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Cervical cancer awareness among Namibian women: Perspectives of primary healthcare nurses

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Abstract

Cervical cancer remains a major public health concern in sub-Saharan Africa, particularly in Namibia, where high rates of HIV and HPV infections and early sexual activity increase its prevalence. Limited awareness of cervical cancer among Namibian women contributes significantly to delayed screening and treatment, reducing the likelihood of successful outcomes. This qualitative study explored the perceptions and experiences of 73 professional nurses purposively selected from public primary healthcare facilities across Namibia's fourteen regions. Data were collected through focus group discussions and analysed thematically, with an independent coder to ensure rigor. Findings revealed a substantial lack of awareness among women, highlighting the need for nurses to lead educational initiatives. The study advocates empowering nurses to strengthen patient–nurse relationships and implement community-based awareness programs, including media outreach to isolated populations. It contributes to public health knowledge by emphasizing strategies to promote prevention, early diagnosis, and improved cervical cancer outcomes in Namibia. *(Afr J Reprod Health 2026; 30 [20]:31-43).*

Keywords: Awareness, Cervical Cancer, Community Engagement, Health Education, Professional Nurses

Résumé

Le cancer du col de l'utérus demeure un problème majeur de santé publique en Afrique subsaharienne, notamment en Namibie, où les taux élevés d'infections par le VIH et le VPH ainsi que la précocité des rapports sexuels contribuent à son ampleur. Le manque de connaissances sur le cancer du col de l'utérus chez les Namibiennes retarde considérablement le dépistage et le traitement, réduisant ainsi les chances de guérison. Cette étude qualitative a exploré les perceptions et les expériences de 73 infirmières professionnelles sélectionnées de manière ciblée dans des établissements de soins de santé primaires publics répartis dans les quatorze régions de Namibie. Les données ont été recueillies par le biais de discussions de groupe et analysées thématiquement, avec un codeur indépendant afin d'en garantir la rigueur. Les résultats ont révélé un manque important de connaissances chez les femmes, soulignant la nécessité pour les infirmières de mener des initiatives éducatives. L'étude préconise de donner aux infirmières les moyens de renforcer la relation soignant-patient et de mettre en œuvre des programmes de sensibilisation communautaires, notamment par le biais de campagnes médiatiques auprès des populations isolées. Elle contribue à l'avancement des connaissances en santé publique en mettant l'accent sur les stratégies visant à promouvoir la prévention, le diagnostic précoce et l'amélioration des résultats en matière de cancer du col de l'utérus en Namibie. *(Afr J Reprod Health 2026; 30 [20]:31-43).*

Mots-clés: Sensibilisation, cancer du col de l'utérus, engagement communautaire, éducation à la santé, personnel infirmier

Introduction

Women play a critical role in global socio-economic development, particularly in Africa, where their contributions extend across agriculture, politics, and health.[1,2] Their well-being is vital for family stability and societal progress.[3] However, women in sub-Saharan Africa continue to face substantial health challenges, including diseases such as cancer, tuberculosis, and malaria.[4,5] Cervical cancer is notably prevalent, with risk factors including infection with human papillomavirus (HPV) and human immunodeficiency virus (HIV), early sexual activity, and smoking.[6] The World Health Organization (WHO) emphasizes the importance of early detection and vaccination against HPV, noting that more than 90% of cervical cancer cases are attributable to HPV infection.[7] Despite these preventive strategies, many women in developing countries are diagnosed at advanced stages, with approximately 80% of cases in sub-Saharan Africa identified late.[8,9] A significant lack of awareness

about cervical cancer persists among women, contributing to delayed diagnoses and treatment, particularly in sub-Saharan Africa.[9,10] This indicates that, despite ongoing efforts to reduce the prevalence of cervical cancer, critical information has not been adequately understood or accessed by all segments of society.

In August 2020, the World Health Assembly implemented a Global Strategy for Cervical Cancer Elimination, with 194 countries pledging to eliminate the disease by 2030 through vaccination, screening, and treatment.[11] This has prompted nations to aim to reduce cervical cancer incidence to fewer than four cases per 100,000 people. In Africa, cervical cancer remains a leading cause of cancer-related mortality among women,[12] underscoring the need for improved awareness and treatment programs.[13] In Namibia, where cervical cancer is highly prevalent, screening rates remain low despite efforts to increase access, particularly for women living with HIV.[14,15] Various studies emphasize the importance of awareness, as knowledge about cervical cancer leads to proactive health-seeking behaviors and better management.[16,17,18] Community education and well-informed healthcare providers, particularly nurses, are essential for effective cervical cancer prevention.[19,20] There is therefore a need to develop measures to reach women across Namibia with accurate and accessible information on cervical cancer.

In Namibia, primary healthcare nurses play an important role as the first point of contact for patients in many communities, particularly in remote areas. They not only provide essential healthcare services but also serve as key sources of health information, offering guidance on prevention, treatment, and health education.[21] Beyond the Namibian context, barriers to cervical cancer awareness are shaped by several unique challenges, including limited access to healthcare services, which disproportionately affect women in rural areas.[22] Low levels of health literacy further impede the dissemination and understanding of essential information related to prevention and early detection. In addition, cultural taboos surrounding discussions of sexual health and cancer restrict open dialogue, contributing to delayed diagnosis. The shortage of resources, including trained healthcare personnel and adequate screening facilities, further exacerbates challenges related to cervical cancer awareness.

Economic constraints also play a significant role, as many women are unable to afford transportation to healthcare facilities. Addressing cervical cancer therefore requires increased awareness, timely screening, and improved healthcare resources. Evidence indicates that women who are informed about cervical cancer are more likely to seek preventive and treatment-related health services.[23,24] Unfortunately, many women remain unaware of the disease's severity and risk, necessitating improved educational interventions.[25,26] Increasing cervical cancer awareness is vital, particularly among marginalized communities.[25,27,24] Symptoms of cervical cancer are often subtle, making early diagnosis reliant on women's knowledge of screening programs.[27] Education is therefore closely associated with awareness, as health education has been shown to enhance knowledge of cervical cancer.[28,29] However, many healthcare providers lack sufficient knowledge to effectively promote awareness among women.[30] Socioeconomic factors further complicate awareness, particularly in patriarchal societies where women's roles may be constrained.[31] There is a critical need for strategies to improve cervical cancer awareness and facilitate access to information, especially in sub-Saharan Africa, to empower women to make informed health decisions.[32,33] Accordingly, this study focused on assessing cervical cancer awareness levels among women in Namibia and identifying ways to address identified gaps in cervical cancer prevention.

Methods

Study design and eligibility criteria

This study adopted a qualitative research design to explore strategies for enhancing cervical cancer awareness among women in Namibia. Professional nurses were purposively selected from the 14 regions of Namibia. Eligible participants were those actively registered with the Health Professions Council of Namibia (HPCNA), employed at primary healthcare (PHC) facilities under the Ministry of Health and Social Services (MoHSS) for a minimum of six months, and fluent in English. Fluency in English

was important to minimize language barriers during data collection, as English is Namibia's official language. Exclusion criteria included professional nurses who had worked in primary healthcare facilities for less than six months and those not employed at state primary healthcare facilities.

Enrollment and data collection

The study population comprised professional nurses working at Namibian primary healthcare clinics and health centers. A nonprobability sampling approach was employed to allow the researcher to select participants who were readily available and most likely to provide rich and relevant data. Purposive sampling was used to select a sample of professional nurses attending to patients at these facilities. This approach enabled the study to gain an in-depth understanding of the phenomenon under investigation, rather than a broad, general perspective.

Data were collected through focus group discussions (FGDs) with 73 participants, conducted under strict COVID-19 protocols to ensure their safety. These protocols included social distancing and mask-wearing. The meeting rooms at each primary health facility accommodated the focus group discussions, with prior arrangements made to avoid any institutional usage of the facilities. Proper prearrangements were made with the primary health facilities to ensure that patient care delivery was not interrupted during the focus group discussions. Each FGD included an average of 6 participants. The decision to use focus groups was based on their ability to provoke discussions among and with professional nurses to obtain valuable information and develop feasible strategies to raise awareness of cervical cancer. Assistance was sought from the offices of the Regional health directors to identify professional nurses with knowledge of the subject matter. An interview schedule was prepared, whereby a set of open-ended questions was used to guide the researcher in collecting the data. Participants were contacted for appointments at their own convenience. Each FGD lasted no more than 90 minutes and was audio recorded. The FGD was conducted at the health facilities to avoid disrupting participants' workstations.

While the intention was to collect data from professional nurses across the 14 regions of Namibia, saturation was reached after the eighth region. However, to ensure regional representation and confirm emerging themes, data collection continued across 12 regions. Consequently, the two regions, Kunene and Kavango West, were not included. The decision was carefully made based on the geographic and cultural proximity of these regions to Otjozondjupa and Kavango East, respectively. It was considered that people from these adjacent regions likely share similar healthcare challenges, cultural backgrounds and perspectives related to cervical cancer awareness. Therefore, their exclusion was unlikely to significantly impact the depth or diversity of the data collected. This rationale is supported by previous research indicating that populations with shared linguistic and cultural backgrounds often demonstrate similar health beliefs, behaviours, and health-seeking patterns.[34,35]

Data analysis

The qualitative data collected from the nurses were analysed inductively using thematic analysis. The central question guiding the study was how cervical cancer awareness among women in Namibia could be improved. Thematic analysis allowed the researcher to examine the data systematically and identify emerging themes. Audio recordings from the focus group discussions were transcribed verbatim to facilitate the analysis. The analysis process involved data familiarization, generating initial codes, developing themes, reviewing potential themes, defining and naming themes, and producing the final report.

To ensure quality and rigor, an independent coder with expertise in qualitative research and data coding was engaged. The coder analysed the data objectively, verified its accuracy, and assigned codes according to established themes and categories, enhancing the study's credibility and applicability. Data and conclusions from the literature were also used to establish transferability and confirmability of the findings.

Ethical considerations

Ethical clearance for the study was obtained from the University of Johannesburg, Faculty of Health Sciences (REC-1747-2022). Permission to conduct

the study in Namibia was granted by the Ministry of Health and Social Services (MoHSS)'s Research Unit (REF: 22/4/2/3). As data were collected across 14 geographical regions of Namibia, gatekeeping permission to access professional nurses at health facilities was sought and granted by the respective Regional Health Directors. Participation in the study was completely voluntary, and all participants provided written informed consent prior to data collection. Confidentiality and anonymity were maintained throughout the research process. Furthermore, the study adhered to the ethical principles of respect for persons, beneficence, and justice.

Results

Demographic characteristics of study participants

Seventy-three professional nurses participated in twelve focus group discussions. Each focus group consisted of five to seven members. The demographic data confirmed that all participants met the study's inclusion criteria and were suitably positioned to contribute to the effective development of cervical cancer awareness strategies.

The participant demographic consisted predominantly of females (83%; n = 60), with males representing 17% (n = 12). Including both genders ensured that diverse viewpoints from participants' experiences were captured.

The participants ranged in age from 23 to 56 years, with the majority falling within the 21–30-year (n = 29) and 31–40-year (n = 27) age groups. Sixteen participants were aged 41 or older, providing a balanced representation of early-career and experienced professionals. All participants held formal nursing qualifications, with most possessing a bachelor's degree (n = 46), followed by postgraduate degrees (n = 19), diplomas (n = 5), and two participants with master's degrees.

Participants also exhibited varied lengths of professional experience. One-third (n = 32) had 1–5 years of nursing experience, while 40 participants had over six years of experience, some exceeding 20 years. In terms of primary healthcare experience, most participants (n = 44) had 1–10 years, with a minority having up to 30 years. All participants were registered with the Health Professions Council of Namibia (HPCNA) and were proficient in English, the language of discussion, thereby supporting the quality and reliability of the data collected.

Presentation of the themes

The study highlighted that many women remain uninformed about cervical cancer, its symptoms, and the importance of screening and vaccination. This finding aligns with previous findings[36], which underscores the critical need for improved health education. Concerns about the psychological and reproductive health impacts, particularly on women of childbearing and menopausal age, support the emphasis on prioritizing cervical cancer in health campaigns. The insufficient prioritization of cervical cancer relative to other diseases reinforces the need for comprehensive health education and accessible screening services, especially in rural areas. Thematic analysis identified three major themes, all indicating a significant lack of awareness about cervical cancer among women, which presents serious health risks. The table below provides an overview of the themes and categories that emerged from the participants' responses.

Theme One: Lack of information about cervical cancer among women

The first category under the major theme of lack of information about cervical cancer among women was the participants' emphasis on the lack of cervical cancer awareness among women in Namibia. This focus emerged as one of the categories identified under the broader theme of 'professional nurses' experience about lack of cervical cancer awareness'. Participants consistently highlighted the insufficient awareness of cervical cancer among the women they had encountered in their practice. Four participants expressed the following views:

"There's no doubt, most women do not know the signs and symptoms of cervical cancer." (Participant D, Focus Group 2).

Table 1: An overview of the themes and categories

Themes	Categories
Theme 1: Lack of information about cervical cancer among women	**Category 1:** Participants emphasized the lack of cervical cancer awareness among women **Category 2:** The participants reiterated conducting awareness campaigns for cervical cancer **Category 3:** Participants' interest in advocating for better health services for women
Theme 2: Community engagement in enhancing healthcare services	**Category 1:** Empowerment of nurses to provide holistic healthcare **Category 2:** Involvement of community health extension workers to raise cervical cancer awareness and improve healthcare **Category 3:** Improved resourcing to address barriers to healthcare services
Theme 3: Enhancement of health education services	**Category 1:** Interpersonal communication between nurses and their stakeholders to improve the quality of health education **Category 2:** Highlighted communication barriers that Hinder effective health education delivery **Category 3:** Integration of media communication to enhance information sharing

"What I have experienced is that most women have no information about cervical cancer. They do not even know that they can be screened and if it's detected earlier, they can be treated, or they don't even know that there are vaccines that can be given to young girls." (Participant A, Focus Group 4)

"Our people are also ignorant. Maybe it's also due to their lack of understanding and so on." (Participant C, Focus Group 6)

"Some people, due to lack of information, keep on being at home, and some of them are just sensitive to come to health facilities to open up and give history." (Participant A, Focus Group 7)

The second category under 'Lack of information about cervical cancer among women' concerned participants' emphasis on the need for awareness campaigns. Nurses highlighted the importance of initiatives aimed at increasing cervical cancer awareness among women. Noting the insufficiency of current efforts, participants stressed the urgent need for enhanced, community-based campaigns to improve women's knowledge of cervical cancer. The following perspectives were expressed by participants:

"As for awareness of cervical cancer or breast cancer, there's nothing like that within the community. So, most people will not know of the information at all." (Participant D, Focus Group 1)

"Run campaigns at the facilities, at schools, churches, community." (Participant F, Focus Group 5)

"Campaigns should include everyone regardless of their status." (Participant E, Focus Group 6)

"I just believe we should have more campaigns at every health facility, not just here but also at other facilities on that side." (Participant C, Focus Group 8)

"Also, the other way of sensitizing the community is using mobile outreach, whereby the Ministry of Health and Social Services reaches the remote areas, sensitizing and also doing the routine screening for everyone." (Participant E, Focus Group 9)

The third category under 'Lack of information about cervical cancer among women' focused on participants' interest in advocating for improved health services for women. Participants expressed the view that professional nurses were not doing enough to champion women's health needs. They highlighted the need for healthcare workers, particularly professional nurses, to serve as advocates for women in securing access to essential

health services. Against this backdrop, participants suggested that cervical cancer awareness could be enhanced when professional nurses actively represent and communicate the previously unvoiced concerns and needs of women.

"Sometimes, women come with a health problem that is not going away. As nurses we should try as hard as we can to advocate for patients like to talk to doctors and just suggest to them to conduct all necessary investigations to rule out cervical cancer." (Participant D, Focus Group 8).

"I feel that once we take it upon ourselves as nurses to speak for our patients and help them get better management from the doctors, they will be at liberty to seek cervical cancer services." (Participant F, Focus Group 2)

"As nurses, we need to advocate for our patients and also just raise awareness to educate women, like in such cases where they are bleeding for such a long period of time." (Participant A, Focus Group 11).

Theme Two: Community engagement in enhancing healthcare services

The first category observed under the major theme of community engagement in enhancing healthcare services was the empowerment of nurses to provide holistic healthcare. Empowerment of nurses was one of the key aspects highlighted by the participants, who expressed a strong desire to be enabled to provide holistic care. They perceived that professional nurses are confined to basic health services conducted within the health facilities, whereas they feel that they have the potential to contribute immensely to the health sector when they are empowered to get involved in both preventative measures and curative measures for various diseases, such as cervical cancer. Below are the comments shared by the participants.

"Lack of knowledge for us healthcare workers is a challenge. Imagine if you are to give information to a patient and you yourself do not have sufficient knowledge of the subject matter…you will be feeding from an empty vessel" (Participant F, Focus Group 6)

"And still, we need to have in-service training so that we can empower one another and motivate those of us who are not doing those check-ups regularly." (Participant E, Focus Group 2).

"Lack of training. Not all staff are trained to do it." (Participant F, Focus Group 4).

The second category observed under the major theme of community engagement in enhancing healthcare services was the involvement of community health extension workers to raise cervical cancer awareness and improve healthcare. It emerged that community health extension workers need to be fully equipped to raise cervical cancer awareness and improve healthcare delivery. These workers can play a pivotal role in providing health information to communities efficiently and reliably. Previous research supports this, showing that adequately trained community health extension workers are essential for effectively raising cervical cancer awareness and disseminating health information to communities.[38] Participants emphasized the importance of engaging communities in awareness initiatives to encourage more women to prioritize screening and treatment for cervical cancer.

"We need to develop a health information package checklist for the community health workers to refer on when they are giving the information to the community." (Participant A, Focus Group 11).

"Engaging more with the community in their native languages. We also have our community health extension workers to close that gap. They just go to the community and give health education on cervical cancer like its negative impact if it's left untreated." (Participant A, Focus Group 8)

"Maybe we can also pass the information to the community healthcare workers as most of time, they are the ones in the community. So, they can also pass on the message." (Participant E, Focus Group 12).

The third category observed under the major theme of community engagement in enhancing healthcare services was improved resourcing to address barriers to healthcare services. One of the major issues raised by participants concerned inadequate resources, particularly the shortage of staff. Participant CFG3 highlighted that staff shortages affect the entire country, raising concerns about Namibia's capacity to deliver healthcare services effectively. Participants noted that the lack of trained personnel prevents eligible women from accessing screening services. Regarding transport, participants indicated that the government has not provided sufficient vehicles for professional nurses to conduct mobile

outreach and awareness campaigns. Delays in service delivery were attributed to the insufficient number of professional nurses. Consequently, participants emphasized the need for additional training and the deployment of more nurses to health facilities across the country.

"Not many women get the opportunity to be screened because there is not a lot of nurses who are trained when it comes to screening" (Participant A, Focus Group 9)
"There's staff shortage which is now so…for everyone in Namibia." (Participant C, Focus Group 3)
"People are really coming but we have challenges. Either we have staff shortage, or shortage of the staff that are trained … like currently, we only have two staff members who are trained." (Participant D, Focus Group 11)
"Just to be honest, especially when it comes to cervical cancer, we need to be trained to give information and do screening. Some of us don't have much information on it." (Participant C, Focus Group 6).

Theme Three: Enhancement of health education services

One of the categories within the major theme enhancement of health education services was the importance of interpersonal communication between nurses and their stakeholders in improving the quality of health education. Discussions with the participants indicated that in order to facilitate effective health education, communication needs to be properly integrated among the various stakeholders. They also emphasized that interpersonal communication between nurses and patients can enhance trust and positive uptake of information. Therefore, participants further highlighted that nurses need to improve their interpersonal communication skills as this would enable them to foster a supportive environment in which women feel comfortable opening up during consultations and ask questions when needed without fear. Poor communication was pointed out as a hindrance to early detection, as some women may refuse to give information, thereby limiting thorough assessment and timely screening.

In addition, participants noted that health education efforts should extend beyond health facilities to include employers in different organizations and domestic services, who are sometimes reported to deny their employees time or permission to access to healthcare services. Nurses were therefore viewed as having a responsibility to ensure that every woman who visits a health facility, regardless of her presenting complaint, receives information about cervical cancer.

The following excerpts illustrate these views:

"From our side, we have a bit neglected this. I think maybe because of our busy schedules and stuff, we have not really been talking to our women as much as we should have and spread the word about cervical cancer." (Participant C, Focus Group 3)
"Patients keep their own information to themselves, but they can't really open up to the nurses to the extent that a nurse cannot even do proper examination to rule out cervical cancer." (Participant A, Focus Group 7)
"It's our responsibility as nurses to make sure that each and every woman using the facility, regardless of their complaints, we should discuss cervical cancer information with them." (Participant A, Focus Group 11)

Another category under the major theme of enhancement of health education services was communication barriers that hinder effective health education delivery. Discussions with participants revealed that critical communication barriers hinder effective health education, contributing to low cervical cancer awareness. Participants identified language barriers as a key factor limiting women's understanding of health information. Participant CFG8 emphasized that any training designed to improve awareness should be delivered in a language that enables health professionals to convey information clearly and effectively. For community engagement initiatives aimed at raising cervical cancer awareness, participants recommended deploying health professionals that are fluent in local languages. Regarding media use, which can reach wider audiences, participant GFG11 suggested that messages should be delivered in local languages to ensure comprehension and maximize impact.

"If we could dedicate a month for sending SMSes in different languages…. at least, everybody now has a phone. You can send a message just to say, 'Get screened today' then today you change the languages to Damara, Oshiwambo like that…it will reach a lot of people." (Participant A, Focus Group 1)

"… talk to the ladies in their native languages because we have a lot of patients who come here, and they do not understand English. They do not understand Afrikaans." (Participant C, Focus Group 8)

"Also in the media, vernacular languages are important so that everyone can understand from their perspectives." (Participant G, Focus Group 11)

The last category under this major theme was the integration of media communication to enhance information sharing. It was highlighted by the participants that the media plays a critical role in delivering important health information, including cervical cancer messages. Participants highlighted the use of radio as an effective medium for reaching rural communities. Participant AFG10 emphasized that radio remains the most trusted source for disseminating critical information in Namibia's rural areas. Consequently, participants suggested that the government should employ multiple media channels to ensure that cervical cancer awareness initiatives reach the intended audience. Participants EFG1 and CFG12 recommended providing informational leaflets at health facilities, allowing individuals to access and read the material at their convenience. Discussions with participants also revealed that rural communities often receive health information late or in incomplete form. They noted that rural populations may be resistant to change, which can be addressed through consistent and reliable dissemination of information via radio services.

"The government needs to participate in raising cervical cancer awareness by printing out information pamphlets, empowering nurses to go to the radio… we can at least give the pamphlets to people visiting the facility. Imagine a granny who comes to the facility, she can take a pamphlet to her children at home so that they can read more about it." (Participant A, Focus Group 6)

"It's like… people in the village don't normally get information about cervical cancer." (Participant C, Focus Group 9)

"Even to be visiting the villages often because some women are unable to come to the facility, or they don't have a radio to listen to NBC. So, it's better to be visiting them." (Participant A, Focus Group 10)

"And more pamphlets. It has been long since the ministry or everyone else provided pamphlets. At least if you can give one or two patients, and then they take it to the community, they will read." (Participant C, Focus Group 12)

Discussion

Findings from the study revealed a significant lack of awareness about cervical cancer among women, which poses serious health risks. Many women were found to be uninformed about the disease, its symptoms, and the importance of screening and vaccination, which aligns with previous research highlighting the critical need for improved health education.[36] Concerns regarding the psychological and reproductive health impacts, particularly for women of childbearing and menopausal age, underscore the importance of prioritizing cervical cancer in health campaigns.[37] The study also found that older women were generally more informed than younger women, many of whom were unaware of available health services. This observation reflects earlier findings[39] that educational disparities exist across age groups. Recognizing cervical cancer as a serious threat affecting women's roles within families further highlights the need for targeted educational campaigns, particularly in rural areas where misinformation persists. Late diagnoses were frequently linked to this lack of awareness, emphasizing the need for comprehensive health education initiatives.

These findings should also be understood within the wider sub-Saharan African and low-resource health system context, where cervical cancer prevention is often affected by limited screening infrastructure, distance from facilities, sociocultural silence around reproductive health, and uneven access to health information. For international readers, the Namibian experience therefore illustrates how awareness is not merely an individual knowledge gap, but a system-level issue shaped by geography, language, service capacity and trust in primary healthcare. The findings further underscore the critical need for robust cervical

cancer awareness campaigns in Namibia. The study emphasized that healthcare professionals, particularly nurses, should prioritize educating women about cervical cancer alongside other preventable diseases. Many women still rely on traditional healers, leading to missed diagnoses, a concern supported by previous research regarding the need for community-based initiatives.[40] There was a consensus that current health campaigns, particularly from the Ministry of Health and Social Services, are insufficient, highlighting the demand for mobile outreach services to reach remote areas and culturally sensitive messaging.

In addition, the findings underscored the urgent need for professional nurses to advocate for women's health services, particularly in relation to cervical cancer. The study presents concerns that nurses are not fully voicing the health needs of women, a situation that reflects broader issues within healthcare systems where women's voices are often marginalized. Advocacy was highlighted as essential for increasing awareness and encouraging women to seek screening services, reinforcing previous research indicating that peer influence can enhance screening participation.[41]

The results further show that nurses occupy a strategic implementation position because they connect formal health policy with everyday community realities. Their accounts demonstrate that improving cervical cancer awareness requires more than the dissemination of information; rather, it necessitates a more focused and sustained approach characterized by continuous communication, culturally responsive messaging, empowered frontline workers and reliable referral pathways. Community engagement also emerged as a crucial factor in improving healthcare services, emphasizing the need for enhanced capacity development among nurses. Increased training was advocated to empower nurses to respond effectively to community health needs. The study called for government intervention, such as mobile clinics, to reduce barriers for women in remote areas. This is consistent with previous research highlighting the importance of integrating community health extension workers into cervical cancer initiatives.

Additionally, significant communication barriers were identified as impediments to effective health education on cervical cancer. Language barriers, particularly in rural and informal settings, emerged as a primary concern, aligning with research indicating that language difficulties can hinder patient adherence to treatment protocols.[42] It was recommended to use native languages in health communications and suggested that healthcare professionals be trained to convey information effectively in these languages. The emphasis on diverse media channels, including radio and printed materials, to reach wider audiences is particularly pertinent in rural areas where access to information is limited. Addressing these barriers is crucial for enhancing cervical cancer awareness and promoting screening, ultimately aiming to improve health outcomes for women in Namibia.

Strengths

The study has several important strengths. The study draws on the views of professional nurses who work directly with women in public primary healthcare facilities, which makes the findings strongly connected to frontline service realities. The inclusion of participants from twelve regions also gives the study broad geographic reach and strengthens the contextual relevance of the findings for Namibia. The use of in-depth focus group discussions with the participant allowed nurses to reflect collectively on shared experiences, practical barriers and possible solutions. Another strength of this study is the relatively large qualitative sample of the seventy-three professional nurses, which enhanced the richness of the data. The continuation of data collection beyond the point of saturation further strengthened confidence in the recurring themes. The involvement of an independent coder also improved the credibility of the analysis and reduced the risk of researcher bias.

Limitations

While the study provided profound insights on ways to address the cervical cancer awareness gap among women in Namibia, the study has some limitations that should be acknowledged. Although the intention was to include all fourteen regions of Namibia, two regions were not represented, which may have limited the full capture of regional differences in cervical cancer awareness and access to services. The study relied only on the perspectives of

professional nurses, meaning that the voices of women, community health extension workers, traditional leaders, policymakers and other stakeholders were not directly included. This may have narrowed the interpretation of awareness gaps and service barriers. In addition, the use of purposive and nonprobability sampling limits the extent to which the findings can be generalised to all primary healthcare nurses in Namibia. The focus group method may also have influenced some participants to withhold sensitive views or align their responses with dominant group opinions.

Implications of the results for policy

The findings have clear implications for health policy in Namibia. They suggest that cervical cancer awareness should be treated as a structured national priority rather than as an occasional health education activity. Policy should therefore strengthen the integration of cervical cancer education, screening and referral messages into routine primary healthcare services. The Ministry of Health and Social Services may also need to formalise continuous training for nurses and community health extension workers so that awareness messages are accurate, culturally appropriate and consistently delivered. The results further point to the need for dedicated funding for mobile outreach, transport, screening equipment and information materials in local languages. Policy should also support stronger media-based health promotion, especially through radio, SMS platforms and community-level campaigns that can reach women in rural and underserved areas.

For practice, the study shows that nurses need to take a more active and deliberate role in cervical cancer awareness. Every routine contact with women at primary healthcare facilities can be used as an opportunity to discuss risk factors, symptoms, HPV vaccination, screening and early treatment. Nurses should also strengthen interpersonal communication so that women feel safe to ask questions and disclose symptoms without fear or embarrassment. The findings further suggest that health education should not remain inside clinics only. Nurses, supported by community health extension workers, should participate in outreach activities at schools, churches, workplaces and villages. It has been observed that practical communication materials such as pamphlets, posters, SMS reminders and radio messages should be provided in local languages. This would help reduce misinformation, improve screening uptake and support earlier diagnosis.

Recommendations for future research

Future research should first include the perspectives of women in different communities, especially those in rural, remote and underserved areas. This would help establish how women themselves understand cervical cancer, what prevents them from seeking screening, and which forms of communication they trust most. Such research would significantly complement the current findings by providing complete picture of awareness gaps, paving way for the tailor-making of practicable strategies for addressing the gaps. Secondly, future studies should evaluate the effectiveness of specific awareness interventions, such as nurse-led clinic education, community health worker campaigns, radio messaging, SMS reminders and mobile outreach services. This could be useful in the determination of strategies that produce measurable improvements in knowledge, screening uptake and timely care-seeking. Evidence from such intervention studies would be useful for guiding national programming and allocating limited health resources more effectively.

Conclusion

The study concluded that there is a lack of cervical cancer awareness among women in Namibia. This limited awareness leads many women to forego cervical cancer screening or treatment, resulting in late diagnoses. Such delays are concerning, as late detection significantly reduces the likelihood of effective treatment and survival outcomes.

To address this gap, the study recommended improving cervical cancer awareness by empowering nurses to advocate for women's health and deliver comprehensive, patient-centred care, strengthened through enhanced patient–nurse relationships. At the national level, the study recommends that the government, through the Ministry of Health and Social Services (MoHSS),

prioritize the training of more nurses to provide preventive cervical cancer services, ensure the availability of screening equipment, and mobilise funding for outreach and mobile health services.

The study makes an original contribution to practice and knowledge by proposing that nurses launch community engagement campaigns to educate women about cervical cancer, with a particular focus on remote and underserved communities where health services are scarce. Furthermore, integrating cervical cancer discussions into women's routine visits to health facilities is also critical, as it helps to raise awareness of their susceptibility to the disease and informs them about the available prevention, screening, and treatment services.

Data availability

Data that were used in the study will be made available upon reasonable request from the authors.

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Conflict of interest

The authors declare that they have no conflicts of interest.

Authors' contribution

Both authors made substantial contributions to the development of this research. Teopolina Nashandi conceptualized and designed the study, conducted the data collection and analysis, and drafted the manuscript. Charlene Downing supervised the research process, contributed to the development of the research framework and methodology, and critically reviewed and revised the manuscript. Both authors approved the final version of the manuscript and take full responsibility for the integrity, accuracy, and scholarly rigour of the work.

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