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FACTORS INFLUENCING HPV VACCINE UPTAKE AMONG CAREGIVERS IN BAYELSA STATE, NIGERIA: A QUALITATIVE STUDY

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Introduction

Cervical cancer remains a major public health challenge in Nigeria, where preventable disease and mortality are compounded by socioeconomic disadvantage and unequal access to healthcare. Nigeria introduced human papillomavirus (HPV) vaccination into its national immunisation programme in October 2023, initially targeting girls aged 9-14 years. However, vaccine availability alone cannot ensure equitable uptake. Misinformation about fertility and population control, historical mistrust of government health interventions, concerns about vaccine safety, and geographical barriers may influence caregivers' decisions (Elemuwa *et al.,* 2024a; Promise *et al.,* 2024; 2025; Oginifolunnia *et al.,* 2025; Opasola & Raimi, 2025). These challenges are particularly relevant in Bayelsa State, where riverine settlements, linguistic diversity, and transport difficulties can constrain healthcare delivery. Understanding caregivers' experiences during vaccine implementation is essential for developing context-sensitive strategies to improve uptake and advance cervical cancer prevention. This study explored factors influencing caregivers' decisions to accept or decline HPV vaccination for eligible girls in Bayelsa State following Nigeria's 2023 national campaign. It examined information sources, trust, sociocultural beliefs, vaccine-safety concerns, service-delivery barriers, and caregivers' recommendations for improving future vaccination programmes.

Methodology

A qualitative study informed by a constructionist paradigm was conducted in urban and rural communities in Yenagoa Local Government Area and surrounding areas of Bayelsa State. Participants were 41 caregivers of girls aged 9–14 years who were eligible for HPV vaccination.

Purposive and snowball sampling, supported by community mobilisers, was used to recruit caregivers with experience accepting or declining vaccination. Approximately 60 caregivers were approached; 41 participated. Five focus group discussions (FGDs) were conducted: four with caregivers who had accepted vaccination and one with caregivers who had declined it. The groups included 5-10 participants each. Discussions were facilitated by an experienced, Ijaw-speaking research assistant, audio-recorded with consent, transcribed and translated into English. Data were analysed using Braun and Clarke's six-phase reflexive thematic analysis, with NVivo 15 supporting data management. Recruitment and analysis considered thematic development, although the limited representation of caregivers who declined vaccination, particularly in rural communities, restricted the depth of comparison between acceptors and decliners. Ethical approval and informed consent procedures were followed.

Results

Participants comprised 29 women and 12 men, with a mean age of 47 years; 90.2% were married, and all identified as Ijaw. Thirty-five participants (85.4%) reported accepting vaccination for an eligible girl, while six (14.6%) reported declining it. Four interconnected themes emerged. First, trust shaped vaccination decisions. Information came through schools, radio, social media, friends, relatives, and healthcare professionals. Personal recommendations from trusted contacts often strengthened acceptance, while inadequate explanations from vaccination personnel undermined confidence. Community members emphasised the importance of competent vaccinators and the involvement of residents, traditional leaders and religious leaders. One caregiver explained that community members cooperate more readily when they recognise someone from their own community among vaccination teams. Second, misinformation and sociocultural beliefs influenced perceptions of vaccine purpose and safety. Rumours linking HPV vaccination to population control and infertility generated suspicion, sometimes reinforced by experiences and misinformation associated with COVID-19 vaccination. Some caregivers believed vaccination was inappropriate before sexual activity, while others understood it as protection against future reproductive health problems. Personal experiences of cervical cancer deaths also motivated acceptance. These accounts demonstrate how trust, perceived vaccine purpose, and culturally shaped understandings of adolescent sexuality influenced decisions. Third, concerns about vaccine safety reflected the quality of communication. Some caregivers reported no significant problems following vaccination, whereas others expressed concern about possible side effects and inadequate pre-vaccination counselling. Participants questioned whether vaccinators were sufficiently trained to answer their concerns. These findings suggest that accessible, transparent explanations of vaccine benefits, eligibility, and potential adverse effects are important for informed decision-making. Fourth, logistical and systemic barriers constrained equitable access. Participants described difficulties reaching remote riverine settlements, language barriers, transportation expenses, insufficient advance notice to schools, and inconsistent programme follow-up. Some caregivers preferred vaccination at established health facilities, while others recommended house-to-house delivery to reach girls missed by school-based campaigns. Participants also advocated multilingual communication, engagement of qualified private providers and integration of HPV vaccination into routine primary healthcare. The study contributes context-specific qualitative evidence showing that HPV vaccine uptake is shaped by the interaction of institutional trust, community relationships, safety communication and practical access. Although the findings cannot establish the prevalence of these barriers across Bayelsa State, they identify locally relevant priorities for improving programme delivery.

Conclusion

Caregivers' HPV vaccination decisions in Bayelsa State reflected more than individual preferences: they were shaped by trust, misinformation, sociocultural beliefs and healthcare accessibility. Strengthening community participation, training vaccinators to communicate effectively, providing culturally appropriate information in local languages, improving school-health service coordination, and extending outreach to remote riverine communities may support more equitable uptake.

Integrating vaccination into routine services and maintaining consistent government commitment are also important for sustainability. These findings offer practical insights for strengthening HPV vaccination delivery and advancing cervical cancer prevention in underserved Nigerian communities.

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