



Tabbatacciyar Kulawar Iyali: Adaptation of the Baby Shower Congregation-based Intervention for Maternal HIV Testing in Predominantly Muslim Communities in Nigeria

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ABSTRACT

A significant number of children in sub-Saharan Africa (SSA) still acquire HIV from mothers living with HIV due to low coverage of maternal HIV testing and antiretroviral therapy. In Nigeria, the effectiveness of the Healthy Beginning Initiative (HBI) in preventing mother-to-child transmission. interventions have been shown in controlled clinical trials and research to program translation in predominantly Christian populations. We report on our adaptation and implementation of the HBI congregational approach (the Tabbatacciyar Kulawar Iyali Initiative) and the result on HIV case identifications among pregnant women living in a predominantly Muslim setting in Northern. Overall, 15,302 pregnant women were tested for HIV, and 25 tested HIV positive via the Tabbatacciyar Kulawar Iyali Initiative. Our result demonstrates the feasibility and potential effectiveness of a community-based PMTCT intervention using an adapted HBI approach in a predominantly Muslim setting.

Keywords: Baby Shower, Congregation-based, Maternal HIV Testing, Muslim Communities.

BACKGROUND

Despite being preventable, a significant number of children in sub-Saharan Africa (SSA) still acquire HIV from mothers living with HIV.¹ Nigeria continues to bear a disproportionate burden of paediatric HIV, contributing about 18% of the global 120,000 new infections among children in 2023.² Mother-to-child transmission (MTCT) is the second major source of new HIV infections in Nigeria, responsible for 22% of all new infections.³ Efforts to reduce the burden of

MTCT in Nigeria have been limited by the low uptake of antenatal HIV testing and, in turn, antiretroviral therapy (ART) coverage for the prevention of MTCT (PMTCT). For example, in 2020, only about 32% of pregnant women were tested for HIV, and antiretroviral coverage for HIV-positive pregnant women was 45%.⁴

While the availability of PMTCT services in health facilities has increased over time in Nigeria, it has not translated to a significant improvement in testing and treatment coverage at the population level.^{4,5} The sub-optimal coverage rates of antenatal HIV testing and ART for PMCT in Nigeria are partly explained by the low coverage of facility-based antenatal care.^{6,7} According to the most recent Demographic and Health Survey in Nigeria, 33% of pregnant women do not receive antenatal care or receive it from an unskilled health provider.⁸ Consequently, meeting the MTCT elimination goal in Nigeria would require the decentralization of PMTCT services to the communities so that pregnant women who would not otherwise access health facilities for antenatal care can be reached with HIV testing services and linked to appropriate care.

A faith-based congregational approach has emerged as one of the effective strategies for PMTCT service delivery in the communities.⁹ The Baby Shower Trial in Nigeria demonstrated that Healthy Beginning Initiative [HBI], which included HIV testing in Churches, was associated with increased uptake of HIV testing and ART among pregnant women compared with referral to health facilities for HIV testing.^{10,11} The effectiveness of HBI has further been shown in real-life settings by programs implemented in Nigeria.¹² However, the growing body of evidence on the congregational approach to complement facility-based PMTCT services has been restricted to churches and Christian-dominated settings. To the best of our knowledge, this would be the first documented implementation of HBI in predominantly Muslim communities in Nigeria.

In this paper, we report our adaptation of the HBI congregational approach (the Tabbatacciyar Kulawar Iyali Initiative) and the impact on HIV case identification compared with other community-based approaches among pregnant women living in predominantly Muslim rural settings in Nigeria under the Accelerating Control of HIV Epidemic in Nigeria – Cluster 2 (ACE 2) project.

The ACE 2 project is a 5-year awarded project that is being implemented by four partner consortiums, including Georgetown Global Health Nigeria (GGHN), Pathfinder International, Society for Women Development and Empowerment (SWODEN), Solina Centre for International Development and Research (SCIDar) operating across three states of Nigeria including Kano, Jigawa and Bauchi. The goal of the project is to increase access to the provision of quality HIV/AIDS and TB services (HAT) while increasing health system resiliency, responsiveness, and accountability.

APPROACH

Implementation Framework

We used the Exploration, Preparation, Implementation, and Sustainment (EPIS) framework^{13,14} to report our adaptation of the HBI congregational approach for providing PMTCT services in a predominantly Muslim population. The EPIS is both a process and a determinant framework. It consists of four well-defined phases that describe the implementation process, identify the outer system and inner context, and bridge innovative factors that impact the implementation of evidence-based practice (EBP). Each phase of the EPIS framework ensures

that the adaptation of the HBI approach is culturally appropriate, community-centred, and effective in promoting PMTCT in a predominantly Muslim population.

Exploration Phase

In the Exploration Phase, we focused on understanding the target population's needs, context, and readiness. It involved assessing the Muslim community's cultural, religious, and social norms, identifying barriers to PMTCT uptake, and exploring how the HBI approach could be culturally sensitive and relevant to this group.

Needs Assessment

During the Exploration Phase, the ACE 2 implementation team conducted a needs assessment to explore implementation readiness and several factors that could impact the feasibility of implementing the HBI in predominantly Muslim communities. This assessment was led by GGHN with its partners, including SWODEN, Pathfinder International, and SCIDar. Several essential factors were identified from the needs assessment, including funding and logistics support for the pregnant women attending the baby shower; an effective supply chain system for the management of commodities and consumables; effective project management and project leadership; effective data management system, documentation, and reporting; and support by community-level organizations to integrate screening including Syphilis tests, TB screening, weight, blood pressure and temperature checks, and random blood sugar into maternal health services in the various communities.

Preparation Phase:

Two main activities were developed following the preliminary assessment (a) the Implementation Team was formed that included the ACE 2 team and other support team members including the Voluntary Community Mobilizers (VCMs), Traditional Birth Attendants (TBAs), and Community Leaders, (b) a broad workplan for the multidisciplinary study team was developed that identified and mapped out the states and sites where the project would be conducted, the dates for the outreaches, responsible team leads, the proposed number of women to be screened, commodities needed, and the logistical challenges that would need to be addressed. During the Preparatory Phase, our team focused on engaging several stakeholders to sensitize them on the upcoming projects and collaboration on implementation site identification and selection, assessing these sites for readiness and training healthcare providers that will be part of the study.

Stakeholder Engagement:

Several stakeholders' meetings were held during the Preparation Phase to adapt the Baby Shower model to align with Islamic values and practices. The team met with religious leaders and community stakeholders to review the design of the Baby Shower Program, incorporate faith-based messaging that resonates with the predominantly Muslim community, prepare healthcare workers for culturally appropriate engagement and tailor resources and training appropriate for this specific cultural setting. Before starting implementation, we conducted a sensitisation and entry meeting with the community stakeholders and gatekeepers (Community leaders, religious leaders, VCMs) for each of the communities and churches in the congregational settings. This meeting was a week-long activity across the 3 states in December 2022 and was led by the GGHN PMTCT team in collaboration with the SWODEN team. The purpose of these meetings was to (a) introduce the aims and objectives of the community

PMTCT (cPMTCT) program in the ACE 2 project; (b) conceptualize HIV and its effects on their communities; (c) describe cPMTCT and its benefits in achieving epidemic control; (d) introduce the congregational approach to PMTCT activity and its implementation plans and schedules; and (e) to make them understand their roles, responsibilities, and the level of support that is required of every stakeholder. The community and religious leaders of all the sites welcomed and accepted the implementation of this project in their communities and congregations. They agreed to provide the necessary support required for the successful implementation of this initiative.

Specific Adaptation of the HBI Approach:

Considering the local settings of the Northern Nigeria region where the ACE 2 project is being implemented, the Project Team adapted the HBI and called it *Tabbatacciyar Kulawar Iyali*, which means (family-centered care) in Hausa, the most common language in Northern Nigeria. This approach to PMTCT layers on congregational platforms to reach out to pregnant women, children, and male partners to provide PMTCT services. The structures of the community's traditional leadership were used to congregate pregnant women rather than in a church congregation setting. Working with the grassroots offices of traditional community leaders gave us access to the VCMs (a women-driven community infrastructure) and established traditional birth attendants (TBAs) who were engaged in mobilizing members of the community. See Table 1 for the HBI components and their adaptations.

Table 1: HBI Components and Adaptation

S/N	Components	HBI	Adaptation	Justification
1	Branding	Baby Shower	Adopted the name - <i>Tabbatacciyar Kulawar Iyali</i> – to suit the local tradition and custom.	The modified name provides a concept that the local women and leaders could culturally relate to.
2	Congregation point	Church	Expand the congregation point to include community centres and birth centres.	Women and Men worship separately in mosques compared to churches, with combined worship programs.
3	Recruitment platform	Prayer sessions	The religious leaders announce the dates for the baby shower during Muslim prayer time. Additionally, House-to-house mobilization by the VCMs and TBAs was incorporated.	In Muslim communities, women need permission from their husbands to go out for any activity. The announcement made by the Imam at the mosques tends to seek consent and inform them of the intended activity, allowing their wives to participate.
4	Implementation Resource Team	Church-based Health Team that includes clergy leadership, women and men church group leaders.	Program Staff, community partners and other IPs.	Expanded use of local resources to enhance sustainability.

5	Implementation Staff	Church-Based Health Advisors.	Voluntary care mobilizers and Traditional Birth Attendants as primary staff.	The VCM is an already established health and welfare structure in these communities, which the traditional leadership council uses for women's welfare programs. The TBAs had earned the trust of women in their communities for pregnancy and care of newborns.
6	Intervention	Health education and testing.	Remain the same	
7	Integrated testing strategy	Expanded health education and testing beyond HIV.	Remain essentially the same, with expanded screening for DM	Increased blood sugar in pregnancy may be a pointer to gestational Diabetes.
8	Target population	Women of childbearing age and their partners.	Pregnant women	In Islamic settings, men and women do not congregate together in one place.
9	Incentives	Mama packs given to participating women.	Detergents	Cost implication with focus on sustainability.
10	Follow-up platform	Baby reception	Identified HIV+ clients are referred to a comprehensive health facility nearer to them or of their choice for comprehensive services and follow-up care.	The facility serves as a point of care for the clients.

Site Identification and Selection:

Each state team worked together with their respective State Ministry of Health (SMOH), State Primary Health Care Development Agency (SPHCDA), State Agency for the Control of AIDS (SACA), and traditional community leaders to identify community-based healthcare facilities, nursing homes and TBA centres within the state which could provide primary PMTCT service (testing and referrals). The facilities were selected using the 2021 mapped data provided by NASCP, SPHCDA and SACA based on a high volume of ANC attendance, HIV prevalence, fertility rate and LGA treatment saturation. The selection criteria for Tabbatacciyar Kulawar Iyali sites emphasized communities with a structured network of social health workers, including community leaders, VCMs, and TBAs. An essential factor was that the VCMs had been trained by UNICEF (United Nations International Children's Emergency Fund), equipping them to support public health interventions like mobilization for Immunization. Additionally, the VCMs were expected to have basic literacy skills, enabling them to read and write simple terms necessary for effective communication and reporting within the program. We purposefully selected sites that met these criteria. The selection for the congregational church settings for

baby shower activity was made by approaching leaders of prominent churches with large congregations within the communities based on local government HIV prevalence.

Site Assessment:

After the sites had been identified, we conducted a baseline site assessment to determine the capacity and readiness, which informed the level of support provided to the sites. The site assessment and readiness were conducted over a 2-week period in multiple sites across 3 states. By working with the SMOH, SPHCDA, SACA, and SASCP, the site assessment team successfully assessed and selected sites (including churches, community centres, nursing homes, and TBA centres). The assessed sites and a description of their categories are described in Table 3. All categories of sites are linked to one ACE 2-supported health facility that serves as their hub site for necessary referrals and reporting.

Training of Services Providers:

Our team selected one focal person who is a direct service provider from all the sites for the start-up training. The objective of the training was to provide trainees with technical knowledge and skills for PMTCT service delivery as well as clarify their roles in bridging the PMTCT gap with their local communities. The training modules included: (a) overview of HIV prevalence and impact; (b) PMTCT; (c) HIV testing and counselling services; (d) referrals and linkages; (e) communication in PMTCT; and (f) documentation using the PMTCT national tools. Following the training, the necessary tools and commodities were supplied to the facilities to ensure the immediate commencement of services. The GGHN Team also supplied the sites with weighing scales, measuring tapes, thermometers, national data collection tools, and general lab consumables like cotton wool, gauze, methylated spirit, and latex gloves. In all, 248 healthcare providers were trained across the implementing sites, with the majority coming from PHCs in the study areas. Of the 248 trained personnel, there were 186 PMTCT focal persons, 22 TBAs, and 40 VCMs. Following the training, each site was assigned specific implementation strategies as seen in Table 4.

Implementation Phase:

During the Implementation phase, the adapted HBI approach was rolled out in the participating communities. During this phase, the model was put into practice, and its effectiveness in promoting PMTCT services was monitored. Strategies such as community outreach, peer education, and integrating religious support were used to encourage participation. Continuous feedback from stakeholders helped to fine-tune the implementation. The congregation-based testing report covered the intervention that was implemented from January 2023 to September 2024.

Ethical Considerations:

The intervention applied the ethical principles of respect for persons by maintaining all participants' autonomy, dignity, and rights. The participants were fully informed about the purpose and benefits of HIV testing in pregnancy, and they provided informed consent before they were tested. The intervention is also hinged on the principle of beneficence to promote the well-being and health of Muslim women in Nigeria by increasing access to maternal HIV testing and promoting a culture of health and wellness. The study did not cause any harm to any participant. All participants were treated with respect, dignity, and care, and their

confidentiality and anonymity were protected. All data collected was stored securely to prevent unauthorized access.

Informed Consent:

The project staff and volunteers were trained on informed consent procedures, cultural Sensitivity and confidentiality to ensure that they can handle the consent process with sensitivity and respect. The purpose and benefits of the HIV test were explained to the women in their local language. The women were assured of confidentiality and anonymity to alleviate the participants' concerns about their personal information being shared. After the participants had been fully informed and had had the opportunity to ask questions, they were provided with the informed consent form to read and sign.

Modalities of Implementation of the Adapted HBI:

The CAT1 and CAT2 sites integrated HIV testing and counselling into routine ANC services using the HIV and Syphilis combo test kit. All pregnant women were tested for HIV and syphilis at the first ANC visit. Those identified to be positive were referred to the Hub sites for comprehensive PMTCT services. Service delivery data were also reported daily via DHIS and other designated platforms and reviewed weekly for state-level reporting. The focal person from each of the spoke sites manually conveyed their registers to the hub site at the end of the month for data triangulation and validation. See Tables 2 and 3 for assigned roles and activities for the project team and Classifications of all assessed cPMTCT sites, respectively.

Table 2: Assigned Roles and Activities for Project Team

Implementing Team Members	Roles
ACE 2 ImplementationTeam	<ul style="list-style-type: none"> • Overall leadership and technical coordination of CAT3 implementation in the state. • Created a schedule for the implementation of AT3 activities. • Ensured all commodities, tools, and equipment are available forimplementation. • Ensured the conduct of activities is in line with guidelines. • Served as triage nurses and health educators during thecongregations. • Provided HTS services during the congregation testing. • Supported in the documentation and reporting of service delivery. • Ensured accompanied referrals for newly identified PLHIV forART initiation. • Provided logistic support.
VCMs/Community Health influencers and Promoters (CHiPs)	<ul style="list-style-type: none"> • Conducted house-to-house sensitization and mobilized PW in their various wards for CAT3 services on scheduled dates. • Provided services in the congregation. • Documented and reported service delivery.
TBAs	<ul style="list-style-type: none"> • Conducted house-to-house sensitization and mobilized PW in their various wards for CAT3 services on a

	scheduled date. <ul style="list-style-type: none"> • Provide services during the congregation.
Ward Development Committees (WDCs)	<ul style="list-style-type: none"> • Stakeholder engagement and collaboration • Improve mobilization coverage in the community.
Community/Religious Leaders	<ul style="list-style-type: none"> • Sensitized and mobilized community members on the date and venue for CAT3 activities.

Table 3: Classifications of all Assessed cPMTCT Sites

Category	Description	Number of sites selected
CAT1	Nursing homes managed by retired or in-service healthcare workers (Nurses or CHEWs)	48
CAT 2	Birth Homes are manned by traditional Birth attendants (TBAs).	22
CAT3 (<i>Tabbatacciyar Kulawar Iyali</i>)	Congregational centres within the community	30
CAT3 (Church Setting)	Church congregational centres	6

Phase 1 - Site Preparation and Location Setup:

Once schedules were set, the community team (WDC, TBAs, VCMs) met with Mai-anguwa (District head) to have a robust discussion on the implementation of the activity. A central location was selected based on the coverage of pregnant women in that area and the neighbouring/surrounding area. The Mai-anguwa of that selected community provided a venue for this activity. This was either the Mai-anguwa's (District Head) house or another venue provided by him. The WDC and VCM accessed this venue to ensure it would address privacy for clients during testing and shelter from the scorching sun and other harsh weather conditions. On the scheduled date, the teams arrived at the venue to set up the location and arranged the various service delivery points to ensure effective and efficient flow.

Phase 2 - Participant Registration:

The registration point served as the entry point for all pregnant women participating in the activities. At the registration point, the information of the women was captured as required on the attendance sheet and the General ANC register, and then they proceeded to take their seats.

Phase 3 - Health Education:

Following the registration, the women sang local melodies and were provided group health education about pregnancy, emergency obstetric signs, HIV infection, and the need for HIV testing services during pregnancy. Questions were entertained, and clarifications were provided as necessary.

Phase 4 - Triage and HTS Services:

After the general health education was provided, pregnant women were directed to the triage section, where vital signs (blood pressure [BP], blood glucose, and weight) were measured for each participant. From the triage point, the women moved to the HIV testing point where each of them was given individual HIV pre-test counselling and HIV tests were performed. The test results were transmitted to the next counsellor tester for result interpretation and post-test counselling. In some cases, group pretest counselling was done during group ANC. This is for

efficient management of time and resources. Additionally, customised cards were issued solely for the congregation, and the results of testing were captured in the card for the team's use.

Phase 5 - Program Closure and Follow-Up Plan for Identified Pregnant Women with Positive HIV Results:

The settings and arrangement of the venue ensured that the women who tested positive were linked to care, and all the previously known positive women were confirmed to be on treatment at their respective treatment facilities. Furthermore, the newly identified and previously known women on ART were all referred to the hub sites for comprehensive PMTCT services. These women were assigned to dedicated case managers at the hub site, and the case managers, in collaboration with the facility and community service providers, directly followed up with these clients for ANC attendance. Additionally, they also coordinated other services like viral load testing at 32 weeks gestational age, and early infant diagnosis and ART prophylaxis for the infants. Furthermore, after this phase of the community PMTCT program, the GGHN Team continued to provide technical oversight and support to all stakeholders. The specific follow-up action included: (a) initiation of HIV+ pregnant women on ARVs; (b) provision of adherence support and increasing knowledge of PMTCT; (c) enrolment into a maternal cohort; (d) index testing for partners of positive pregnant women; (e) referral of infants to the OVC program for social support and infant feeding; (f) health education for the mother on the importance of stopping breastfeeding at 1 year; and (g) final outcome evaluation for mother-baby pair at 18 months. See Tables 4 and 5 for assigned services for implementing sites and screening results, respectively.

Table 4: Assigned services for the implementation sites.

Services	Spoke health facilities	CAT 1	CAT 2	CAT 3
Carry out baseline test- PCV, HTS, urinalysis	X	X	X (HTS only)	X (HTS only)
Be able to determine fundal heights, GA, EDD and danger signs in pregnancy	X	X	X	
Provide other necessary ANC services like TT, malaria in pregnancy and referrals, etc.	X	X		
Collect samples for the Viral load test and the EID	X	X		
Conduct clinical screening for TB and referral	X	X		
Conduct pregnancy tests	X	X		
Ensure accompanied referrals for newly identified PLHIV for ART initiation.	X	X	X	X
Lay priest who prays and the VCM to give a health talk for a group of pregnant women				X
Provide ART Services	X	X		
Management of HEIs	X	X		

Table 5: Maternal HIV Testing January 2023- September 2024

	Attendance	HIV Testing	Number of HIV positive Pregnant women identified	% Contribution of HIV+ pregnant women identified

CAT1	22,481	22467	19	29%
CAT2	6,320	6,319	1	2%
CAT3 (<i>Tabbatacciyar Kulawar Iyali</i>)	16,643	16,626	37	57%
CAT3 (Church Setting)	923	917	8	12%
Total	46,367	46329	65	100%

Sustainment Phase

In the final phase, our team's goal was to ensure the long-term sustainability of the adapted approach. This involved strengthening community ownership, securing ongoing support from local leaders and integrating the HBI model into routine health services. Monitoring outcomes and adjusting the program to maintain relevance and effectiveness in the Muslim community are also crucial for its continued success. In July 2024, the Nigerian Government and the PEPFAR program in Nigeria adopted the HBI Toolkit as a critical community intervention in congregational settings ¹⁵⁻¹⁷, further entrenching its use for programmatic use in resource-constrained settings.

Lessons Learned

Providing periodical HIV testing services for pregnant and breastfeeding mothers while linking those who are HIV positive to care and treatment is crucial in eliminating MTCT of HIV infection, reducing incidence of new infections, and ultimately achieving epidemic control. Our team adapted the HBI to bring quality PMTCT services closer to the community while establishing seamless referral systems and data transmission between the cPMTCT sites and Hub sites. Most maternal deaths are preventable when women have access to quality antenatal, labour and delivery care as well as postnatal care, especially when provided by skilled health workers. We deployed a multi-disciplinary team to integrate maternal and child health services, including HIV testing services for pregnant women within their communities. Our key finding is that the Tabbatacciyar Kulawar Iyali initiative effectively identified pregnant women who were at a higher risk of being HIV-positive, more so than other interventions. The results suggest that while CAT1 and CAT2 played essential roles in the broader testing efforts, CAT3 was more successful in targeting and identifying the higher-risk pregnant women, thereby contributing the most to the detection of new HIV-positive cases. This distinction highlights the importance of tailored interventions like Tabbatacciyar Kulawar Iyali in enhancing the effectiveness of maternal HIV testing programs.

During this process, we learned multiple lessons. First, the engagement of community and religious leaders improved the level of reception and participation by the women and other stakeholders in the community. Second, from the various interactions, it was observed that majority of pregnant women in the communities prefer to access ANC and midwifery services from nursing homes and TBAs within their community due to ease of access, trust in the service providers, perceived low cost, and cultural beliefs. Third, the nursing homes strived to provide a minimum standard of ANC and midwifery service to their clients. However, limited resources such as test kits, other medical equipment, and inadequate training have been major bottlenecks.

Other lessons learned include that our team should have engaged town criers or local announcers to help maximize sensitization efforts and improve the turnout of pregnant women. Our team could also have encouraged more active participation of the community stakeholders by allowing them to take direct responsibility for parts of the implementation.

The exploration phase revealed crucial insights into the complex interplay of cultural, logistical, and systemic factors influencing PMTCT implementation in resource-limited settings. Our results corroborate with existing studies highlighting the critical importance of context-specific assessment in program design.¹⁴ The comprehensive evaluation of human resources, funding, supply chains, and data management systems allows for a nuanced understanding of potential implementation barriers and facilitators, consistent with best practices in implementation science.

A key innovation in our approach was the cultural adaptation of the "baby shower" concept to "Tabbatacciyar Kulawar Iyali," leveraging existing community structures. This adaptation goes beyond surface-level modifications, representing a deep structural tailoring of the intervention to the local context. This approach could serve as a model for other health interventions in culturally diverse settings.

Our success in training 248 service providers across various categories not only built local capacity but also established a sustainable model for skill transfer in low-resource settings. This approach addresses a critical gap that is addressed both in the EPIS Preparation Phase and the Sustainment Phase. The implementation phase demonstrated the feasibility of integrating HIV testing into routine ANC services at the community level, aligning with and extending World Health Organization recommendations.¹⁸

Policy Implications

Our results have significant implications for policy and practice. The success of this community-based model challenges the traditional facility-centric approach to PMTCT, suggesting a need for policy shifts towards more decentralized, community-integrated services. Furthermore, the effective use of the EPIS framework in this context provides a robust template for implementing complex health interventions in resource-limited settings.¹⁹

Future research should include rigorous cost-effectiveness analyses comparing community-based and facility-based PMTCT interventions. Additionally, investigating the potential of mobile health technologies to enhance intervention delivery and follow-up could provide valuable insights for improving PMTCT programs in similar settings. Longitudinal studies examining the long-term impact of such interventions on community health outcomes and health system strengthening are also warranted.

CHALLENGES

We also encountered multiple challenges including government monetary policy change (cashless policy) that delayed the commencement of the project in some rural communities. The cash issue was addressed by using the money to purchase detergent given to the women instead of cash. Another challenge encountered was the out-of-stock of the Dual HIV/Syphilis test kits which also delayed the implementation of the activity. Special allocation of test kits and other commodities specific to the Congregational Approach to PMTCT (CAP) activity was

provided to ensure the availability of commodities. Other challenges included difficulty in the timely collation and reporting of service delivery data through the DHIS mobile App and limited IEC materials for visibility during congregational testing activities. The challenges encountered, particularly in supply chain management and data reporting, underscore the complex realities of implementing PMTCT programs in resource-constrained environments. Data entry clerks were included in the team to ensure real-time data reporting during activity on the daily performance tracker (DPT). These findings highlight the need for adaptive and resilient implementation strategies in sub-Saharan Africa.

CONCLUSION

Our project demonstrates the feasibility and potential effectiveness of a community-based PMTCT intervention using an adapted HBI approach in a predominantly Muslim setting. By successfully navigating the complex interplay of cultural, logistical, and systemic factors, our approach offers a promising congregational model for improving PMTCT outcomes in Muslim communities in Nigeria and similar settings. These findings contribute to the growing body of evidence supporting community-based approaches to critical health interventions and provide a roadmap for future implementation aimed at reducing MTCT of HIV in resource-limited settings.

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