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# Introducing Group Antenatal Care in Nigeria's Borno State

A Peer Support Model for Increasing Participation in Antenatal Care

November 2023

## Summary

With funding through the Bill & Melinda Gates Foundation's Technical Advice Connect (TACConnect) platform and with technical assistance (TA) from Pathfinder International, 121 health facilities in Nigeria's Borno State are now offering pregnant women the opportunity to attend group antenatal care (G-ANC). This peer-support approach attracted the participation of more than 17,000 mothers-to-be during its first seven months of implementation, quickly increasing state-wide uptake of antenatal care (ANC) in the first trimester of pregnancy by 28% and improving the likelihood that women will use the full range of services they need for healthy pregnancies. Scaling up G-ANC to all 432 health facilities in Borno has the potential to greatly improve maternal, newborn, and child health (MNCH) outcomes across the state.

## Background

Since 2016, the World Health Organization (WHO) has recommended that all women have at least eight contacts with a skilled health provider during pregnancy. This level of care is directly associated with a range of improved MNCH outcomes, including significant reductions in neonatal mortality.<sup>1</sup> Yet many health systems struggle to create demand for comprehensive ANC. In Nigeria's Borno State, only half of mothers seek ANC from a skilled provider, and 38% do not pursue any form of care during pregnancy. The result of such low demand is a worrisome rate of 27 neonatal deaths per 1,000 live births.<sup>2</sup>

## Provision of Group Antenatal Care in Borno State

To improve participation in ANC, the Borno State Government decided to introduce G-ANC, a strategy pioneered in the early 1990s in the United States and replicated around the world, including other states in Nigeria. With funding through TACConnect, an innovative TA delivery platform conceptualized by the Bill & Melinda Gates Foundation to help Nigerian states strengthen their primary health care systems and enhance service delivery, the Borno State government partnered with Pathfinder from January 2022 to March 2023 to implement G-ANC in 121 primary health care service delivery points, known as Basic Health Care Provision Fund facilities in the Nigerian system.

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<sup>1</sup> Doku, David T, and Subas Neupane. "Survival Analysis of the Association between Antenatal Care Attendance and Neonatal Mortality in 57 Low- and Middle-Income Countries." *International Journal of Epidemiology* 46, no. 5 (October 1, 2017): 1668–77. <https://doi.org/10.1093/ije/dyx125>.

<sup>2</sup> "Nigeria Demographic and Health Survey 2018." Abuja, Nigeria, and Rockville, Maryland, USA: National Population Commission-NPC/Nigeria and ICF, 2019.

G-ANC provides a powerful, straightforward solution for increasing pregnant women’s participation in ANC. Pathfinder Nigeria’s Country Director Dr. Amina Aminu Dorayi explains, “G-ANC brings groups of pregnant women together at the facility and community levels to spend quality time understanding their own health, preparing for birth, and discussing family planning and male involvement in their care.” In contrast to the traditional ANC model, which centers on one-way interactions in which health workers give instructions to clients, “With G-ANC, clients are empowered to be responsible for themselves and their fellow group members, sharing experiences and supporting each other by doing such things as jointly checking vital signs and looking for signs of danger during pregnancy.”

In lower-and-middle-income countries like Nigeria, G-ANC has been correlated with improved health literacy, higher patient satisfaction, and increased facility-based delivery. It has been shown to be a particularly compelling care model for engaging adolescents because they are more receptive to socially embedded interventions.<sup>3</sup> This is highly relevant in Borno State given that the median age of first-time mothers in the state is 19.<sup>4</sup>



All six of Hajara’s children were delivered safely by a traditional birth attendant. The 30-year-old mother was still willing to give G-ANC a try for her latest pregnancy after meeting community health influencers, promoters and services supported by the G-ANC project.

“We were grouped according to our gestational age and given the opportunity to share experiences and problems,” she said. “This served as a support system from pregnancy until delivery.”

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<sup>3</sup> Vander Morris, Ashley, Britt McKinnon, Mohamadou Sall, Adrian Witol, Mahamadou Traoré, Fatma Lamesse-Diedhiou, and Diego G. Bassani. “Adolescents’ Experiences with Group Antenatal Care: Insights from a Mixed-methods Study in Senegal.” *Tropical Medicine & International Health* 26, no. 12 (December 2021): 1700–1708. <https://doi.org/10.1111/tmi.13692>.

<sup>4</sup> “Nigeria Demographic and Health Survey 2018.”

## Laying the Groundwork for Group Antenatal Care

**Table 1. What and Who Made G-ANC Work in Borno State?**

WHAT	HOW	WHO
<b>Policy, leadership &amp; coordination</b>	Stakeholder engagement	<ul style="list-style-type: none"> <li>• State Ministry of Health</li> <li>• State Primary Health Care Development Agency</li> <li>• State Emergency Maternal Child Health Intervention Center</li> <li>• State Emergency Routine Immunization Coordination Center</li> <li>• State Malaria Elimination Programme</li> </ul>
<b>Demand creation</b>	Community Interventions	<ul style="list-style-type: none"> <li>• CHIPS</li> <li>• Ward development committees</li> <li>• Community leaders</li> <li>• Religious leaders</li> <li>• Media</li> </ul>
<b>Maternal &amp; child health service delivery support</b>	TA Supplies Safety Oversight Funding	<ul style="list-style-type: none"> <li>• WHO</li> <li>• UNFPA</li> <li>• INTERSOS</li> <li>• FHI-360</li> <li>• Médecins Sans Frontières</li> <li>• Donors &amp; philanthropic organizations</li> <li>• School of Nursing &amp; Midwifery</li> </ul>

A host of local bodies and their partners helped to establish a political environment in Borno State in which G-ANC could succeed, promote it to potential participants, and ensure the quality and accessibility of associated services. Pathfinder helped launch G-ANC in Borno State by convening stakeholders to establish shared understanding and accountability among the primary stakeholders: the Borno State Ministry of Health and Human Services, the State Primary Health Care Development Agency, and other implementing partners in the state. The project also engaged additional stakeholders such as the State Malaria Elimination Program; State Emergency Maternal and Child Health Intervention Center; Ward Development Committees; Voluntary Community Mobilizers; facility-in-charges; and Community Influencers, Promoters, and Services (CHIPS) to introduce the intervention and clarify roles in institutionalizing G-ANC. CHIPS agents play a crucial role, connecting health facilities and the local community. They engage and educate pregnant women and their families about the benefits of G-ANC, promote regular check-ups, and recruit pregnant women for G-ANC using their community influence. They also assist in referring women who need specialized care, gather data on G-ANC participation and outcomes within their communities, and contribute to overall program improvement.

## Adapting Group Antenatal Care to Meet Borno State's Needs

To adapt G-ANC to Borno State's specific needs, Pathfinder assembled key state government officials such as the Director of Primary Health Care and the state reproductive health coordinator, as well as academics and health care workers from selected facilities to adapt the training materials and operational manuals for implementation. To ensure optimal contextualization, Pathfinder limited its role to facilitating the process, while local experts made content decisions to ensure cultural acceptability. For example, visual aids depict women wearing the traditional head covering (hijab), and reproductive and MNCH content is communicated with culturally sensitive language.

## Training Stakeholders

In collaboration with the State Ministry of Health and Human Services, State Primary Health Care Development Agency, and the State Malaria Elimination Program, Pathfinder identified and trained 20 master trainers from Borno's existing pool of state trainers in basic emergency obstetric and newborn care. The master trainers then delivered follow-on training in G-ANC management to 414 service providers—primarily midwives—from 121 health Basic Health Care Provision Fund facilities. In turn, these trainees were responsible for training their colleagues onsite. This cascade approach enabled the program to deliver the bulk of training in low-dose, high-frequency sessions in the workplace, improving the efficiency of knowledge transfer and minimizing service disruption in primary health clinics.



*Borno state trainers in basic emergency obstetric and newborn care become G-ANC trainers.*

Training comprised seven modules, sequentially covering the seven thematic meetings that G-ANC participants attend after an initial registration session. Although the trainees were already well versed in providing ANC, the modules concentrated on how to establish and maintain G-ANC cohorts, facilitate theme-specific meetings, liaise with community mobilizers to create awareness, and demand, and manage program record-keeping.

In addition, Pathfinder strengthened the capacity of four additional key groups, guiding 64 retired nurses to become program mentors; instilling a greater sense of ownership among facility in-charges and maternal and child health coordinators from all local governments in the state; developing program-specific monitoring and evaluation (M&E), documentation, and reporting skills

among local government area M&E officers; and supporting three CHIPS agents per facility catchment area to integrate G-ANC promotion and support into their community activities.

## Blending Mentoring and Supportive Supervision

Through 18 supervisors nominated by the Borno State Ministry of Health and State Primary Health Care Development Agency, the G-ANC initiative conducted six visits per facility during initial implementation. In areas prone to security threats, the project effectively used remote monitoring to limit risk while attending to quality improvement in G-ANC. Mentoring was available on demand and gave providers the opportunity to work through problems with experts assigned to their facilities. Mentors facilitated peer learning between neighboring facilities to increase knowledge and share experiences, relevant solutions, and best practices. They also offered on-the-job support in the facilities they aided, particularly for developing mothers' groups, tracking attendance, and ensuring that women with varying degrees of literacy could do the clinical self-assessments.

Integrating mentorship and supportive supervision allowed for a thorough focus on provider skills and program quality. To focus holistically on implementation, the G-ANC initiative adopted a periodic records-based review as part of supervision tracking elements like number of participants referred to G-ANC through community awareness raising, number of active groups and meetings held, and availability of necessary commodities.

## Making Supplies Available to Ensure Quality

Pathfinder supported the government to deploy logistics management information system tools and antenatal and postnatal care registers to ensure consistent tracking of MNCH services. We also provided basic equipment, including blood pressure cuffs, scales, fetoscopes, and batteries, to all facilities to enable a smooth launch of the G-ANC initiative.



*Director of Primary Health Care (R), Biu Local Government Area (LGA) of Borno State presents G-ANC items procured by Pathfinder Nigeria to officers-in-charge of various primary health centers in the LGA.*

## Program Format

G-ANC consists of eight sessions (Table 2) that correspond to the eight interactions pregnant women should have with qualified health care professionals. Partner attendance is recommended for the unique fourth session, which addresses male support, birth preparation, and postpartum family planning (PPFP). After the last session, participants receive individual ANC until delivery.

**Table. 2. What to Expect from Group Antenatal Care When You're Expecting**

MEETING	TIMING	THEME/SESSION PLAN
1	Before 20 weeks of pregnancy	<ul style="list-style-type: none"> <li>Registration</li> </ul>
2	16 to 20 weeks	<ul style="list-style-type: none"> <li>Introduction to group care</li> <li>Preventing problems during pregnancy</li> </ul>
3	20 to 24 weeks	<ul style="list-style-type: none"> <li>Recognizing problems during pregnancy</li> <li>Joint planning on topics for male engagement in preparation for meeting</li> </ul>
4	24 to 28 weeks	<ul style="list-style-type: none"> <li>The role of partners in positive pregnancy experiences</li> <li>Birth preparedness and complication readiness</li> <li>Healthy timing and spacing of pregnancies</li> </ul>
5	28 to 32 weeks	<ul style="list-style-type: none"> <li>Contraceptive methods</li> <li>Labor signs</li> </ul>
6	32 to 36 weeks	<ul style="list-style-type: none"> <li>What to expect during labor and delivery (includes a visit to the labor ward)</li> <li>Preventing problems after birth</li> </ul>
7	34 to 38 weeks	<ul style="list-style-type: none"> <li>Recognizing baby problems</li> <li>Exclusive breast feeding</li> <li>Labor support</li> </ul>
8	36 to 40 weeks	<ul style="list-style-type: none"> <li>Recognizing postpartum maternal problems</li> <li>Final birth planning</li> </ul>

Every G-ANC meeting follows the same format, including songs at the beginning and end of the session to solidify participants' sense of coming together and being present. Before discussing their experiences completing the personal actions they commit to in each session, participants "sister up" into groups of five or six to complete self-assessments. These include taking each other's blood pressure and weight and identifying potential danger signs. Joint problem-solving is an integral component of this activity. After a brief private consultation with an ANC provider for each group member, the full group reconvenes to report on challenges they addressed during the sister-up

activity, fostering collaborative learning. Then a provider covers topics related to the group's shared pregnancy stage. To reflect on new knowledge gained and encourage each woman to plan specific activities based on the lessons—such as using a mosquito net, talking to relatives about danger signals, or setting aside funds for unexpected medical costs linked to pregnancy—participants repeat the sister-up and report-out process before closing.

## Results

Between August 2022, when the first G-ANC cohort formed in Borno State, and April 2023, the G-ANC initiative enrolled 17,249 women in 1,164 peer groups across the 121 participating health facilities. This created state-wide impact, notably resulting in the following:

- **28%** increase in the rate of pregnant women participating in the all-important first ANC visit before 20 weeks of pregnancy
- **28%** increase in pregnant women accessing intermittent treatment for malaria up to the third and final dose
- **9%** increase in health facility deliveries and a **14%** increase in skilled birth attendance
- **30%** increase in participation in one-day postnatal check-ups for newborns
- **14%** increase in uptake of long-acting reversible contraceptives, including intrauterine devices and implants, in the facilities where G-ANC was implemented

These results demonstrate the ability of G-ANC to create rapid impact. Beyond that, Borno State Commissioner of Health and Human Services Dr. Mohammed Arab Alhaji observes, “These promising results have further demonstrated that G-ANC provides an excellent platform to integrate and increase the uptake of high-impact interventions for reproductive health, MNCH, adolescent health, and nutrition during the antenatal, intrapartum, and postpartum periods.”



Thirty-two-year-old Yagana enrolled in G-ANC with 11 other women at Abbaganaram clinic in August 2022. She credits group support for her first-time decisions to attend ANC, give birth in a health facility, and adopt PFP.

Recognizing how her new practices are improving her family's wellbeing, Yagana has become a maternal and newborn health champion. “My group members bestowed me the group chairperson role, which then saw me rise to the cadre of a community health volunteer,” she explains. “I am a proud ambassador for maternal and newborn health.”



## Key Lessons

- Ensuring that the government drove the identification of requirements, establishment of expectations, and coordination and implementation of the initiative ensured the early and ongoing buy-in essential to the success of the G-ANC initiative in Borno State. Similarly, engaging with the government and other partners—who are often competing for TA opportunities—opened the door for quick scale-up. Première Urgence Internationale and FHI360 were able to include G-ANC in their programs as a result of Pathfinder's work at Borno State health coordination meetings.
- Implementation of G-ANC should not rely on an assumption that each implementing facility will consistently have an adequate number of women at comparable stages of pregnancy. For lower-volume sites in the Borno initiative, program organizers brought participants together from different facilities and, despite the longer travel distances this meant for some, no reduction in participation was noted.
- Before G-ANC, CHIPS agents consistently reported witnessing dissatisfaction among women they recruited to attend one-on-one ANC due to lengthy wait periods. G-ANC has the potential to reduce wait times since it can effectively handle groups of up to 18 women concurrently. Moreover, it appeals to both first-time users and those who previously attended individual ANC in Borno State.

## Recommendation

G-ANC was effectively implemented in 121 health facilities and highly accepted by stakeholders. **We recommend that the Borno State Government promptly scale G-ANC to all remaining facilities.** G-ANC should be regarded as a model for raising awareness of nutrition, reproductive health, MNCH, and adolescent health. Other packages, including routine immunizations, PFP, and newborn and early child feeding practices should be included in future programming in Borno State and beyond, particularly in cases where indicators have been stagnant, indicating the need to boost demand.

The G-ANC model improves maternal and newborn health outcomes by providing a safe space where pregnant women can share experiences and receive essential health information from a midwife or other skilled providers. It likewise serves as a platform to increase access to and uptake of services for improved MNCH outcomes by providing structured information and care packages.

As G-ANC continues to thrive in the 121 facilities supported through TACConnect, and Borno positions itself for state-wide scale-up, Dr. Mohammed Arab Alhaji's enthusiasm is building. "I am confident that the poor maternal indices reported in the state will be a thing of the past through the new layered intervention, thereby significantly reducing maternal and child morbidity and mortality in Borno State."

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*Cover: A client is interviewed during a supportive supervision visit in a participating facility in Borno State. Photo: Pathfinder Nigeria*

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