Contents lists available at ScienceDirect

Journal of Cancer Research and Practice

journal homepage: http://www.journals.elsevier.com/journal-of-cancer-research-and-practice

Original Article

Perspectives of cervical cancer and screening practices among staff of a teaching hospital in South-South Nigeria

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ABSTRACT

Background: Workers at tertiary health facilities may be expected to have good knowledge of cervical cancer and also good screening practices so that they could be good sources of health information and motivation to promote screening in the general public. An assessment of their perceptions and practice of cervical screening could reveal gaps that would inspire efforts to improve key indicators among them and in turn, the general population.
Methods: This cross-sectional analytic study was conducted among 316 workers of a tertiary health facility selected by stratified random sampling with proportionate allocation. Data was collected using pretested semi-structured questionnaires and analysed with SPSS 20 and PEPI programs.
Results: The majority of respondents were aware of cervical cancer but it was significantly higher among females, *p=.001*. Most respondents, 266 (84.2%) were less than 40 years of age but knowledge of cervical cancer screening diminished with increase in age, *p=.039*. Only 92 (29%) had good knowledge of cervical screening; a better knowledge of cervical screening was significantly associated with working in a clinical department, employment duration of less than 2 years, and being female. All females who had ever screened for Ca cervix, 18 (11%) had a Pap smear, and majority 15 (83%) had screened only once. Factors associated with screening were level of education, years of work experience, and being in a clinical department. Reasons given for not screening included pain from the procedure, its cost, and the delay with getting results.
Conclusion: Knowledge of cervical screening was not good among staff of DELSUTH and practice of screening was also very poor. They may benefit from health education and promotion programmes directed towards better screening practices. Introduction of easier-to-perform and less costly screening modalities like VIA/VILI may also improve uptake.

1. Introduction

Cervical cancer is the fourth-most common cancer affecting women globally, but the second ranking cancer affecting females in Nigeria.[1] The spectrum of the disease is such that, if detected early, appropriate treatment could be instituted and subsequent cure achieved. Detecting cervical cancer early is critical to its prevention or treatment, which could be achieved through regular screening.[2] The techniques for early detection of cervical cancer have become more generally available worldwide.[3] Nevertheless, many low- and middle-income countries like Nigeria still lack established screening programs that ensure all women at risk get screened.[4–6] Thus, a significant proportion of women still present with advanced stages of cervical cancer, by which time only palliative care is possible.[7,8]

A major challenge of cervical cancer prevention is the lack of awareness that exists in the general population, even among women of reproductive age.[9] Previous studies have reported poor knowledge of cervical cancer and screening among women.[10,11] The level of awareness of cervical screening may vary depending on socio-economic factors including education, occupation, and whether people reside in urban or rural settings. However, awareness may not translate to the practice of regular and timely screening, which has been demonstrated in various studies.[12–14] Hence, there is a need to assess the knowledge and practice of prevention of cervical cancer in different populations, and to identify the attitudinal issues that lie beneath the surface.

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Peer review under responsibility of Taiwan Oncology Society.

2. Material and methods

In this cross-sectional analytic study, 328 members of the staff of Delta State University Teaching Hospital, Oghara, Delta State, Nigeria were selected by stratified random sampling method from a list of all hospital staff using proportionate allocation. A total of 162 males and 166 females were selected. Data were collected from the study subjects using a pretested semi-structured questionnaire, which had four sections covering socio-demographic characteristics of respondents, knowledge, attitude and practice of cervical cancer screening. Depending on the level of education of the respondents, questionnaires were either self- or interviewer-administered.

2.1. Data analysis

After sorting and checking filled questionnaires for completeness, data from only 316 questionnaires were entered for analysis into the spreadsheet of Statistical Package for the Social Sciences (SPSS) Version 20, while the Program for Epidemiologists (PEPI) was used for further analysis. Categorical variables were presented as frequency tables and percentages, while continuous data were summarized as means (±standard deviation, and tests of association were performed using chi-square. The two-tailed level of significance was set at $p < .05$.

Knowledge of cervical cancer screening was assessed using 8 multiple choice questions as follows: correct age to begin screening (1 point); Risk factors for acquiring the disease (5 points - family history, cigarette smoking, multiple sex partner, diet and age); what should be seen before screening oneself (3 points - nothing, post-coital bleeding, weight loss); Knowledge of a screening centre (1 point); Method of screening (1 point). The total score for all correct answers was 11. Overall, good knowledge was a score of 8–11; fair knowledge was a score of 4–7, while poor knowledge was a score of 0–3. Attitude to screening for cervical cancer was assessed using 6 questions with responses that ranged from agree to disagree. The scoring system used with respect to respondents' responses was as follows: correct response (agree/disagree) - 3 points; indifferent - 2 points; and wrong response (agree/disagree) - 1 point. The total score for correct answers was 18. Good attitude was rated as a score of 13–18, while poor attitude generally produced scores in the range of 6–12. The practice of screening for cervical cancer was assessed simply by respondent having screened or not screened for cervical cancer in the past, and the number of times screened.

2.2. Ethical consideration

Ethical clearance for this study was obtained from the Health Research and Ethics Committee of Delta State University Teaching Hospital, and permission obtained from the various department heads. Each respondent gave verbal consent before the questionnaire was administered.

3. Theory

Tertiary health facilities are at the top of the health care system in most countries, including Nigeria, and most cases of cervical cancer are managed at those institutions. Hospital staff members are usually a source of health information, education and public role modelling. It could therefore be assumed that workers at this type of medical facility have access to more information about cervical cancer, and would more reliably practice cervical screening.,[15] However, available evidence in Nigeria suggests otherwise. Previous studies among market women in Zaria, Kaduna State and among non-medical female staff of tertiary hospitals in south-west, Nigeria showed virtually the same level of practice: 15.4% and 15%, respectively.[16,17] Among female health workers at two tertiary institutions in north-eastern and south-western Nigeria, the utilization rate varied at 23.3% and 8.7%, respectively.[18,19] However, these studies were completed at different times. These figures suggest an underperformance in the uptake of cervical screening among health workers. An assessment of their perception and practice of cervical screening could reveal gaps that may inspire intensified health education and promotional efforts of this important target group, with a view to improving key indicators in the general population.

4. Results

The mean age of respondents was 33.4 ± 6.7yrs with a range of 20–64 years. Male respondents were marginally less likely than females to be aware of cervical cancer, with a ratio of 1:1.11. However, a significantly higher number of females had heard of cervical cancer, where $p = .001$. Most of the respondents, 266 (84.2%), were less than 40 years of age. Only a fraction of all female workers 5 (3.0%) were less than 25 years, a subgroup that did not satisfy the age criteria for cervical screening of 25–65years.[20] More than 60% of the respondents, 198 (62.7%), were from Delta Central, the senatorial district where the hospital is situated. Almost two-thirds of respondents were married, 201 (63.6%), and less than 20% (55, 17.4%) had not worked at DELSUTH over 2 years. Respondents' awareness of the disease from clinical and non-clinical departments were close; 54.4% vs. 45.6%, respectively. Only a quarter (80, 25.3%) said they were unaware of cervical cancer, while the most common sources of information on cervical cancer were school and health workers (Table 1).

There was a wide spread representation of occupations among respondents. Doctors and nurses constituted about two-fifths, (40.5%) and one-third, (34.7%) of all clinical respondents respectively while admin staff constituted over half, (51.7%) of all non-clinical respondents (Table 2).

One-fifth of males and a quarter of females had a good knowledge of cervical screening but knowledge of cervical cancer screening was not significantly different between the two sexes ($p = .557$). Knowledge of cervical cancer screening diminished with increasing age, ($p = .039$); thus, the youngest age group had the best knowledge of cervical cancer screening among respondents. Having 'good knowledge' of cervical screening was significantly associated with working in a clinical department; over half (51.2%) of all respondents from the clinical departments had 'good knowledge,' while two-thirds of those in the non-clinical departments had a 'poor knowledge' of cervical screening. Over half (21, 50.9%) of the respondents who had spent less than 2 years in DELSUTH had a 'good knowledge' compared to over a third, and 90 (34.5%) of those who had spent over 2 years had 'poor knowledge' of cervical cancer screening, where $p = .019$ (Table 3).

Females had a significantly better attitude towards cervical cancer screening, where $p = .001$. The attitude towards cervical screening was poorer among respondents as their ages increased. Over half of all respondents below 40 years had a good attitude towards screening for cervical cancer, while 30 (61.2%) of respondents above 40 years of age had a poor attitude towards screening for cervical cancer. Having a good attitude toward cervical screening was quite significantly associated with working in a clinical department, ($p < .001$); three-quarters, 112 (75.2%) of respondents from the non-clinical departments had a poor attitude toward screening for cervical cancer. Respondents who had worked less than 2 years at DELSUTH had a better attitude towards cervical screening compared to those who had worked there in excess of 2 years, but the difference was not statistically significant, ($p = .079$) (Table 4).