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The MWAN Experience in Scaling-Up HPV Vaccination in Nigeria: Challenges, Lessons Learned, and Future Directions

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Introduction

Cervical cancer remains a significant public health challenge in Nigeria, claiming the lives of thousands of women annually despite being largely preventable.^[1,2] It is the second most frequent cause of cancer-related deaths among women aged between 15 and 44 in the country.^[3,4] According to recent estimates, Nigeria records over 12,000 new cases and 8,000 deaths from cervical cancer each year, with most victims presenting at advanced stages due to limited access to screening and treatment services.^[3,4] The high burden of cervical cancer, compounded by late diagnosis and inadequate healthcare infrastructure, underscores the urgent need for effective preventive strategies. In this regard, the HPV vaccine serves as a powerful and highly effective tool, given that persistent HPV infection is responsible for over 95% of cases worldwide.^[5] Studies have shown that HPV vaccination can prevent more than 90% of HPV-related cancers, particularly those caused by serotypes 16 and 18, which account for over 70% of cervical cancer cases globally.^[6,7]

Recognising the need for a comprehensive approach, the World Health Assembly (WHA) has set a global goal to eliminate cervical cancer as a public health problem by 2030.^[8] To achieve this, the World Health Organisation (WHO) introduced the 90–70–90 strategy, which outlines three critical targets: ensuring that 90% of girls are fully vaccinated against HPV by the age of 15; screening 70% of women with a high-performance test by ages 35 and 45 to enable early detection and intervention; and providing appropriate treatment to 90% of women diagnosed with cervical disease, whether pre-cancer or invasive cancer.^[8] Integrating HPV vaccination into national immunisation programmes is a key step toward achieving the first target, especially in low- and middle-income countries like Nigeria, where the burden of

cervical cancer remains disproportionately high. Since its introduction in 2006, the HPV vaccine has demonstrated remarkable efficacy.^[6] The impact of routine HPV vaccination is evident in countries with well-established HPV vaccination programmes, where significant reductions in cervical cancer incidence, ranging from 54% to 83%, have been reported.^[6,9] Given this success, scaling up HPV vaccination efforts in Nigeria is essential to reducing cervical cancer cases and related deaths.

In alignment with the global initiative, the Nigerian Federal Ministry of Health (FMOH) launched a strategic three-phase nationwide rollout of free routine HPV vaccination, targeting girls aged 9 to 14 years.^[3,4] The first began in October 2023, covering 15 states and the Federal Capital Territory (FCT). This was followed by Phase 2 in May 2024, which expanded coverage to an additional 21 states. The Phase 3, set to commence in January 2025, will integrate HPV vaccination into the routine immunisation programme for all 9-year-old girls nationwide.^[3,4]

Prior to the free HPV vaccine rollout in Nigeria, access was restricted to those whose parents could afford it.^[11,12] This resulted in extremely low coverage among eligible girls, with HPV vaccination rates as low as 1.5%, due to high costs and limited availability.^[10,11] The introduction of free, routine HPV vaccination therefore marks a significant milestone in Nigeria's public health efforts to reduce the burden of cervical cancer. However, the initial rollout faced several challenges, including low community awareness, logistical difficulties, and vaccine hesitancy. Overcoming these barriers required strong collaboration among key stakeholders, including the Medical Women's Association of Nigeria (MWAN) and other partners. Their concerted efforts played a crucial role in ensuring the successful implementation of Phase-2 Rollout and setting the stage for seamless integration into routine immunisation, thereby promoting widespread acceptance and coverage of the HPV vaccine.

MWAN is a non-governmental, non-profit organisation comprising fully registered female medical and dental practitioners. Established in 1976, MWAN operates in nearly all 36 states of Nigeria and the FCT, with the primary focus on improving the health of Nigerians, particularly women and children.^[12] Over the years, it has pursued this mission through grassroots information dissemination, advocacy, sensitisation, capacity building, and service delivery. MWAN has been a leader in immunisation advocacy, actively participating in various initiatives to enhance vaccine uptake.

As a professional organisation dedicated to improving the wellbeing of women and children, MWAN played a proactive role in supporting the Phase-2 HPV Vaccine Rollout and the transition to nationwide routine HPV vaccination.^[13] Its efforts centered on public enlightenment, advocacy, community mobilisation, technical support and capacity building to overcome vaccination barriers and promote widespread uptake. This article highlights MWAN's journey in scaling up routine HPV vaccination, outlining the strategies employed, challenges encountered, lessons learnt, and actionable insights to accelerate progress and ensure no child remains unprotected from cervical cancer.

Methods

MWAN's approach to Scaling up Routine HPV Vaccination in Nigeria

Recognising the critical role of the HPV vaccine in preventing cervical cancer, MWAN intensified efforts to scale up routine HPV vaccination among eligible adolescent girls across Nigeria. The strategies adopted include collaborations with key stakeholders, training and capacity building for healthcare providers, advocacy and stakeholder engagement, community mobilisation and sensitisation, monitoring and supervision, and knowledge sharing.

Collaborations and capacity building

To effectively address the challenges of the HPV vaccine rollout, MWAN partnered with key stakeholders, including the International Vaccine Access Centre (IVAC), Direct Logistics Consulting (DCL), the Paediatrics Association of Nigeria (PAN), Pathfinder, the National and State Primary Healthcare Development Agencies (NPHCDA and SPHCDA), and various Civil Society Organisations (CSOs).

Through these joint efforts, 30 MWAN members were trained as HPV Vaccine Champions across 21 Phase 2 states, equipping them with knowledge on HPV vaccine facts, rollout strategies, and approaches to addressing vaccine hesitancy. MWAN Vaccine Champions co-facilitated LGA-level training and mobilisation initiatives to drive vaccine demand among school leaders, parents, and adolescents. As a result, an additional 34 CSOs, 17 youth leaders, and 493 community-based HPV vaccine champions were trained across 21 Phase-2 states. Furthermore, a pre-rollout webinar for female medical doctors promoted HPV vaccine uptake in clinical practice and personal engagements, reaching 695 medical practitioners nationwide.

To emphasize the importance of collaboration, MWAN participated in the official flag-off ceremony of the Phase-2 HPV Vaccination campaign in each state, graced by the First Lady.

Advocacy and stakeholder engagement

MWAN actively engaged policymakers, traditional and religious leaders, and other key stakeholders through targeted advocacy efforts to secure support for the HPV vaccination initiative. By presenting evidence-based data on the vaccine's efficacy, safety, and potential to significantly reduce cervical cancer incidence in Nigeria, MWAN reinforced stakeholder commitment to the programme. To further drive impact, MWAN's HPV Vaccine Champions were integrated into HPV vaccine Technical Working Groups (TWGs) across 21 states, where they provided technical expertise, addressed myths

and misconceptions, and promoted vaccine uptake.

Community mobilisation

Recognising the critical role of community acceptance in the success of the HPV vaccination programme, MWAN implemented sensitisation campaigns using culturally appropriate strategies. These included town hall meetings, school outreach programmes, and the distribution of educational materials in local languages to enhance awareness and understanding of HPV vaccination. To further amplify its reach, MWAN leveraged key global health observances such as World Cancer Day, Cervical Cancer Awareness Month, International Day of the Girl Child, and World Immunisation Week to disseminate vital messages and dispel misconceptions about the HPV vaccine.

Knowledge sharing

MWAN facilitated platforms for knowledge exchange among healthcare providers, policymakers, and community leaders to enhance HPV vaccine uptake. Through workshops, seminars, and conferences, MWAN shared best practices, addressed challenges, and developed innovative solutions to improve vaccine acceptance and coverage. A key forum for these discussions was the 2024 African Women in Medicine, Health, and Wellness Conference, which provided an opportunity to reflect on the HPV vaccine rollout—highlighting successes, identifying challenges, and strategising for future improvements. Additionally, MWAN fostered intersectoral dialogue and forged innovative partnerships to strengthen vaccine introduction strategies, securing a more coordinated and effective implementation.

Monitoring and supervision

MWAN implemented robust monitoring and supervision mechanisms to ensure the quality and effectiveness of the HPV vaccination programme. These efforts included regular field visits, data collection and analysis to track vaccination coverage, and identifying areas requiring additional support. As part of its commitment, MWAN actively participated in supervisory activities during the seven-day MAC campaign at both state and LGA levels. Members attended evening review meetings to assess field reports, refine strategies, and enhance campaign outcomes. Additionally, MWAN played a key role in training Adverse Events Following Immunisation (AEFI) Committee members at the state level, monitoring AEFI cases, and contributing to various subcommittees to strengthen vaccine safety measures.

Impact and Achievements

MWAN's extensive membership network played a vital role in ensuring the HPV vaccination initiative reached all states in Nigeria, including rural and hard-to-reach communities. By leveraging strategic partnerships, MWAN facilitated the pooling of resources, expertise, and influence to enhance advocacy, community engagement, logistics, and technical support at both state and LGA levels.

These coordinated efforts were instrumental in strengthening public trust, increasing HPV vaccine acceptance, and improving accessibility, demonstrating the power of collaboration in achieving a successful rollout. Participation in town hall meetings, school sensitisation programmes, and advocacy visits to community and religious leaders further reinforced public confidence, ultimately driving higher vaccine coverage. MWAN's initiatives also garnered positive feedback from stakeholders, with healthcare providers reporting increased confidence in discussing HPV vaccination with carers.

A major milestone was achieved during the 2024 World Immunisation Week when MWAN's

community sensitisation efforts engaged over 54 million people across Nigeria, significantly boosting awareness and acceptance of the HPV vaccine. As shown in Figure 1, every MWAN state launched a social media campaign, complemented by other activities such as radio talk shows (95%), hospital-based sensitisation campaigns (95%), advocacy visits (85%), and church/mosque sensitisation programmes (82%).

The collective efforts of MWAN and its partners contributed to a remarkable increase in vaccine

uptake nationwide. As shown in Figures 1 and 2, HPV vaccine coverage surged to 96% during Phase 2 of the rollout, a significant increase from the 80% recorded in Phase 1. This remarkable progress highlights the effectiveness of strategic interventions by MWAN and other stakeholders.

These achievements provide a strong foundation for sustaining HPV vaccination efforts and expanding coverage, ensuring long-term protection against cervical cancer in Nigeria.

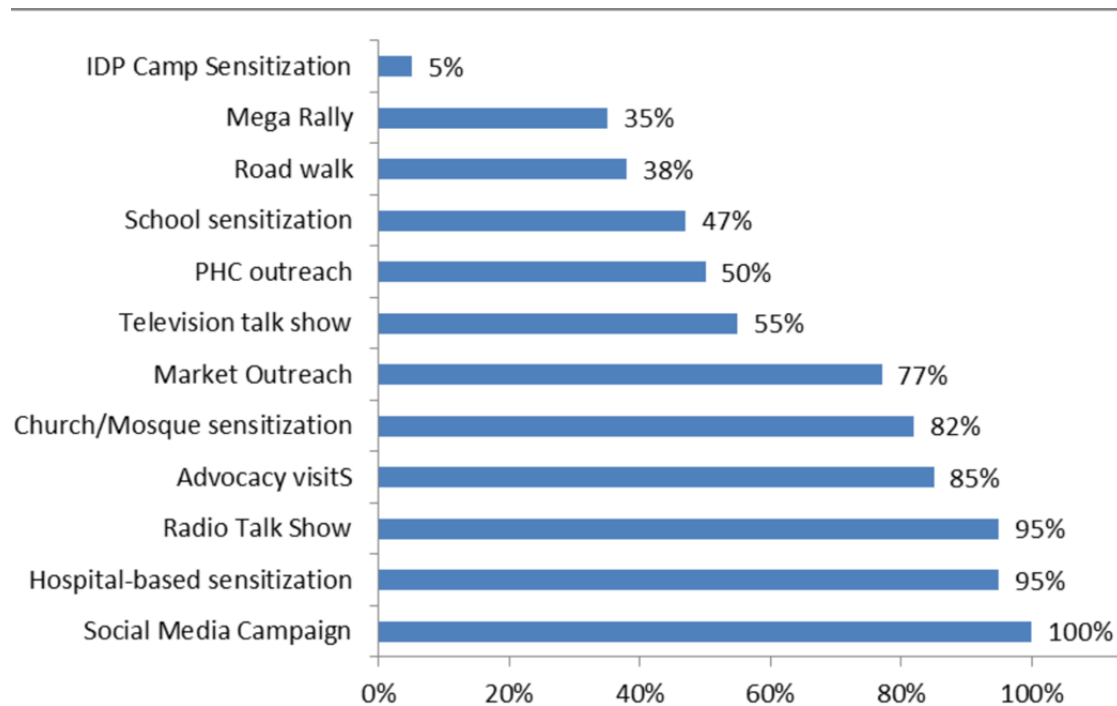
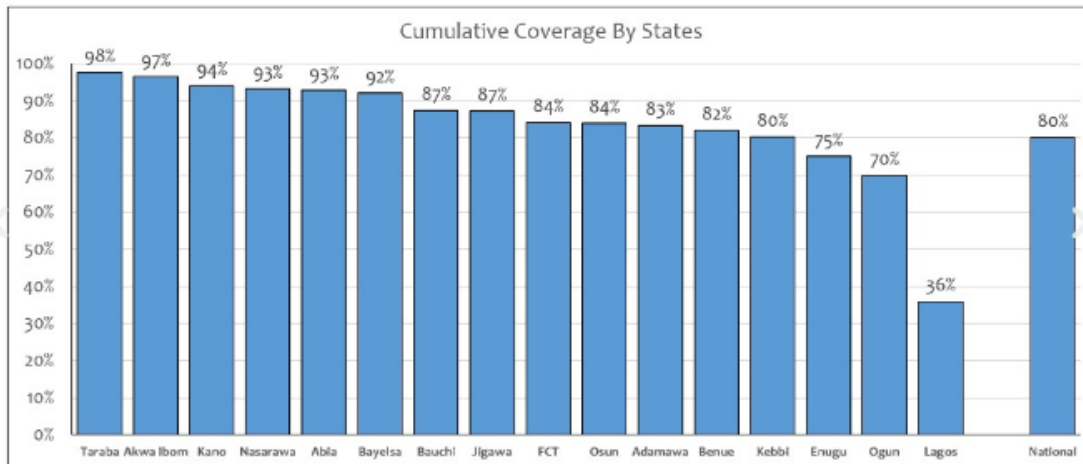


Figure 1: 2024 World Immunization Week Activities (Reached above 54 Million people; 10-30% Male, 70-90% Female)

Phase 1 achievement MAC Campaign coverage across the 16 states

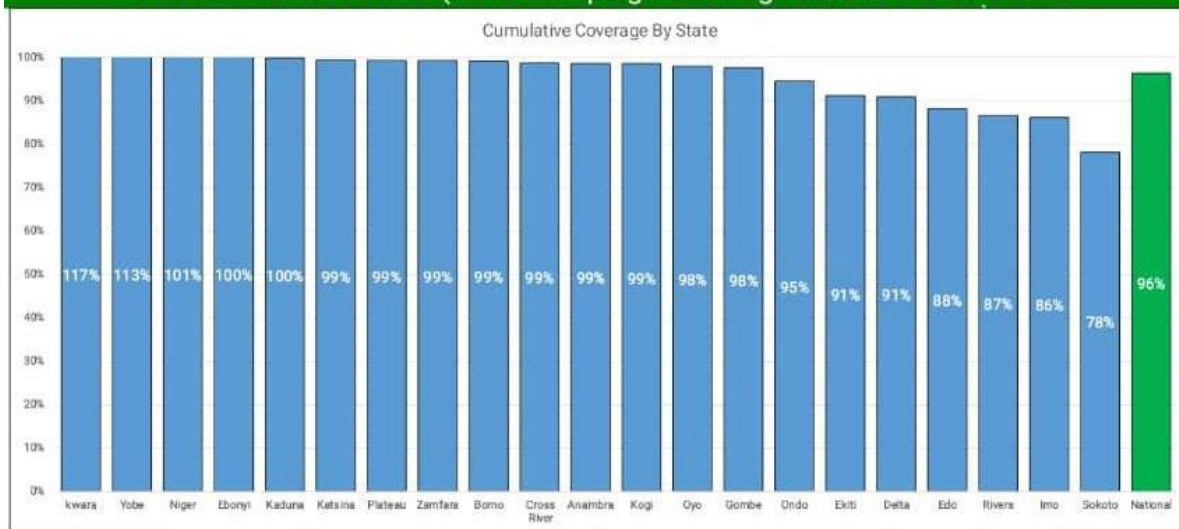


Source: Daily Call-In Data

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Figure 2: Phase-1 HPV Vaccine Coverage

Phase 2 achievement (MAC Campaign coverage across the 21 states)



7.3 million adolescent girls were vaccinated during the MAC Campaign across the 21 phase 2 states

Source: Daily Call-In Data

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Figure 3: Phase-2 HPV Vaccine Coverage

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