Journal of Community Medicine and Primary Health Care. 31 (1) 76- 85

JOURNAL OF COMMUNITY MEDICINE AND PRIMARY HEALTH CARE

ORIGINAL ARTICLE

Knowledge of Cervical Cancer and Attitude to Cervical Cancer Screening among Women in Somolu Local Government Area, Lagos, Nigeria

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Keywords:

Knowledge, Attitude, Cervical cancer screening, Women, Nigeria

ABSTRACT

Background: Cancer of the cervix is the second most common cancer in women globally, and a major cause of morbidity and mortality among women in developing countries. The study was carried out to determine the knowledge of cervical cancer and attitude to its screening among women in Somolu Local Government Area (LGA), Lagos State, Nigeria.

Methods: The study employed a descriptive design. A pre-tested, self-administered, structured questionnaire was used to elicit information from 260 women who were recruited by multi-stage sampling method. The data were analyzed using SPSS version 20.0.

Results: The mean age of the respondents was 28.3 ± 8.36 years with 161 (61.9%) being single. One hundred and fifteen (44.2%) were aware of cervical cancer and 47 (18.1%) had good knowledge. Among those aware of cervical cancer, 37 (32.2%) had negative attitude while 78 (67.8%) had positive attitude to cervical cancer screening.

Conclusion: The respondents had a poor knowledge of cervical cancer but a positive attitude to its screening. Using the electronic media, the LGA authority should intensify public educational programmes about cervical cancer among women of all ages.

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INTRODUCTION

Cervical cancer is a malignant disease of the cervix with clear-cut pre-malignant and malignant stages.[1] Globally, it is the second most common cancer in women with about 530,000 new cases being diagnosed every year and developing countries having 85% of this burden. [2-4] In Sub-Saharan Africa, it comprises 20 to 25% of all cancers among women, which is about double that of women worldwide.[5] Incidence rate of cervical cancer in sub-Saharan countries ranges from 30 to 40 per 100,000 women.[6] Cancer of the cervix also constitutes a huge burden in Nigeria where it is the second commonest cancer in women and accounts for 63% of genital cancers and 30-40% of uterine cancers among women aged 15 years old and above.[6] In 2012, the World Health Organization's extrapolation from the Ibadan and Abuja population-based cancer registries in Nigeria indicated that about 14,089 women were diagnosed with cervical cancer and 8,240 died from the disease.[7, 8]

Cervical cancer is a preventable disease and should not continue to cause as much morbidity and mortality as it does presently. Prevention includes health promotion, removal or reduction of modifiable risk factors associated with the disease and immunization against the Human Papilloma virus which has been implicated in the causation of the cancer.[9] Screening to identify cervical abnormality in an asymptomatic population so that disease progression can be halted at an early stage is also a recognized method of control.[10] Screening for cervical cancer is an established and effective intervention in the prevention and treatment of the disease. In developed countries, its widespread use has drastically reduced the morbidity and mortality from cervical cancer among the women.[11-13] However, in developing countries like Nigeria, even where such facilities are available, the utilization is still poor.[13-17]

As some studies revealed, poor awareness, knowledge and attitude to cervical cancer could have been responsible for this.[12, 13, 18-20] Studies conducted on awareness and knowledge of cervical cancer among women in South Western Nigeria, [12] North Eastern Nigeria[13,18] and in Eastern parts of Nigeria, [21] reported poor or at best, below average knowledge of cervical cancer. There are also studies about knowledge and attitude to cervical cancer which are hospital-based in other parts of Nigeria and Uganda.[22, 25] There is however a paucity of community-based studies about awareness, knowledge and attitude to cervical cancer among women in Somolu LGA, Lagos which are imperative if the women would know what to do and what to avoid in order to safeguard their lives against this deadly disease.

This study was therefore conducted to assess the knowledge of cervical cancer and attitude to cervical cancer screening among women in Somolu LGA, Lagos.

METHODOLOGY

Somolu Local Government Area (LGA) is one of the 18 LGAs located in Lagos East Senatorial District of Lagos State. It is made up of eight wards, covers a land area of 99 km^2 and is bounded by three LGAs: Yaba, Bariga, and Mushin. The LGA has an estimated population of 495,776 projected from the 2006 national census.[26] The people are predominantly Yorubas but other ethnic groups such as Igbos and Hausas also reside in the LGA. Majority of the people are printers, traders and bankers and are of medium to low socioeconomic status. The LGA is plagued by problems of overcrowding, poor housing and inadequate sanitation. It has one general hospital, two primary health care centers and several private health facilities. The major religions of the inhabitants are Islam and Christianity.

This was a descriptive survey conducted in 2014 among women between the ages of 16 and 60 years. Those who did not give their consent were excluded from the study. The proportion of women with awareness of cervical cancer from a previous study was 80%.[27] This was inserted into the formula for calculating single proportions by Abramson and Gahlinger.[28] Assuming a 95% level of confidence and a level of significance 5%, a minimum sample size of 245 was obtained but the sample size was increased to 260 in order to make up for incompletely filled questionnaire.

Respondents were recruited into the study using multistage sampling technique. There are eight wards in the LGA; simple random sampling was used to select 50% out of these. From each of the selected wards, 10 streets were selected by simple random sampling. Starting from the centre of each street, systematic random sampling was used to select 6 or 7 houses. From each selected house, an eligible respondent who consented was

interviewed until the required number of respondents were interviewed. In a house where there were more than one eligible respondent, simple random sampling (balloting) was used to pick one of them.

A pre-tested, structured questionnaire, developed by the researchers in English language, translated to Yoruba language and back translated to English language in order to ensure content validity was used. The questionnaire, administered in English was pre-tested by one of the researchers and some trained research assistants in Bariga LGA which was not utilized for this study. Thereafter, some questions were re-adjusted. It elicited information about the socio-demographic characteristics, knowledge of risk factors, symptoms and prevention of cervical cancer, knowledge and attitude to cervical cancer screening among the women. The questionnaire was self-administered by the literate respondents while the non-literate ones were interviewed by trained research assistants.

Data was analyzed using the Statistical Package for Social Sciences (SPSS) version 20.0. In determining the knowledge of cervical cancer, a 20-point question covering knowledge of risk factors, symptoms and prevention of cervical cancer and knowledge of cervical cancer screening (from the knowledge section of the questionnaire was used). Each correct response was scored one while a non- or wrong response was scored zero. Respondents who scored 10-20 were categorized as having good knowledge while those that scored 0-9 were categorized as having poor knowledge. In determining attitude to cervical cancer prevention, a 10-point question was used. Each positive response was scored one while a non- or negative response was scored zero. Respondents who scored 5-10 were categorized as having positive attitude while those that scored 0-4 were categorized as having negative attitude.

Ethical clearance was obtained from Lagos University Teaching Hospital Ethics and Research Committee. Permission to conduct the survey was obtained from the LGA authorities and written informed consent was obtained from the respondents. The questionnaires were filled anonymously and confidentiality of information collected was ensured by the researchers.

RESULTS

A total of 260 questionnaires were distributed during the course of data collection. All were retrieved, properly filled and therefore analyzed. This gave a response rate of 100%. Table 1 shows the socio-demographic characteristics of the respondents. Two hundred and seven (79.6%) of the respondents were 20-40 years old while the mean age was 28.3 ± 8.4 years. Two hundred and nine (80.4%) were Christians, 120 (46.2%) were of Yoruba origin and 161 (61.9%) were single. One hundred and seventy-two (66.2%) had tertiary education and 138 (53.0%) were unskilled workers.

One hundred and fifteen (44.2%) respondents were aware of cervical cancer. The main sources of information were the internet 53 (46.1%), radio/TV 51 (44.3%) and health care personnel 45 (39.1%). The most commonly identified risk factors of cervical cancer were HPV infection 56 (49.0%), multiple sexual partners 55 (47.8%) and early sexual debut 34 (30.0%). (Table 2)

The most commonly mentioned symptoms of cervical cancer were foul-smelling vaginal discharge 60 (52.2%), post-coital bleeding 49 (42.6%), lower abdominal pain 47(41.0%) and inter - menstrual bleeding 30 (26.1%). Only 75 (65.2%) out of the 115 that were aware of cervical cancer knew that the disease is

Table 1. Socio-demographic characteristics of respondents

Variables	Frequency (n=260)	Percent
Age (years)		
<20	28	10.8
20-30	162	62.3
31-40	45	17.3
41-50	21	8.1
51-60	4	1.5
Religion		
Christianity	209	80.4
Islam	47	18.1
Traditional	4	1.5
Ethnicity		
Yoruba	120	46.2
Igbo	99	38.0
Hausa	12	4.6
Other groups	29	11.2
Marital status		
Single	161	61.9
Married	82	31.5
Separated/ divorced/widowed	17	6.6
Level of education		
None	4	1.5
Primary	15	5.8
Secondary	69	26.5
Tertiary	172	66.2
Occupation		
Professionals	20	7.7
Intermediate	28	10.8
Skilled	74	28.5
Unskilled	138	53.0

preventable. The most commonly mentioned method of prevention were avoiding multiple sexual partners 42 (56.0%), avoiding early sexual debut 31(41.3%), abstinence 28 (37.3%), and HPV vaccination 27 (36.0%). One hundred and twelve (97.4%) knew that help should be sought from doctors, 100 (87.0%) knew it can be detected through screening, 96 (83.4%) knew that screening enhances early detection and control; 88 (76.5%) knew that faith will not extinguish faith in God and 78 (67.8%) (Table 3) Overall, 213 (81.9%) respondents had poor knowledge while 47 (18.1%) had good knowledge of cervical cancer.

Majority 92 (80.0%) of those aware of cervical cancer agreed that screening is not against their religious beliefs; 88 (76.5%) agreed that periodic screening is important to health; 73 (63.5%) agreed that early detection by screening decreases complication and 53 (46.1%) agreed that every woman is at risk of developing cervical cancer. Majority 80 (69.5%) also disagreed that screening is merely looking for trouble; 85 (73.9%) disagreed that results of screening can be used to retrench workers, and screening shows one is promiscuous 65 (56.5%) (Table 4) Overall, 78 (67.8%) respondents had a positive attitude while 37 (32.2%) had a negative attitude to cervical cancer screening.

Table 2. Respondents' knowledge about risk factors of cervical cancer

Risk factors	Frequency (n=115)*	Percent
Human papilloma virus (HPV)	56	49.0
Multiple sexual partners	55	47.8
Early sexual debut	34	30.0
Long term use of contraceptive	24	21.0
Smoking	21	18.3

*Number of respondents aware of cervical cancer

Table 3: Respondents knowledge of cervical cancer screening

Knowledge Statements*	Correct Responses n (%)	Incorrect Responses n (%)
For cervical cancer help should be sought from doctors	112 (97.4)	3 (1.6)
It can be detected through screening	100 (87.0)	15 (13.0)
Screening enhances early detection and control of cervical cancer	96 (83.5)	19 (16.5)
Cervical cancer screening will not extinguish faith in God	88 (76.5)	27 (23.5)
Cervical cancer is curable if detected early	78 (67.8)	37 (32.2)

*(n = 115)

Table 4: Respondents attitude towards cervical cancer screening

Attitudinal Statements	Agree n (%)	Unsure n (%)	Disagree n (%)
Cervical cancer screening is not against my religious belief	92 (80.0)	14 (12.0)	9 (7.8)
Periodic screening is important to health	88 (76.5)	20 (17.4)	7 (6.0)
Early detection by screening decreases complication	73 (63.5)	12 (10.4)	30 (26.1)
Every woman is at risk of developing cervical cancer	53 (46.1)	20 (17.4)	42 (36.5)
Screening is merely looking for trouble	13 (11.3)	22 (19.1)	80 (69.5)
Results of screening can be used to retrench workers	11 (9.5)	19 (16.5)	85 (73.9)
Screening for cervical cancer shows one is promiscuous	15 (13.1)	35 (36.5)	65 (56.5)`
Screening is unnecessary if one eats a healthy diet	20 (17.4)	47 (40.7)	48 (41.7)
Screening is not likely to change the outcome	12 (10.4)	25 (21.7)	78 (67.8)
Traditional methods of treatment are effective	22 (19.1)	48 (41.7)	45 (39.0)

*(n=115)

DISCUSSION

The study assessed the knowledge of cervical cancer and knowledge and attitude to cervical cancer screening among women in Somolu LGA, Lagos. Less than half of the respondents were aware of cervical cancer. Previous studies done in Nigeria gave differing reports. In Osogbo, South-western Nigeria, [23] similar level of awareness was recorded among female secondary school teachers found attending an antenatal clinic while in Lagos[12] and Ife [20] the awareness was even lower than that found in this study. However, higher levels of awareness ranging from 52.8% to 88.2% have been reported in other studies conducted in different parts of Southern Nigeria,[21, 24, 29, 30] Qatar,[27] Saudi Arabia[31] and Uganda.[32]

The low level of awareness recorded in this study though worrisome may be accounted for by the comparatively lower levels of both awareness campaigns about the disease and availability of screening opportunities in developing countries, as opposed to the developed ones.[8, 11] Given the rising incidence of morbidity and mortality from cancers, women of all ages should be enlightened about this deadly disease in order to know what to do to protect themselves. The major source of information in this study was the electronic media- the internet, radio and TV. While some studies reported the radio/TV as the most important source of information, [21, 32-33] some others reported health personnel as the most important source of information.[22, 31, 34] The electronic media plays a major role in reaching the public with vital information. These media should be employed to disseminate information about cervical cancer to the women.

In this study less than half of respondents associated cervical cancer with HPV infection. This is higher than what was reported in studies conducted in Ogun, [35] Abuja[36] and Saudi Arabia[37] in which only 2.3%, 14% and 14.4% of the respondents, respectively knew HPV as a risk factor for cervical cancer. It is however lower than that reported Southwest Nigeria, [38] Abakaliki[29] and Uganda[32] where 67.1% and 79.4% of the respondents, respectively knew HPV infection as a risk factor for the disease. HPV infection, especially of the strains 16, 18, 31, 33 and 35 is known to

cause cervical cancer which is a cause of high morbidity and mortality among women in Nigeria. The infection can however be prevented by HPV vaccination and use of condom. Poor association of the disease with the infection implies that the women would continue to practice unsafe sex and also fail to avail themselves or their children of the availability of HPV vaccine. This might continue to worsen the burden of the disease among the women. Also, less than half of respondents linked cervical cancer with multiple sexual partners and less than a third linked cervical cancer with early age of sexual intercourse. Studies conducted in Bhutan and Uganda reported higher proportions of respondents linking cervical cancer with having multiple sexual partners and early sexual debut.[32, 39] Yet other studies conducted in Qatar and Hong Kong reported lower figures than those in this study.[27, 40] Inability of the majority of the respondents to link cervical cancer with unsafe .sexual practices and early sexual debut as noted in this study implies continuation of these behaviours which can further worsen the burden of the disease.

Less than half of the respondents in this study knew the symptoms of cervical cancer. This is very similar to the result in studies conducted in Lagos[24] and Zaria [41] where, a similar proportion of women had the knowledge of the risk factors and symptoms of cervical cancer. Poor knowledge about symptoms implies inability to seek medical help until the disease becomes advanced, which can further worsen the burden and outcome of the disease. Less than three-quarters of those aware of the disease knew that cervical cancer is preventable. The most commonly mentioned method of prevention were avoiding early sexual debut, avoiding multiple sexual partners and HPV vaccination. Similar findings were reported in the Ugandan[32] and Bhutan[39] studies.

A high proportion of those who were aware of cervical cancer knew it can be detected through screening; screening enhances early detection and control of the disease and the disease is even curable if detected early. Reports of studies conducted in Lagos Nigeria[33] and Qatar[27] reported that lesser proportion of respondents understood that Pap smear could be used to detect precancerous state of cervical cancer and improve the treatment outcome. Overall, less than a fifth of the respondents had a good knowledge of cervical cancer. This underscores the need for more aggressive educational and public enlightenment programmes about the disease, using all avenues where women can be reached: the internet, electronic media and public enlightenment in churches, mosques and hospital settings. Health workers who can give detailed and accurate information about the disease should be employed under these situations. This would go a long way to empower the people with adequate knowledge to take action against the disease.

Overall, about two-thirds of the respondents who were aware of cervical cancer had a positive attitude to its screening. Majority of the respondents felt that screening was not against their religious beliefs; periodic screening is important to health and can decrease complications and every woman is at risk of developing the disease. This is corroborated by results of studies conducted in Zaria and Ibadan where there was generally a positive attitude to cervical cancer screening.[41, 42] In contrast to these, some studies conducted in Uganda and Qatar reported negative attitudes towards cervical cancer screening.[25, 27] Attitude is closely related to behavior; those respondents with positive attitudes to cervical cancer screening are more likely to practice it. The government and health workers can leverage on this by

encouraging such women to actually go for screening.

Study Limitation

The study did not collect information about cervical screening utilization and factors affecting it among the women. This can be a topic for future research.

Conclusion

Majority of the women in Somolu LGA were not aware of cervical cancer. Among those that were aware, majority knew through the electronic media. Most of the women had a poor overall knowledge of cervical cancer but among those who were aware of the disease, the attitude to its screening was largely positive. The government and related non-governmental organizations should regularly sponsor detailed and accurate health educational programmes about cervical cancer on the electronic media. Special days like 'International Women's Day' and World Cancer Awareness Day' especially provide additional opportunities for such programmes to be done. Health care workers should also use all available opportunities to educate women about cervical cancer whenever they visit health facilities to access care.

Acknowledgement: The authors will like to acknowledge the women who were interviewed and those involved in collecting the data.

Conflict of interest: There is no conflict of interest that exist for individual contributors to this manuscript. The manuscript was self-sponsored.

Authors' Contributions: This work was carried out in collaboration between all authors. Foluke Olatona designed the study and also critically reviewed the writings. Eyitope Amu performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript; Stanley Ndugba managed the literature searches, data collection and analyses of the study. All authors read and approved the final manuscript.

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