

# Barriers to cervical cancer screening uptake among rural women in South West Nigeria: A qualitative study

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**Background.** Diverse barriers influence cervical cancer screening uptake among rural women. The study explored barriers related to the uptake of cervical cancer screening among rural men and women in 14 communities of Ado-Odo Ota, Ogun State, Nigeria.

**Objective.** To inform the development of a cervical cancer screening model for use by rural women.

**Methods.** A qualitative exploratory research design was used. Qualitative information was collected from purposively sampled 28 individuals (13 rural men and 15 rural women) using focus group discussions and in-depth interviews. Data were analysed thematically.

**Results.** Five categorical barrier themes were identified including hospital-related, economic, geographical, educational and psychosocial barriers.

**Conclusion.** To address the identified barriers, the involvement of spouses and religious and cultural leaders in the planning and implementation of cervical cancer screening intervention is recommended. Cervical cancer screening services should be integrated into the services of primary healthcare centres. The government should consider providing subsidised or free screening programmes for rural women.

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Deaths related to cervical cancer in developed countries have drastically declined over the past three decades due to successfully organised population-based cervical cancer screening programmes.<sup>[1,2]</sup> Similar programmes are generally lacking in sub-Saharan Africa and other low- and middle-income countries (LMICs).<sup>[3,4]</sup>

Barriers to screening uptake have been widely documented. A study in the UK identified barriers to cervical cancer screening, including not wishing to know the result of the test, belief that the test was not necessary in asymptomatic women, not trusting the health services and inconvenient appointment times.<sup>[3]</sup> A Canadian study reported inconvenient clinic hours, procedural barriers and travel distance to screening services.<sup>[5]</sup> Among Asian-American women, psychosocial factors, religious beliefs, lack of knowledge and poor access to healthcare were identified.<sup>[6]</sup>

Chidyaonga-Masek *et al.*<sup>[7]</sup> reviewed contributing factors for underutilisation of cervical cancer prevention services in LMICs. They identified three categorical barriers at individual, community and health systems levels. The individual barriers were knowledge and awareness about risk factors, while stigma related to discussion of reproductive issues was a limiting factor at the community level, and inadequate financial resources and infrastructure as well as poorly-trained personnel were health system-related barriers.

In sub-Saharan Africa, notable barriers to cervical screening have been attributed to widespread poverty and lack of awareness of such programmes.<sup>[1,8]</sup> Other factors include psychosocial and cultural contexts, and limited family support.<sup>[3]</sup>

Earlier studies attributed poor screening uptake to the presence of competing healthcare priorities, burdens of diseases other than cancers, and reduced public budgets resulting in failure to establish cervical cancer screening programmes.<sup>[9]</sup> In Nigeria, healthcare

services have traditionally been based on curative interventions rather than preventive healthcare. War and civil strife have had consequences on the existing healthcare infrastructure.<sup>[10]</sup>

The principal barriers associated with cervical cancer screening uptake reported in the literature for developing countries such as Nigeria are mainly a low level of awareness, widespread poverty, and lack of the requisite human and material resources to support cytology-based programmes and poverty.<sup>[3,11,12]</sup> Isa-Modibbo *et al.*<sup>[4]</sup> explored the religious and cultural barriers to cervical screening in two hospitals, from the South West and North Central regions of Nigeria. The study reported that barriers to cervical cancer screening vary by religious affiliation.

Most of the previous studies that examined barriers to screening uptake among women were institutional or hospital-based. The present study focused on understanding the barriers among rural community men and women. As the heads of households/families, men are increasingly involved in reproductive issues. Our study aimed to identify the current barriers against uptake of cervical cancer screening by rural men and women. The aim of the study was to inform the development of a community-based cervical cancer screening model for the Sango community in South West Nigeria.

## Methods Study site

The study was conducted in 14 catchment communities of Sango Primary Health Center (PHC) located in Ado-Odo/Ota Local Government Area (LGA) of Ogun state, South West Nigeria. Ado-Odo/Ota LGA has an estimated population of 527 242, of whom 261 523 are male and 265 719 are female,<sup>[13]</sup> in ~450 towns, villages and settlements. The LGA has 16 constitutional wards and Sango is one of them.

## Study design selection, description of participants' data collection

An exploratory qualitative study design was used. Data were collected through in-depth interviews and focus group discussion (FGD) sessions from 28 purposively sampled participants that included rural dwellers (13 men and 15 women). Purposive sampling was used to identify subjects for in-depth investigation that enabled the researcher to gain a deeper understanding of the issue of enquiry.<sup>[14]</sup> Traditional, religious and opinion leaders were considered most appropriate to provide responses that would help to answer the research questions.

The inclusion criteria were rural men and women residing in the catchment communities of Sango PHC, men aged  $\geq 30$  years, and women aged 23 to 65 years, which is the recommended screening age range. The head of the community, village development committee chairmen, religious leaders (pastor, imam, priest, traditional religion) were included in the study as key informants.

Three FGD sessions were held with groups comprising 7 males and 8 females. The FGD guide assessed participants' demographics, their experiences or opinions about cervical cancer screening, and what could prevent community women from accessing screening services. Thirteen interview sessions were conducted using a semi-structured interview guide (6 males and 7 females). The interview guide assessed participants' demographics, screening experience (personal for the female and spouses among male respondents) and perceived barriers to screening uptake.

Data were collected by trained research assistants fluent in the local languages. All interview sessions were audio recorded and transcribed verbatim with participants' permission. Confidentiality of information and anonymity of participants were maintained and assurances on these were given to the participants during the process. Credibility was developed through earlier familiarity with the participants from preliminary visits before the first data collection commenced. Prolonged investigation strategies were used to establish trust.

## Data analysis

All interviews were audio recorded, transcribed verbatim and translated into English. Validity was ensured by checking back transcripts against original audio recordings for accuracy, thereby confirming the semantic equivalence of the data.<sup>[15]</sup> The transcripts were prepared for coding by providing adequate space at the margin for comments. Using highlighters, potential patterns were marked as follows: (i) notes on the text were analysed with highlights; (ii) codes were identified and matched with extracted data; (iii) codes were collated together on a board; (iv) the different codes were sorted into potential themes, grouping relevant coded data extracted within the identified themes in tabular form with names of code and the meaning identified and described; (v) using an iterative process, a thematic map was generated from the FGD and in-depth interview sessions; (vi) themes were defined and redefined; the themes involved identifying what was important in answering the research questions. Codes generated from the data and the responses were organised into key thematic areas, from which a report was produced with verbatim quotes from participants to support each theme. The data collection process lasted 16 weeks (13 July to 30 November 2016).

Observational field notes and responses from rural men and women (different sources) were triangulated to provide multiple perspectives of the information, as well as validate the data.

## Ethical approval

Ethical approval and permission to conduct this study were obtained from: (i) the Biomedical Research Ethics Committee (BREC) at the University of KwaZulu-Natal (ref. no. BFC505/15), (ii) the Ethics and Research Committee of the Federal Medical Centre, Abeokuta, Nigeria, (ref. no. NREC/06/21/2010-15); (iii) the Ado-Odo Ota LGA; and (iv) the Sango Joint Community Development Association. All participants were given an information sheet indicating the research aim, purpose, and meaning of their participation and their right to withdraw from the study at any time. Thereafter, each participant signed a consent form.

## Results

### Sociodemographics of study participants

The mean (range) age of the participants was 49 (36 - 60) years. Of the 28 participants interviewed, 15 were women and 13 men. A higher proportion of 18 were Christians and 10 were Muslim. Twenty-six were married and from the Yoruba ethnic group. Ten had technical and tertiary education, and 8 had no formal education. The participants' occupations included petty trading, technicians, faith leaders and retired civil servants.

### Barriers to screening uptake

Five broad themes emerged that described the barriers to cervical cancer screening uptake: hospital-related barriers, economic, geographical, educational and psychosocial barriers (Fig. 1).

### Hospital-related barriers

Complaints were expressed about long clinic waiting hours, often resulting in loss of business or earnings, and excessive hospital fees. Other issues cited included the painful screening procedure, an inconvenient screening time, and lack of trust of the healthcare workers. Some prominent comments associated with screening time are given below:

*'...when I come for hospital, the doctor cannot come in time and check us so I can't go to the market... that's why I don't want to come, because of my market.'* (ID1 p4; female)

*'...but the money they are collecting for the test is too much, they [referring to rural women] cannot afford it.'* (IDIp<sup>5</sup>, female)

*'...Patience on the part of the community health workers; they should not be harsh on the women. They should explain it vividly and tell them the whole truth about it.'* (IDIp<sup>6</sup>, male)

### Geographical barriers

Geographical barriers are related to hospital-related barriers. Distance to screening centres, not knowing where the screening centres are located and travel costs to healthcare services discourage cervical cancer screening uptake, especially for women who do not have an adequate source of income. Distance to screening centre was cited as centres are located in tertiary health institutions located in a town of a neighbouring state. Some of the concerns raised are captured in the quotes below:

*'Because I want to do cervical test I have to go to Lagos University Teaching Hospital or Lagos State University Teaching Hospital ... no money even for transport and it is not near us ...'* (IDIp<sup>5</sup>, female).

*'Well, the lack of availability of screening centres is also a critical issue.'* (FGD<sub>3</sub>P<sup>3</sup>, male).

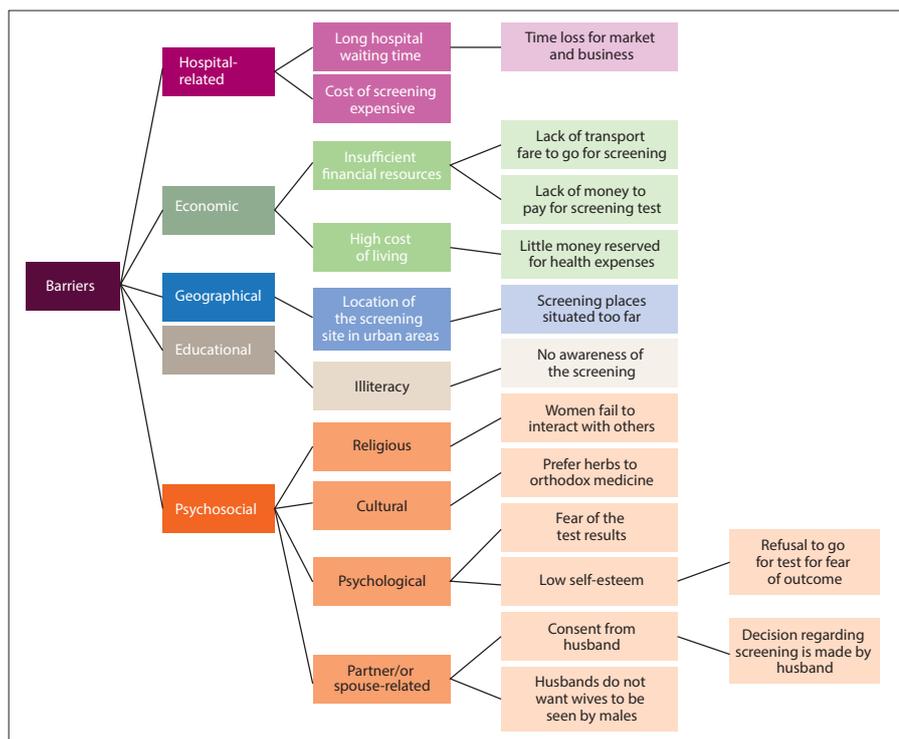


Fig. 1. Categories of barriers to cervical cancer screening among rural women.

**Economic/financial barriers**

Financial constraints that were cited included cost of travel to distant screening centres and charges for screening and treatment. These difficulties were compounded by the prevailing high cost of living and the economic recession, as well as high levels of unemployment in Nigeria, were noted by participants in comments such as the following:

*‘Some women are just ordinary house wives. Yes, they are unemployed. So...if the husband doesn’t give her any money, she cannot go to the hospital. And some of them, their husband will be jobless, the wife jobless... will not be able to be affording the test.’ (IDIp<sup>10</sup>, female).*

**Educational barriers**

Illiteracy, especially of husbands, was noted as a barrier to cervical cancer screening uptake. This was in relation to lack of appropriate health information concerning the disease among community men and women. Women’s responses showed that when they experienced symptoms, they preferred herbs to orthodox medications. The women perceived no need for healthy women to visit hospitals for a check-up of any form; the perception was that hospital visits were for sick people only, not for those in good health. If you were healthy looking, you were assumed to be healthy. This poor

health maintenance behaviour is reflected in the following response:

*‘...Illiteracy is the major problem that may...if the husbands are illiterate, because they will say ‘why? Why are you going, don’t say that you have it’...when somebody is an illiterate they may not see the need to go for screening (IDIp<sup>3</sup>, male).*

**Psychosocial barriers**

In relation to psychological, religious, cultural or partner-related, a few of the respondents cited cultural and religious barriers. The findings indicate linkage between partner/spousal approvals and religious beliefs. The female respondents mentioned spousal approval before undergoing screening. Community beliefs in traditional medicine could constitute a barrier to using orthodox medicine. Major reasons for non-utilization of orthodox medicine were the negative belief that not all forms of ailment require orthodox medical intervention. There was a negative perception that some illnesses, one of which was cervical cancer, should not be treated by orthodox medicine. An FGD participant made the following comment:

*‘The community may say, that type of sickness you are having is not the one they treat in the....they use medical treatment for, it might be done locally and they continue to apply local medicine.’ (FGD<sub>3</sub>P<sup>2</sup>, male)*

Other responses conveyed similar perceptions:

*‘Cultural reasons too can affect because there are...some people who have never left their village. They believe that they don’t have business with the Oyinbo medicine (orthodox medicine). So, they don’t want to even hear anything about white man, their own is their root and their herbs, and will not agree to go for screening.’ (IDIp<sup>7</sup>, female)*

*‘...like we the Hausa’s, it is not every man that will allow his wife to go to the hospital. In fact, it is not every man that will even allow his wife to go outside the house. not to talk of going to the hospital. Some men will say “Ha their wives, their mothers, did they go to the hospital before giving birth to them?” Some will say that the practices in the hospital doesn’t tally with what they have in the culture so they will not go to the hospital.’ (IDIp<sup>10</sup>, female)*

Fear was a very frequently used word in describing barriers to screening uptake by rural men and women: fear of a positive result and its implication; issues related to the disclosure of results to the spouse; fear of embarrassment following disclosure of positive test results; and fear of what the spouse would say or do on learning about a positive result, since it could lead to a broken home. A woman could potentially be forced to leave the husband’s house because she had a sexually transmitted infection and is assumed to be unfaithful. Shame was especially associated with disclosure of cervical cancer-related symptoms as it is a disease of the female reproductive system. The situation would be worse if the woman was young and unmarried. The following responses reflect these perceptions:

*‘It depends on the age these things occur, if it is much younger family or is not married you know, sometimes they have the tendency to hide such things. Like a woman who is raped, if she doesn’t want people to know what happened to her and if she has such sickness, she might not even tell her family.’ (FGD<sub>3</sub>P<sup>3</sup>, male)*

*‘In a situation where the husband is not the understandable type, such woman can even lose her home. The process of saying how did you get this thing and the thinking that she is cheating on the husband that is why she caught the cervical problem.’ (FGD<sub>3</sub>P<sup>3</sup>, male)*

## Dependency on spouse for decision-making

Spousal approval is needed for women to undertake cervical cancer screening; this could constitute a barrier if the husband delayed the decision, providing funds for the screening or giving approval to undertake the service. The extract below supports this information:

*'I have to seek the permission of my husband, if he permits me to go, then I can go.'* (ID1p<sup>8</sup>, female).

*'Some husband can delay their wife not to go, because of what? Because of money. Maybe the woman is not doing anything to buy matches from another woman only her husband. So, all these things can disturb them not to come for the screening.'* (FGDp<sup>2</sup>, female)

## Religious and gender barriers

Religious beliefs and practices can constitute a barrier among Christians and Muslims. Some Muslim women would not allow male screeners to attend to them in the hospital, which is a potential barrier to uptake of cervical cancer screening. In our cohort, most women respondents preferred female health workers to attend to them as indicated in the quotes below:

*'Alfa's wife may not want her private part to be seen by another person other than her husband.'* (FGD<sub>2</sub>P<sup>5</sup>, female)

*'...some categories of Muslim women that will not allow men to examine them, so they will not go for the screening. The husbands won't allow other men to see their womb...so they may not be permitted to come for screening.'* (FGD<sub>3</sub>P<sup>3</sup>, male)

*'Some religious belief don't go to hospital like the Jehovah Witness. They do not believe in hospital services Christians and Muslim alike.'* (ID1p<sup>1</sup>, female)

Stigma/shame was an associated barrier, as indicated in the quote below:

*'So again, if it is a tight community, the ideas of not being seen can also restrain the person...everybody knows each other and err what is wrong with her?...maybe can prevent or cause hiding the sickness.'* (FGD<sub>3</sub>P<sup>3</sup>, female)

## Discussion

The aim of this study was to explore the perceptions of rural community men and women on barriers to cervical cancer screening uptake. The findings informed designing a culture-sensitive model of care for use by rural women. Hospital-associated factors, such as poor access due to high screening costs, location, unprofessional attitude and gender of healthcare workers, emerged as key barriers that need to be addressed. These findings are similar to the reports from other LMICs. Chidyaonga-Maseko *et al.*<sup>[7]</sup> reported that underutilisation of cervical cancer screening services was associated with health system-related barriers, infrastructure, and lack of trained personnel.

The rural women in our study saw no need for healthy women to undergo any kind of hospital check-ups. Cues to seek hospital care were having obvious symptoms and having tried herbal remedies without a desired result. This leads women to present at an advanced stage of the disease.

In our study, screening uptake was influenced by psychological, religious and cultural barriers, such as spousal approval. Similar findings have been documented elsewhere.<sup>[9,12]</sup> Further barriers of significant concern are erroneous cultural beliefs that cervical cancer is not among the diseases that require orthodox medical

intervention, and the high preference given to the use of herbs in the management of most diseases.

In Nigeria, poor access to screening services was compounded by poverty, which had a negative influence on screening uptake. Similar findings were documented in other LMICs,<sup>[7,8]</sup> where rural women reported poor access to screening services as a result of transportation costs.

Fears expressed by the women studied were associated more with an anticipated reaction from spouses/partners and community members rather than with the health implications of a positive test result. Women feared the negative consequences such as separation and abandonment. Drawing on the lessons of the HIV/AIDS epidemic, male involvement through couples' counselling and education for cervical cancer uptake can ease such fears. Shame was associated with disclosure of cervical cancer-related symptoms and screening results because it is a disease of the female reproductive system. Isa-Modibbo *et al.*<sup>[4]</sup> also reported fear of disclosure of results and lack of awareness among the barriers to uptake of screening.

## Study limitation

Limited funding restricted the study to a single geopolitical region in Nigeria. The findings of this study may not be generalisable to other regions due to diverse cultures and religions.

## Conclusions and recommendations

Hospital-related barriers, poverty, ignorance and psycho-social barriers (cultural and religious) negatively influenced screening uptake. To address the identified barriers in cervical cancer prevention interventions, we recommend the following: (i) male involvement, including spouses, and religious and cultural leaders; (ii) cervical cancer screening services should be integrated into primary healthcare centres as a strategy to improve screening access; and (iii) the government should consider providing free or subsidised cervical cancer screening for rural women. Further exploration of the roles of culture and religion in promoting cervical cancer prevention programmes would be useful.

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**Author contributions.** AOC was the principal investigator, conceived the study, carried out the data collection and analysis and prepared the manuscript. GG guided the development of the protocol to completion, verified data, edited and revised the manuscript for intellectual content and approved the version for submission. Both authors approved the final version to be published.

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**Conflicts of interest.** None.

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## RESEARCH

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