCLUSION

The highest rates of cervical cancer incidence and mortality are in sub-Saharan Africa (SSA), Central America and South-East Asia WHO (2022). Regional differences in the cervical cancer burden are related to inequalities in access to vaccination, screening and treatment services, risk factors including HPV prevalence, and social and economic determinants such as sex, gender biases and poverty.

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