

## Awareness and Uptake of Cervical Cancer Screening in Owerri, South-Eastern Nigeria

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### **Abstract**

**Background:** Cancer of the cervix is the most common cancer of the female genital tract and accounts for about two hundred and fifty thousand deaths yearly most of which occur in the developing countries. It has assumed greater prominence with the decrease in deaths due to infective causes and the increase in the incidence of HIV/AIDS which is a predisposing factor. A significant drop in its incidence has been recorded in the developed countries as a result of intensive program of cervical screening. This study determines the level of awareness and uptake of cervical screening in Owerri, South Eastern part of Nigeria.

**Method:** This is a cross sectional study in which self administered questionnaires returned by eight hundred and forty six respondents were analysed using simple percentages.

**Results:** The level of awareness of cervical screening was 52.8 %( 447), while 7.1 %( 60) had ever done the test. The major sources of information about cervical smear were hospital /health facilities (31.3%) and friends (30.9%).The most common reasons given for not doing the test were lack of awareness 390(46.1%),no need for it 106( 12.5%) and fear of a bad result 98(11.6%).

**Conclusion:** The level of awareness of cervical screening is low and worse still, is the level of uptake at the present level of uptake no significant impact will be made on the incidence of cervical cancer which needs to be reduced. A national cervical smear screening policy is advocated but in the interim, greater public education and the greater use of opportunistic screening by physicians should be vigorously pursued.

**Key words:** Cancer, cervical screening, awareness, uptake

### **Résumé**

**Introduction:** Le cancer du cou est le cancer le plus ordinaire de la voie génitale du sexe féminin et il constitue environs deux cents cinquante mille des morts annuelle dont la plupart arrivent dans les pays en voie de développement. Présumé une plus grande éminence avec un ralentissement des morts attribuables aux causes infectives et à un accroissement dans la fréquence de VIH/SIDA qui est un facteur possible. Une baisse remarquable dans sa fréquence a été notée dans les pays développés à la suite du programme intensif du test de dépistage cervical. Cette étude décide le niveau de la conscience et l'esprit vif d'un test de dépistage à Owerri Sud Est du Nigéria.

**Méthode:** Il s'agit d'une étude d'un groupe représentatif dont des questionnaires soi-fait et retourné par huit cents et quarante six sondés ont été analysés à travers l'utilisation du pourcentage simple.

**Résultats:** Le niveau de la conscience d'un test de dépistage cervical était 52,8% (447), tandis que 7,1% (60) avaient déjà fait le test. La source principale pour avoir des informations à propos du couler cervical étaient hôpital et aménagement sanitaire (31,3%) et amis (30,9%). Des raisons le plus ordinaires données pour ne pas faire du test étaient manque de la conscience 390 (46,1%) pas d'importance 106 (12,5%) et la peur d'un mauvais résultat 98(11,6%).

**Conclusion:** Le niveau de la conscience du test de dépistage cervical est bas et mauvais encore, c'est le niveau l'esprit vif dans le niveau actuel d'esprit vif, il n'y a aucun impact remarquable qui peut être réalisé dans la fréquence du cancer du cou qu'on doit nécessairement réduire. Une politique nationale sur le test de dépistage du couler cervical est exigée mais entre-temps, message de grande cause nationale et l'utilisation d'une grand test de dépistage opportunistique par des médecins devraient être vigoureusement atteint/recherché.

**Mots-clés:** Le cancer, dépistage cervical, la conscience, l'esprit vif d'un test

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## Introduction

Cancer of the cervix is the commonest genital tract malignancy in the female.<sup>1</sup> It is even more important in the developing countries where it used to be the most common malignant disease.<sup>2, 3</sup> Recently however it has been ranked second to breast cancer in some studies.<sup>4-7</sup> About half a million new cases are seen world wide each year most occurring in developing countries where they present late<sup>8,9</sup> when only palliative treatment can be given.<sup>10</sup> Cancer is responsible for about 51 million deaths yearly out of which cervical cancer accounts for 8.5% most of which occur in the developing countries.<sup>11</sup> In Nigeria the national incidence of cervical cancer is 250/100,000.<sup>12</sup>

With the decline in death from infective causes, the increasing permissiveness of the society fueling the HIV/AIDS pandemic<sup>13</sup> the relative incidence of cancer of the cervix is on the increase. Unfortunately anything approaching adequate treatment is only available in a few centers at costs beyond the reach of many of the afflicted.<sup>16</sup> This is amply illustrated by the fact that by the year 2004 only three radiotherapy units were available to serve a population of 130 million Nigerians.<sup>15</sup>

The long transition time from a premalignant lesion to frank cancer of the cervix affords ample time for early detection and nearly complete cure even in secondary health care centers. However this window of opportunity which has enabled the developed countries to reduce the incidence of cancer of the cervix<sup>16</sup> would be wasted if the level of screening is low. In this paper we determine the level of awareness of, and the uptake of cervical cancer screening in South Eastern Nigeria a highly populated part of Nigeria, using Owerri as a case study.

## Materials and Methods

The study was carried out in Owerri, Nigeria, between January 2004 and June 2004. Owerri is the capital of Imo State, which is one of the nine states in the South Eastern part of Nigeria. It has a population of two hundred and ninety thousand and is inhabited largely by Ibos, one of the three major ethnic groups in Nigeria. Until 1976 when the Imo State was created, Owerri was a typical sleepy rural town made up of five indigenous villages. With the creation of Imo State and its choice as the capital, the population mushroomed due to the influx of public servants and businessmen from other parts of the state. The socio-economic activity revolves around the government as Owerri has virtually no industries. It is however highly favoured educationally as it boasts of two universities, a polytechnic, and a college of education among others.

There is no organized government screening policy, screening being offered at the request of patients or the suggestion of health personnel by gynecologists.

A multistage cluster sample approach was used in this study. Owerri town is divided into seventeen political wards. Four out of these were randomly selected for logistic reasons and to minimize cost. Each of the wards is divided into ten chapters. Four chapters were again randomly selected from each of the four wards previously selected. The research assistant visited households in the four selected chapters and distributed two hundred and fifty questionnaires to willing women aged between twenty and sixty five years. The questionnaires were pretested on twenty respondents who were not included in the study. The minimum sample size of three hundred and eighty four was determined according to Kregcie and Morgan.<sup>17</sup>

Each questionnaire was semi structured, contained seventeen questions and elicited information on respondent's biodata, education and occupation. It also sought information about knowledge, awareness, uptake source of information and reasons for not doing cervical smear, where applicable. Most of the women completed the questionnaires without assistance. A few who had difficulties were assisted by the research assistant. Data analysis was by use of simple percentages.

## Results

Eight hundred and forty six of the returned questionnaires were suitable for analysis. They were from public servants 460, teachers 246, nurses 72, administrators 20, self employed 20, students 3. Twenty five (25) respondents did not state their occupations. Three hundred and sixty (42.6%) of the respondents were aged between 20 and 40 years, while 396 (46.8%) were between 40 and 65 years, and 90 (10.6%) did not state their ages. Single women were 112 (13.2 %) while the rest were married. The study population was predominantly Christian 800 (94.6%). Nulliparous women (102) constituted 12.1%, while 384 (45.4%) had 1-4 children and 336 (39.7%) had greater than four children 24 respondents (2.8%) did not state their parity.

Six hundred and thirty (74.5%) had tertiary education, 124 (14.7%) had secondary education while 24 (2.8%) did not indicate their educational status. 447 (52.8%) of the respondents were aware of cervical screening, 390 (46.1%) were unaware while 9 did not answer the question (Table 1).

Amongst the respondents (447) who were aware of screening 140 (31.3%) got their information from hospital sources while 138 (30.9%) got their information from friends, and 94 (21%) from books or magazines (Table 2). Only five got their information from relations who had had carcinoma of the cervix.

Only 60, (7.1%) of the respondents had ever done the test and most of these were done over three years ago.

The reasons for the lack of uptake (Table 3) included lack of awareness 390 (46.1%), no need for it 106 (12.5%) and fear of a bad result 98 (11.6%).

Table 1: Level of awareness of cervical smear among 846 respondents

Level of awareness	No. (%)
Previously aware of the test	447 (52.8)
Previously unaware of the test	390 (46.1)
Not stated	9 (1.1)
Total	846 (100)

Table 2: Sources of information about cervical screening among 448 respondents

Source of information	No. (%)
Hospital	140 (31.3)
Friends	138 (30.9)
Books/magazines	94 (21.0)
School	40 (8.9)
Husband	13 (2.9)
Television/radio	10 (2.2)
Others	13 (2.8)
Total	448 (100)

Table 3: Reasons for not doing cervical smear among 846 respondents

Reason	No. (%)
Lack of awareness	390 (46.1)
Saw no need for it	106 (12.5)
Don't know it can be done here	98 (11.6)
Fear of bad result	98 (11.6)
Not recommended by doctor	46 (5.4)
Too expensive	46 (5.4)
Others	35 (4.1)
Not stated	27 (3.3)
Total	846 (100)

## Discussion

At every stage in life, a woman in the third world risks some serious health problems. These include HIV/AIDS, high maternal mortality rates, and cancer of the cervix later in life. Cancer of the cervix is a preventable disease and a key aspect of its prevention is the detection of the premalignant form by cervical screening.

The major findings of this study are that 52.8% of the respondents were aware of cervical screening and that 7.1% had ever done the test. It also finds that most of those who were aware of screening got their information from hospital sources (31.3%) and friends (30.9%). The major reasons for not doing the test cited by those who were aware of it were 'no need for it', lack of knowledge that it could be done locally, and fear and anxiety over a positive result.

The major drawback of the study is that the high percentage (74.5%) of respondents who had tertiary education would not normally be expected in a typical population in a developing country. Robert et al<sup>18</sup> found a positive relationship between education and

awareness of cervical screening. This would suggest that the level of awareness could be lower than was found in this study in other parts of the state where the level of education is lower.

The level of awareness of 52.8% found in this study is less than 69.8% from Ilorin<sup>19</sup> and 70% in Ibadan<sup>20</sup> but is much higher than what is found in other parts of Nigeria<sup>18, 21, 22</sup> or 39% in Ghana.<sup>23</sup> It is also much lower than what obtains in developed countries.<sup>25</sup> The differences in the levels of awareness may be partly explained by educational status.<sup>18</sup> The highest levels of awareness are from studies using undergraduates and health care professionals while the lowest levels come from studies using commercial sex workers and clinic attendees. Educational level would however not explain the figure from Ghana as the respondents were said to be well educated women.

There was greater concordance among the various local studies in the percentage of women who had ever done the test. There was an overall very poor uptake of screening irrespective of education and level of awareness, which ranged between 0.3% and 8.5%.<sup>18-23, 25</sup> This level of uptake of screening is clearly unsatisfactory and worrisome as it will make no significant impact on the prevalence of cervical cancer as screening of highest level and coverage 24 is needed for any meaningful impact on the incidence of cervical cancer. It has been suggested that one way of correcting this is for health care workers to show good example which the populace can copy.<sup>19</sup>

Lack of awareness, being unnecessary, fear and anxiety were cited as the major reason for not doing the test in 46.1%, 12.5% and 11.6% respectively of the respondents. In the study from Ilorin, Nigeria<sup>19</sup> where unlike our study population there is a preponderance of Muslims, the reasons cited for not doing the test were unavailability of the test, fear of detection of cancer and it's being against religious beliefs in 52.5%, 19.2% and 14.6% of those studied. This reveals a lack of appreciation of the disease, and the failure of the health system to effectively disseminate information. Fear and anxiety associated with a bad result stems from the poor understanding of the principle behind cervical screening. Our women would rather live in blissful ignorance than know that they have a disease where adequate treatment is practically non-existent, unaffordable and results of treatment poor.<sup>26</sup> This situation could be reversed by better public enlightenment highlighting the fact that a premalignant lesion can be completely cured. Hospital sources (31.3%) were the major source of information in this study. This is similar to the results of some studies<sup>18, 21</sup> but is different from other studies where radio and TV<sup>22</sup> or lectures and textbooks<sup>20</sup> were the main sources of information.

That screening prevents deaths is not in doubt.<sup>27</sup> This has reduced the scourge of this disease in advanced countries. However low income countries are unlikely to be able to mount screening programmes as sophisticated as those in the developed countries for some time to come. A national screening policy has been advocated,<sup>28, 29</sup> but while we wait for this, greater public awareness

should be created and greater use should be made by physicians of opportunistic cervical screening as presently even amongst Nigerian gynaecologists only 15% request for cervical screening of their patients while 76.9% of those who did a cervical smear did so because a health worker asked them to do it.<sup>19</sup> In addition, modified strategies like limited pap screening,<sup>29</sup> single visit approach<sup>30</sup> and visual inspection with acetic acid application<sup>31, -33</sup> should be used as stop gap measures.

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