# Qualitative Assessment of Cervical Cancer Awareness among Primary Health-Care Providers in Zaria, Nigeria

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### **Abstract**

Background: Cervical cancer is a major cause of cancer morbidity and mortality, especially in the developing countries. Preventive measures have helped in curbing the morbidity and mortality associated with the disease in the developed countries. Primary health-care centers provide opportunity for the primary prevention of cervical cancer, especially in environments where there are no standard protocols/programs for cervical cancer prevention. Objective: This study sought to assess the awareness of cervical cancer among primary health-care providers in Zaria. Methodology: The study was qualitative. Five primary health-care centers in Zaria local government were purposively selected for the study. Focus group discussions were conducted with the health-care providers in the selected facilities. The discussions were recorded on tape recorders and were transcribed verbatim. The transcripts were then analyzed into themes. Results: All participants were aware of cervical cancer. However, only few of the participants were aware of the cause of cervical cancer and the risk factors associated with the disease. None of the participants has had any training on the prevention of cervical cancer. Conclusion: Primary health-care providers can play a critical role in the prevention of cervical cancer in our environment. However, there is a need to train them on cervical cancer prevention for effective control of the disease.

**Keywords:** Cervical cancer awareness, developing country, primary health-care providers

### INTRODUCTION

Cancer of the cervix is the fourth most frequently diagnosed cancer in women worldwide and also the fourth leading cause of cancer death in women worldwide. The International Agency for Research on Cancer reported 570,000 new cases and 311,000 deaths in 2018. In low human development index settings, including Nigeria, cervical cancer ranks second in incidence and mortality behind breast cancer.

Cervical cancer is a preventable disease. The incidence and mortality of cervical cancer have decreased significantly in countries that have adopted population-based screening and early treatment of precancerous lesions of the cervix.<sup>2</sup> However, it has remained a major cause of cancer morbidity and mortality among women in developing countries.<sup>3</sup> The high burden of cervical cancer in the developing world has been attributed to many factors. Lack of awareness and knowledge of cervical cancer has been a major challenge in the prevention of cervical cancer.<sup>4</sup> Low awareness of women about the cancer of the cervix has been reported as a barrier to access to cervical cancer screening services.<sup>5</sup>



Primary health-care centers provide opportunity for primary prevention of cervical cancer, especially in environments where there are no standard protocols/programs for cervical cancer prevention. Primary health centers provide easy access to health care in most communities in Nigeria. They have a high patient load and are in direct contact with grassroots of the society. Thus, primary health-care providers can play a vital role in the prevention of cervical cancer by educating the general public about cervical cancer and cervical cancer prevention services. However, the role of primary health care in the prevention, early detection, and control of cancer has not been emphasized in many developing countries.<sup>6</sup>

This study sought to assess the awareness of cervical cancer among health-care personnel that provide health-care services at primary health-care level in Zaria.

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**How to cite this article:** Yahya A, Mande AT. Qualitative assessment of cervical cancer awareness among primary health-care providers in Zaria, Nigeria. Niger Med J 2018;59:50-4.

### **M**ETHODOLOGY

The study was a qualitative study. It was conducted in Zaria local government area of Kaduna state, Nigeria. Five primary health-care centers were chosen based on staff numbers. Centers with at least twenty members of staff were chosen. The centers covered rural, urban, and semi-urban settlements. A total of 27 participants that included all cadres of health personnel in these centers were recruited for the study. Written approval to conduct the study was obtained from the Primary Health Care department of Zaria local government, Kaduna state.

Focus group discussions were conducted to obtain data. Discussions were conducted within the chosen centers. All discussions were conducted between April 12, 2018, and April 19, 2018. Three groups had five participants each, while two groups had six participants each. The discussions were conducted within 2 weeks. Each session of the discussion lasted between 60 and 75 min. The groups comprised the participants, the researcher, a lead moderator, and a notetaker. The discussions were tape recorded.

The research group was introduced to the participants, and verbal consent was obtained from all participants. The sociodemographic characteristics of the participants including name, age, sex, marital status, qualification, and years of service were obtained by the notetaker. A structured focus group discussion guide was used for the discussions. The discussions were tape recorded and transcribed verbatim. Thematic analysis was done for the transcribed data. The thematic analysis was organized into the following seven themes.

- Common presenting complaints by women attending their clinics
- 2. Awareness about cervical cancer as a disease
- 3. Awareness about clinical presentation of cervical cancer
- 4. Awareness about the cause of cervical cancer
- 5. Awareness about the risk factors for cervical cancer
- 6. Awareness about treatment for cervical cancer
- 7. Participation in workshops for the prevention of cervical cancer.

The participants were encouraged to express themselves freely by creating good rapport before the discussions were commenced. Every participant was given the opportunity to respond to all the questions that were asked without interruptions. A brief overview of cervical cancer was given by the researcher at the end of each discussion, and all wrong notions and misconceptions expressed by the participants about cervical cancer during the discussions were also corrected.

#### RESULTS

# Common presenting complaints by women attending their clinics

The common complaints by women attending the primary health-care centers in Zaria included prolonged labor, abnormal vaginal bleeding, abnormal vaginal discharge, malaria, and hypertension. Some women present for family planning services.

"The common complaints by women attending our clinic include fever, abdominal pain, bleeding and vaginal discharge."

## Participants' awareness about cervical cancer as a disease

All participants were aware of cervical cancer.

"It is an abnormal growth on the cervix which can spread to other organs of the body."

# Participants' awareness on clinical presentation of cervical cancer

Most of the participants mentioned vaginal discharge, bleeding, and abdominal pain as the clinical presentation of cervical cancer. Some mentioned swelling of the private part, dyspareunia, recurrent miscarriage, dysmenorrhea, irregular menses, fever, weight loss, nausea, and vaginal itching as clinical presentation of cervical cancer.

"The signs and symptoms of cervical cancer include abnormal bleeding, vaginal discharge and painful intercourse."

"Patients with cervical cancer present with fever, nausea, weight loss and sometimes there is vaginal itching, discharge and bleeding."

## Participants' awareness about the cause of cervical cancer

Only few participants were aware of human papillomavirus (HPV) as a causative agent of cervical cancer. Some participants mentioned sexual promiscuity as a cause of cervical cancer. Majority of the respondents mentioned use of herbal concoctions, poor hygiene, use of chemicals, and old age as causes of cervical cancer. Some said that cervical cancer is a hereditary disease, while others said that the cause is unknown.

"It is caused by inserting traditional herbal medicines for enjoyment during sexual intercourse, infections and inheritance from parents."

"It is caused by having multiple sexual partners, by sharing underwear and lack of personal and environmental hygiene."

"It is caused by a virus called human papilloma virus."

## Participants' awareness about the risk factors for cervical cancer

Use of herbal concoctions and lack of personal hygiene were mainly mentioned as risk factors for cervical cancer. Some of the participants mentioned multiple marriages as a risk factor for developing cervical cancer.

"Risk factor for cervical cancer include when a woman marries more than once."

# Participants' awareness about treatment for cervical cancer

Most of the participants knew that cancer of the cervix can be treated.

"Cervical cancer can be treated but only in teaching Hospital."

# Participation in workshops for the prevention of cervical cancer

The participants have attended many workshops, but none of these workshops were on cervical cancer. Some have had about cervical cancer in other workshops.

"I have not attended any workshop on cervical cancer and its prevention."

"They talked about cervical cancer during a workshop on reproductive health I attended but I have not attended any workshop on cervical cancer and its prevention during my training and practice."

### DISCUSSION

The mean age of the participants was 38 years, and majority of the participants were female [Table 1]. The fact that women constitute the majority of health providers in the primary

Table 1: Sociodemographic characteristics of the participants

Characteristics	Frequency (%)
Age (years)	
<30	3 (11.1)
30-39	13 (48.1)
40-49	9 (33.3)
≥50	2 (7.4)
Sex	
Female	20 (74)
Male	7 (26)
Qualification	
CHEW	20 (74.1)
СНО	2 (7.4)
Nurse	1 (3.7)
BSc Microbiology	1 (3.7)
Laboratory technicians	3 (11.1)
Years in service	
<10	15 (55.6)
10-20	11 (40.7)
>20	1 (3.7)
Workshops attended	
Family planning	18 (67)
Polio	19 (70)
Reproductive health	1 (3.7)
IMCI	2 (7.4)
Tuberculosis	3 (11.1)
Nutrition	1 (3.7)
None	1 (3.7)

IMCI- Integrated management of childhood illnesses, CHEW-Community health extension worker, CHO-Community health officer

health-care centers that participated in this study may have a positive effect on the use of primary health-care facility by women in Zaria. This is because preference for female health providers has been reported among women attending obstetric and gynecologic clinics in Zaria. Furthermore, the mean age of the participants is within the reproductive age group of women. Thus, women with reproductive health issues can express their concern more openly because they are likely to meet health-care providers within their age range. The distribution of health workers in the facilities that participated in this study is clearly skewed. The official structure of the primary health-care system has five levels<sup>8</sup> and covers all cadres of health personnel ranging from medical doctors at Level 5 to informally ad hoc staff that help in case finding and community engagement at Level 1. The community health extension workers who occupy Level 2 of the primary health-care system structure formed the majority of the workforce in this study. Only 7.4% and 3.7% of the workforce were at Levels 3 and 4 of the primary health-care system structure, respectively. There was no doctor in any of the facilities that participated in the study. Maldistribution of health-care workers in the primary health-care centers in Nigeria has been identified as a barrier to effective health-care delivery. 8 The mean duration of service was 9.8 years. Thus, majority of them have worked for fairly long duration.

The presenting complaints of some women that sought for care at the primary health-care centers where this study was conducted included lower abdominal pain, abnormal vaginal bleeding, and abnormal vaginal discharge among others. These symptoms are also seen in women with cervical cancer. Women that have no complaints also present to these centers for contraceptive services. The fact that women present to the primary health-care centers for various health needs including contraceptive services makes primary health-care centers a potential site for implementing cervical cancer prevention services.

All participants were aware of cervical cancer as a disease entity. This is not surprising because they are all trained health personnel. The participants mentioned media, workshops, and the various health institutions they attended as the sources of information on cervical cancer.

However, awareness on etiology and risk factors for cervical cancer was quite low among the participants. This is quite surprising and worrisome because health-care providers are expected to educate the general population about diseases, especially in the context of prevention. Some participants mentioned health institutions and workshops as the source of information on cervical cancer, yet their knowledge about etiology and risk factors of cervical cancer was quite poor. Only few of the participants mentioned HPV as an etiological factor for cervical cancer. Most of the participants mentioned use of traditional herbal concoctions and lack of personal and environmental hygiene as the etiological factors for developing cervical cancer. Other authors<sup>9-11</sup> reported similar findings. The fact that many participants were not aware of the etiology of cervical cancer explains why they were not aware of the risk

factors for the disease. Lack of awareness also prevents women from seeking for preventive methods. Individuals are likely to take actions when they know that the action is necessary to meet their needs as explained by Rosenstock's Health Belief Model<sup>12</sup> for studying and promoting the uptake of preventive health services. Thus, wrong perception about etiology and risk factors can prevent the uptake of preventive measures.

Even though most of the participants mentioned vaginal bleeding and discharge as symptoms of cervical cancer, some mentioned swelling of the private part, dyspareunia, recurrent miscarriage, dysmenorrhea, irregular menses, fever, weight loss, nausea, and vaginal itching as clinical presentation of cervical cancer. Some also believed that vaginal bleeding and discharge may not always be present in patients with cervical cancer. Primary health-care centers offer treatment to patients and refer cases that are beyond their scope of management to secondary or tertiary health facilities for appropriate care. However, inability of health-care providers to identify symptoms of diseases that need management at higher health-care centers can lead to unnecessary delay in accessing adequate management. This can cause delay in diagnosis and treatment, and an early disease may become advance before the patients finally access appropriate treatment. In our settings, most patients present with advance disease and in most cases, they have had several visits to different health-care centers, both public and private, before a diagnosis is finally made. This may explain why cervical cancer has the highest regional mortality in Africa.

Most of the participants agreed that cervical cancer is curable with appropriate treatment modalities such as chemotherapy and surgery. However, none of the participants mentioned radiotherapy as a modality of treatment in cervical cancer.

A community-based study in North-Central Nigeria<sup>5</sup> reported high level of awareness about cervical cancer which did not translate to good knowledge about the disease. In the study, 67.0% of respondents have heard about cervical cancer, but only 8.7% demonstrated good knowledge. The poor knowledge about the disease may be due to the fact that it was a community-based study and thus involves people from all cadres of life. Media was reported as a major source of information about cancer of the cervix by some authors. This may account for the poor knowledge because unfamiliar terms may be used and participants may not have had the opportunity to ask questions. Ahmed et al.13 conducted a similar study in Zaria among market women. They reported that the respondents had fair knowledge about cervical cancer but poor knowledge on risk factors. A similar picture was reported by Ferdous et al.14 in Bangladesh which revealed that only 12% of the respondents had good knowledge of cervical cancer. Wong et al.15 also reported poor awareness and knowledge about cervical cancer among Malaysian women. The study also highlighted the fact that women that were aware of the disease were not aware of its preventive measures.

Even though health workers are required to give the general population the necessary information about health issues, several other studies<sup>16-18</sup> have reported poor knowledge with regard to cervical cancer among female health workers. The poor knowledge about cervical cancer in the general population may be a reflection of the poor knowledge among some health personnel who provide health education to the general public, especially in clinical settings. Poor knowledge about the disease can create a barrier against the use of prevention services because women with poor knowledge may assume that they are not at risk of the disease and thus they may not see the need to be screened for the disease.<sup>12</sup>

#### CONCLUSION

This study has highlighted that the high level of awareness of cervical cancer among primary health-care providers in Zaria did not reflect appropriate knowledge about the disease. Poor knowledge about the etiology and risk factors of cervical cancers among health-care providers can lead to misinformation of the general public, especially in women attending the primary health-care centers, and thus women may not feel the need to utilize preventive services.

#### **Recommendations**

There is a need to review the curriculum of health institutions that train the community health workers and community health extension workers with regard to topics related to cervical cancer and its presentation.

Cervical cancer is preventable; thus, there is a need for community-based cervical cancer prevention services in Nigeria. These services should be based in the primary health-care centers where all health personnel can be adequately trained on cervical cancer and its prevention. The Society of Gynaecology and Obstetrics of Nigeria (SOGON) has released guidelines for the prevention of cervical cancer. The SOGON can collaborate with the National Primary Health Care Development Agency (NPHCDA) to implement cervical cancer prevention services at primary health-care level similar to the ongoing Volunteer Obstetrician Scheme of SOGON and NPHCDA. The SOGON can provide expertise in terms of policymaking and training of staff, while the Nigerian government provides funding for the establishment of cervical cancer screening services at primary health-care centers with the aim of ending the menace of the disease.

#### **Acknowledgment**

The authors would like to thank Mallam Abubakar Suleiman, Ahmadu Bello University Teaching Hospital, Zaria, Nigeria.

### Financial support and sponsorship

Nil.

#### **Conflicts of interest**

There are no conflicts of interest.

### REFERENCES

- Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre LA, Jemal A, et al. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin 2018;68:394-424.
- Haesebaert J, Lutringer-Magnin D, Kalecinski J, Barone G, Jacquard AC, Régnier V, et al. French women's knowledge of and attitudes towards cervical cancer prevention and the acceptability of HPV vaccination among those with 14 – 18 year old daughters: A quantitative-qualitative study. BMC Public Health 2012;12:1034.
- Louie KS, de Sanjose S, Mayaud P. Epidemiology and prevention of human papillomavirus and cervical cancer in Sub-Saharan Africa: A comprehensive review. Trop Med Int Health 2009;14:1287-302.
- Ndikom CM, Ofi BA. Awareness, perception and factors affecting utilization of cervical cancer screening services among women in Ibadan, Nigeria: A qualitative study. Reprod Health 2012;9:11.
- Idowu A, Olowookere SA, Fagbemi AT, Ogunlaja OA. Determinants of cervical cancer screening uptake among women in Ilorin, North central Nigeria: A Community-based study. J Cancer Epidemiol 2016;2016:6469240.
- Bahkah S, Houseli M, Bawazir A, Khalifa M, Sheikh M. The role of Primary Health Care in prevention, early detection and control of cancer. In: Sheikh M, Mahamoud A, Houseli M, Bahkali S, editors. Transforming Primary Health in Developing Nations. Pennsylvania: IGI Global; 2015. p. 52-67.
- Audu O, Ogboi S, Abdullahi AU, Bako IA, Aba ER, Enokola OP, et al.
   Preference for health care providers' gender amongst women attending
   obstetrics and gynaecology clinic at Ahmadu Bello University teaching
   hospital, Zaria Northwestern Nigeria. Am J Public Health Res 2014;2:21-6.
- Gyuse AN, Ayuk AE, Okeke MC. Facilitators and barriers to effective primary health care in Nigeria. Afr J Prim Health Care Fam Med 2018;10:e1-3.

- Assoumou SZ, Mabika BM, Mbiguino AN, Mouallif M, Khattabi A, Ennaji MM. Awareness and knowledge regarding of cervical cancer, pap smear screening and human papillomavirus infection in Gabonese women. BMC Womens Health 2015;15:37.
- Francis SA, Nelson J, Liverpool J, Soogun S, Mofammere N, Thorpe RJ Jr. Examining attitudes and knowledge about HPV and cervical cancer risk among female clinic attendees in Johannesburg, South Africa. Vaccine 2010;28:8026-32.
- Adanu RM. Cervical cancer knowledge and screening in Accra, Ghana.
   J Womens Health Gend Based Med 2002;11:487-8.
- Stanhope M, Lancaster J. Community Health Nursing: Promoting Health of Aggregates, Families and Individuals. 4th ed. St. Louis: Mosby; 1996.
- Ahmed SA, Sabitu K, Idris SH, Ahmed R. Knowledge, attitude and practice of cervical cancer screening among market women in Zaria, Nigeria. Niger Med J 2013;54:316-9.
- Ferdous J, Islam S, Marzen T. Attitude and practice of cervical cancer screening among the women of Bangladesh. Mymensingh Med J 2014;23:695-702.
- Wong LP, Wong YL, Low WY, Khoo EM, Shuib R. Knowledge and awareness of cervical cancer and screening among Malaysian women who have never had a pap smear: A qualitative study. Singapore Med J 2009;50:49-53.
- Carr KC, Sellors JW. Cervical cancer screening in low resource settings using visual inspection with acetic acid. J Midwifery Womens Health 2004;49:329-37.
- Ayinde OA, Omigbodun AO. Knowledge, attitude and practices related to prevention of cancer of the cervix among female health workers in Ibadan. J Obstet Gynaecol 2003;23:59-62.
- 18. Gharoro EP, Ikeanyi EN. An appraisal of the level of awareness and utilization of the pap smear as a cervical cancer screening test among female health workers in a tertiary health institution. Int J Gynecol Cancer 2006;16:1063-8.