

KNOWLEDGE, ATTITUDE AND PRACTICE OF CERVICAL CANCER SCREENING (PAP SMEAR) AMONG FEMALE NURSES IN NNEWI, SOUTH EASTERN NIGERIA

G. O. Udigwe.

Department of Obstetrics and Gynaecology, Nnamdi Azikiwe University Teaching Hospital Nnewi Anambra State, Nigeria

ABSTRACT

Objective: To determine the knowledge and practice of cervical cancer screening among practicing female nurses with a view to sensitizing them as a first step towards increasing screening uptake in the community.

Method: A self administered questionnaire survey of all the female nurses working in Nnamdi Azikiwe university Teaching Hospital Nnewi center.

Results: 144 out of 166 questionnaires were correctly completed and returned. 122 (87%) were aware of the existence of screening services. Although 9.3% had lost relations to cancer of the cervix, only 5.7% had ever undergone a pap smear. While 52 (37.1%) had no reason for not screening, 21 (15%) were afraid of the possible outcome and 35 (25%) felt they were not likely candidates for cancer of the cervix.

Conclusion: knowledge of cervical cancer screening services among female nurses in Nnewi is high while uptake rate is abysmally poor. There is need to further educate the nurses who will play a major role in enlightening the public on the availability and need for cervical screening services.

Key words: Cervical cancer, screening, female nurses.

INTRODUCTION

Carcinoma of the cervix is the commonest malignancy of the female genital tract in the developing countries¹⁻⁵ and second commonest in the world.⁶ This is due to lack of precursor screening. Due to the accessibility of the cervix, it offers excellent opportunity for early detection of disease.

In 1941, Papanicolaou and Traut introduced exfoliative cytology as means of early detection of carcinoma of the cervix.⁷ Although screening has become routine in developed countries such as Britain and United States leading to extensive reductions in mortality, opportunistic screening or no screening at all is the norm in developing countries like Nigeria such that most cases present late with attendant high mortality.⁸ Opportunistic screening in Nigeria is indeed very low⁹

Variable factors have been blamed for this state of affairs. These include low literacy level, poverty, ignorance, lack of equipment and dearth of trained medical personnel.¹⁰ In current practice, the yield of opportunistic screening is about 10 to 12 percent^{11,12} and when done once in a lifetime say at the age of 30 to 35 years with access to treatment can lead to drastic reduction in cervical cancer morbidity and mortality.¹

In developed countries, new ways of screening such as Human Papilloma Virus DNA testing and liquid based monolayer cytology are being evaluated.^{13,14} In developing countries, the emphasis is on simpler and cheaper methods like visual inspection of the cervix

after application of acetic acid.^{15,16}

In any community, trained nurses and midwives constitute a knowledgeable class with regards to medical information and intervention. It is against this background that in a first of many studies on the prevention of carcinoma of the cervix, it was decided to appraise the knowledge and practice of female nurses who work in a tertiary health care setting with regard to cervical cancer screening.

SUBJECTS AND METHODS

This study was undertaken among all the female nurses working in Nnamdi Azikiwe University Teaching Hospital Nnewi Center in May 2004. This is a tertiary healthcare facility located in a suburban town. The nurses are distributed to several sections such as operating theatre, medical, surgical, children's wards and clinics, emergency rooms etc. Male nurses were excluded. The Teaching Hospital, a multicentered tertiary health facility at the time of the study had 8 gynaecologists and one pathologist. Only opportunistic screening for cervical cancer is done at the moment in the hospital.

Data were collected using self administered structured questionnaires. The questionnaire obtained information on socio-demographic characteristics such as age, marital status and parity. It also sought information on years of practice and their knowledge of cervical cancer screening services. Information was also obtained on their uptake of screening services and reasons for not undergoing screening obtained. The data were collated and analysed along these lines.

Correspondence: Dr. G. O. Udigwe

RESULTS

Of the 166 questionnaires administered, 140 were correctly completed and returned. This gave a response rate of 84.3%. 80 (57.2%) of the respondents were aged 30-39 years while 34 (24.3%) were aged 40-49 years (see table 1). 10 (7.1%) were aged 50 years and above. 107 (76.4%) were married, 30 (21.4%) were single while 3 (2.2%) were widowed. 40 (28.6%) were nulliparous while the rest had 1 to 7 children.

112 (80%) had practiced for more than 5 years including 15 (10.7 %) who had practiced for more than 21 years. Only 26 (18.6%) had practiced for 5 years or less. 122 (87.1%) were aware of cervical cancer screening services. Only 59 (42.1%) got their knowledge from formal lectures during training while majority of the rest got their knowledge from the mass media and work exposure (see table 2). 128 (91.4%) advocated routine screening while 12 (8.6 %) did not. 13 (9.3%) of the nurses suggested that screening should start after the age of 50 years while 29 (20.7%) suggested the age of 41. Only 38 (27.1%) suggested that screening should start at the age of 21. 70 (50%) advocated yearly screening while 37 (26.4%) and 14 (10%) advocated 3 yearly and 5 yearly screening respectively. 13 (9.3%) acknowledged ever losing a relation to carcinoma of the cervix. Only 8 (5.7%) had ever undergone screening. Among reasons for not screening, 52 (37.1%) had no reason while 35 (25%) felt they were not likely candidates for carcinoma of the cervix. A further 26 (18.6%) claimed ignorance of the procedure while 21 (15%) attributed fear of the outcome as reasons for not screening. This is shown in table 3.

Table 1 Age Distribution of Respondents

Age (Years)	No	%
20-29	16	11.4
30-39	80	57.2
40-49	34	24.3
50-59	9	6.4
60	1	0.7
TOTAL	140	100

Table 2 Source of Information on Cervical Cancer Screening Services

SOURCE	NO	%
Lectures	59	42.1
Mass media	23	16.4
Work exposure	38	27.1
Seminar/workshops	8	5.7
All above	13	9.3
No answer	14	10.0

Table 3 Reasons for not undergoing Pap smear

REASON	NO	%
Ignorance of availability	26	18.6
Fear of outcome	21	15.0
Not a likely candidate	35	25.0
Financial implication	1	0.7
No reason	52	37.1
Not applicable	8	5.7

DISCUSSION

Although it has largely not been tested in a randomized trial, the effectiveness of cervical smear in reducing cervical cancer mortality is almost universally accepted. In developed societies like the Nordic countries and the United Kingdom, invasive cancer of the cervix is almost eliminated. However in Nigeria, late presentation and attendant high mortality continue to be the case with about 90% presenting late in a series.⁸

Among health care providers such as practicing nurses, one expects a near 100% awareness of cervical cancer screening services, but in this study 87% were aware of such services. Among the respondents, only 42% got their knowledge from formal lectures. The rest got the knowledge from work exposure and mass media. This suggests that there is need to adjust the nursing curriculum to accommodate important preventable diseases like invasive carcinoma of the cervix.

More than 70 % suggested that screening should start after the age of 30 years and more than 70 % suggested screening intervals other than once in three years. This is against the background of increasing incidence of invasive cancer in younger women sometimes as low as 17 years.¹⁷

It is also important to note that although majority of the nurses were married and parous, almost 90% were more than 30 years and 13 (9.3%) had lost relations to carcinoma of the cervix, only 8 (5.7%) had ever undergone screening. This uptake rate is quite low and is similar to 6.8% obtained among medical workers in Ibadan Nigeria.¹⁸ Obstacles to uptake of cervical screening has been listed among others to include conflicting health beliefs, cultural taboos, interference with sexual relationships and denial driven by fear of cancer.¹⁹

Although the yield for opportunistic screening in Nigeria at the moment hovers around 10 % with invasive lesions below 1%,^{9,20,21} opportunistic screening is poorly practiced.⁹ Perhaps more intriguing from this study are the various reasons advanced by the nurses for not undergoing screening. As much as 35 (25%) claimed they were not likely candidates for carcinoma of the cervix while 21 (15%) feared the outcome of the screening. A further 52 (37.1%) had no reason for abstaining. This calls for a complete re-orientation of this group who

should be catalysts to galvanize women in the local community to undergo cervical screening. At current level of poverty, illiteracy, staffing and level of infrastructural development, routine screening may not be feasible but there is need to intensify opportunistic screening which has a higher yield than routine screening. Nurses have a major role to play in this regard. At the moment though their knowledge is good, the uptake rate is still very low.

CONCLUSION

The knowledge of cervical cancer screening services among female nurses in our environment is fairly good, however the uptake of these screening services by the nurses is very poor. There is need to further enlighten this group who are expected to mobilize the local communities to accept cervical cancer screening and thus reduce the morbidity and mortality associated with invasive cervical cancer.

ACKNOWLEDGEMENT

I deeply appreciate the assistance of the head of nursing services and all the female nurses of Nnamdi Azikiwe University Teaching Hospital who participated in this study.

REFERENCES

1. **Conje H S.** Screening for cervical cancer in developing countries. *Int J Gynaecol Obstet* 2004. 84 (2): 101- 8
2. **Galadanci H S, Mohammed A Z, Uzoho C C, Jido T A, Ochicha O.** Gynaecological malignancies seen in a tertiary health facility in Kano Northern Nigeria. *Trop J Obstet Gynaecol* 2003. 20: 105 – 108.
3. **Briggs N D, Katchy K C.** pattern of primary gynaecological malignancies as seen in a tertiary hospital situated in Rivers state of Nigeria. *Int J Gynaecol Obstet* 1990. 31 (2): 157–61.
4. **Uzoigwe S A, Seleye Fubara D.** Cancers of the uterine cervix in PortHarcourt, Rivers State- a 13 year clinico- pathological review. *Niger J Med* 2004.13 (2): 110- 3.
5. **Nkyeker K.** Pattern of gynaecological cancers in Ghana. *East Afr Med J* 2000. 77 (10): 534- 8.
6. **Singer A.** Cervical cancer screening: State of the art. *Balliere's Clin Obstet Gynaecol* 1995. 9 (1): 39–64.
7. **Papanicolaou G N and Traut H F.** The diagnostic value of vaginal smears in carcinoma of the uterus. *Int J Obstet Gynaecol.* 1941. 42: 193

8. **Emembolu J O, Ekwempu C C.** Carcinoma of the cervix uteri in Zaria: aetiological factors. *Int J Gynaecol Obstet* 1988. 26 (2): 265-9.
9. **Onah H E, Ezugwu F O, Eze J M.** Cervical cancer screening. A survey of current practice among Nigerian gynaecologists. *Trop J Obstet Gynaecol* 2001. 18 (2): 78-81.
10. **Adesina O A, Babarinsa I A, Fawole O A, Oladokun A, Adeniji A R, Adewole I F.** Cervical cytology services in Nigeria. Providers perspective. *J Obstet Gynaecol* 2003. 23 (4) 416-18.
11. **Chukwuali L I, Onuigbo W I B, Mgbor N C.** Cervical cancer screening in Enugu Nigeria. *Trop J Obstet Gynaecol* 2003. 20: 109-12.
12. **Von Bogaert L J, Knapp D C.** Opportunistic testing of medically underserved women for cervical cancer in South Africa. *Acta Cytol* 2001. 45 (3): 313–6.
13. **Coste J, Cochand Priollet B, de Cremoux P, le Gales C, Cartier I, Molinie et al.** Cross sectional study of conventional cervical smear, monolayer cytology and human papillomavirus DNA testing for cervical cancer screening. *BMJ* 2003. 326 (7392): 733
14. **Cheung A N, Szeto E F, Leung B S, Khoo U S, Ag A W.** Liquid based cytology and conventional cervical smears: a comparison study in an Asian screening population. *Cancer* 2003. 99 (6): 331-5.
15. **Betinson J L, Pretorius R G, Zhang W H, Wu L Y, Qiao Y L, Elson P.** Cervical cancer screening by simple visual inspection after acetic acid. *Obstet Gynaecol* 2002. 99 (3) : 517–8.
16. **Chiraje Z M, Chipato T, Kasule J, Rusakaniko S.** Visual inspection of the cervix as a primary means of cervical cancer screening: results of a pilot study. *Cent Afr J Med* 1999. 45 (3): 79
17. **Adewole I F, Edozien L C, Babarinsa I A, Akang E E.** Invasive and insitu carcinoma of the cervix in young Nigerians – a clinicopathological study of 27 cases. *Afr J Med Sci* 26 (3-4): 191-3.
18. **Ayinde O A, Omigbodun A O.** Knowledge, attitude and practices related to prevention of cancer of the cervix among female health workers in Ibadan. *J Obstet Gynaecol* 2003. 23(1): 59–62.

19. **Carey P, Gjerdingen D K.** Follow up of abnormal pap smears in women of different races. *J Fam Pract* 1993. 37: 583 –7.
20. **Konje J C, Ogunniyi J O, Otolorin E O , Odusoga O L, Ogunlusi M O, Obiesesan K A.** Cervical cancer screening in Ibadan. *Euro J Gynaecol Oncol.* 1991. 12 (1) : 55-61.
21. **Ayinde A E, Adewole I F, Babarinsa I A.** Trends in cervical cancer screening in Ibadan Nigeria- a four year review. *West Afr J Med* 1998. 17(1): 25- 30.