

Research Article

Knowledge of Cervical Cancer, Awareness and Attitude to Screening among Patients at a Cytology Clinic

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Abstract

Objective: Cervical carcinoma is the most common genital cancer in Nigeria and a leading cause of cancer-associated deaths, but the success of large-scale screening programs with the Pap test and the associated reduction in invasive cancer has been well described in developed nations. We determined the level of knowledge of cervical cancer, awareness, and attitude toward the cervical screening program in Lagos.

Methods: Between December 1, 2003, and May 31, 2004, we studied the knowledge, awareness, and attitude of patients at a tertiary institution cytology clinic concerning cervical cancer and screening methods using a self-administered questionnaire.

Results: Of the 255 patients surveyed, data were complete in 238 (93.3%); 112 (47.1%) had heard of cervical cancer, while 94 (39.5%) knew about the Pap test, with health professionals being their most frequent source of information. Fifty-nine (24.9%) had had a prior Pap test, while after counseling on cervical cancer and the screening methods, 213 (89.5%) were ready for routine periodic screening if given the opportunity. Nineteen (8%) would still refuse due to various reasons, and six (2.5%) were not sure. Age and marital status did not influence their knowledge, but the level of education and occupation were found to positively influence their knowledge of cervical cancer and their acceptance of the Pap test.

Conclusion: Adequate health information and counseling on cervical cancer and regular Pap testing still need to be emphasized in developing countries so as to reverse the morbidity and mortality associated with cervical cancer.

Introduction

Cancer of the cervix is the second most common cancer among women worldwide following breast cancer, accounting for an estimated 530,000 new cancer cases worldwide and for 275,000 deaths in 2008 [1].

It is the commonest gynecological malignancy in Nigeria and a leading cause of cancer associated deaths [2] with an incidence rate of approximately 3% of patients attending the gynecological clinic of the teaching hospital in Lagos [3] but with the aid of screening programs for precancer as well as the availability of HPV vaccination, there has been a 75 percent decrease in the incidence and mortality of cervical cancer over the past 50 years in developed countries [4].

The Pap smear is inexpensive and easily performed but low educational status, prohibitive cost of healthcare, the expense of obtaining and retaining the infrastructure, the technical expertise that are required for cytological screening as well as for tracking women with abnormal test result [5] and the predominance of the etiological factors for cancer of the cervix, have been inimical to its implementation.

Despite there been an increase in centers providing screening over the recent years, it's still not commensurate with the number of patients availing themselves, of their use [6]. This results in

patients presenting with advanced disease thereby increasing both the morbidity and mortality and putting undue strain on available health facilities and resources. Our objectives were to determine the awareness of cervical cancer and the screening program at the institution and highlight the role of enlightenment campaigns.

Materials and Method

Design

A Prospective cross sectional survey was used.

Setting

The study was conducted in the cytology clinic of the Lagos university teaching hospital that holds once a week on a Wednesday. Doctors refer patients to the cytology clinics and only few are self-referrals with the bulk of patients being from the gynecological outpatients and postnatal clinics. An average of about 10 patients attend the clinic each day. Cervical smears are routinely taken for cytology and abnormal smears are referred to the gynecology clinic for further investigations and treatment.

Study population

The study involved patients who attended the cytology clinic run by the Obstetrics and Gynecology department of the Lagos University Teaching Hospital between the months of December 2003 and May 2004. A total of 238 patients were seen during this period.

Data collection

The purpose of the study was explained to the patients and verbal consent was obtained before conducting a face-to-face interview using a structured questionnaire administered by the author.

The questionnaire was in three parts; the first part contained the socio-demographic characteristics relating to the age at first intercourse, first and last pregnancies, ethnic background, marital status, place of abode, occupation and educational background. The second related to the knowledge of cervical cancer and the screening programme viz a viz any information the patient might have concerning them and the third part related to the patient's attitude to cervical cancer and the screening programme. This is elicited after some information had been given concerning cervical cancers and the screening programme.

Analysis

The responses were analysed with descriptive statistics for continuous variables and simple percentages for categorical variables using the statistical package SPSS for MS Windows with $p < 0.005$.

Results

The age range of the participants was between 18 and 65 years with a mean of 33.87 years. The peak age of attendees was between 30 and 39 years.

The parity distribution revealed a pattern of between 0 and 11 children with 90.3% having less than 5 children and the mean parity was 2.23.

84.2% were married with 12.7% single but sexually active. 82% of patients had education to at least the secondary school level while only 3.8% had no formal education with 55.5% of patients being traders, unemployed or housewives while only 18.1% were professionals. The socio-demographic characteristics are highlighted in Table 1.

Table 2 shows that 38.2% had their first sexual intercourse before 18 years of age. 71.8% had had between 1 and 3 sexual partners, while 22.7% had had more than 4 sexual partners as shown in Table 3.

On their awareness of cervical cancer, Table 4 shows that 39.5% of patients had heard of cervical cancer before presentation at the clinic.

Health professionals were the most frequent source of information (58.5%) followed by the mass media in 24.5% of cases as shown in Table 5 but only 26% of the respondents had some insight into what cancer of the cervix really meant (Table 6).

Table 7 shows that 47.1% of respondents have heard of Pap smear with 91% having gotten their information from health professionals but only 29% had some insight into what Pap smear meant (Table 8).

In Table 9, 84.9% of respondents have had Pap smear screening before, while after giving some information about the procedure, 89.5% were ready for routine periodic screening if given the opportunity but 2.5% were still not sure (Table 10).

8.0% of respondents said No but gave reasons ranging from the fear of detecting cervical cancer to their view of not being susceptible to cervical cancer.

Table 1: Sociodemographic Characteristics of Patients.

AGE	FREQUENCY	PERCENTAGE
<20 years	1	0.4%
21-29 years	84	35.3%
30-39 years	101	42.4%
40-49 years	37	15.5%
50-59%	13	5.4%
>60 years	2	0.8%
PARITY		
<1	50	21.0%
1-5	165	69.3%
>5	23	9.7%
MARITAL STATUS		
SINGLE	31	12.7%
MARRIED	200	84.2%
DIVORCED	4	1.8%
WIDOWED	3	1.3%
EDUCATIONAL STATUS		
NO FORMAL EDUCATION	9	3.8%
PRIMARY	32	13.4%
SECONDARY	78	32.8%
TERTIARY	119	50.0%

Table 2:

AGE AT FIRST COITUS (Yrs)	FREQUENCY	PERCENTAGE
10-18	91	38.2%
19-25	105	44.1%
26-30	19	8.0%
>30	2	0.8%
No answer	21	8.8%

Table 3: Sexual Characteristics of Respondents.

NO. OF SEXUAL PARTNERS	FREQUENCY	PERCENTAGE
None	1	0.4%
1-3	171	71.8%
4-7	45	18.95
>7	9	3.8%
No answer	12	5.0%

Table 4: Respondents Awareness of Cervical Cancer.

EVER HEARD OF CANCER OF CERVIX?	FREQUENCY	PERCENTAGE
YES	94	39.5%
NO	144	60.5%

Discussion

In this study even though it was conducted amongst patients specially referred to the cytology clinic for the pap smear test, knowledge of the procedure and the reason for it was low with just about 29% having insight into what it is meant for and just about 26% having some knowledge about cervical cancer itself but this was still higher than the 4.23% gotten in a similar study conducted by

Table 5: Source of Information on Cervical Cancer.

SOURCE OF INFORMATION	FREQUENCY	PERCENTAGE
Print Media	8	8.5%
Electronic Media	15	16.0%
Health Professional	55	58.55
Friends and Relatives	10	10.6%
School	5	5.3%
Worship Centre	1	1.1%

Table 6: Knowledge of Cervical Cancer.

KNOWLEDGE OF CANCER OF CERVIX	FREQUENCY	PERCENTAGE
NO/POOR KNOWLEDGE	176	73.9%
MODERATE KNOWLEDGE	56	23.5%
ADEQUATE KNOWLEDGE	6	2.5%

Table 7: Awareness of pap Smear.

EVER HEARD OF PAP SMEAR?	FREQUENCY	PERCENTAGE
YES	112	47.1%
NO	126	52.9%

Table 8: Source of Information on pap Smear.

SOURCE OF INFORMATION	FREQUENCY	PERCENTAGE
Print Media	3	2.75
Electronic Media	2	1.8%
Health Professionals	102	91.0%
Worship Centre	5	4.5%

Table 9:

EVER BEEN SCREENED BEFORE?	FREQUENCY	PERCENTAGE
YES	36	15.1%
NO	202	84.9%

Table 10: Response to whether respondent was ready for Screening after Counselling.

RESPONSE	FREQUENCY	PERCENTAGE
YES	213	89.5%
NO	19	8.0%
Don't Know Yet	6	2.5%

Anorlu et al amongst women attending a primary health care facility [7]. This might actually be a reflection of the specialist nature of the tertiary institution as well as differences in the social status of the patients attending the two facilities. The low level of knowledge was however in contrast to a high knowledge level of 72.9% demonstrated concerning Pap smear by female health workers in Abuja in a study of Olaniyan et al [8].

This immediately signifies that adequate counseling is not given to the patients on both cervical cancer and Pap smear before they are sent for the test at the cytology clinic.

Age or marital status did not affect having a Pap smear done in this study but this is in contrast to findings in a study in Aberdeen where single and nulliparous women were more likely to have been screened [9]. This might be a reflection of the tendency for earlier marriages in our population.

The commonest reason given for lack of routine screening among

women at the cytological clinic is lack of adequate health information and this was elicited by a high percentage comprising 84.9% been present at the clinic for a repeat Pap smear but still with little or no knowledge about the test.

Physicians and health care institutions must attempt to change the perception by educating and personalizing the message so that patients can accept their disease susceptibility as well as have adequate information concerning the procedure and its usefulness.

Awareness and enlightenment campaign have to be initiated with emphasis on the risk factors with proper highlighting of sexual exposure as the major underlying risk factor and the fact that every woman is at risk.

The most frequent reason given by women for non-attendance of a Pap smear test in Northern Ireland was that it was not regarded as necessary at their age [10] but it should be emphasized that age is not a factor as cervical intraepithelial neoplasia have been found to sometimes develop in young teenagers [11].

The level of education and the occupation of the respondents were also found to influence their knowledge of cervical cancer and its screening procedure with a high percentage of those with tertiary education having at least a little knowledge. This is not influenced by the religion or ethnicity of the respondents, highlighting the role of mass education in our nation.

Most respondents agreed after counseling that Pap smear is a useful test and nearly 90% were eager for routine screening if given the opportunity.

A significant minority were either not decided or would not have the test even if offered for free. A fear of the consequence of detecting cancer or a fatalistic attitude towards cancer detection and treatment may account for this disposition and the lack of fear of the consequence of investigation had been alluded to be the most important predictor of attendance at the cytology clinic for cervical smear [12].

None of the respondents cited the cost of services as the reason for non-compliance and perhaps this is reflective of the status of patients attending clinics at the tertiary hospital.

Healthcare providers have a very important role to play in getting people interested in the screening programmes and some authors have suggested that cervical cancer should be included in pre-employment medical examination [13].

Medical institutions must collaborate to develop standards for cancer screening with particular attention being paid to the cost, to determine how limited resources can best be spent in cancer control.

A lot of attention should also be paid to adequate enlightenment of patients as regards the procedure and its benefits.

References

1. Cervical Cancer Incidence, Mortality and prevalence worldwide in 2008.
2. Babarinsa EA, Akang EEU, Adewole IF. Pattern of gynecological malignancy at the Ibadan Cancer Registry.1976-95. Nig Qt J. Hosp. Med. 1998; 8: 103-106.
3. Edozien LC, Adewole IF. Cervical carcinoma in Nigeria--a need for early

- detection. *Afr J Med Med Sci.* 1993; 22: 87-92.
4. Quinn M, Babb P, Jones J, Allen E. Effect of screening on incidence of and mortality from cancer of cervix in England: evaluation based on routinely collected statistics. *BMJ.* 1999; 318: 904-908.
 5. Ayinde AE, Adewole IF, Babarinsa IA. Trends in cervical cancer screening in Ibadan, Nigeria: a four-year review. *West Afr J Med.* 1998; 17: 25-30.
 6. Bishop A, wells E, Sherris J, Tsu V, Crook B. Cervical cancer: Evolving prevention strategies for developing countries. *Health matters.* 1995; 6: 60-71.
 7. Anorlu. Cervical cancer and cervical cancer screening: level of awareness in women attending a primary health facility in mushin, Lagos, Nigeria. *The Nigeria Postgraduate Medical journal.* 2000; 7: 25-28.
 8. Olaniyan OB, Aghoroma OC, Oladipo OP. Knowledge and practise of cervical Screening among female health workers in Government Hospitals in Abuja metropolis, Nigeria. *Tropical journal of Obstetrics and Gynaecology.* 2000; 17: 18-20.
 9. Nicoll PM, Narayan KV, Paterson JG. Cervical cancer screening: women's knowledge, attitudes and preferences. *Health Bull (Edinb).* 1991; 49: 184-190.
 10. Murray M, McMillan C. Social and behavioural predictors of women's cancer screening practices in Northern Ireland. *J Public Health Med.* 1993; 15: 147-153.
 11. Womeodu RJ, Bailey JE. Barriers to cancer screening. *Med Clin North Am.* 1996; 80: 115-133.
 12. Omigbodun AO. Management of cervical intraepithelial neoplasia where colposcopy is not available. *Cent Afr J Med.* 1991; 37: 7-11.
 13. Babarinsa IA, Adewale IF. Knowledge and attitude to utilization of cervical cytology screening by female workers in a Nigeria Teaching Hospital. *Nig. Med. Pract.* 1998; 35: 47-50.