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CONTENTS

AWARENESS OF CERVICAL CANCER RISK FACTORS AND UTILISATION OF PAP-SMEAR TESTING AMONG HEALTH WORKERS IN IBADAN, NIGERIA

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Abstract
Cervical cancer is a major reproductive health problem among women in Nigeria, every woman who has ever been sexually active is at risk. Certain factors also increase the risk of developing the disease. Cervical cancer can usually be found early by having regular Pap smear tests but this test is rarely provided and hardly utilised by women. This study was aimed at finding out the level of awareness of female health workers and the level of utilization of pap smear testing. The study was carried out using descriptive survey research design and the total population of 623 health workers in government owned hospitals were used as respondents for the study. Only 502 of the structured questionnaire were returned. Reliability of the instrument was determined using a test-retest method with Pearson Product Moment correlation and it yielded reliability co-efficient of 0.73. Data collected was analysed using descriptive statistics of frequency count and percentage for the research question, while inferential statistics of chi-square and regression were used to determine the level and the direction of relationship between the independent and the dependent. The level of significance was set at p-value <0.05. The results shows that only 118 (23.5%) have had pap smear test while 384 (76.5%) have not. Also, awareness of cervical cancer risk factors was significant (X^2cal 33.426, X^2crit =11.071, df= 5, p< 0.05) among health workers. But, this awareness of the risk factors did not significantly influence (13 =.084, t= 1.069, p> 0.05) the utilization of pap-smear testing among female health workers in Ibadan. It is surprising to note that the awareness of cervical cancer risk factors did not influence the utilization of pap-smear testing among health workers in Ibadan. In recommendation, female health workers

should be sensitised and encouraged to subject themselves to pap-smear testing as the experience will serve as a source of empowerment in their pivotal role of adviser and developing consciousness, reliance and cooperation of other women.

Keywords: Awareness, Cervical Cancer, risk factors, utilisation, Pap Smear test.

Introduction

Cancer is a deadly disease that has claimed several lives not only in developing countries, but also in the developed ones. Cancer is a non-communicable disease that accounts for 12.5% of all deaths worldwide; a greater percentage than deaths caused by HIV/AIDS, tuberculosis and malaria combined. Cancer which is characterized by uncontrolled growth of body cell, invasion and sometimes metastasis is a global problem. However, the burden is more in developing countries like Nigeria where 70% of all new cases are predicted to occur and where governments are least prepared to address growing cancer burden. This rate of cancer related cases could further increase in 2020. However, lifestyles and public action by government and health practitioner could stem this trend and prevent as many as one third of cancers worldwide. A critical review of published data from Nigeria cancer registries and other publications have confirmed some changing trends in the relative incidence of major cancer in both adults and children. Cancer is indeed a serious public health problem in Nigeria but regrettably, its management has not been satisfactory owing largely to poor health management policies and poor economic factors.

Cervical cancer, a female genital cancer is still the leading type of cancer among women. Cervical cancer is a key reproductive health problem for women particularly in the developing countries where screening services are lacking or inaccessible for the majority. In Nigeria approximately 10,000 women develop cancer and about 8000 women die from the disease. Basically, every woman who has ever been sexually active can develop cancer of the cervix but certain risk factors increase the risk of developing the disease. These risk factors include infection with high-risk human papilloma virus (HPV), high parity, smoking, family history, low social economic status, low diet in fruits and vegetables and long term use of oral contraceptives. Furthermore the risk of acquiring the HPV, a sexually transmitted virus drastically increases with multiple lifetime sexual partners, co-infection with other sexually transmitted agent such as chlamydia traconmatis and herpes simplex. Likewise, early sexual debuts, multiple sex partners of spouse, co-infection with human immunodeficiency virus (HIV) are known to be associated risk factors for HPV infection.

The Papanicolaou (Pap) smear test which was introduced in 1947 by a Greek Doctor, George Papanikolou, is one of the most essential screening tools for early diagnosis of cervical cancer and it has been found to be the most effective preventive measure. The value of cervical cancer screening in reducing the risk of cervical cancer and mortality has been

established while the risk of developing cervical cancer has been said to have reduced by 80% through regular screening. The benefits of Pap smears availability and usage have been documented; resulting in reduction of mortality rates by 60 to 90% in several developed countries. Discoveries from studies have submitted that unscreened women are at high risk of cervical cancer and these necessitated researchers to investigate different reasons for non-screening among women. It is nevertheless worrisome in Nigeria as several studies have continued to show very low rate of Pap smear utilization. This is coupled with almost two thirds of cervical cancer cases presenting at the stage 111 or later where cure is not possible. While The American Cancer Society recommends that all women should begin cervical screening at age 21 a 2 year interval can be considered in the age group 21 to 29 while women age 29 - 49 should be screened at 3 years interval provided the last two result are negative; for women aged 50 and above a 5 year interval is recommended. However, in Nigeria, health policies are not in place to support this practice; rather, the burden of the cervical cancer is overshadowed by other health priorities such as AIDS, tuberculosis and malaria.

In Nigeria, as in many other developing countries, organized screening services are not available. What is being practiced is sporadic screening for women who visit certain clinics. There is no standard policy or protocol for cervical cancer screening in Ibadan or in Nigeria as a country. Incidentally in places where the services are available, women are not utilizing them sufficiently. Some of the reasons cited by previous studies for low utilization of Pap smear testing are limited screening programs and lack of resources. Cultural based embarrassment, fear of the outcome of test, hopelessness concerning diagnosis of cancer, spouse influence, cost and access barrier, lack of physician referral, perception of test as being unnecessary, discomforting experience during procedure have also been identified as factors responsible for lack of utilization of cervical screening services.

A previous study from Zaria also noted that only 270 patients were screened as part of routine screening in 5 years, women's knowledge and health care professionals were seen as predictors in the screening uptake. Women with little or no knowledge about cervical cancer and its prevention are unlikely to access screening services. Women in developing countries like Nigeria seem to utilize reproductive health services more during pregnancy, post natal check-up, family planning or when they are faced with actual gynaecological problem. Hence, there is need for national commitment on cervical screening programs whereby health workers play a major role in motivating and educating women by subjecting themselves to regular screening for cervical cancer.

Cervical cancer, the most common genital tract cancer in female, represents a unique global health problem. But its burden is more in the developing countries owing largely to low level of Pap smear utilization. Despite the efforts of the ministry of health to encourage women to

go for cervical cancer screening which serves as a secondary preventive measure, many women only go for treatment when the disease is at the advance stage[2]. Several studies have been carried out on cervical cancer. The level of knowledge and awareness of cervical screening among undergraduate was surveyed, awareness of cervical cancer screening among market women and there were also studies on the perception and factors affecting utilization of cervical screening among women in Ibadan. Nonetheless, there is need to work on knowledge of cervical cancer risk factors among health workers, especially as it relates to the practice of pap smear test. Health workers who should be responsible for opportunistic screening of women they care for may not be keen on getting screened themselves. As a matter of urgency, health care providers need to be targeted first in order to convince and motivate other women to access cervical screening services. This study was aimed at finding out the level of awareness of female health workers and the level of utilization of pap smear testing among health workers in government health facilities in Ibadan.

Objectives of the Study

The objectives of this study were to:

1. Determine awareness of cervical cancer risk factors among health workers in state government owned hospitals in Ibadan?
2. Examine the relationship between awareness of cervical cancer risk factors and the utilisation of pap smear testing among health workers in state government owned hospitals in Ibadan?

Research Questions

Answers were sought for the following research questions:

3. What is the prevailing rate of Pap smear testing among health workers in state government owned hospitals in Ibadan?

Hypotheses

The following hypotheses were tested at 0.05 level of significance:

1. There will be no significant awareness of cervical cancer risk factors among health workers in state government owned hospitals in Ibadan.
2. Awareness of cervical cancer risk factors will not significantly influence the utilisation of Pap smear testing among health workers in state government owned hospitals in Ibadan

Methodology

The methods adopted for this study are described below.

Research Design: the descriptive research design was adopted for this study.

Population: consists of all female professional health workers (female doctors, nurses, pharmacist, medical laboratory scientists and physiotherapists.) in state government owned hospitals located in Ibadan. (623)

Sample and Sampling Technique: The sample for this study is six hundred and twenty three (623) respondents. The population size is manageable thus, the total population of health workers in government owned hospital in Ibadan was used.

Numbers of female professionals in government owned hospitals in Ibadan, Oyo State

S/N	Professionals	Name of hospitals								
		Adeoye Maternity Hospital Yemetu	Maternal and child Hospital Apata	Ring Road State Hospital	Oni Memorial Children Hospital Ring road	Jericho Specialist	Jericho Nursing Home	St Peters Hospital Aremo	Govt Chest Hospital Jericho	Total
1.	Doctor	7	1	5	6	1	1	1	1	23
2.	Pharmacist	3	-	2	3	2	2	1	1	14
3.	Physiotherapist	2	-	2	2	2	2	-	-	10
4.	Med. Lab. Scientist	10	-	6	4	2	1	1	2	26
5.	Nurses	202	23	125	52	56	44	32	16	550
6.	Total	224	24	140	67	63	50	35	20	623

Instrumentation: A self - developed, validated two- section questionnaire was used to collect data for this study. The instrument was administered on twenty (20) female health workers of a private Hospital in, Ibadan. This was repeated two (2) weeks after. The data collected was used to estimate the reliability coefficient of the instrument using Pearson product moment correlation. The instrument yielded a reliability co-efficient of 0.73.

Procedure for Data Collection: The questionnaire was self- administered with the help of three research assistants. A total of 623 copies were administered to the health workers in state government owned hospitals in Ibadan. However, only 502 of the questionnaire were valid for analysis 24 were not returned and the others (97) were badly filled.

Data Analysis: Reponses from section A were analysed using descriptive statistics of frequency counts and percentages, while the responses from section B were analysed with correlation and regression to test the stated hypotheses at 0.05 level of significance.

Results: All the research questions and hypotheses were answered and the following findings were made and presented in tables below

Research Question One: What is the prevailing rate of Pap smear test among health workers in state government owned hospitals in Ibadan?

Table 1: Frequency table showing prevailing rate of pap-smear test among health workers in Ibadan

	Frequency	Percent
No	384	76.5
Yes	118	23.5
Total	502	100.0

Table 1 above revealed the prevailing rate of pap smear test among health workers in state government owned hospitals in Ibadan. The table shows that only 118 (23.5%) have had a pap smear test, while 384 (76.5%) reported that they have never had this test. This shows that majority of the respondents have not been tested or do not practice pap smear testing.

Hypothesis One: There will be no significant awareness of cervical cancer risk factors among health workers in state government owned hospitals in Ibadan.

Table 2: Chi-square table showing responses on awareness of cervical cancer risk factors among health workers in state government owned hospital in Ibadan.

	Yes	%	No	%	X^2cal	X^2 crit	Df	P
Human papiloma virus is a risk factor for cervical cancer	485	96.6	17	3.4				
Human papiloma virus can be contacted through sexual intercourse	348	69.3	154	30.7				
Early exposure to sex is a risk factor for cervical cancer	359	71.5	143	28.5				
Multiple sexual partner is a risk factor for cervical cancer	313	62.4	189	37.6				
Cervical cancer is can be contracted through sex	248	69.3	154	30.7				
Long use of oral contraceptives is a risk factor for cervical cancer	378	75.3	124	24.7	33.426	11.071	5	.000
Multiple parity is a risk factor for cervical cancer	373	74.3	129	25.7				
HIV/AIDS is a risk factor for cervical cancer	359	71.5	143	28.5				
Smoking is a risk factor for cervical cancer	382	76.1	120	23.9				
Herpes simplex and Chlamydia (STIs) increases the risk of HPV infection	320	63.7	182	36.3				

Table 2 above shows that health workers in state government owned hospital in Ibadan have significant awareness of cervical cancer risk factor (X^2cal 33. 426, X^2crit =11.071, df= 5, p< 0.05. The observed X^2cal is greater than X^2crit, therefore the null hypothesis is rejected. This study revealed that the respondents have high or significant awareness of cervical cancer risk factors.

Hypothesis Two: awareness of cervical cancer risk factors will not significantly influence the utilisation of Pap smear testing among health workers in state government owned hospitals in Ibadan

Table 3: Regression table showing responses on the relative contribution of awareness of cervical cancer risk factors on the utilisation of pap smear test among health workers in Ibadan.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.415	.636			
Awareness of cervical cancer risk factors	.084	.078	.084	1.069	.286

Table 3 above shows that awareness of cervical cancer risk factors does not have a significant influence on the utilisation of pap smear test among health workers (13 =.084, t= 1.069, p> 0.05). Therefore, the hypothesis is accepted.

Discussions

The findings in hypothesis one indicate that health workers in state government owned hospitals have a significantly high level of cervical cancer risk factors. This findings hypothesis corroborates with the findings of a research carried out in a sub-urban district of Nigeria among female health workers[1] who observed a similar high level of knowledge of cervical cancer risk factors among their respondents. The high level of awareness observed in this study is not unexpected considering the educational background of the respondents. The risk associated with cervical cancer is therefore not strange to these health workers.

The results of hypothesis two showed that the awareness of cervical cancer risk factors did not translate to adequate utilization of pap smear testing among health workers in Ibadan. This finding is in-line with the position of some earlier studies[6,21] that reported that high knowledge and awareness of cervical cancer risk factors among their respondents did not translate to utilization of pap smear test. The poor utilization of pap smear testing despite adequate knowledge of cervical cancer risk factors also affirms similar findings by other

researchers across Nigeria who reported that the high level of knowledge of cervical cancer risk factors shown by their respondents did not translate to utilization of the pap smear test. Although a greater proportion of the respondents (76.5%) were aware of the presence of the screening service, only (23.5%) of the respondents had undergone the screening for cervical cancer. This poor utilization of screening services observed in this study calls for concern and questions as to why are these services not used by the very people who are to convince, employ and motivate other women to take the test.

Conclusion

This study revealed that health worker in state government owned hospital has high awareness of cervical cancer risk factors. However, this awareness of cervical cancer risk factors did not translate to adequate use of the service hence the low practice of Pap smear test among health workers in Ibadan. Several barriers have been identified to have contributed to the low uptake 'of the screening for cervical cancer. If the fight against the disease is to be won, concerted efforts should be, made to educate female health workers who are involved in providing health education to other women.

Recommendations

The observed low utilisation of Pap smear testing in this study shows that female health workers must be proactive and should be in the vanguard for the fight against cervical cancer as anything short of this will erode the confidence that other women have in them. For successful implementation of cervical screening program in Nigeria, the pivotal role played by health workers should be kept in mind and they should be targeted first. The knowledge about cervical cancer and screening is already good among Health workers. Therefore, there is the need for brief training session or sensitization of health workers so that they can play the role of enlightening the community about the availability and need of regular cervical screening.

Though there are no organized national programmes for cervical cancer screening in Nigeria today, female health workers should be sensitized to patronize the few screening centres available now. They could then play a pivotal role in educating and encouraging other women to make use of these centres. There is also a need for clear national policy guidelines on cervical cancer screening. Well organized and accessible screening services should be made available in the count, matched with good treatment modalities and follow up programmes for screened women. The National Health Insurance Scheme (NHIS) should be strengthened to increase access of the entire women folk to screening- this will go a long way in reducing the burden of cervical cancer in the country.

References

Abotchie, P.N, Shokar, N.K. Cervical cancer screening among college students in Ghana: knowledge and health beliefs. International Journal of Gynaecological Cancer. 2009.19:412-41

Adefuye, P.O. knowledge and practice of cervical cancer screening among female professional Health workers in a sub-urban district of Nigeria: Nigeria Medical practitioner. 2006. 50(1), 919-22.

Adewole, I.F., Edozien, E.1. Babarinsa, I.A. and Akang, C.E. Invasive and in situ carcinoma of the cervix in young Nigerians. A clinic-pathologic study of 27 cases. Africa. Journal of Medical Science. 1997. 2b:191-193.

Airede, L.R., Onakewhor, J.U.E., Aziken, M.E., Ande, A.B.A. and Aligbe J.U. Carcinoma of the Uterine Cervix in Nigerian Women: The Need to Adopt a National Prevention Strategy. Sahel. Medical Journal 2008, 11(1): 1-11.

American Cancer Society. Issues, New early detection guidelines. Women health weekly, Dec 2002.19:12.

Ayinde, O.A., Omigbodun, A.O. and Ilesanmi, A.O. Awareness of cervical cancer, Papanicolaou's smear and its utilization among female undergraduates in Ibadan. African Journal of Reproductive Health. 2004. 8(3):68-80.

Basu, P., Sarkar T., Mukherjee, S., Ghoshal, M., Mittal, S. and Biswas, R. Women's perceptions and social barriers determine compliance to cervical screening: results from a population based study in India. Cancer Detect Prey. 2006; 30(4):369-74.

Bosch, F. X. Lorinez A., Munoz, N. Mei,jer, C.J.M and Shap, K.V. The causal relationship between Human Pupilloma virus and cervical cancer. A Review: 265 Journal Clinical Pathology. 2002. 55 ;244-3 65.

Cancer Research, UK. Cancer incidence statistics by age. Retrieved on 20-08- 2013 from http://czancernet.nci .nih. gov/wyntkpubs/cervix.htm//2. 2007.

Clifford, G.M., Polesel, J., Rickenbach, M., Dal Maso, L., Keiser O. and Kofier, M. Cancer risk in the Swiss HIV cohort study: associations with immune deficiency, smoking and highly active antiretroviral therapy. Journal of National Cancer Institute. 2005; 97(6):425-32.

Ezem, B.U. Awareness and uptake of cervical cancer screening in Owerri, SouthEastern Nigeria. Annals of African Medicine. 2007. 6:94-8.

Ferlay, I. Shin, H.R., Bray F, Forman D, Mothers C, Parkin DM. GLOBOCAN: Cancer Incidence and Mortality Worldwide: IARC Cancer Base. 10. Lyon, France:

International Agency for Research on Cancer; 2008. Retrieved from http://globocan.iarc.fr.

Franco, E.L., Mayrand, M.H and Trotter, H. Cervical cancer prevention, promises and perils in a changing landscape. Oncology Exchange. 2006. 5:9-12,40.

Gatune J.W and Nyamongo I.K. An ethnographic study of cervical cancer among women in rural Kenya: is there a folk causal model? International Journal of Gynaecological Cancer 2005. 15(6):1049-59

Hummeida, M., Elrasheed, T. and Burhan A. Cervical cancer prevention in Sudan Barriers missed opportunities Free communication (oral) presentations. International Journal of Gynaecology Obstetric. 2009. 107(2) :93-396

IARC. Cervical cancer screening. IARC handbook of cancer prevention 10. Lyon: International Agency for Research on Cancer. 2003.

Kahesa, C., Mwaiselage, J., Wabinga, H.R., Ngoma, T. Kalyango, J.N. and Karamagi, C. Association between invasive cancer of the cervix and HIV-1 infection in Tanzania: the need for dual screening. BMC Public Health. 2008. 8(l):262.

Liao, C.C, Wang H.Y., Lin R.S., Hsieh, C.Y. and Sunga FC. Addressing Taiwan's high incidence of cervical cancer: Factors associated with the Nation's low compliance with Papanicolaou screening in Taiwan. Public Health Journal. 2006. 120:1170-1176

Mutyaba, T., Mmiro , F.A. and Weiderpass, E. Knowledge, attitudes and practices on cervical cancer screening among the medical workers of Mulago Hospital, Uganda. BMC Medical Education 2006;6(13):4 pages

Ndikom C. N and Ofi, B. A. Awareness, perception and factors affecting utilization of cervical cancer screening services among women in Ibadan; a qualitative study, Reproductive health Journal. 2012. 25(1):23- 27.

Ogunbode, 0. 0. Awareness of cervical cancer and screening in a Nigeria market population. Ann. Afr: Med. 2006. 4 (4); 1 60-3.

Oguntayo, O.A. and Samaila, M.O. Prevalence of cervical intraepithelial neoplasia in Zaria. Annals of African Medicine. 2010. 9:194—5.

Oscarsson, M.G., Benzein, F G. and Wijma, B F. Reasons for non-attendance at cervical screening as reported by non-attendees in Sweden. J. Psychosom. Obstet. Gynaecol Journal.2008. 29(1):23—3 1

Ozgul, N. The Condition of cervix cancer in Turkey and cervical cancer screening programs, in Tuncer A. M. (ed.), Turkiye'deKanserKontrolu (Cancer Control in Turkey), T.C. SalikBakanli, (Ministry of Health), Sayfa. 2007. 349-58.

Sankaranarayanan, R., Budukh, A.M.and Rajkumar, R. Effective screening programmes for cervical cancer in low- and middle-income developing countries. In: Bulletin of World Health Organ. 2001. 79:954-962

Sherris, J. and Herdrnan, C. Preventing cervical cancer in Low- Resource Settings. Outlook.2000; 18(1): 1-7

Spayne, Y., Ackerman, I., Milosevic, M. and Seindefield. Cancer: A Failure of Screening. European formal of Public Health. 2007. 18(2): 162—165.

World Cancer Report, International Agency for Research on Cancer. IARC Press, Lyon, France.

Wong, L.P., Wong, Y.L., Low, W.Y., Khoo, E.M. and Shuib, R. 2009. Knowledge and awareness of cervical cancer and screening among Malaysian women who have never had a Pap smear: a qualitative study. Singapore Medical Journal. 2009. 50(1): 49-53

World Health Organization. National cancer control programmes: policies and managerialguidelines,Geneva.2002.Retrievedfromhttp://whqlibdoc.who.int/hq/2002/9241545577.pdf?ua=1

World Health Organization. The World Health Organization's fight against cancer: strategies that prevent, cure and care. WHO Publication 2007