Journal of Integrative Oncology
ISSN: 2329-6771

Research Article Open Access

Assessment of Knowledge, Attitudes and Practice of Cervical Cancer Screening Among Female Health Workers in a Tertiary Health Facility in South-East Nigeria

Babafemi Charles Daniyan*, Kenneth Chinedu Ekwedigwe, Emmanuel Yakubu, SU Mbamara, IC Amamilo and Ileogben Sunday-Adeoye

Department of Gynaecology and Obstetrics, National Obstetric Fistula Centre, Abakaliki, Nigeria

Abstract

Background: Cervical cancer is the commonest gynecologic cancer in the developing world. Screening remains the cornerstone of prevention. The study sought to assess the knowledge, attitudes, and practice of cervical cancer screening among female health workers in a tertiary health facility.

Methods: It was a cross-sectional study carried out among forty female health workers at the National Obstetric Fistula Centre, Abakaliki. Data was collected from the subjects using self-administered questionnaires. The frequencies and proportions of the responses were calculated and entered on a Likert Scale of 1 to 5. The range, median and mean of the variables were also determined. Values ranging from 1-2 points were considered low, 3 was considered average while those from 4-5 points were considered high.

Results: A total of 40 respondents completed the questionnaire. The mean age of the respondents was 35.5 years. The mean of the knowledge of the respondents about cervical cancer screening was between 4.55 and 4.68 on a Likert Scale of 1-5. The mean of the attitudes of the respondents about cervical cancer screening was between 4.39 and 4.81 on a Likert Scale of 1-5. The practice of cervical cancer screening was found to be 2.89 on a Likert Scale of 1-5.

Conclusion: While the knowledge and attitudes of the female health workers about cervical cancer screening were good, the practice was found to be poor in this study.

Keywords: Knowledge; Attitudes; Practice; Cervical cancer; Screening; Health workers

Introduction

Cervical cancer is the commonest gynecologic cancer in the developing world [1]. While it has become almost non-existent in the developed world due to organized and effective screening programmes, it is a serious problem in developing countries with poor health infrastructures, poor funding, and a dearth of healthcare personnel and lack of widespread screening facilities [2]. Population-based surveys showed that the coverage of cervical cancer screening in developing countries is on average 19%, as against 63% in developed countries with women who are at the highest risk of developing the disease least likely to be screened [3]. The prevalence, as well as mortality from cervical cancer in the developing world, continues to be frightening [4,5].

Cervical cancer is preventable and screening remains the cornerstone of reduction in the prevalence [6]. This is feasible because the cervix is anatomically accessible in sexually active women thereby allowing visual examination without difficulty. Also, the continuous exfoliation of the cervical epithelial cells makes the cervix an easy target for the various techniques of preventive cytology. Moreover, abnormal cervical epithelium transits through a spectrum of treatable pre-invasive phases before the onset of frankly invasive disease and this change occurs over a period of years or decades allowing ample time for effective treatment of the pre-cancers [7].

Cervical cancer is now known to be almost entirely (in over 99% of cases) due to persistent infection with the high-risk subtypes of the Human Papilloma Virus (HPV) [8]. HPV is one of the commonest sexually transmitted diseases. Contemporary evidence suggests that HPV testing is more effective than cervical cytology for screening [2]. However, these highly sensitive tests developed for primary screening are not widely available in the developing world. Cervical smear, also known as the Pap smear, was pioneered by the scientist George Nicholas Papanicolaou. He was recognized for being able to discern the differences between the appearances of normal and malignant cells taken from the cervical swab and viewed under the microscope. Pap smear has remained the commonest method of cervical cancer screening. It is widely available and less expensive than HPV testing. It entails scrapping of exfoliated cells on the cervix and subjecting them to cytological examination.

Awareness and uptake of cervical cancer screening have been a subject of interest in our environment given the high prevalence and mortality from an otherwise preventable disease. The knowledge, attitudes, and practice of the different modalities of screening vary according to age, location, education, and development. In our environment, although knowledge of cervical screening is high, various reasons such as wrong perceptions [9], lack of awareness [10], lack of physicians' referrals [11], among others have been cited as reasons for low utilization.

This study was carried out to assess the knowledge of cervical screening among health workers at the National Obstetric Fistula Centre,

***Corresponding author:** Babafemi Charles Daniyan, Department of Gynaecology and Obstetrics, National Obstetric Fistula Centre, Abakaliki, Nigeria, Tel: +2348033803982; E-mail: abcdaniyan@gmail.com; babafemidaniyan@yahoo.com

Received January 16, 2019; **Accepted** March 22, 2019; **Published** March 29, 2019

Citation: Daniyan BC, Ekwedigwe KC, Yakubu E, Mbamara SU, Amamilo IC, et al. (2019) Assessment of Knowledge, Attitudes and Practice of Cervical Cancer Screening Among Female Health Workers in a Tertiary Health Facility in South-East Nigeria. J Integr Oncol 8: 228.

Abakaliki. It will also determine their attitudes towards screening as well as the practice of cervical cancer screening. This is because health workers remain important sources of enlightenment and information regarding cervical cancer screening [12,13]. Findings from the study will help determine if there is a need to educate health workers on the importance of cervical cancer screening as well as various screening methods available in our environment. They will also determine if there is a need for attitudinal change towards cervical cancer prevention. This will impact significantly on the general population as this category of people will be better empowered to carry out public enlightenment and behavioral change communication needed to curtail the increasing cases of cervical cancer in our environment. It will also enable them to educate the general public on available methods of screening and how to access available screening programmes.

Methodology

This was a cross-sectional study carried out at the National Obstetric Fistula Centre, Abakaliki. The Centre has an Oncology Unit dedicated to screening for cancers of the cervix, breast, and prostate. The study population comprised of female health workers. Participation was voluntary and informed consent was obtained before enrollment for the study. The information obtained was treated with confidentiality. Using convenience sampling, forty consenting female health workers at the National Obstetric Fistula Centre, Abakaliki were recruited for the study. Data was collected from the subjects using self-administered questionnaires which assessed the level of knowledge of cervical cancer screening, the attitude of respondents to screening and uptake of cervical cancer screening by respondents. Data was extracted manually. The frequencies and proportions of the responses scale were determined and entered on a Likert Scale of 1 to 5. The range, median and mean of the variables were also determined. The range was determined by observing the lowest number chosen from the response scale to the highest number. The mean was calculated as the numbers chosen from the response scale and divide by the total number of responses. The median was determined by arranging the values chosen from the response scale in ascending order. Values ranging from 1-2 points were considered low, 3 was considered average while those from 4-5 points were considered high. The findings were interpreted based on the Likert Scale and deductions made accordingly.

Results

A total of 40 respondents completed the questionnaire. The mean age of the respondents was 35.5 years. Over 40% of the respondents were between 31 and 40 years. (Table 1) Thirty (75%) respondents were married while 10 (25%) were single (Table 2).

The knowledge of the respondents about cervical cancer screening was assessed on a Likert Scale of 1-5 (Table 3). The majority (27 out of 40) of the respondents strongly agreed that cervical cancer was a problem among women in Nigeria. The median score was 5 while the mean score was 4.58. 22 respondents strongly agreed that cervical cancer was preventable with a median score of 5 and a mean score of 4.53. Twenty-four respondents strongly agreed that cervical cancer could be prevented by regular screening with a median score of 5 and a mean score of 4.55. Twenty-seven respondents strongly agreed that every sexually active woman should be screened for cervical cancer with a median score of 5 and a mean score of 4.68. This shows that the knowledge of the respondents about cervical cancer screening was good enough and may not require any intervention.

The attitude of the respondents about cervical screening was also assessed on a Likert Scale of 1-5 (Table 4). Thirty-two out of 37 respondents thought cervical cancer screening was very important, a median score of 5 and a mean score of 4.81. Also, 32 out of 37 respondents felt that subjecting women to cervical cancer screening was very necessary, a median score of 5 and a mean score of 4.65. 20 out of 36 respondents thought to refuse cervical cancer screening as it was very risky, a median score of 5 and a mean score of 4.39. This shows that the attitude of the respondents towards cervical cancer screening was good enough and may not require any intervention.

The practice of cervical screening among the respondents was also assessed. Twenty out of 37 (54.1%) respondents had undergone cervical cancer screening while 17 (45.9%) had not (Table 5).

On a Likert scale of 1-5, 11 out of 36 respondents (30.1%) felt very uncomfortable when offered cervical cancer screening. The median score was 3 while the mean score was 2.89 (Table 6).

This was poor. It, therefore, warrants interventions geared towards making women feel comfortable with cervical cancer screening so as to improve the uptake of the screening.

Age group (years)	Frequency (%)
<20	3 (7.5)
21-30	9 (22.5)
31-40	17 (42.5)
41-50	7 (17.5)
>50	4 (10.0)
Total	**40 (100)**

Table 1: Age distribution of respondents.

Marital status	Frequency (%)
Single	10 (25)
Married	30 (75)
Total	**40 (100)**

Table 2: Marital status of respondents.

Question	1	2	3	4	5	Total	Range	Median	Mean
4	1	0	1	11	27	40	1-5	5	4.58
5	0	0	1	17	22	40	1-5	5	4.53
6	0	0	2	14	24	40	1-5	5	4.55
7	0	0	0	13	27	40	1-5	5	4.68

Table 3: Knowledge of the respondents about cervical cancer screening.

Question	1	2	3	4	5	Total	Range	Median	Mean
8	0	1	0	4	32	37	2-5	5	4.81
9	0	4	1	1	32	37	2-5	5	4.65
10	1	1	1	13	20	36	1-5	5	4.39

Table 4: Attitude of the respondents about cervical screening.

Practice	Frequency (%)
Yes	20 (54.1)
No	17 (45.9)
Total	**37 (100)**

Table 5: Practice of cervical cancer screening.

Question	1	2	3	4	5	Total	Range	Median	Mean
12	11	4	9	2	10	36	1-5	3	2.89

Table 6: Practice of cervical cancer screening on a Likert Scale.

Discussion

Majority of the respondents were in the 31-40 years age group with a mean of 35.5 years. It was not unexpected that young women were the majority of the respondents as this age group constitute the main population of women seeking cervical cancer screening because the treatable pre-malignant forms of the disease are more prevalent in them long before the onset of invasive cervical cancer. Also, the study was carried out among female health workers who are essentially in the working class. This was comparable to a recent cross-sectional study [9] carried in Eastern Uganda to assess women's knowledge and attitude towards cervical cancer prevention that reported the mean age of the respondents to be 32.9 years. This is actually the ideal target age group for studies on cervical cancer screening.

The knowledge of the respondents about cervical cancer screening was assessed to be good. This is not surprising as the respondents were health workers who have been exposed to extensive sensitization on the danger of cervical cancer and the need for regular screening. It also shows that the massive campaigns and public enlightenment on the subject have translated considerably into knowledge among the target audience. Being health workers theoretically gives this category of women access to useful information on contemporary health issues in our environment. Other studies have shown similar findings of good knowledge of cervical cancer screening among health workers. Adefuye [11] demonstrated good knowledge of Pap smear among female health workers in Remo, Ogun State. Ayinde, et al. [14] showed that knowledge about the etiology and prevention of cervical cancer was high among doctors but surprisingly low among nurses. Another study in Maiduguri [13] showed a high awareness of Pap smear among health workers.

The attitude of the respondents about cervical cancer screening was also assessed to be good. This is expected among health workers given their professional backgrounds and experiences. A positive attitude towards cervical cancer screening is also required to educate and convince other women to accept and utilize screening services. A study by Dike et al. [15] however revealed that female health workers had a poor attitude towards cervical cancer screening. Mutyaba [16] in a descriptive cross-sectional study, interviewed 310 medical workers including nurses, doctors and final year medical students using a self-administered questionnaire, also showed that despite knowledge of the danger of cervical cancer and prevention by screening using a Pap smear, attitudes and practices towards screening were negative.

The practice and utilization of cervical cancer screening by female health workers was found to be poor in this study. Only about half of the respondents had undertaken screening. Besides, about a third of the respondents said they felt very comfortable taking the screening tests. This was inconsistent with the high level of knowledge about cervical cancer screening in this category of women. This implies that the knowledge seen in these women did not translate into practice as expected as far as cervical cancer screening was a concern and it calls for serious concern. Even more worrisome was the fact that the study was carried out in a center with facilities and personnel dedicated to educating and conducting cervical cancer screening for a large population of women.

Similar findings have been reported by other authors. In the study by Adefuye [11], despite the good knowledge found among the female health workers, only 16 out of 187 respondents (8.7%) had done Pap smear showing poor utilization of cervical cancer screening services. The author advocated continuous education of female health workers to improve knowledge and increase service utilization. In the study by Ayinde et al. [14] in Ibadan, 93.2% of respondents never had Pap smears performed. They, therefore, emphasized the need to intensify campaign towards the prevention of cervical cancer among health workers. In another study in Ibadan to assess the perception and utilization of cervical screening services, Arulogun et al. [17] revealed that both knowledge and utilization were low.

Poor utilization of Pap smear among health workers was also reported in Maiduguri despite a high level of awareness and availability of screening services [13]. The reasons for the low utilization among health care workers, who are the custodians of health care need to be investigated to improve their utilization of Pap smear. In another study in Southern Ethiopian [18], although healthcare workers were found to have good knowledge of cervical cancer screening, the utilization of screening services was poor among them. The authors also recommended investigating the reasons for the poor uptake of screening. Also, Awodele et al. [12] similarly observed that although nurses have good knowledge of cervical cancer, they have a poor disposition towards undergoing cervical cancer screening. This paradox requires a paradigm shift because the health workers appear to be at risk of the same condition they educate their clients about.

Conclusion

Although the knowledge and attitude of the female health workers about cervical cancer screening were good, the practice was poor. We recommend regular sensitization of female health workers about the need to utilize available services. Also, health institutions should adopt pre-employment as well as regular screening for eligible female health personnel. Further studies are needed to determine why female health workers are not comfortable taking tests for cervical cancer screening.

References

1. Globacan (2012) Estimated cancer incidence, mortality and prevalence worldwide in 2012. Fact sheet by cancer.
2. Catarino R, Petignat P, Dongui G, Vassilakos P (2015) Cervical cancer screening in developing countries at a crossroad: Emerging technologies and policy choices. World J Clin Oncol 6: 281-290.
3. Gakidou E, Nordhagen S, Obermeyer Z (2008) Coverage of cervical cancer screening in 57 countries: Low average levels and large inequalities. PLoS Med 5: e132.
4. Joseph A, Olisaemeka EP, Chukwudi OR, Igwe NM, Agwu MR, et al. (2015) Pattern and frequency of gynecological malignancy at Federal Teaching Hospital, Abakaliki, Nigeria. Journal of Basic and Clinical Reproductive Sciences 4: 54-57.
5. Yakasai IA, Ugwa EA, Otubu J (2013) Gynecological malignancies in Aminu Kano Teaching Hospital Kano: A 3 year review. Niger J Clin Pract 16: 63-66.
6. Denny L (2008) Prevention of cervical cancer. Reprod Health Matters 16: 18-31.
7. Safaeian M, Solomon D, Castle PE (2007) Cervical cancer prevention-cervical screening: Science in evolution. Obstet Gynecol Clin North Am 34: 739-760.
8. Burd EM (2003) Human papilloma virus and cervical cancer. Clin Microbiol Rev 16: 1-17.
9. Mukama T, Ndejjo R, Musabyimana, Halage AA, Musoke D (2017) Women's knowledge and attitudes towards cervical cancer prevention: A cross-sectional study in Eastern Uganda. BMC Womens Health 17: 9.
10. Ezem BU (2007) Awareness and uptake of cervical cancer screening in Owerri, South-East Nigeria. Ann Afr Med 6: 94-98.
11. Adefuye PO (2006) Knowledge and practice of cervical cancer screening among female professional health workers in a sub-urban district of Nigeria. Niger Medical Practitioner 50: 19-22.

12. Awodele O, Adeyomoye AAA, Awodele DF, Kwashi V, Awodele IO, et al. (2011) A study on cervical cancer screening amongst nurses in Lagos University Teaching Hospital, Lagos, Nigeria. J Cancer Educ 26: 497-504.

13. Bakari M, Takai IU, Bukar M (2015) Awareness and utilization of Papanicoloau smear among health care workers in Maiduguri, Nigeria. NJBCS 12: 34-38.

14. Ayinde OA, Omigbodun AO (2003) Knowledge, attitude and practices related to prevention of cancer of the cervix among female health workers in Ibadan. J Obstet Gynaecol 23: 59-62.

15. Dike FM, Ehiemere IO (2017) Factors influencing uptake of cervical cancer screening among female health workers in University of Port Harcourt Teaching Hospital, Rivers State. J Health Sci Res 2: 1-9.

16. Mutyaba T, Mmiro FA, Weiderpass E (2006) Knowledge, attitudes and practices on cervical cancer screening among the medical workers of Mulago Hospital, Uganda. BMC Med Educ 6: 13.

17. Arulogun OS, Maxwell OO (2012) Perception and utilization of cervical cancer screening services among female nurses in University College Hospital, Ibadan, Nigeria. Pan Afr Med J 11: 69.

18. Dulla D, Daka D, Wakgari N (2017) Knowledge about cervical cancer screening and its practice among female health care workers in southern Ethiopia: A cross-sectional study. Int J Womens Health 9: 365-372.