Araştırma / Research Article *TAF Prev Med Bull 2011; 10(6): 675-680*

Güney-Güney Nijerya'da, Kadın Hemşireler Arasında, Serviks Kanseri Tarama Yöntemi Olarak Servikal Smear Farkındalığı ve Uygulaması

[Awareness and Practice of Cervical Smear as A Screening Procedure for Cervical Cancer among Female Nurses in A Tertiary Hospital in South-South Nigeria]

ÖZET

AMAÇ: Serviks kanseri kadınlar arasındaki en yaygın ikinci kanser olarak önemli bir halk sağlığı sorunudur ve gelişmiş ülkelerde etkin tarama programları sonucunda önemli ölçüde kontrol edilmiştir. Bu çalışmanın amacı güney-güney Nijerya''da bir üçüncü basamak sağlık tesisinde görev yapmakta olan hemşireler arasında bir serviks kanseri tarama yöntemi olarak servikal smear uygulaması farkındakilığı araştırmaktır.

YÖNTEM: Yarı yapılandırılmış soru formları Uyo Üniversitesi Eğitim Hastanesi''ndeki tüm kadın hemşirelere dağıtılmıştır.

BULGULAR: Katılımcıların yaşları 21-60 aralığında idi ve en fazla 31-40 yaş grubunda idiler (%48.9). Katılımcıların çoğu evliydi (%59.7) ve %36.4''ü on yıldan uzun süredir hemşirelik yapmakta idi. Grubun büyük çoğunluğu servikal smear''i duymuştu (%94.3) ve %79.5''i servikal smear''in serviksin premalin hastalıklarını teşhis için kullanıldığını biliyordu. Hemşirelerin sadece %7.4''ü serviks kanseri taraması yaptırmıştır. Tarama yaptırmayan katılımcıların bildirdiği en sık nedenler, serviks kanseri adayı olduğunu düşünmemek (%31.9), tarama yapılırken ihmal etmek (%28.8) olmuştur. Serviks kanseri hakkındaki en yaygın bilgi kaynakları hastane ortamı (%87.5) ve kaynak kitaplar (%13.6) olmuştur.

SONUÇ: Bir koruyucu önlem olarak servikal smear''in farkındalığı yüksel olmasına karşın, testin kullanımı umut kırıcı düzeyde düşüktür. Kanser koruma ve kontrolünde modern yaklaşım hemşirelik okulu müfredatına eklenmeli ve hemşireler toplum üyeleri ile olan kanser ve korunması konulu sağlık eğitimi etkinliklere dahil edilmelidir. Yazılı ve elektronik yayınlar ortamımızda serviks kanserinden korunma bilgisinin yaygınlaştırılmasına katılabilir.

SUMMARY

AIM: Carcinoma of the cervix, the second most common cancer among women remains a public health problem. Though this preventable cancer occurs more commonly in the developing world, it is almost non-existent in developed countries where there are well established screening programs. The aim of this study is to determine the degree of awareness and practice of cervical smear as a screening procedure for cervical cancer among female nurses in a tertiary health facility in south-south Nigeria.

METHOD: Semi-structured questionnaires were distributed to all the female nurses at the University of Uyo Teaching Hospital.

RESULTS: The ages of the respondents were between 21 - 60 years with the modal age group being 31- 40 years (48.9%). Majority of the respondents were married (59.7%) and 36.4% of them had practiced nursing for over 10 years. Majority of the respondents (94.3%) had heard of the cervical smear and 79.5% of the nurses knew that cervical smears were used to detect premalignant diseases of the cervix. Only 7.4% of the nurses had undergone screening for cervical cancer. Common reasons given by the respondents who had not screened were not being a candidate for cervical cancer (31.9%) and ignorance as to where screening is done (28.8%). The most common sources of information about cervical smear were the hospital (87.5%) and textbooks (13.6%).

CONCLUSION: The level of awareness of the cervical smear as a preventive tool for cervical cancer was high but utilization of the test was disappointingly low. Modern concepts of cancer prevention and control should be included in the curriculum of the school of nursing and nurses should be involved in the organisation of health talks to members of the community on cervical cancer and its prevention. The print and electronic media should be made to participate in the dissemination of information on the prevention of cervical cancer in our environment.

Imoh Unang
Aniekan M Abasiattai
Edem J Udoma

Department of Obstetrics/Gynaecology, University of Uyo Teaching Hospital, Uyo.

Anahtar Kelimeler:
Servikal Smear, Kadın Hemşireler, Uyo.

Key Words:
Cervical Smear, Female Nurses, Uyo.

Sorumlu yazar/ Corresponding author:
Aniekan M Abasiattai
Department of Obstetrics/Gynaecology, University of Uyo Teaching Hospital, PMB 1136, Uyo-Akwa Ibom State, Nigeria.
animan74@yahoo.com

INTRODUCTION

Carcinoma of the cervix is a global public health problem and the second most common cancer among women worldwide (1). It continues to be a major cause of morbidity and mortality among women as recent reports indicate that 493,000 new cases of cervical cancer occur each year and 274,000 women

die of the disease annually (2). It is more common in the developing countries where 83% of the new cases and 85% of all cervical cancer deaths occur yearly (3). In Nigeria, where an estimated 25,000 new cases are diagnosed annually, it remains the most common malignancy among women (4-6).

In the developing countries, the situation is compounded by the fact that 75% of patients with cervical cancer present in hospital with advanced stages of the disease (stages III & IV) with a low probability of survival, which is the converse in developed countries where 75% present early and a cure can be realistically expected (1,7). The recorded decrease in the incidence of cervical cancer in developed countries is partly due to high level of awareness of the malignancy among the populace, education and empowerment of women so that they present with early symptoms of the disease and also the presence of well established cervical cancer screening programs (1,8).

The cervical smear is widely recognized as the most effective cancer screening test yet devised and serves as a model for screening of other malignancies (9). It is an exfoliative cervical cytology designed to collect the cells that had been shed from the skin of the cervix. Originally, cells were washed from the vagina and collected in the posterior fornix (10). However, a more efficient technique of exfoliative cytology involves scrapping the cervix to collect the cells directly (9,10).

Previous reports have shown that the major actors responsible for the high case fatality associated with these otherwise preventable tumours are poor knowledge about the disease and absence of preventive measures against it (11,12) Although facilities for cervical smears have been available in our institution for years, these are mostly used for opportunistic screening and also by few patients with gynaecological complaints and not by asymptomatic women. The low request for cervical smears in our institution is the stimulus for this study. Since health workers especially, nurses are a major outlet of health related information to the public and also, are often the health providers of first contact to members of the community when they are ill, a study on awareness and practice of cervical cancer screening among nurses may be facilitatory to any strategy aimed at improving the awareness of the preventive role of cervical cancer screening in our environment.

MATERIAL and METHOD

This cross sectional study was carried out at the University of Uyo Teaching Hospital, Uyo, the capital city of Akwa Ibom State in the South-South geo-political zone of Nigeria between 1st December 2008 and 28th February 2009. The University of Uyo Teaching Hospital is a 300-bed hospital and the only health facility offering tertiary health care services in the state which has a population of 3.92 million people.

Copies of semi-structured pretested questionnaires were distributed to all the female nurses working at the hospital during the time of the study (the hospital had 249 female nurses on its nominal roll at the time of the study). The respondents were informed about the research and its objectives and were assured of confidentiality of information. Participation was voluntary and participants had options of opting out of the study at any point. The questionnaires were administered by trained resident doctors in the department of Obstetrics and Gynaecology to only consenting nurses and retrieved from them as soon as they had voluntarily completed them. The questionnaires contained questions on personal data which included the ages of the respondents, their years of practice, and marital status. There were also seven core questions addressing the issue of respondents' knowledge and practice of cervical smear as a screening method of preventing cervical cancer. Ethical approval was obtained from the ethical committee of the hospital. Male nurses were excluded from the study.

Two hundred and forty nine copies of the questionnaire were distributed. Out of these, 183 were returned. However, 176 (70.7%) questionnaires were correctly filled and data analysis was based on these. The data was analysed using frequency count and percentages and the results obtained formed the basis of the discussion. Only opportunistic screening is done at the moment in the hospital.

RESULTS

The demographic data and number of years of practice of the respondents are shown in Table 1. Their ages ranged from 21 – 60 with modal age group being 31-40 years (48.9%). Majority of the respondents were married (59.7%), 50.6% of the nurses had practiced nursing for five years or less while 36.4% of them had practiced for over 10 years.

Table 1: Demographic data and years of practice of the respondents (N=176).

Variable		No (%)
Age (years)	21-30	81 (46.0)
	31-40	86 (48.9)
	41-50	6 (3.4)
	51-60	3 (1.7)
Marital status	Married	105 (59.7)
	Single	67 (38.0)
	Widowed	3 (0.6)
	Divorced	1 (1.7)
Years of practice	0-1	11 (6.2)
	2-3	63 (35.8)
	4-5	15 (8.5)
	6-7	9 (5.1)
	8-9	14 (8.0)
	≥10	64 (36.4)

Majority of the respondents (94.3%) had heard of the cervical smear while 5.7% had not. One hundred and forty women (79.5%) felt cervical smears were used to detect premalignant diseases of the cervix, 19.3% felt they were used to detect cancer of the cervix while 1.2% of the respondents did not know what there were used for. Concerning methods of preventing cervical cancer, 86.9% of the nurses knew that regular cervical smears could lead to prevention of cancer of the cervix, 5.2% felt surgery could be used to prevent cancer of the cervix while 6.8% did not know how cancer of the cervix could be prevented. Majority of the nurses derived their sources of information on cervical smear from the hospital (87.5%) while 0.5% of the nurses derived theirs from their friends (Table 2).

Only 7.4% of the nurses had undergone screening for cervical cancer. Ten (5.7%) of these nurses had had screening once, while three (1.7%) had screening thrice. Common reasons given by respondents for not screening included not being a candidate for cervical cancer (31.9%), ignorance as to where screening is done (28.8%), while 16.0% felt the test was not that important to them. Other reasons given by the respondents were fear of cost (8.6%), 3.7% preferred to wait till they were old before they screened while 4.6% of the nurses had no reasons (Table 3).

The relationship between the number of years of practice of the respondents and awareness and practice of cervical smear is shown in Table 4. The number of years of practice of the nurses did not seem to influence actual practice while majority of those who were aware of cervical smear had practiced nursing for over ten years (37.9%).

Table 2: Knowledge of cervical smear among the respondents (N=176).

Variable		No (%)
Awareness of cervical smear	Yes	166 (94.3)
	No	10 (5.7)
Primary purpose of cervical smear	To detect precancerous state	140 (79.5)
	To detect cancer of the cervix	36 (19.3)
	No idea	2 (1.2)
Methods of preventing cervical cancer	Regular cervical smears	153 (86.9)
	Surgery	9 (5.2)
	Blood test	2 (1.1)
	No idea	12 (6.8)
*Sources of information	Hospital	154 (87.5)
	Textbooks	24 (13.6)
	Media	6 (3.4)
	Friends	1 (0.5)

*Some respondents derived their information from more than one source.

Table 3: Practice of cervical smear.

Variable		No (%)
Had done cervical smear (n=176).	**Yes**	13 (7.4)
	No	163 (92.6)
No of times cervical smear had been obtained (n=176).	**Once**	10 (5.7)
	Thrice	3 (1.7)
Reasons for undergoing cervical smear (n=163).	**Cannot have cervical cancer**	52 (31.9)
	Does not know where test can be done	47 (28.8)
	Test not important	26 (16.0)
	Financial implication	14 (8.6)
	Fear of detecting cancer	8 (4.9)
	Would do smear test when old	6 (3.7)
	No reason	10 (5.7)

Table 4: Relationship between number of years of practice and awareness and practice of cervical smear.

Variable		
Years of practice	**Awareness of cervical smear (n=166) No (%)**	**Practice of cervical smear (n=13) No (%)**
0-1	11 (6.6)	-
2-3	58 (34.9	5 (38.5)
4-5	13 (7.8)	4 (30.8)
6-7	8 (4.8)	2 (15.4)
8-9	13 (7.8)	-
≥10	63 (37.9)	2 (15.4)

DISCUSSION

This study revealed that the awareness of cervical smear as a screening tool for the prevention of cervical cancer among female nurses in our center is high. About 94.3% of the nurses where aware of the cervical smear and 79.5% of them correctly knew that the primary purpose of the cervical smear was to detect premalignant cervical lesions. This high level of awareness is similar to what obtains in other Nigerian centers (13-16). In a study among female health professionals in South-Eastern Nigeria, 77.9% had heard of the cervical smear while 79.5% of the respondents knew it was used to prevent cervical cancer (14). Similarly, 87.1% of the health workers interviewed at Nnewi, Anambra State, Nigeria and 72.9% interviewed at Abuja were aware of the cervical smear as a screening tool for the prevention of cervical cancer (15,16).

Majority of the respondents (86.9%) also knew that regular cervical smears were necessary for the prevention of cervical cancer. Unlike malignancies of the endometrium and ovary, carcinoma of the cervix is largely preventable due to the accessibility of the cervix which provides excellent opportunity for detection of premalignant disease or malignant process in its early stages (17). Cervical cancer has a prolonged phase of premalignancy and the introduction of screening programs have drastically reduced the incidence and mortality from invasive cancer in developed countries (18). It takes as long as ten years or more for the earliest form of the disease (mild dysplasia) to progress to invasive disease (19). To ensure that most women benefit from cervical cancer screening services, most developed countries have instituted effective screening programs. In England and Wales, following the introduction of a screening program, the incidence of cervical cancer fell by 42% between 1988 and 1997 and the program

is estimated to save approximately 4,500 lives every year (1). Currently, it is believed that even a single smear will reduce the death rate from cancer of the cervix by 50% with each additional smear reducing the death rate by a proportional increment (20).

The hospital environments where the respondents worked or schooled were the major source of information on cervical cancer (87.5%). This probably shows that our nurses have some form of introduction to the preventable nature of cervical cancer which might have been obtained during the course of their training at school of nursing. Also, they could have acquired such knowledge by interaction with other medical personnel in the course of their duties at the hospital. However, this knowledge did not translate to practice in the vast majority of the nurses interviewed. Only 3.4% of the nurses derived their source of information from the media. This is highly unfortunate and exemplifies the poor role the media plays in disseminating appropriate information about cervical cancer and its prevention in our environment. This is probably why there is very low level of awareness of cervical cancer and its prevention among non-health professionals in Nigeria (22,23). Even though cervical cancer is at epidemic proportions in Nigeria, more priority is accorded to Human immunodeficiency virus, malaria, tuberculosis, and childhood immunisation and most available recourses are allocated to these (18). Messages disseminated by the mass media have positive and powerful influence on people's beliefs, attitude and behaviour concerning health related matters.

Majority (92.6%) of the nurses had never had cervical screening done. This was totally an unexpected finding. Though current scientific data indicates that generally, due to low levels of awareness, and poor knowledge of cervical cancer coupled with unavailability and inaccessibility of cervical cancer services only a small number of women are being screened in sub-Saharan Africa and countries in Asia, this very low rate of screening among nurses in our environment is most worrisome considering the very important role they play in providing health care delivery and disseminating health related information particularly in the rural communities where majority of the populace reside (18,21). Health workers are usually looked upon as role models in health related issues. Thus, their attitude and practice to such an issue as utilizing the cervical smear for the prevention of cervical cancer might positively or negatively influence the people they come in contact with (17).

The common reasons given by the respondents for non utilization of screening services in this study were the belief that they cannot have cancer of the cervix and ignorance as to where screening is done. This is most worrisome and is at variance to their knowledge of cervical cancer in general. As female health personnel practicing in an environment where currently, the incidence of cancer of the cervix is reportedly increasing even in women below the age of 30 years and when majority of them were married and above 20 years of age, a higher uptake of the cervical smear test would have been expected (17). Other reasons given which were equally intriguing were that the screening test was not important to them, fear of detecting cancer, cost of the test and preference for performing screening when old.

In conclusion, although the level of awareness of the cervical smear as a preventive tool for cervical cancer among the nurses was high, their utilization of the test was disappointing low. Since this group of health workers unconsciously and passively act as role models in health related attitude and behaviour to members of the larger society, they need to be educated on the importance of taking up the cervical smear test so that they can be able to convince other women they come in contact with in the course of discharging their duties. Modern concepts of cancer prevention and control should be included in the curriculum of the schools of nursing and as a matter of priority; nurses should be involved in organising health talks about the menace of cancer of the cervix and its prevention in the community in general. Also, concerted efforts should be made by Government to ensure the electronic and print media are involved in the dissemination of accurate and current information about cervical cancer and its prevention in our environment.

REFERENCES

1. Shafil MI. Premalignant and malignant disease of the cervix. Eds.: Edmonds DK. In: Dewhurst's textbook of Obstetrics and Gynaecology. Blackwell Publishing. Oxford. 7th edition. 2007, p. 614-624.
2. Preventing cervical cancer worldwide. Population reference bureau 2004. 1875 Connecticut Ave, NW Suite 520, Washington DC.
3. Bukar M, Mayun AA, Audu BM, Musa AB, Inuwa U. Prevalence of preinvasive lesions of the cervix in Maiduguri, North-Eastern Nigeria. Nig Med Practitioner. 2009; 55(4): 52-55.

4. Bassey EA, Ekpo MD, Abasiattai A. Female genital tract malignancies in Uyo, South-South Nigeria. The Nig PostGrad Med J. 2007; 14(2): 134-138.
5. Anorlu RI, Igwilo CI, Akanmu AS, et al. Prevalence of abnormal cervical smears among patients with HIV in Lagos, Nigeria. West Afr J Med. 2007; 26(20); 143-147.
6. Onwere S, Okoro O, Chigbu B, Onwere A. Knowledge and practice of cervical smear screening using PAP smear among women attending antenatal clinic at Aba, South-Eastern Nigeria. Nig J Clin Practice. 2009; 12(3): 341-342.
7. Sankaranga YR, Black R, Parkin DM. Cancer survival in Developing countries. Lyons IARC Scientific publication. 1998; 145: 11-12.
8. Nieminem P, Kallio M, Hakama M. The effect of mass screening on the incidence and mortality of squamous and adenocarcinoma of the cervix uteri. Obstet Gynecol. 1995; 85: 1007-1020.
9. Champion M. Preinvasive disease. Eds.: Berek JS, Hacker NF. In: Practical Gynaecological Oncology. Lippincott Williams of Wilkins Publishers. 3RD edition. 2000; 8: 15.
10. Hudson E. The prevention of cervical cancer: The place of the cytological smear test. Clinics in Obstet Gynaecol 1985; 12 (1): 33-52.
11. Ayinde OA, Omigbodun AO. Attitude and practices related to prevention of cancer of the cervix among female health workers in Ibadan. J Obstet Gynecol. 2003; 23(1): 55-58.
12. Ajayi IO, Adewole IF. Knowledge and attitude of general out-patients attendants in Nigeria to cervical screening. Centr Afr J Med. 1998; 17(1): 25-30.
13. Aboyeji PA, Ijaiya MA, Abdul-Gafar AJ. Knowledge, attitude and practice of cervical smear as a screening procedure for cervical cancer in Ilorin, Nigeria. Trop J Obstet Gynaecol. 2004; 21(2): 114-117.
14. Anya SE, Oshi DC, Nwosu SO, Anya AE. Knowledge, attitude and practice of female health professionals regarding cervical cancer and PAP smear. Nig J Med. 2005; 14(3): 283-289.
15. Udigwe GO. Knowledge, attitude and practice of cervical cancer screening among female nurses in Nnewi, South-Eastern Nigeria. Nig J Clin Practice. 2006; 9(1): 40-43.
16. Olaniyan OB, Agbohoroma OC, Ladipo OR. Knowledge and practice of cervical screening among female health workers in Government Hospitals in Abuja metropolis, Nigeria. Trop J Obstet Gynaecol. 2000: 17(11): 18-20.
17. Udigwe GO, Ogabido CA. A clinico-pathology study of cervical carcinoma in South-Eastern Nigeria: A five year retrospective study. Nig J Clin Practice. 2008; 11(3): 202-205.
18. Anorlu RI. Cervical cancer: the Sub-saharan African perspective. Reproductive Health Matters. 2008: 16(32): 41-49.
19. Shwarts PE, Hadjimmicheal O, Lowel DM, Merimo MJ, Janerich D. Rapidly progressive cervical cancer. The Connecticut experience, Am J Obstet Gynaecol. 1996; 175: 1105.
20. Richart R. Cervical cancer in developing countries. In: Special challenges in third world. Women's health. International Women's Health Condition. Publication. 1990, p. 17-21.
21. Ali SF, Ayub S, Manzoor NF, et al. Knowledge and awareness about cervical cancer and its prevention amongst Interns and Nursing staff in Tertiary care Hospitals in Karachi, Pakistan 2010; 5(6): e11059.
22. Ayinde OA, Ogunbode OO, Adebayo OJ. Determinants of cervical cancer knowledge and the utilization of screening among a Nigerian female population. Trop J Obstet Gynaecol. 2005; 22(1): 21-24.
23. Feyi-Waboso PA, Kamanu C, Aluka C. Awareness and risk factors for cervical cancer among women in Aba, South-Eastern Nigeria. Trop J Obstet Gynaecol. 2005; 22(1): 25-26.