

Strategies for effective group prenatal care with pregnant adolescents

By Joanne B. Stevens, PhD, WHNP-BC, ARNP; Elizabeth Cooper, CNM, EdD; and Stasha Roberts, MSN, ARNP

Managing the prenatal care of adolescents is both challenging and rewarding. Given adolescents' developmental needs, group prenatal care (GPC) such as that modeled after Centering-Pregnancy is particularly well suited to members of this age group. The authors share their strategies for providing developmentally appropriate GPC for adolescents.

KEY WORDS: group prenatal care, teen pregnancy, Centering-Pregnancy, prenatal care, adolescent pregnancy, prenatal education



Most females receive prenatal care via a traditional model focused on screening for health-related complications. A healthcare provider (HCP) offers this care on an individual and regular basis throughout the pregnancy. At minimum, each visit involves assessment of maternal weight and blood pressure (BP), fundal height, and fetal heart rate. The initial visit is more comprehensive than subsequent visits, and includes taking a personal and family history, conducting a complete physical examination, and ordering laboratory tests. Education is provided about prenatal care and avoidance of risky behaviors. Subsequent visits include screening for problems and provision of information about nutrition, pregnancy complications, childbirth, and infant care. When indicated, special fetal assessment tests may be recommended and the need for genetic counseling discussed.¹

In 1993, CenteringPregnancy (CP) was introduced as an alternative model for delivering prenatal care.^{2,3} The CP model provides comprehensive prenatal care to small groups of women at similar points in their pregnancies. For participants in this group prenatal care (GPC) program, learning and support are enhanced by group

dynamics and by the HCP's leadership.³ Compared with traditional care, CP has been associated with improved patient satisfaction, knowledge, and attendance; similar or superior maternal/newborn health outcomes; and greater affordability.⁴⁻¹⁰

The advent of the Affordable Care Act of 2010, with its provision of access to healthcare for additional millions of Americans, has created a distinct need for innovative, cost-effective, high-quality prenatal care models. GPC can be both safe and affordable, provided at convenient times for better access, and directed at meeting a group's special needs. GPC is ideal for pregnant adolescents: Management of adolescent pregnancy in group settings has been shown to foster optimal maternal and neonatal outcomes.^{4-7,11,12} The authors, with many years' experience in delivering prenatal care to adolescents using the group model, discuss their own program.

Background information on CenteringPregnancy

The authors' adolescent GPC approach was based on principles of CP. According to Rising,³ developer of CP, attending prenatal sessions can result in better pregnancy outcomes, with less maternal stress, lower rates of substance abuse, improved labor progress, higher infant birth weights, and higher 5-minute Apgar scores. The CP model, which includes essential components of traditional prenatal care within a group framework, integrates three major components of prenatal care: health assessment, interactive learning, and community building.¹³ CP groups comprise 8-12 females at similar points in their pregnancies. After a one-on-one prenatal visit with an HCP, par-

ticipants attend regular group sessions lasting 1.5-2 hours, usually held in the late afternoon or early evening, for the remainder of their care. The sessions, typically led by an HCP and a nurse, meet every 4 weeks until the 28th week and then every 2 weeks until delivery.

At the start of every group session, each participant has a quick private visit with a nurse and an HCP for checks of weight, BP, fundal height, and fetal heart tones and for an opportunity to ask personal questions. During this time, the other participants chat or watch an educational video. Once individual checks are done, the group session begins. Topics discussed include nutrition, exercise and relaxation, discomforts of pregnancy, childbirth preparation, infant care and feeding, postpartum concerns, contraception, communication/self-esteem, and parenting skills. Participants are encouraged to ask questions, which can help others with similar concerns,¹² and they are invited to bring a partner or a family member. Additional prenatal visits are necessary only if problems with the pregnancy arise or if a participant requires a confidential private exam.

The CP structure comprises 13 essential elements,¹⁴ which are also used in the authors' prenatal program: (1) Health assessment occurs within the group space; (2) Women are involved in self-care activities; (3) A facilitative leadership style is used; (4) Each session has an overall plan; (5) Attention is given to the core content, but emphasis may vary; (6) There is stability of group leadership; (7) Group conduct honors the contribution of each member; (8) The group is conducted in a circle; (9) Group composition is stable but not rigid; (10)

Group size is optimal to promote the process; (11) Involvement of family support is optional; (12) Opportunity for socializing within the group is provided; and (13) There is ongoing evaluation of outcomes.

Primary differences between CP and traditional prenatal care are the time spent in care and the opportunity for group interaction. Traditional visits usually last 5-10 minutes, whereas CP visits are about 90 minutes long. This amount of time allows participants





to grow comfortable with their HCPs and each other, which enhances discussions and learning. In addition, belonging to a group can help participants feel valued and important, and provide support during the pregnancy.¹²

Adolescents and group prenatal care: Literature review

Adolescence is a challenging stage of life, but when pregnancy complicates the picture, additional physical, social, and emotional

stresses must be managed. Because pregnant adolescents are more likely than their non-pregnant counterparts to be in a lower socioeconomic bracket, they are less likely to receive adequate prenatal care unless it is accessible and affordable. GPC may be optimal for these individuals; not only can it be offered at convenient times and be covered by Medicaid, but it is also geared toward adolescents' developmental level and learning needs.^{15,16} To ascertain what the literature shows in terms of the usefulness of GPC for young females, especially adolescents, the authors searched the CINAHL and Medline databases for studies and systematic reviews reported from 2010 through 2015. **Table 1. Selected studies on group prenatal care** can be accessed [here^A](#).^{4,5,7,11,12,17-21}

Authors' experiences and strategies

The authors' outpatient prenatal program was affiliated with a large urban medical center and enrolled adolescents aged 12-19 who were African American (65%), Caucasian (20%), Latino (10%), or Southeast Asian (5%). Most participants came from low-income families receiving public assistance. Initial training for the program's staff was provided by two CP consultants during a 2-day workshop on content and process. Funding for the training came from the program's budget; ongoing training for new staff was derived from continuing education funds and a community agency grant.

A nurse practitioner (NP), midwife, or nurse who saw prospective program participants at their intake and first obstetric visit invited them to join the GPC program. The authors expected that

all recruited adolescents would participate in the program, but they made exceptions when a patient needed individual care because of privacy concerns or a conflict with another participant. Each group was managed by an HCP (either an NP or a midwife) and a nurse. A social worker performed psychosocial evaluations and was available to address psychosocial concerns, and a nutrition specialist performed one-on-one assessments early in the pregnancy and participated in a group discussion of prenatal nutrition and meal planning.

GPC can be both safe and affordable, provided at convenient times for better access, and directed at meeting a group's special needs.

The group meeting room accommodated 15 people and was set up to be comfortable and welcoming—similar to a setting for a baby shower. The CP model recommends that participants sit in a large circle with no table, but the authors used the existing large oval table in their space, which did not seem to affect group interactions. Educational aids available in the room included models of a bony pelvis, fetus, uterus, and dilating cervixes; posters; and a TV with a DVD player and videos to reinforce topics such as maternal nutrition, vaginal and cesarean delivery, and newborn and self-care.

The first GPC session took place when participants were at 12–16 weeks' gestation. For scheduling purposes, the groups were referred to by their due dates (e.g., the September/October group). As with the CP program, at the start of each session, a nurse weighed each participant and checked her BP. Next, the participant lay on a small firm couch and an HCP assessed fundal height and fetal heart tones and obtained other relevant information. A curtain divider between the couch area and the group meeting area ensured privacy.

During the initial group meeting, the HCP and the adolescents reviewed "Teen Rules for Group Prenatal Care" as follows:

- Be sensitive to others' confidential information: "What is said in group stays in group."
- Discuss who should be allowed to come to group (usually one guest who was a partner, friend, or mother figure, but no children).
- Behave politely and respectfully toward other group members (e.g., when one person is talking, others should listen).
- Do not use hand-held electronic devices during the sessions.
- Encourage everyone to be involved in discussions, and reinforce that no one should dominate or be excluded.
- Describe how group works: weight, urine sample, and fundal height measurement, followed by the education component, with the option of being seen individually after group as needed.
- Know the danger signs of pregnancy.
- Know how to contact the practice and use the after-hours on-call service for labor and emergencies.

Table 2. Websites on adolescent pregnancy and group prenatal care

- Centers for Disease Control and Prevention, Reproductive Health: Teen Pregnancy: cdc.gov/teenpregnancy
- March of Dimes, Teen 2 Teen: marchofdimes.org/materials/teen-2-teen-entire-curriculum-guide-for-presenters.pdf
- Centering Health Care Institute: centeringhealthcare.org
- MedlinePlus, Teenage Pregnancy: nlm.nih.gov/medlineplus/teenagepregnancy.html

In the authors' program, 3–4 groups attended GPC sessions once weekly in the afternoon. Participants received phone reminders the day before the sessions; any transportation prob-

tion was stored on a laptop. Patient encounter forms were printed prior to group meetings for easy completion with billing codes and designations of return visits. GPC visits were reimbursed the same way as an individual visit. Some insurance was fee-for-service, but most patients were covered by Medicaid managed care programs that reimbursed globally. The prenatal portion was then applied to the adolescent program budget and the delivery portion to the midwifery budget.

Adolescence is a challenging stage of life, but when pregnancy complicates the picture, additional physical, social, and emotional stresses must be managed.

lems were resolved at this time. Although 8–10 participants were assigned to each group, only 5–6 attended regularly. Postpartum group reunions—including the infants—were scheduled to occur 4–6 weeks after the last girl in each group had delivered. However, because of low participation, these sessions were discontinued.

At first, GPC participants kept copies of their health records. When the authors' practice converted to an electronic health record (EHR) system, this informa-

Table 2 lists websites specific for curriculum content for adolescent GPC and general information on teen pregnancy. Topics of greatest interest to participants in the authors' program included preparation for labor and birth, pain management, bringing baby home, bottle feeding versus breastfeeding, parenthood, relationships with their boyfriend, and contraception.

Table 3 lists GPC activities that the authors found particularly useful. GPC worked best when HCPs were facilitators of group activities rather than lecturers of content. The adolescents appreciated knowing what they could expect from their HCP as well as what was expected of them. HCPs reinforced the confidentiality of patient information and demonstrated respect to gain the trust and confidence that promote regular group attendance and partici-

Table 3. Useful group prenatal care activities

- Introductions: name, due date, current feelings about being pregnant
- Provision of nutritious snacks (e.g., apples and peanut butter, strawberries, cheese, popcorn) as a healthful way to start each group meeting
- Themed questions: At the initial visit, patients write down their greatest concern, fold the paper, and place it in a bowl. The HCP or nurse then reads what patients have written, bundles similarly themed concerns, and addresses these concerns across group sessions. In the authors' experience, the most frequently expressed concerns related to fears about labor and delivery and pain.
- "What month or week am I?" Each patient receives a copy of a pregnancy wheel, with clear demarcation of her due date so that she can easily determine how far along she is at any given time. The wheels usually include length and weight of fetuses per week gestation, which patients seem to enjoy.
- Use of videos of labor and delivery, followed by a discussion to address and lessen fears
- Demonstration and practice of body mechanics, breathing and relaxation, and toning exercises
- Building nutritious meals with food models; properly reading a variety of food labels
- Brushing and flossing teeth (supplies provided when available) and discussion about infant oral health
- Open-ended questions geared for adolescents: What are the signs of preterm labor? How do you know your baby is getting enough food? How would you describe a good relationship with the father of the baby? What is a good weight loss after delivery? Why is exercise so important? Why is your pediatric appointment so important?
- Handling different types of contraceptives (e.g., oral contraceptives, intrauterine devices, Depo-Provera injection, implant)
- Social worker interactive visit to provide information about birth certificates and discharge plans
- Providing a list of what to bring to the hospital, including infant supplies and best tips for going home
- Having a baby shower with cake as part of the final group visit, with wrapped gifts donated by local church groups (e.g., crocheted caps, booties, blankets)

pation. In the authors' experience, HCPs who were seasoned clinicians, had senses of humor, were approachable, and had knowledge of community resources were best suited as GPC providers.

Group attendees completed a satisfaction survey at the last session. Over the years, the surveys demonstrated high satisfaction with the program, especially with

regard to its structure, the knowledge it imparted, the relationships it fostered, and the preparation it provided for labor, delivery, and newborn care.

Discussion

Initiating a GPC model requires considerable planning and commitment. The authors learned the importance of gaining commit-

ment to the program from everyone involved, from the clerical staff to the HCPs themselves, because they all needed to adapt to a new way of providing care. Periodic retreats were held to address the challenges that arose as the program was implemented.

The GPC program needed to be budget neutral; ensuring that reimbursement covered costs meant having at least 6-8 patients per session. Given the substantial no-show rate among adolescents, the groups were intentionally overbooked. Obtaining funding for training and costs for snacks was an ongoing challenge. The program received contributions from various community organizations, and small grants were sought.

Regular planning time was essential for the administrative support staff to schedule groups, assign HCPs, write grants, and perform program evaluation. Nursing staff members took responsibility for setting up the room, providing handouts and snacks, and following up on no-shows. HCPs were busy managing traditional patients before and after groups, so a *pre-group huddle* was used to prepare co-leaders for the session.

The conversion to EHRs was an added challenge, particularly because laboratory test and ultrasound order entries and follow-ups became an HCP task rather than a nursing one. A laptop and Wi-Fi access were required to manage the EHR during the group sessions. The commitment of all staff to GPC and allocation of extra time were essential to successful transitioning to this system.

This GPC model encourages mutually beneficial relationships between pregnant adolescents and obstetric HCPs and provides opportunities for interdisciplinary

collaboration.^{22,23} The authors' program included a strong collaboration with the pediatric resident clinic, wherein GPC participants transitioned into well-child care groups that encouraged follow-up visits and immunizations. In addition, the authors had collaborative arrangements with the pediatric dental clinic and hospital social work department.

Conclusion

Given the developmental needs of adolescents, GPC provides a satisfying experience for both those who are pregnant and their HCPs.²⁴ The authors modeled their program after CP principles for evidence-based care.^{4-6,8,11} They created a supportive environment for prenatal care and helped adolescents learn the essentials about pregnancy, labor, delivery, and postpartum and newborn care, with the goal of optimizing outcomes for both mother and child.

Joanne B. Stevens is Associate Professor at the University of Tampa, Department of Nursing, in Tampa, Florida. Elizabeth Cooper is Professor Emeritus in Obstetrics and Gynecology at the University of Rochester in Rochester, New York. Stasha Roberts is an alumna of the University of Tampa and an advanced registered nurse practitioner. The authors state that they do not have a financial interest in or other relationship with any commercial product named in this article.

References

1. American Academy of Pediatrics and American College of Obstetricians and Gynecologists. *Guidelines for Perinatal Care*. 7th ed. Elk Grove, IL: American Academy of Pediatrics; 2012.
2. Thielen K. Exploring the group prenatal care model: a critical review of the literature. *J Perinat Educ*. 2012; 21(4):209-218.
3. Rising SS. Centering pregnancy. An interdisciplinary model of empowerment. *J Nurse Midwifery*. 1998; 43(1):46-54.
4. Tanner-Smith EE, Steinka-Fry KT, Gesell SB. Comparative effectiveness of group and individual prenatal care on gestational weight gain. *Matern Child Health J*. 2014;18(7):1711-1720.
5. Picklesimer AH, Billings D, Hale N, et al. The effect of CenteringPregnancy group prenatal care on preterm birth in a low-income population. *Am J Obstet Gynecol*. 2012;206(5):e1-7.
6. Kennedy HP, Farrell T, Paden R, et al. A randomized clinical trial of group prenatal care in two military settings. *Mil Med*. 2011;176(10):1169-1177.
7. Barr WB, Aslam S, Levin M. Evaluation of a group prenatal care-based curriculum in a family medicine residency. *Fam Med*. 2011;43(10):712-717.
8. Teate A, Leap N, Rising SS, Homer CS. Women's experience of group antenatal care in Australia—the CenteringPregnancy Pilot Study. *Midwifery*. 2011;27(2):138-145.
9. Novick G, Sadler LS, Knafl KA, et al. The intersection of everyday life and group prenatal care for women in two urban clinics. *J Health Care Poor Underserved*. 2012;23(2):589-603.
10. Gaudion A, Menka Y. 'No decision about me without me': centering pregnancy. *Pract Midwife*. 2010; 13(10):15-18.
11. Tandon SD, Colon L, Vega P, et al. Birth outcomes associated with receipt of group prenatal among low-income Hispanic women. *J Midwifery Womens Health*. 2012;57(5):476-481.
12. Ickovics JR, Reed E, Magriples U, et al. Effects of group prenatal care on psychosocial risk in pregnancy: results from a randomised controlled study. *Psychol Health*. 2011;26(2):235-250.
13. Rising SS. Group prenatal care. *UpToDate*. Last updated April 29, 2015.
14. Rising SS, Kennedy HP, Klima CS. Redesigning prenatal care through CenteringPregnancy. *J Midwifery Womens Health*. 2004;49(5):398-404.
15. Grady MA, Bloom, KC. Pregnancy outcomes of adolescents enrolled in a CenteringPregnancy program. *J Midwifery Womens Health*. 2004;49(5):412-420.
16. Feldman JB. Best practice for adolescent prenatal care: application of an attachment theory perspective to enhance prenatal care and diminish birth risks. *Child Adolesc Soc Work J*. 2012;29(2):151-166.
17. Cypher RL. Collaborative approaches to prenatal care: strategies of successful adolescent programs. *J Perinat Neonatal Nurs*. 2013;27(2):134-144.
18. Hale N, Picklesimer AH, Billings DL, Covington-Kolb S. The impact of Centering Pregnancy Prenatal Care on postpartum family planning. *Am J Obstet Gynecol*. 2014;210(1):50.e1-7.
19. Homer CS, Ryan C, Leap N, et al. Group versus conventional antenatal care for women. *Cochrane Database Syst Rev*. 2012;14(11):CD007622.
20. Novick G, Reid AE, Lewis J, et al. Group prenatal care: model fidelity and outcomes. *Am J Obstet Gynecol*. 2013;209(2):112.e1-6.
21. Tanner-Smith EE, Steinka-Fry KT, Lipsey MW. Effects of CenteringPregnancy group prenatal care on breastfeeding outcomes. *J Midwifery Womens Health*. 2013;58(4):389-395.
22. Picklesimer A, Heberlein E, Covington-Kolb S. Group prenatal care: has its time come? *Clin Obstet Gynecol*. 2015;58(2):380-391.
23. Stevens J, Iida, H. Implementing an oral health program in a group prenatal practice. *J Obstet Gynecol Neonat Nurs*. 2007;26(6):244-249.
24. Ellison T. Group prenatal care: a pilot study evaluating patient satisfaction. Unpublished Honor's Senior Thesis. Department of Nursing, The State University of NY at Brockport; 2010.

Web resource

- A. npwomenshealthcare.com/?p=4641