INNOVATIONS JOURNALS

Brief Report

Group Antenatal Care Start-Up in the Indian Private Sector: An Implementation Journey to Improve Quality of Care

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Sources of Support: An "Innovation Project" grant from Dr. Vishwanath Karad MIT World Peace University. Conflicts of Interest: None.

Submitted: Feb 12, 2024; First Revision Received: May 31, 2024; Accepted: Aug 7, 2024; First Published: Nov 1, 2024.

Kinra TD, Ramanathan V, Umarji CP, Dublin P, Rising SS. Group antenatal care start-up in the Indian private sector: an implementation journey to improve quality of care. *Glob J Qual Saf Healthc*. 2024; 7:191–196. DOI: 10.36401/JQSH-24-5.

ABSTRACT

Introduction: The introduction of the innovative group antenatal and postnatal care model into the private health sector in India has the potential to pivot the experiences of families during pregnancy and beyond. Growing evidence worldwide shows this model moves fragmented healthcare systems toward a more integrated model to improve quality in care and outcomes for mothers and children. The aim of this study was to better understand the challenges and benefits of implementation of the group model of antenatal care in the Indian private health sector for the purpose of improving quality of care. **Methods:** Through a collaborative innovation project led by a master's student of public health and an international organization with expertise in implementing this model, an urban 35-bed private hospital in Pune was identified with readiness to explore the model with stakeholders, train hospital staff as facilitators, and initiate group antenatal care. Semi-structured interviews with facilitators, along with feedback from participants in cohorts and observation of the groups by the trainer, were done for qualitative analysis of themes related to the strengths and barriers in implementing the model. **Results:** A total of 31 pregnant women participated in two cohorts over their second to third trimesters for group antenatal care with a team of three facilitators from November 2022 to June 2023. On review of experiences in implementing the model, the top strengths demonstrated were meeting of felt needs of the participants, high engagement, and relative advantage of the model. Challenges for implementation included for scheduling and attendance, adapting the model for compatibility, capacity-building, and need for more ongoing planning, monitoring, and evaluation. **Conclusions:** Through this innovation project, important lessons were learned for robust planning for a future pilot study. Patient-centered and integrated antenatal care are markers of quality of care that this group model can bring not only in the private healthcare sector but throughout India.

Keywords: Centering-Based Group Care, group antenatal care, postnatal care, healthcare quality, implementation

INTRODUCTION

An experience of care that is dignified, respectful, emotionally supportive, and uses effective communication has been shown by the World Health Organization (WHO) to be an essential process by which evidence-based antenatal care (ANC) can achieve targeted health outcomes.[1] One of the most important outcomes of the third Sustainable Development Goal is to reduce maternal and neonatal mortality. The excess of mortality comes from treatable maternal and neonatal disorders, with up to 64.4% of cases of death due to poor quality of care in low- and middle-income countries rather than nonusage of services.[2] As members of the Network for Improving Quality of Care for Maternal, Newborn, and Child Health launched in 2017 by the WHO, Indian policymakers identified the private health sector as an ally for improving the quality of care (QoC) in ANC.[3]

The WHO recognizes G-ANC as an acceptable alternative to conventional (one-on-one) ANC in its recommendations for a "positive pregnancy experience."[4] Implementation of Centering-Based Group Care (CBGC) involves redesigning the health system with the following three main components bundled together: routine preventative healthcare, an interactive style of educational activities with discussion, and a small group cohort for building community support.[5] These cohorts of women going through the same stage of pregnancy together experience the benefits of empowerment, enhanced satisfaction, and education.[6] Furthermore, the group may provide continuity of group postnatal care (G-PNC) to both the mother and child, including preventive healthcare, continued education, and parenting support, spanning the critical period referred to as the "first 1000 days," from conception to age 2 years. Patient satisfaction is an important perspective for assessing QoC and is one among many outcomes evaluated for G-ANC in more than 99 published peer-reviewed articles.[7] Satisfaction is an indicator that arises from aspects of QoC, including being patient-centered, effective, safe, timely, equitable, efficient, and integrated.[8] Service delivery innovations, such as the G-ANC model, create opportunities for quality learning collaboratives to enhance organizations in a highly fragmented private health sector.[9]

The group model is distinctly patient-centered as a form of routine preventive healthcare that begins with women's active participation in clinical assessments by encouraging them to collect their own weight and blood pressure data. Groups are conducted with an interactive learning style that facilitates knowledge sharing among group members as peers and builds community support. This contrasts with conventional care, which often separates outpatient department visits from pregnancy classes and webinars and is less relational. Group care also fosters community building and peer support by seeking to maintain a stable small group composition of 8 to 12 women of similar gestation.[10] Traditional ANC in India has suffered from poor QoC ranging from obstetric violence in the form of physical and verbal abuse to routine episiotomies, poor rapport with providers, and high workload conditions.[11] Though the private sector is doing slightly better in service delivery and availability of drugs, both public and private sectors in low- and middle-income countries such as India have been found lacking in QoC.[12] To address key bottlenecks in achieving adequacy and quality, G-ANC can contribute toward a strategy for upscaling training and skill building that focuses on improving communication, trust, and bonding between patients and healthcare providers.[13] Evidence on G-ANC is emerging in the Indian context on how it promotes higher use of care, patient empowerment, and satisfaction levels.[14]

The aim of this project was to learn more about the challenges and successes observed in an Indian private health setting in implementing the innovative group ANC (G-ANC) model with the intention of bringing a more patient-centered approach to improve QoC.

METHODS

This project was conducted between January 2022 and June 2023 in three phases: (1) exploration, (2) installation, and (3) implementation of G-ANC. This work entailed learning about how to identify a site with readiness for the model, adapting to a hybrid mode of training, and conducting observational field visits and semistructured interviews with the facilitators led by a Master's in Public Health (MPH) student working in the field in collaboration with a nonprofit organization to provide expertise on the model from a distance.

Exploration Phase

Using the "Planning Guide for Implementation of Group Care," the exploration phase began in January 2022 with site visits to various settings, including public, private, and charitable hospitals in urban settings throughout the city of Pune, India.[15] By May 2022, a site was identified as having readiness to start groups with the minimum criteria of patient volume of at least 30 women registering monthly for care and availability of adequate meeting space. More importantly, this private 35-bed hospital in Pune had a clinician to champion the change from traditional care to group care with administrative support for planning, clinicians and support staff participation in facilitators' training, and evidence of funding available to sustain the model.

Installation Phase

Installation began with steering committee meetings for planning starting in June 2022. The steering committee consisted of administrative, clinician, and support staff members for multidisciplinary input and ongoing support of the groups. This was followed by conducting a total of 12 hours of hybrid online/offline training starting in August with a physician, nurse midwife, dietician, and other steering committee members of the local site guided by the MPH student on the ground and an international expert virtually. Training included orientation to the group model, practicing listening and facilitation skills, conducting mock sessions in which the topics for each session were practiced along with sample activities and discussion prompts, and providing feedback. Methods of strategic inquiry were modeled and reinforced.

Implementation Phase

The first G-ANC cohort started in November 2022, and a second started in January 2023. Enrollment targets for each group were to invite up to 15 women (anticipating some drop-out) between 16 and 20 weeks of gestation after the initial one-on-one visit with their

clinician and their first ultrasound completed at 12-weeks gestation. The group members were invited to bring a support person of their choice to a 2-hour session once a month as part of their routine ANC session for the second and third trimesters. In the first half hour of the session, the women were guided to check their own weight and participate in recording their own blood pressure. Next, their clinician conducted the health assessment in a private area adjacent to the group space. Rather than sitting in a waiting room, group members were offered healthy snacks and invited into the group space adjacent to the clinical assessment room, with free time to socialize during the check-in assessment time. Finally, the group gathered in a circle for an interactive educational discussion for the next 60 to 90 minutes with activities relevant to the gestational age of the members. During this time, common questions shared by many were addressed together rather than individually.

The MPH student provided ongoing support through field visits to observe and provide feedback and collect aggregate attendance data. Preliminary feedback questionnaires and consent forms for participants were developed and translated into local Hindi and Marathi languages. Semistructured interview (SSI) questions for facilitators were used to evaluate qualitative themes on implementation facilitators and barriers based upon the Consolidated Framework for Implementation Research. NVivo 14.23.0 (QSR International) was identified as a tool for analysis.[16] Ethical committee and institutional review board approval were not sought in this initial iteration of groups as the site elected to explore the model internally without formal study.

RESULTS

The first G-ANC cohort began with a core group of six pregnant women and had no more than six at any session, with a total engagement of 13 participants over five sessions. The second cohort began with a core group of 11 pregnant women and had a peak of 14 participants plus support people at the largest group meeting, with a total engagement of 18 participants over six sessions. Additionally, pregnant women invited support people including both men and grandmothers. The site allowed for open enrollment at each session, with new pregnant women allowed to attend who had a similar month due date, which was April 2023 for the first cohort and June or July 2023 for the second cohort. It was observed that the women from the initial session formed a core group that composed approximately two-thirds of the participants at any session. When asked about reasons for missing group sessions, at least three members from the first cohort and six from the second reported traveling out of town to visit extended family. Because of scheduling concerns for the local context, the facilitators condensed topics into six rather than the seven to eight ANC sessions recommended by the WHO and the Centering-Based model (see Table 1 for session topics). The first cohort combined the fourth and fifth session topics into one session due to anticipated schedule conflicts the following month. The second cohort met for five in-person sessions but held the sixth session online. Postnatal sessions were also planned but did not meet due to low attendance.

Table 1. Group antenatal care (G-ANC) session topics

Session Number	G-ANC Session Topics
1	Orientation to group, lifestyle changes, and common discomforts of pregnancy
2	Nutrition and behavior change communication
3	Family planning and reproductive system
4	Labor and birth planning
5	Breastfeeding and emotional support
6	Postnatal mother and baby's health

Adapted from the original eight sessions.

From each cohort, nine participants provided feedback by answering multiple-choice questions with Likert value scales and writing open-ended comments that were reviewed internally. The averages of the Likert scale responses were all positive or strongly positive. Open-ended written comments from participants described the group as "helpful" and "good." They liked the "activities," being able to clarify "doubts" or that "questions were answered," and being "with people going through the same phase." Comments for improvement were made about the "time/waiting" as some of the sessions started and ended late.

In April 2022, SSIs were conducted with the three facilitators for their perspectives on the strengths that facilitated implementation and challenges that posed barriers according to the Consolidated Framework for Implementation Research. Themes were analyzed for concrete examples given and consensus (Table 2). Of all the strengths noted, the most consistent theme related to the perception that patient needs for education were being met. Patient engagement was also higher than expected, with high-risk and multigravida mothers attending. A relative advantage of the model was found in that it offered something unique to the patients, with care being provided at the same time as compared with pregnancy classes. Additional strengths included evidence of a learning climate and tension for change at this site. However, the top challenges of the model were the perceived need for adaptation to make the model compatible with the setting, the need to build the team's capacity for self-efficacy, better goal definitions, and following up on feedback to make the program sustainable. Other minor barriers included the cost and relative priority with other pressing issues for the administration's attention.

Table 2. Facilitators perceptions on implementation strengths and barriers

*CFIR Theme	Facilitators' Comments
Strengths	
1. Meeting needs and resources of those served	[meeting need for] "knowledge retention," "clear doubts," "dispelled lots of myths"
2. Engaging	"high-risk patients are willing to attend"
3. Relative advantage	"create a bond between the care and the providers"
4. Learning climate	"after the contraception session with patients enquiring about Implanon (implantable option), we ordered some since we previously never tried that option"
5. Tension for change	"group care could be part of the change needed in the way women look at their healthcare, there is need for pivoting"
Barriers	
1. Compatibility	"Include more local values," "needs to be adapted to different groups, rural vs. urban"
2. Self-efficacy	"Every time we have to call to invite them [patients] to come and they should call to remind each other"
3. Goals and feedback	[Not yet meeting] "attendance goals" [lack of comments on other goals and feedback]
4. Cost	"Healthcare providers are overburdened and less likely to be compliant to attend the sessions"
5. Relative priority	"Currently we need to focus on NABH accreditation and the site visit"

From interviews with group antenatal care facilitators, concrete examples with internal consensus of CFIR themes were scored as strengths versus barriers. The top five strengths and barriers are listed above that helped or hindered implementation of the model at this private hospital in India.
CFIR: Consolidated Framework for Implementation Research[16]; NABH: National Accreditation Board for Hospitals and Healthcare Providers.

DISCUSSION

Key lessons were learned about the strengths and challenges of implementing G-ANC in this context by listening carefully to the experiences of facilitators and reviewing the patient feedback. A previous pilot study in India showed the feasibility and acceptability of the model to stakeholders.[17] Going from implementation to sustainability will require interacting with the factors that overcome barriers and strengthening the maintenance of G-ANC in the healthcare system in each context. This will include maximizing patient satisfaction benefits and building more capacity through training and upgrading to address challenges to institutionalize the model into practice. The limitations of this project were that findings were all observational and specific to this context, and formal pilot research is required to collect and evaluate quantitative data related to outcomes and the process of achieving QoC changes through this model.

Challenges

One of the greatest perceived barriers was the model's compatibility with the local context, both in the content of the session activity plans and the set schedule of group meetings. For content compatibility with the local cultural context, revisions to the facilitator session guides were made during the debriefing of each session and preparation for the next session with the facilitators. However, the concern voiced by facilitators was if patients would prefer the status quo of coming at their individual convenience or adjusting to a predetermined group schedule? We found positive feedback and a high level of engagement from the participants who came; therefore, it appears that patients may be motivated to attend predetermined visit schedules with continuity of clinician and facilitators. However, owing to disruptions caused by changes in the clinician's schedule and rescheduling of initial sessions due to low enrollment, up to three of the six sessions had to be rescheduled per cohort, which may be a factor for decreased attendance. Capacity building to train more than one team of facilitators will help to sustain multiple groups staying on schedule. Also, a strategy that can be further developed is involving patient advocates to help with recruitment to achieve the target group size at the initial session. Still, the cultural practice of Indian women traveling to their mother's place during the last month of pregnancy for the delivery and after the birth period seemed to contribute to the loss of some group members at later sessions and the late enrollment of other new members. Exploration of more hybrid and online options to adapt to this challenge is being planned for future groups. Administration investment will be vital to ensure a multidisciplinary steering committee continues to meet regularly to set goals and monitor and evaluate the desired health outcomes.

Successes

Capitalizing on the success of the model, a key distinction of G-ANC is the satisfaction of pregnant women in having their questions answered. This brings an increase in rapport between patients and the clinical team, which can generate more patient engagement and retention in the demand-driven private sector. Anecdotal reports from facilitators interacting with G-ANC participants in other outpatient appointments or during their labor and delivery admission highlighted an increased sense of trust and bonding between patients and the care team. After delivery, staff reported that some patients requested to continue in G-PNC sessions, which could serve as continuity through the first 1000 days. Word-of-mouth publicity was finally starting to take off. Even among staff, relationships were strengthened, as one commented, "I have gained a friend." The hospital administration felt there was a relative advantage in offering groups, distinct from other

webinars or class activities already being offered to patients. The integrated and relational aspects of G-ANC motivate hospital staff and communities, as seen in this private hospital's tension for change, stating that "group care could be part of the change needed in the way women look at their healthcare."

Future Directions

The next step after this innovation project is to formally pilot a study to build on this ground experience implementing and expanding G-ANC and integrating it into G-PNC in India. This site is now ready to seek approval by an ethics committee for a mixed-methods study. The purpose would be to document the quality improvement process, patient satisfaction outcomes, and quantitative evaluation of maternal and child health outcomes, including mode of delivery as vaginal or by cesarian section, birth weight, preterm versus term birth, admission to neonatal intensive care, breastfeeding initiation rates within the first hour and before discharge, and family planning needs to be met postnatally. Future research could also compare hybrid versus only in-person meetings. Besides the private sector, public-private partnership sites may be an ideal option to bridge toward spread to the public healthcare sector, and additional sites would be invited to explore the model. Some initial work has been reported in other areas of the country, and collaboration can help engage more stakeholders. Furthermore, results can be shared with the Global G-ANC Collaborative to add to growing evidence from low- and middle-income countries as recommended by the WHO and advocate for policy decisions to support implementation.[18]

CONCLUSION

The path toward sustainable improvement in QoC is further illuminated by these lessons learned in implementing G-ANC. Engaging in G-ANC and G-PNC by private healthcare practitioners, as well as others in India, can help build capacity, increase health system performance, and improve patient and provider satisfaction for sustainable change. With a current push toward entry to the National Accreditation Board for Hospitals and Healthcare Workers, known as NABH, many private hospitals already have a value for growth in teamwork, tools, and skill building for quality improvement. In the 2017 National Health Policy, India encourages research collaborations on healthcare delivery, with goals by 2025 to reach 90% coverage of ANC, full immunization rates by 1 year of age, and the need for family planning to be fully met.[19] Patient satisfaction may be an important driver in meeting the costs of implementing this service. Cost is also saved for the patients in the form of less time spent waiting for the clinician compared with traditional one-on-one care. Formal studies are needed to demonstrate these aspects of QoC within G-ANC/PNC, as well as to understand the long-term impact on health outcomes in the Indian context, such as improved mental health and a decreased rate of preterm birth or low birth weight, which will reduce overall cost and improve quality of life.[20] In conclusion, the goal of enhancing the QoC through implementing G-ANC among private practitioners should not be seen as an indulgence only for the elite but rather a priority for collaboration toward more patient-centered and integrated, compassionate care that all mothers and children in India and around the world deserve.

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