

## **AWARENESS OF CERVICAL CANCER AND ITS SCREENING IN ABAKALIKI, NIGERIA**

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### **ABSTRACT**

**Aim:** Cervical cancer is the most common genital tract malignancy among women in developing countries. It accounts for more than 250,000 deaths yearly most of which occur in the developing countries. The aim of this work was to assess the awareness of cervical cancer among Igbo women in Abakaliki, Nigeria.

**Methods:** A descriptive cross-sectional study using structured questionnaires at the Federal Teaching Hospital Abakaliki, Nigeria was conducted and the data analyzed.

**Results:** Our research revealed that 37.6% of respondents were aware of cervical cancer while 26.0% were aware of cervical screening and only 11.1 % had ever done Pap smear. Age, education and occupation were significantly associated with awareness of cervical cancer, cervical screening and having done Pap smear. There was no association between marital status and awareness of cervical cancer and cervical screening, but there was an association between marital status and having done Pap smear.

**Conclusion:** National cervical smear screening policy is advocated.

**Keywords:** Cervical cancer, Cervical screening, Pap smear

### **INTRODUCTION**

Cervical cancer results from the uncontrolled growth of severely abnormal cells in the cervix. The primary underlying cause is Human Papilloma Virus (HPV) (Imelda, 2008). Sexually transmitted HPV infection leads to the development of cervical intraepithelial neoplasia and cervical cancer (An et al., 2005). HPV is spread through sexual contact, although most women are immune to the infection. HPV types 16 and 18 cause 70% of cervical cancer cases, whereas types 6 and 11 cause 90% of genital warts cases. During persistent HPV infection, precancerous changes may be detected in the

cervix. Early detection and treatment of these changes is an effective strategy for the prevention of cervical cancer and forms the basis of cervical screening programmes (Stephen, 2006). Cervical cancer is the most common malignancy among females worldwide especially in women of 20–39 years of age. Its contribution to cancer burden is significant across all cultures and economies. Cervical cancer accounts for over 270,000 deaths worldwide, an overwhelming majority of which occur in the less developed regions (Ferlay et al., 2008). Globally, there are over 500,000 new cases of

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cervical cancer annually and in excess of 270,000 deaths, accounting for 9% of female cancer deaths. 85% of cases occur in developing countries and in Africa (Campbell et al., 1997). Mortality rates vary seventeen fold between the different regions of the world. Cervical cancer remains the second leading cause of cancer deaths after breast cancer and the fifth most deadly cancer in women, accounting for approximately 10% of cancer deaths (Okonofua et al., 2007). Cervical cancer contributes over 2.7 million of life lost among women between the ages of 25 and 64 worldwide, 2.4 million of which occur in developing areas and only 0.3 million in developed countries (Adefuye, 2006). Around the world a woman dies of cervical cancer every 2 minutes. In Nigeria the national incidence of cervical cancer is 250/100,000 (Solanke, 2007). Awareness of screening programmes, preventive vaccination and diet are preventive measures that reduce the incidence of cervical cancer. In developed countries of Europe and America that have organized national cervical screening programs, early detection and treatment of precancerous cervical lesions have resulted in a dramatic reduction in the incidence of and mortality from cervical cancer (WHO Publication 2007). Pap smear screening can identify potentially precancerous changes. Treatment of high grade changes can prevent development of cancer. Cervical cancer is the most common genital tract malignancy of women living in poor rural communities of developing countries (Ferlay et al., 2002). The ideal ages of women for screening are 30– 40 years owing to high risk of precancerous lesions due to sexual activity; and precancerous lesion is detectable 10 years or more before a cancer develops (Oguntayo et al., 2011). Although it has already been proven that the efficiency of regular Pap tests reduced the mortality rate of cervical

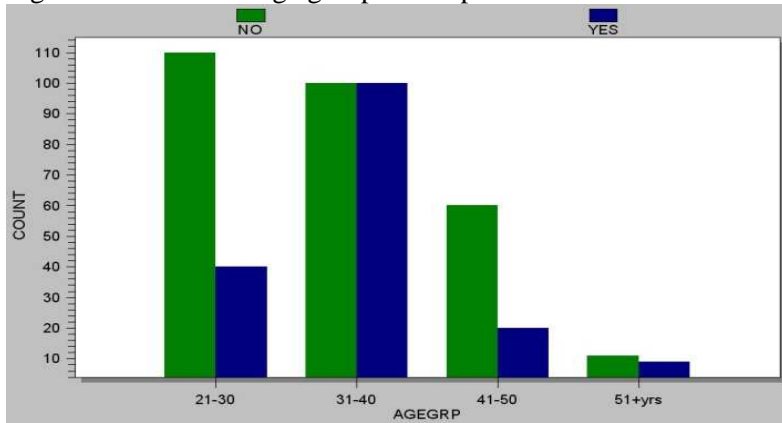
cancer, its application in the developing countries is less, compared to what obtains in the developed countries. The lack of knowledge concerning cervical cancer may be related to this fact (Solanke, 2007). In the developing countries, the widespread use of cervical screening methods has reduced the incidence of invasive cervical cancer by 50% or more. Cervical cancer is one of the most preventable of all cancers through primary and secondary prevention, prophylactic HPV vaccination and cervical screening (Ezem et al., 1982). Vaccination against HPV, when it is available and affordable may further reduce the incidence of the disease. The lack of regular screening programmes and low rate of Pap smears in Nigeria led to this study. The present study assesses the perception, predisposition and attitude towards cancer of the cervix among Igbo women in Abakaliki, Southeast Nigeria.

### **MATERIALS AND METHODS**

The investigation was conducted at Federal Teaching Hospital Abakaliki (FETHA), Ebonyi State, Southeast Nigeria, from October 2012 to December 2012. Data collection was by a structured "interviewer or self-administered" questionnaire. Five hundred (500) questionnaires were administered to females of reproductive age and postmenopausal women who attended ante natal clinics at FETHA, to obtain relevant information about knowledge, awareness, source of information, uptake of cervical screening, reasons for and against uptake of cervical screening. The questions were designed to elicit "yes", "no" answers. The questionnaires were pretested on twenty respondents who were not included in the study. Informed consent was granted by respondents. Data obtained was analyzed using EPI INFO version 3.3.2. Statistical testing was done using bivariate analysis.

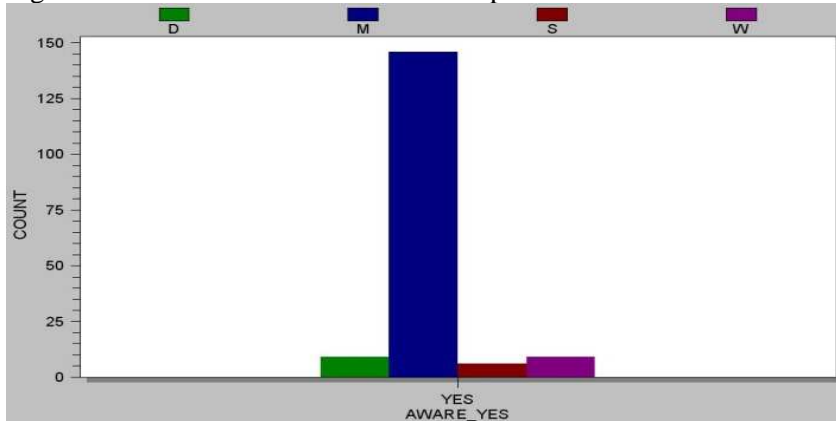
**RESULT**

Fig.1. Association of age groups of respondents and awareness of cervical cancer



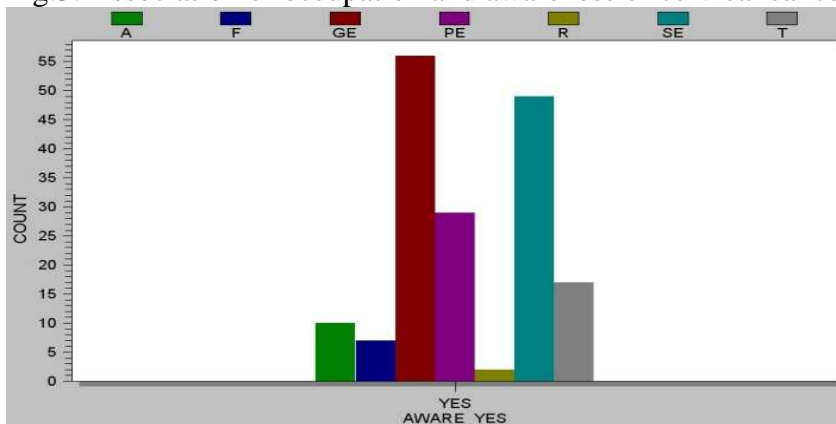
Only 40 (26.7%) of respondents within the age group of 21-30 were aware of cervical cancer, 100(50%) of respondents within the age group of 31-40 were aware of cervical cancer and 20(25%) within the age limit of 41-50.

Fig.2. Association of marital status of respondents and awareness of cervical cancer



About 9(45%) of respondents who were divorced were aware of cervical cancer. 146(39.5%) of married and 9(22.5%) of widowed were aware of cervical cancer.

Fig.3. Association of occupation and awareness of cervical cancer



Nine representing 36% of applicants were aware of cervical cancer, 7(23.3%) of farmers, 56(46.7%) of government employee, 29(64.4%) of private employee, 2(40.0%) of retirees, 49(28.8%) of self-employed and 17(30.9%) of traders were aware of cervical cancer.

## DISCUSSION

Pap smear is one of the most crucial screening tools for the early diagnosis of cervical cancer (Van Bogaert, 2001). While the rate of women having Pap testing is equal to or above 80% in developed countries (ACCP, 2004), this rate varies between 46-68% in developing countries. Cervical cancer kills a disproportionate number of women in developing countries, despite the fact that evidence-based secondary prevention methods exist (ACCP, 2004). Numerous studies have shown that many women do not attend screening programs because they are not aware of their risk of cervical cancer or of the benefits of screening and early detection and prevention (Madong et al., 2003). The extent to which women actually are well informed about cancer and about screening can be judged simply by questioning their knowledge. The age distribution in the present study is similar to the ones reported from other studies in Nigeria (Oguntayo et al., 2011), emphasizing the fact that cancer of the cervix is a disease of the reproductive age group. In this work, about 37.6% of respondents were aware of cervical cancer while 26.0 % of the respondents were aware of cervical screening and only 11.1% had ever been screened in this study. The level of awareness found in this study is less than 69.8% from Ilorin (Aboyeji et al., 2004), 70% in Ibadan (Ayinde et al., 1998) and 39% in Ghana (Adanu et al., 2002). It is also much lower than what obtains in developed countries (Chukwuali et al., 2003). The differences in the levels of awareness may be partly explained by educational status (Roberts et al., 2004). 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 attendee. The uptake of cervical screening is however, generally low (Macgregor et al., 1994). The level of uptake of screening (11.1%) in this work is clearly unsatisfactory and worrisome. It is noteworthy that following counseling in this study, more than 60.0% of the women showed positive attitude toward cervical screening, thus indicating that awareness creation may lead to improved screening uptake. Unfortunately, this positive attitude may wane if it is not met with

accessible, culturally acceptable and affordable service, hence the need for an immediate action.

Age, education, occupation and marital status were significantly associated with awareness of cervical cancer, cervical screening and having done Pap smear. Thus women with higher level of education and social class were more aware than those with lower level of education and social class. Respondents who were 21-30 years, and those with primary education were least aware of Pap smear while those above 50 years and those with tertiary education were most aware. Studies in both developed and developing countries have elicited similar associations between socio-economic status and awareness of Pap smear screening. A study in southern Illinois of women attending university colposcopy clinics for abnormal screening cervical cytology found that women in higher income strata were also more likely to understand the meaning of an abnormal Pap test ( $p=0.03$ ) (Adefuye, 2006). The same study also found older women more likely to know the nature of the Pap test ( $p=0.005$ ) and the meaning of abnormal Pap test ( $p=0.04$ ). Thus women with higher level of education and social class were more aware than those with lower level of education and social class. Pap smear uptake was highest among older women, women who were ever married, and those with tertiary education and higher social status. This contrasts with the study of Chinese-Americans in the United States which found a negative association between age and Pap smear uptake (Macgregor, 1994). Another study in Botswana found a positive association between socio-economic level and uptake of Pap smear. In that study involving 30 women recruited from all income levels, Pap smear utilization was limited among low-income women (Olusegun et al., 2008).

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