Group Antenatal Care: A Paradigm Shift to Explore for Positive Impacts in Resource-poor Settings

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The delivery of high-quality antenatal care is a perennial global concern for improving maternal and neonatal outcomes. Antenatal care is currently provided mainly on a one-to-one basis, but growing evidence has emerged to support the effectiveness of group antenatal care. Providing care in a small group gives expectant mothers the opportunity to have discussions with their peers about certain issues and concerns that are unique to them and to form a support system that will improve the quality and utilization of antenatal care services. The aim of this article is to promote group antenatal care as a means to increase utilization of healthcare.

Key words: Prenatal care, Group antenatal care, Preventive health services, Maternal health services, Pregnant women

INTRODUCTION

Improving maternal and neonatal outcomes is a global priority, and high-quality antenatal care (ANC) is a key aspect of this pursuit. A previous study showed that ANC of inadequate quality has a counterproductive effect and in fact, reduces ANC attendance and compromises the effectiveness of care [1]. In such a scenario, a new strategy (group antenatal care; G-ANC) is a viable alternative to the conventional method of ANC. G-ANC is an emerging concept of organizing antenatal check-ups and is based on 3 major components (medical assessment, knowledge, and social support). The aim of this article is to promote G-ANC as a means to increase utilization of healthcare and to promote uptake of good health practices, resulting in higher patient satisfaction and maternal and neonatal outcomes, especially in resource-poor settings.

WHAT IS GROUP ANTENATAL CARE?

G-ANC entails the following 3 broad components: medical assessment, knowledge, and social support to pregnant women. As part of G-ANC, pregnant women are organized into similar cohorts that visit a health centre at the same time. The cohort of antenatal women also actively participate in their health assessments and discussions led by health workers. The idea behind organizing group care is to increase discussions among participants and to ensure peer support during the antenatal period. During the initial visit, all antenatal women are assessed individually, their physical parameters (e.g., body weight and blood pressure) are measured, and an abdominal examination are carried out by healthcare providers, similar to a routine health check-up. This is followed by an interactive session among the expectant mothers, supporting family members, and healthcare providers in which certain topics are discussed, such as nutrition, discomfort management, newborn care, and family planning services.

During subsequent visits, following the usual individual
pregnancy health assessment, an integrated G-ANC session is conducted, with facilitated educational activities. These educational sessions form the crux of G-ANC and are conducted in small groups of around 8–12 women who have similar gestational age, residence, and language. At the end of these sessions, the participants have opportunities to freely interact with the healthcare provider (auxiliary nurse midwife/midwife) and amongst themselves. The cohort of expectant mothers will thus bond with one another, seek moral support, exchange knowledge, and share concerns and problems and thereby form a unique support system over the course of their pregnancy. It may be noted that certain infrastructural requirements are needed for G-ANC, namely large well-ventilated rooms or sheltered spaces with adequate seating, as well as an appropriate area for conducting examinations to ensure privacy.

**RATIONALE FOR ADOPTING GROUP ANTENATAL CARE IN RESOURCE-POOR SETTINGS IN LOW- AND MIDDLE-INCOME COUNTRIES**

Providing high-quality, woman-centred ANC is especially important in low- and middle-income countries (LMICs) as these countries disproportionately bear the brunt of adverse pregnancy and neonatal outcomes on a world-wide scale. In a review article on barriers to ANC in LMICs, the main categories of barriers were identified as individual, organizational, financial, structural, and social and cultural barriers [2]. Out of these, women's negative attitudes to healthcare was one of the most important prenatal care utilization barriers identified among individual barriers. The authors of the review opined that “public awareness promotion on the importance of prenatal care and its benefits for the child and mother's healthcare may eliminate negative attitude toward healthcare,” and stated that “encouraging factors for pregnant women to prenatal care utilization included awareness promotion about the need to be healthy, disease complications, and prenatal care [2].”

For a doctor to provide such health education and awareness to antenatal mothers on an individual basis not be feasible in busy outpatient departments in LMICs where there are long waiting queues. The doctor also might not have adequate time to address doubts or concerns of the pregnant woman on a one-to-one basis in such a scenario. This issue is very aptly addressed by G-ANC health education sessions, which give ample opportunities for antenatal women to receive adequate knowledge and awareness on various relevant topics, as well as a congenial atmosphere to raise and resolve doubts about which they would not otherwise ask the doctor.

In alignment with the World Health Organization (WHO) framework for quality of care, “G-ANC models put women at the centre of service provision and aim to improve women's access, engagement, and satisfaction with care” [3]. Effective communication and support function as a key to improve the quality and service utilization of ANC services, as distinct from the traditional methods of providing one-to-one ANC as highlighted by the WHO [3].

G-ANC also provides an opportunity for antenatal women to form a social support system and to discuss certain issues and concerns that are unique to themselves and to arrive at solutions and conclusions specific to their social and cultural contexts.

Furthermore, the dearth of adequate healthcare staff is a very real problem in LMICs, and this issue is addressed to a great extent by G-ANC.

**CHALLENGES TO PROVIDING GROUP ANTENATAL CARE IN LOW- AND MIDDLE-INCOME COUNTRIES**

The G-ANC model is being implemented and has been reported in more than 22 countries including India, but there are some challenges. Problems include additional resource allocation in terms of logistical support, as well as organizational issues, privacy concerns, and adaptation of materials for beneficiaries [4].

According to previous research, pregnant women also worried about the potential for their personal information to be shared outside the group and the negative consequences associated with privacy loss. Some women also reported inconveniences on their part that decreased their participation in G-ANC, namely lack of financial resources, uncooperative behaviour from their male partner, and long travel distances between their residence and the centre. They also opined that there should not be any interruptions to the providers during the scheduled group care visits [5].

Despite the presence of various hurdles, G-ANC should be promoted, especially in outreach areas where healthcare services and providers are limited in number. It has been noted that G-ANC decreased the duration that women spent waiting
for each other, was conducive for forming communications systems to remind families about follow-up visits, and increased community outreach. A few studies have shown inconclusive evidence in terms of improved ANC, caesarean section rates, initiation of breastfeeding, intensive care unit admission, and neonatal mortality, but no harmful outcomes have been reported [6-9].

RECOMMENDATIONS

We propose that issues concerning space can be addressed by recruiting self-help groups or volunteers from villages or by involving local governing bodies or industries as part of their corporate social responsibility programs to construct low-cost structures to hold these educational sessions attached to the local primary healthcare centres.

The training of peripheral health workers and development of educational materials to suit the local context must be undertaken by the government, considering the importance of the situation. A cohort of trainers at the district level can be developed to impart training to new staff and to update the skills of the peripheral health workers on a regular basis, which might not require the investment of too many resources.

Privacy concerns can be adequately addressed by developing rapport with the antenatal women and assuring them that their interests are paramount in such situations and that confidentiality will be maintained.

There is a dearth of research reporting concrete evidence about the effects of G-ANC, especially in socially and financially constrained settings. Therefore, additional operational research is needed to ascertain the true benefits of adopting G-ANC on a widespread basis. Empowering women with knowledge and ensuring access to better care will go a long way to make a positive impact on maternal and child health in the coming years, and thus newer strategies to achieve these goals must be explored and adapted to local contexts.

CONCLUSION

Despite challenges, introducing G-ANC in LMICs can provide an opportunity to improve the delivery, performance, and utilization of services for expectant mothers, especially in conditions where the scope of comprehensive care is low and the standard of care provided is less than ideal.

Ethics Statement

This paper is a perspective, so it did not need ethical approval.

CONFLICT OF INTEREST

The authors have no conflicts of interest associated with the material presented in this paper.

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AUTHOR CONTRIBUTIONS

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REFERENCES

1. Finlayson K, Downe S. Why do women not use antenatal services in low- and middle-income countries? A meta-synthesis of qualitative studies. PLoS Med 2013;10(1):e1001373.
2. Roozbeh N, Nahidi F, Hajiyan S. Barriers related to prenatal care utilization among women. Saudi Med J 2016;37(12):1319-1327.
3. World Health Organization. WHO recommendations on antenatal care for a positive pregnancy experience; 2016 [cited 2020 Jul 1]. Available from: https://www.who.int/publications/i/item/9789241549912.
4. Andrade-Romo Z, Heredia-Pi IB, Fuentes-Rivera E, Alcalde-Rabanal J, Cacho LB, Jurkiewicz L, et al. Group prenatal care: effectiveness and challenges to implementation. Rev Saude Publica 2019;53:85.
5. Sharma J, O’Connor M, Rima Jolivet R. Group antenatal care models in low- and middle-income countries: a systematic evidence synthesis. Reprod Health 2018;15(1):38.
6. Mazzoni SE, Carter EB. Group prenatal care. Am J Obstet Gynecol 2017;216(6):552-556.
7. Carter EB, Temming LA, Akin J, Fowler S, Macones GA, Colditz GA, et al. Group prenatal care compared with traditional prenatal care: a systematic review and meta-analysis. Obstet Gynecol 2016;128(3):551-561.
8. Tilden EL, Hersh SR, Emeis CL, Weinstein SR, Caughey AB. Group prenatal care: review of outcomes and recommendations for model implementation. Obstet Gynecol Surv 2014;69(1):46-55.
9. Catling CJ, Medley N, Foureur M, Ryan C, Leap N, Teate A, et al. Group versus conventional antenatal care for women. Cochrane Database Syst Rev 2015;2015(2):CD007622.