

# Knowledge and Accessibility of Cervical Cancer Screening Services among women of reproductive age in rural communities of Ekiti State

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**Abstract:- This research study is on the knowledge and accessibility of cervical screening among reproductive age women of reproductive age. The researcher was able to determine how knowledgeable these women are about cervical screening.**

**A self administered questionnaire was used for data collection. Data were processed and analyzed with SPSS version 21.**

**The findings revealed that more than half (62.4%) have never heard of cervical screening, just a bit above half (56.4%) knows what it is, while 25.7% do not know what it is meant for. Less than half (28.7%) do not know the category of women to be screened while only 40.6% knows the category of women to be screened. The Practice of cervical screening is abysmally low (8.9%).**

**The researcher discovered that if awareness of cervical screening is improved, uptake of cervical screening will increase significantly since 62.4% opined that their reasons for not ever being screened is because they've never heard of it.**

## I. INTRODUCTION

Cervical screening is an effective means of preventing cervical cancer. It is often used to treat cancerous changes at its early stage. Regular cervical screening prevents 75% of cervical cancers from developing and about 80% potential deaths that could result from it. (National Institute for Health and Clinical Excellence, 2011). Cervical screening is any examination carried out on the uterine cervix to detect precancerous changes that could develop into cervical cancer before the disease results. It could also diagnose the disease by identifying cancerous cells that are already present.

The various methods of carrying out cervical screening are as follows: Liquid-based cytology, Papanicolaou's test, Visual cervical inspection and Colposcopy. Screening results are recorded as follows depending on the state of the cervical cells using the Bethesda system:- Squamous cells abnormality (SIL), Atypical squamous cells of undetermined significance (ASCUS), Low-grade squamous intraepithelial lesion (LSSIL), High grade squamous intraepithelial lesion(HGSIL), Squamous carcinoma and Glandular epithelial abnormalities

Meanwhile despite the effectiveness of this screening, many researchers have confirmed in their studies that the awareness of cervical screening among Nigerian women is just fair while the practice is very low. Cervical cancer is one of the most common cancers that affect women's reproductive health worldwide. Cervical cancer is a malignant neoplasm arising from cells origin in the cervix of the uterus without any racial, ethical or cultural preference. It occurrence is a worldwide problem that consumes large sum of funds from the purse of both developed and developing countries.

The incidence of cervical cancer has increased over the years; data has revealed an estimated 466,000 new global diagnoses per year ( Wright, Faseru, Kuyimu, Faduyile, 2011), these occurrences are recorded owing to lack of early detection through cervical screening. It is devastating to know that every 10 minutes, two women die from cervical cancer worldwide, affecting more of younger reproductive women between 20 years and mid 30s (Ogundipe and Obinna, 2011). According to Surveillance Epidemiology and End Results (2011) between year 2004 - 2008 there was annual age adjusted incidence of 8.1% per 100,000 women that by the year 2011 about 12,710 women will be diagnosed of cervical cancer and 4,290 deaths will result from cervical cancer in United States.

In recent times, statistics have shown that in Nigeria cervical cancer accounts for 15% of female cancers (Ogundipe and Obinna, 2010). Meanwhile, many countries have significantly reduced the incidence of cervical cancers through well defined screening measures as a means of preventing cervical cancer for example, in Britain deaths resulting from cervical cancer have reduced by 75% and reducing further by 7% annually (WHO in Ogundipe and Obinna, 2010).

Although 100% preventive, there is still a low level of awareness about cervical screening to detect abnormal cervical entities. Another study conducted in Onitsha, Southeast Nigeria revealed that 26.8% of all respondents were aware of cervical screening (Obiechina and Mbiara, 2009). Also another study conducted among female students in Nnamdi Azikwe University, Akwa-Ibom revealed that two third of the students did not know about pap's smear and were still, none of them had ever undergone a pap smear (Akunjobi, Ikechebelu Omunkwo and Ogtarorah, 2008).

In Nigeria 80% of cervical cancer cases are advanced where very little can be done; measures include prevention through early detection through screening measures. The rate of cervical cancer is 70% and thus necessitating further studies to assess women's knowledge, attitude and practice of cervical cancer screening. In England, Bartoszek, Marlow and Wardle (2009) reported on the barriers to cervical screening attendance that 85% of women were up-to-date with cervical screening but 15% were overdue including 2.6% who had never had a paps smear. The most commonly endorsed barriers to these few low turn-ups were embarrassment (29%), intending to go but not getting around to it (21%), fear of pain (14%) and worry about what the test might find (12%). Only four barriers showed significant independent associations with screening status and they are: difficulty making appointments, not getting around to going, not being sexually active and not trusting the test therefore they concluded that, practical barriers were more predictive of screening uptake than emotional factors such as embarrassment.

Goig by Villafuerte, Gomez. Belancout and cervantes (2007) reported both denial and fear are two important factors that regulate the behaviour of women and their partners they discovered that women with a small support network may have limited opportunities for taking actions in favor of their own health and wellbeing.

GaO, Deseuza, paterson and Lu (2008) in their study of factors affecting uptake of cervical screening among women born in China reported that; the 4 most important predictive factors affecting uptake were; the women's belief that cervical Smear tests are not necessary, for asymptomatic women; having a family doctor, having received gynaecologic, obstetric and family planning service in New Zealand and having ever received a recommendation for a cervical smear test. These researchers concluded that the most important influential factors affecting cervical screening uptake in New Zealand are women's belief in its value and their engagement in general and women's health service.

In Malaysia, Abdullah, Aziz and Sn (2011) in their study to find out the factors related to the poor practice of pap's screening among secondary school teachers reported that just 38% previously had pap test while the majority (62%) had never had a pap test. Approximate 50% of participants categorized that at contemplation stage, they have the intention to undergo a pap test within 6months. For demographic and socioeconomic factors affecting uptake, women who never had paps smear were significantly younger; malay, muslims with a graduate degree; shorter duration in teaching service, lower personal and household income groups, never been pregnant and without children.

Going by Were, Nyaberi and Bajiba (2011) in their study to find out the perceptions of risk and barriers to cervical cancer screening at Mo: Teaching and Referral Hospital (MTRH). Eldoret, Kenya. The result reads thus; of the 219 women interviewed, 12.3% of participants of over 30yrs were more likely to have been screened before while 22.8% felt that they were at risk of the cervical cancer, 65%

of all participants nevertheless wished to be screened, Perception of being at risk was significantly associated with a felt need for screening and association that persisted only for women reporting multiple lifetime sex partners. Fear of abnormal results and lack of finances were the commonest barriers to screening as reported by 22.4% and 11.4% of respondents respectively. These researchers concluded that, previous screenings were uncommon, cheaper screening methods are needed and messages about screening should clarify the meaning and consequences of possible results.

In Enugu, Nigeria; Nwankwo, Aniebe, Agunwa, Anarado and Agunwa (2011) studied about knowledge, attitudes and practices of cervical screening among urban and rural Nigerian women revealed that only 15.5% of the respondents were aware of availability of cervical screening services and that the awareness significantly varied with the level of educational attainment. Only 42% had ever had a pap's smear and were all referred for the screening. The study revealed that the most important factors hindering the use of available cervical screening services were lack of knowledge (49.8%) and the feeling that they have medical problems (32.0%). They concluded that there is very poor knowledge and practice of cervical screening among Nigerian women.

In another study by Adekanle, Adeyemi and Afolabi (2011) on knowledge, attitude and practice of cervical cancer and screening among female secondary school teachers on Osogbo Southwest Nigeria, it was revealed in the study that there is high awareness of screening (40.8-71.0%) but with a abysmally low uptake (0.3%-8.3%). However those with better knowledge of the disease had significant higher uptake of the screening compared to those with lower knowledge.

Even among Nigerian Gynaecologists, a study was carried out to survey their current practice by Onah, Ezugwu, and Eze (2011) and the result of the study was that 76.1% of gynaecologists who practiced in centres with cervical screening services estimated that they screened 15.0-18.9% of their gynaecology patients. Pap's smears were available to 76.1% of them, colposcopy to 32.6%. direct visual inspection to 18.6%, human papilloma virus DNA testing to 2.3% and cervicography to 1.2%. Thirty gynaecologists had definite cervical screening programmes, most of which were selective and based on specific indications. The conclusion of these gynaecologists was that despite the general agreement amongst Nigerian gynaecologists on the need for a National cervical screening programme, their level of opportunistic screening of patients is currently low.

The general objective of this study is to ascertain the knowledge, attitude and practice of cervical cancer screening of reproductive age women in rural communities of Ekiti State.

**• Objectives of the study**

To assess the level of knowledge of reproductive age women about cervical screening.

To determine the factors affect accessibility to cervical cancer screening.

$$= \frac{3.8416 \times 0.071 (0.929)}{0.0025}$$

$$= \frac{0.25338809}{0.0025}$$

$$= 101.355236$$

$$\approx 101$$

**II. RESEARCH METHODOLOGY**

**A. DESIGN OF STUDY**

The research is descriptive, cross sectional study to elicit information from women of reproductive age about their knowledge and accessibility of cervical screening as a means of preventing cervical cancer.

**B. TARGET POPULATION**

This comprises of women of ages 18-45years

**SAMPLE**

101 subjects were selected using the formula'

$$N = \frac{Z^2 p (1-p)}{d^2}$$

where N = Sample size

$\Sigma$  = a constant value of 1.96

d = standard deviation of 0.05

p = prevalence rate pf 7.1%; going by Ezem (2007) in awareness and uptake of cervical screening in Owerri: South Eastern, Nigeria.

$$N = \frac{Z^2 P(1-p)}{d^2}; - 7.1 = 7.1/100$$

$$= \frac{1.96 \times 1.96 \times 0.71 (1 - 0.71)}{0.05^2}$$

**C. SAMPLING TECHNIQUE**

Multistage sampling method was used to select the local government area ,settlements, wards and households for the study. Proportional allocation of questionnaires was used. All consented and eligible respondents within the chosen communities were interviewed

**D. DATA INSTRUMENT AND DATA COLLECTION**

The data was collected using a validated 21 – item structured, self administered questionnaires were given to the respondents on a house-house visit, while the purpose of research was explained to respondents making use of the local dialect (Ekiti) to interpret to unlearned respondents. Copies of answered questionnaire were retrieved completely within one week.

**E. ETHICAL CONSIDERATION**

Permission was taken from the local government chairman and was granted evidently by his signature. Also informed consent was obtained from the respondents before questionnaire was administered and maximal level of confidentiality was used to treat respondent's data..

**III. RESULTS**

VARIABLES		FREQUENCY	PERCENTAGE (%)
<b>Age:-</b>	18 – 25 Yrs	21	20.8
	26 9 35 yrs	39	38.6
	36 – 45yrs	41	48.6
	Total	101	100
<b>Marital Status:-</b>	Single	20	19.8
	Married	61	60.4
	Divorced	1	1.0
	Separated	3	3.0
	Others	16	15.8
	Total	101	100
<b>Tribe:-</b>	Yoruba	78	77.2
	Hausa	3	3.0
	Igbo	9	8.9
	Others	11	10.9
	Total	101	100
<b>Religion:-</b>	Christianity	76	75.2
	Islamic	23	22.8
	Traditional	2	2.0
	Total	101	100
<b>Level of Education:-</b>	Primary	36	35.6
	Secondary	33	32.7
	Tertiary	26	25.7
	Others	6	6.0
	Total	101	100
<b>Occupation:-</b>	Civil servant	24	23.8
	Traders	34	33.7

Self employed	23	22.7
Farmer	10	12.9
Others	10	6.9
Total	101	100

Table 1: Respondents' bio-data

The table above reveals that 20.8% (21) of respondents are between the ages of 18-25 yrs, 38.6% (39) of them are between the ages of 26-35 yrs with the modal age group being 36-45 yrs; 40.6% (41).

The table shows that 19.8% (20) were single 60.4% (61) married, 1.0% (1) divorced, 30% (3) separated and 15.8% (16) were others (which include widowed, engaged).

The largest ethnic group in this study is the Yorubas with 77.2% (78), the Hausas constitutes 3.0% (3), Igbos, 9.0% (19) and others (which includes the Igbiras, Igede and Igbominas) 10.9% (11).

The modal level of education of the respondents in this study is primary with 35.6% (36), followed by secondary with 32.7% (33) next is the tertiary with 25.7% (26) and others (e.g technical school, secretariat school, Grade II colleges) 60% (6).

The most prominent occupation is trading being 33% (34), next to this is the civil service, 23.8% (24), followed by self employment; 22.7% (23), next is farming with 12.9% (13) and the least is others (e.g cassava mill workers, volunteer health workers) 6.9% (7).

The majority (75.2%) are Christians, 22.8% are muslims and the rest (2.0%) are traditional worshippers.

QUESTIONS/RESPONSES	FREQUENCY N=101	PERCENTAGE (%) N=100
Have you heard of cervical screening		
a) Yes	31	30.7
b) No	63	62.4
c) Unknown	7	6.9
Sources of information		
a) media	16	51.6
b) Friends	5	16.1
c) Hospital	6	19.4
d) Others (books/seminars)	9	12.9
What did you understand by cervical screening		
a) Performing surgery on cervix	44	43.6
b) Taking sample from the cervix for laboratory analysis	57	56.4
The reason(s) for cervical screening		
a) To prevent cervical cancer	26	25.7
b) To diagnose cervical cancer	52	51.5
c) To treat cervical cancer	23	22.8
Categories of women that need to be screened		
a) Women with multiple sexual partners	27	26.7
b) Women of reproductive age group	32	31.7
c) Post menopausal women	13	12.9
d) All women	29	28.9
Did you think that cervical cancer can be prevented?		
a) Yes	14	13.9
b) No	67	66.3
c) unknown	20	19.8

Table 2: ASSESSMENT OF KNOWLEDGE OF CERVICAL SCREENING

The table shows that majority of the respondents (62.4%) are not aware of cervical screening, only 30.7% have heard about cervical screening. The sources of information is mainly through media (51.6%), follow by hospital (19.4%), friends (16.1%) and other sources (12.9%).

Above half of the respondents (56.4%) reported that the screening involves taking samples for laboratory

analysis while some (43.6%) said the screening is a form of surgical operation on the cervix. About half (51.5%) of the respondents believed that the purpose of screening is to diagnose cancer of cervix, 25.7% and 22.8% believed that is for prevention treatment of cancer of cervix respectively. Majority (66.3%) of the respondents does not know that cancer of cervix is preventable.

QUESTION/RESPONSES	FREQUENCY N=101	PERCENTAGE (%) N=100
Have you ever had cervical screening? a) Yes b) No	9 92	8.9 91.1
Why have you not been screened? a) No interest b) Do not feel susceptible c) Lack of awareness d) No facility e) Cost	22 15 54 9 1	21.8 14.8 53.5 8.9 1.0
Do you believe cervical screening is important? a) Yes b) No	68 33	67.3 32.7
If no, why? a) I don't have any symptom b) I can't have cancer	14 19	42.4 57.6
Would you accept the idea of screening in the absence of symptoms? a) Yes b) No	64 37	63.4 36.6
Why will you not accept cervical screening? a) Financial Constraints b) Don't know where to do it c) Scared of positive result	 2 23 12	 5.4 62.2 32.4
Why would you not go for screening, if it is free and easily accessible? a) I don't need it b) Screening does not have any benefit c) Lack of positive family history	9 5 23	24.3 13.5 62.2

Table 3: ASSESSMENT OF ATTITUDE TOWARDS SCREENING

The table shows that most of the respondents (91.1%) have not had cervical screening, 53.5% are not aware of cervical screening and 21.8% are having no interest. Majority of the respondents (63.4%) believed that they will accept cervical screening without symptoms while some (36.6%) would not accept it. The reason for not accepting cervical screening by respondents include not know the location for the test (62.2%), fear of positive result (32.4%), and cost (5.4%).

#### IV. DISCUSSION

According to the findings of this study, 20.8% of the respondents are between ages 18-25yrs, 38.6% are between ages 26-35yrs, while the largest percentage;48.6% are between ages 36-45yrs. Some of these women according to this study, had primary school education (32.7%), some (35.6%) had secondary school education while 26% had tertiary education. This study found out that just 30.7% (31) of these women has heard about cervical screening, some (5.9%) are not sure if they have heard about it or not, 0.9% cannot remember if they have heard or not while majority (64.4%) have never heard about it.

This study shows that these reproductive age women had a fair knowledge of cervical screening is, as 56.4% (57) of them opined that it is taking samples of cells from the cervix and analyzing it while 43.6% (44) think that it is

performing surgery on the cervix. Also about 51.5% of these women know what cervical screening is meant for i.e. is to diagnose cervical cancer, some (22.8%) of them believed it is to treat cervical cancer while others 25.7% think it is to prevent cervical cancer. Just 28.75% knows the right category of women to be screened; being women of all ages while 26.75% believed cervical screening is only for women having multiple sexual partners, 12.9% believed it is only for post-menopausal women alone and 31.7% it is only for reproductive age women. All these results implied that these women had inadequate knowledge of cervical screening which is consistent with the result of the study of Nwankwo et al(2011) in their study on knowledge, attitude and practice of cervical screening among rural and urban Nigerian women which concluded that there is very poor knowledge and practice of cervical screening among Nigerian women.

The main reasons presented by these women for not ever been screened are: lack of interest(21.8%), do not feel susceptible to cervical cancer(14.8%), lack of awareness(53.5%), lack of facility(8.9%) and cost(1.0%) which is consistent with Akunjobi et al(2008) in their study on knowledge, attitude and practice of cervical screening among female students of tertiary institution of South-eastern Nigeria which reveals that the low participation in cervical screening were attributed to ignorance of the

existence of such test, lack of awareness of screening centers and ignorance of the importance of screening.

These women demonstrated a fair attitude to screening because this study gathered that 67.3% of them believed that cervical screening is important while 37.7% believed it is not. Those who believed it is not, do so because they do not have any symptom (42.4%) and they can't have cancer (57.6%).

The practice of cervical screening among this women very poor, only 8.9% had ever been screened while 91.1% have never been screened. This finding is consistent with Onah et al's finding in 2011 which found out that level of opportunistic cervical screening programme is very low and that majority of gynecologists had definite cervical screening programmes which were selective and were based on specific indications

## V. CONCLUSION AND RECOMMENDATION

The result of this study shows that women have inadequate knowledge of cervical screening and poor attitude towards it, both of which made the practice of cervical screening to be abysmally low.

## VI. RECOMMENDATIONS

In view of the finding of this study, the following recommendations are made:

- Mass media advertisement of cervical screening should be initiated.
- Mass education of women on the purpose and importance of cervical screening should be ensured by health workers.
- Government should provide affordable and accessible screening facilities to health care centers and train health care personnel on how to make use of them.

## REFERENCES

- [1.] Abdullah F., Norlaili, Abdul A., Tin T. (2011); Factors related to poor practice of pap's smear among secondary school teachers in Malaysia.
- [2.] Adekanle D.A, Adeyemi A.S, and Afolabi A.F (2011); Knowledge, attitude and practice of cervical screening among female secondary school teachers in Osogbo, Nigeria.
- [3.] Alliance for Cervical Cancer Prevention (2005); Cost-Effectiveness of Cervical Screening in five African countries.
- [4.] Aisling E.C., Niall L., Ciaran J.O., Peter T. M. and Alexander P. M (2012); The uptake of cervical screening by renal transplant patients.
- [5.] Akinjobi C.N., Ikechibelu I.I, Omunkwo I., Onyiaorah I.V (2008); Knowledge, attitude and practice, attitude and practice of screening for cervical cancer among female students of a tertiary institution in South Eastern Nigeria.
- [6.] Bano K., Khan J., Begum H., Munir S., Abkar N., Ansari J. and Anees M. (2008); National Health Insurance Scheme's cervical screening Programme.
- [7.] Bartoszek M., Marlow L. and Wardle J. (2009); Barriers to cervical screening attendance in England: a population based survey.
- [8.] Bessler P., Aung M. and Jolly P. (2007); Factors affecting uptake of cervical screening among clinic attendees in Trelawny, Jamaica.
- [9.] Cornforth Tracee (2005); Colposcopy- What is a colposcopy?
- [10.] Croyle R.T. (2005); Health belief model: a model for addressing problems of behaviours that evoke health concerns.
- [11.] Ezem B.U(2007); Awareness and uptake of cervical screening in Owerri, South-east Nigeria.
- [12.] Faduyile FA, Kuyinu A.Y, Wright O.K and Faseru B. (2011); Awareness and uptake of pap's smear among market women in Lagos, Nigeria.
- [13.] Gao W., Desouza R., Paterson J. and Lu T (2008); Factors affecting the uptake of cervical screening among Chinese women in New Zealand.
- [14.] Jarvis S. (2012); Cervical screening, treatments abnormal cervical cells, diagnosis of cervical cancer and its treatment.
- [15.] Mupepi S.C. and Sampelle C.M. (2011); Knowledge, attitude and demographic factors influencing cervical screening behaviour among Zimbabwean women.
- [16.] National Institute for Health and Clinical Excellence (2011); Clinical topic- Cervical screening-basis for recommendation.
- [17.] National population Commission of Nigeria (2006); 2005-2006 census results
- [18.] North west Cervical Screening Quality Assurance Reference Centre (2009); The Effectiveness of cervical screening.
- [19.] Nwankwo K.C., Aniebe U.U, Agunwa E.N., Anarado A.N. and Agunwah (2010); Knowledge, attitude and practice of cervical screening among urban and rural Nigerian women: a call for education and mass screening.
- [20.] Obiechima N. J. and Mbiara K.O(2009); Knowledge, attitude and practice of cervical screening among sexually active women in Onitsha, Southeast, Nigeria.
- [21.] Obinna C. (2012); World cancer day: what hope for Nigerian cancer patients?
- [22.] Ogundipe S. and Obinna C. (2012); Cervical cancer: Every sexually active woman is at risk, in Vanguard mobile edition.
- [23.] Robert P. (2011); Cervical cancer: A future Epidemic for Nigerian women.
- [24.] Surveillance Epidemiology and End Result(2011); Cancer Statistics Datasets and Software publications for cancer Registrars.
- [25.] Tacken J.B, Braspenning J.C., Rosella P.M, Spreeuwenberg M.M, Hoogen J.M, De Bakke H.D, Groenewegen P.P and Gro T.M(2009); Uptake of cervical screening in the Netherlands is mainly influenced by women's beliefs about the screening and by the inviting Organization.

- [26.] Urasa M. and Darj J.C (2011); Knowledge of cervical cancer and screening practices of nurses at a regional hospital in Tanzania.
- [27.] Villafuerte B.E, Gomez L.L, Betancourt A.M and Cervantes M.L (2007); Cervical cancer: a qualitative study on subjectivity, family, gender and health services.
- [28.] Wikimedia Foundation Incorporations(2011); Female Urogenital neoplasia and cervical screening.
- [29.] Wong Li, Shuib R.A, Khoo (2007); Knowledge and awareness of cervical cancer and screening among Malaysian women who have never had a Pap's smear.