"Cancer of the cervix and Cervical screening: current knowledge, attitude and   practice of primary health care workers in Ikenne Local Government Area Ogun State, Nigeria."

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Abstract: *It is known that attitudes of physicians and motivation by community nurses influence uptake of cervical cancer screening methods by women. A cross-sectional study was conducted using a self-administered questionnaire to assess the knowledge of cervical cancer, its risk factors, beliefs about treatment and practice of screening methods among 100 primary health care workers in all primary health care centers in Ikenne LGA, Ogun State. A purposive sampling method was employed for the sampling technique. Data were analyzed using frequency tables and Pearson's correlation. The result, showed a significant relationship between the level of education awareness cervical cancer, while there is no significant relationship between the knowledge of cervical cancer screening and practice of cervical cancer screening (Correlation is significant at the 0.01 level). Continuing medical education and programs aimed at improving knowledge of cervical cancer and its screening practice, among primary health care providers is necessary.*
Keywords: *Cervical cancer, Cervical screening, Knowledge, Attitude and Practice.*

I.   Introduction

Cervical cancer is one of the easiest and safest female cancers to prevent with series of tests and follow up (Centre for Disease Control and Prevention, 2013).Cervical cancer is the Second most common cancer in women worldwide, with about 500,000 new cases and250,000 deaths each year. Almost 80% of cases occur in low-income countries (World Health Organization, 2013).Studies shows that cervical cancer is the second leading cause of deaths in women in developing and under developed countries and it accounts for 12% of all cancers. Cervical cancer is accounting for 9% of all female cancers, and 9% of all cancer deaths in women. It is the seventh most common cancer in the world, with an estimated 530,000 new cases in 2008, and accounting for 40% of all cancers worldwide. Cervical cancer is more common in less developed countries, with 454,000 cases in 2008, compared to approximately 77,000 in more developed countries where it accounts for more than 85% of the global burden of cancer (World Cancer Research Fund International, 2008).

In Nigeria, an estimated 25,000 new cases of cervical cancer with 480 cases per week are recorded in Nigeria yearly (Daniel, 2013) and the reasons for this, range from lack of adequate knowledge of the disease and its screening methods by health care providers and also of the risk factors associated with the disease, early marriage, multiple sexual partners, high risk sexual partners, high parity, poor socio-economic status and poor uptake of cervical cancer screening.

Out of estimated 275,000 women who die each year from cervical cancer more than 85% of these deaths have been researched to occur in developing countries and by year 2030 it is expected to kill more than 474,000 women per year at the prime of their lives. Hence, there is a great need for its preventive practices which is its screening.It is very paramount for all women to go for regular screening especially when they are 21years or older. Until they are about 65 years they can stop if only they have had at least 3 screening test results in the last 10 years. There are also vaccines used in the prevention of cervical cancer and the human papillomavirus in place of Pap smear but notwithstanding, the need to go for regular screening is still called for. Despite the risks of the HPV both males and females are hardly aware of the virus and the risks it carries. (Roland, 2009).

 The World Health Organization (2006) has shown the importance of primary health care professionals as predictors of the use of cervical cancer screening.According to data collated from the Global Cancer Incidence and Mortality Study (GCIMS, 2010), it is estimated that 80,000 African women get a diagnosis of cervical cancer annually. A total of 53,000 women in Africa actually die annually from this cancer, with higher prevalence in countries where women never attend cancer screening and low incidence seen in countries in North Africa compared to East Africa because of the inadequate experience or knowledge of these preventive services by health care providers. The incidence of cervical cancer in Nigeria is 250/100,000 and since there are approximately 32 million Nigerian women aged 15-64 years old, we have up to 10,000 women dying annually from the condition, approximately, a woman every hour (WHO, 2010). Thus, comprehensive training and re-

training of primary health care workers, health education programs are more likely to be beneficial than disease-specific programs in tackling this problem. It has been identified that cervical cancer is the second known cause of mortality among women. Every year, between 30,000 to 80,000 women die of cervical cancer (WHO, 2013) and for some time now, various groups in the health sector have been trying to educate the women folk on the need for screening. However, one critical factor is to access the level of knowledge of primary health care workers on cervical cancer and its screening. Therefore, the rationale for this study is the need to evaluate the knowledge, attitude and practices (KAP) of primary health care workers on cervical cancer and its screening in Ikenne Local Government Area of Ogun State, Nigeria, in order to improve the provision of these preventive services to the population. For these reasons, the following hypotheses were raised:

1. H0- There is no significant relationship between the level of education and awareness on cervical cancer.
2. H0 – There is no significant relationship between knowledge of cervical cancer screening and the practice of cervical cancer screening.

II. Methodology

Research design

The design used for this study was a cross sectional design. A cross sectional design is used when the cross section of the subject varying ages are sampled and studied at the same time to reveal possible trends in the development of their characteristics. This approach made it possible for different subjects to be studied in terms of their departments in the health sector.

Research setting

Ikenne Local Government Area is one of the 20 Local Government Areas in Ogun State, Nigeria; it is rarely urbanized but popular due to the fact that many influential citizens are from Ikenne. The Local Government Area lies in the rainforest vegetation belt of Nigeria. There are three urban towns and two rural villages, the urban towns are Iperu, Ikenne and Ilishan while the rural villages are Irolu and Ogere. The Local government is made up of ten primary health care centers and one national program on immunization program facility namely: Health post Ikenne ward 1, PHC post Ikenne ward 2, Health post Iperu ward 3, Health post Iperu ward 4, PHC Iperu ward 5, Health post Ogere ward 6, PHC Ogere ward 7, PHC Ilisan ward 8, Health post ward 9, PHC Irolu ward 10 and National program on immunization center Ogere.. Ikenne LGA is a multi-ethnic expression area with predominantly Remo's, Ijebu's and Yoruba speaking residents; also many people from other parts reside there. The people who reside in Ikenne Local Government are predominantly Christians and Muslims but some people still practice the Traditional religion.

Target population

The respondents comprises of the following primary health care workers: Doctors, Nurses, Pharmacist, Public health officers, Community health workers, Health attendants and the Medical laboratory scientist with a total number of 100 primary health care workers in all primary health centers at Ikenne Local Government Area.

Sampling Technique and Size

Purposive sampling technique was used for the purpose of this study One hundred primary health care workers were the population of health care providers within the Local Government**.** The sample conscription was done using the primary health care centers in Ikenne Local Government Area.

Instrument for data collection

The instrument that was used for data collection was a structured questionnaire which was divided into four sections to address: Socio demographic factors, Knowledge Attitude Perception of susceptibility and seriousness of the disease and Involvement in screening practices. The questionnaire was titled "Knowledge, Attitude and Practice Cervical Cancer and its screening among Primary Health care workers in Ikenne Local Government".

Validity/ Reliability of instrument

The instrument was pre-tested using a sample of 20 respondents from another study population and were asked to make suggestions to improve the instrument. The reliability test was carried out using the Cronbach's alpha to determine the instruments reliability and the derived (0.847) statistic..

Method of data collection/analysis

The questionnaire was distributed to the primary health care workers at intervals. The questionnaire was not obtained that same day due to the fact that some health care workers ran the block system at work. The questionnaire was collected and analysis was done using SPSS. Pearson correlation was used to analyze the

hypothesis. Descriptive statistics such as Frequency distributions tables was used to evaluate personal characteristics, age, knowledge, attitude and practice of the respondents.

Ethical consideration

Permission was acquired from the ministry of health in the local government to carry out the study in all primary health care centers in the local government area, Participants were fully informed about the nature of the study and their participation was voluntary. All information received from the respondents was treated confidentially with respect and their consents were gained before the distribution of the questionnaire.

III.   Results

H_0: There is no significant relationship between the level of education and the awareness of cervical cancer among primary healthcare workers in Ikenne local government Area.

Table 1.0: Level of education and the awareness of cervical cancer among primary healthcare workers in Ikenne local government Area.

		Educational background	Awareness of cervical cancer
Educational background	Pearson Correlation	1	-.280(**)
	Sig. (2-tailed)		.05
	N	100	100
Awareness of cervical cancer	Pearson Correlation	-.280(**)	1
	Sig. (2-tailed)	.05	
	N	100	100

Correlation is significant at the 0.05 level (2-tailed).
Pearson correlation of educational background and experiences towards the awareness and knowledge of cervical screening and vaccine is equal to -280 P-value = 0.05
Therefore it nullifies the null hypothesis; there is significant relationship between the educational background and experiences towards the awareness and knowledge of cervical screening and vaccine. Mean is 2.81
H_0: There is no significant relationship between the knowledge of cervical cancer screening and practice of cervical cancer screening among primary healthcare workers in Ikenne local government Area.

Table1.1: Knowledge of Cervical Cancer screening and practice of cervical cancer Screening among Primary Healthcare workers in Ikenne Local Government Area.

		Knowledge of cervical cancer screening	Practice of cervical screening
Knowledge of cervical cancer screening	Pearson Correlation	1	-.154
	Sig. (2-tailed)		.125
	N	100	100
Practice of cervical screening	Pearson Correlation	-.154	1
	Sig. (2-tailed)	.125	
	N	100	100

Correlation is significant at the 0.01 level (2-tailed)
Pearson correlation of knowledge of cervical cancer screening and practice of cervical cancer screening is equal to – 0.154 P-value = 0. 125.
From the Pearson correlation table, the null hypothesis was accepted that there is no significant relationship between the knowledge of cervical cancer screening and practice of cervical screening when P-value is 0.05

IV.   Discussion

From the hypothesis result, it revealed that the educational background of the respondents was found to significantly (p=0.005) affect the awareness and knowledge of cervical screening and vaccine, when correlation is significant at 0.05 level therefore nullifies the null hypothesis and this shows that the level of education of health workers can influence their awareness and knowledge on cervical cancer screening. In contrary, a study conducted in North central Nigeria revealed limited knowledge of Pap smear among health workers of average socio economic status in the federal health facilities Slightly over (38%) reported having heard about the Pap smear test and (27.0%) said that regular screening with Pap smear test can prevent cervical cancer (Hyacinth *et al,* 2012*)* and the reasons for the limited knowledge includes; cultural norms of the society, health care providers and public health practitioners not informing the public and policy makers about the seriousness of the disease and limited attention to cervical cancer due to their lack of adequate knowledge since they are not well trained for that purpose.

The second null hypothesis was accepted when tested with Pearson correlation at 0.001 which states that there is no significant relationship between the knowledge of cervical cancer screening and practice of cervical screening (P= 0.125), which means having knowledge on cervical cancer screening, will not affect the practice of cervical screening, rather The behavior of some these health care workers appears to be predicted by complex socio-cultural beliefs where women hardly reveal their personal medical details especially in a polygamous setting and superstition and inappropriate belief were the commonest excuse for not having a simple Pap smear test. (Gharoro et al., 2006 & Nakalevu, 2009).

V.   Conclusion
The study revealed that the respondents have high level of awareness and knowledge of cervical cancer but have limited level of attitude towards routine screening of cervical cancer and several barriers might be associated with the practice of cervical cancer screening.Globally Cervical cancer has been recognized as the most common cause of female genital cancer and female cancer deaths and also as the leading cause of cancer related morbidity and mortality in women and some of the predisposing factors and barriers could be the behavior of these health care workers which appears to be predicted by complex socio-cultural beliefs where women hardly reveal their personal medical details especially in a polygamous setting and superstition and inappropriate belief therefore, Cervical cancer is well preventable by screening especially on women that are asymptomatic for precancerous cervical cancer lesions early detection leads to faster and more successful treatment. It is encouraged that all female health workers and other women should go for cervical cancer screening for early detection and treatment.

VI.   Recommendations
1. There should be an implementation of more awareness programs and campaigns about cervical cancer and Pap smear to target women by the health care professionals
2. There should be recurrent training and retraining of health care professional on all these prevailing diseases so as to be knowledgeable in most of these services and also for them to know how to offer these preventive services to women and the other population at large.
3. Other screening method should be used not just Pap smear because through the study it was discovered that Pap smear was the prominently used screening method.
4. Sufficient and adequate organized screening services should be made available and accessible in all health care facilities so as to ensure availability of theses screening services to women.

References
[1].   Boone, A., Stewart, M., Phelan D., Bury G., and Mulcahy, F. (2001) Cervical Smears: Comparison of knowledge and practices of a general practice sample with a high risk group. *International Journal of STD and Aids* 12:171-175
[2].   Castellsague, X, Bosch, X. & Munoz, N. 2003. The male role in cervical cancer. *New England journal of medicine, 360(13), 1337-1344* cervical cancer control in Africa. *American Journal of Gynecology vol 99*: S209–S212.
[3].   CentersforDiseaseControlandPrevention.(2013).*HPVandHPVvaccine:Informationforhealthcare providers.* Retrieved from http://w ww.cdc.gov.std/HPV/STDFact-HPV-Vaccine-hcp.htm#prov*hpvrecaccines?* Retrieved from http://www.cdc.gov/vaccines/vpd-vac should-not—vacc.htm#hpv
[4].   Cunningham, M.S., (2015), Cervical cancer screening and Hpv vaccine acceptability among rural and urban women in Kilimanjaro region, Tanzania *BMJ Open 10;5(3)*:e005828 doi: .
[5].   Damm,O., Nocon M., Roll S., Vauth C., Willich S., & Greiner W., (2009)"Human Papillomavirus (HPV) Vaccination for the Prevention of HPV 16/18 Induced Cervical Cancer and Its Precursors." *GMS Health Technology Assessment* ; 5: 4-5.
[6].   Daniel D., Garland S, & Ferris D., (2013). The humoral response to Gardasil over four years as defined by total IgG and competitive Luminex immunoassay. *Hum Vaccin*; 7 (2): 230–238.
[7].   Gharoro, E.P. And Ikeanyi E., (2006) An appraisal of the level of awareness and utilization of the Pap smear as a   cervicalcancer screening test among female health workers in a tertiary health institution. *International Journal of gynecology Cancer 16:1063-1068*
[8].   Hyacinth, I., Adekeye, O., Ibeh, J.,& Osoba, T., (2012) Cervical Cancer and Pap Smear Awareness and Utilization of Pap Smear Test among Federal Civil Servants in North Central Nigeria. PLoS ONE 7(10): e46583. doi:10.1371/journal.pone.0046583.
[9].   Parkin, D.M., (2006) The global health burden of infection-associated cancers in the year 2002. *Int. J. Cancer*; 118 (12): 3030–44.
[10].   Parkin, D., Bray F., Ferlay J.,& Pisani P., (2010) Global cancer statistics. *CA Cancer J Clin;* 55 (2): 74–108.
[11].   Roland, K., Bernard V., Saraiya M., Hawkins N., Brandit H., & Friedman A.,(2009) Assessing Cervical Cancer   Screening Guideline in Patient Education Materials. *Journal of Women´s Health*; 18: 5-12.
[12].   World Health Organization (2013) Information Centre on HPV and Cervical Cancer (HPV) Information Centre.   Summary report on HPV and cervical cancer statistics 2013.
[13].   World Health Organization. (2006) Cervical Cancer Prevention Program (CCPP). Comprehensive cervical cancer control: a guide to essential practice. Cervical Cancer Prevention Program of Cancer Care.