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Adolescent Group Prenatal Care:
A Pilot Study Evaluating Patient Satisfaction

A Senior Honors Thesis

Presented in Partial Fulfillment of the Requirements
for graduation in the College Honors Program

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Tara Ellison

Honor's Senior Thesis

Dr. Joanne Stevens

April 30, 2010

Introduction

Among the most highly utilized preventative health care measures in the United States today is prenatal care (Moos, 2006). The concept of prenatal care was established in the early 1900s by a Scottish physician named J.W. Ballantyne and included prenatal visits starting in the seventh month of pregnancy (Moos, 2006). This practice became standard, and by the 1920s prenatal care in the United States included earlier and more frequent prenatal visits. By 1929 a framework for prenatal care visits was created, and is still used today (Moos, 2006). The framework for uncomplicated pregnancies includes having a first obstetric visit before sixteen weeks gestation, with monthly appointments until week twenty-eight. From twenty-eight to thirty-six weeks appointments are scheduled every two weeks and then weekly from thirty-six weeks until delivery. Appointments are more frequent with complicated pregnancies (American Academy of Pediatrics and ACOG Guidelines for Perinatal Care, 2007).

Prenatal care continues to be a critical component of pregnancy today. Quality prenatal care affects maternal and neonatal outcomes; such components will be discussed in further detail in the literature review. Recently, a new twist on prenatal care has emerged, consisting of prenatal care within a group setting. This new concept described as CenteringPregnancy® (CP) has proven to be satisfying with quality outcomes for many pregnant and post partum women (Rising, 1998).

This essay describes a pilot study consisting of satisfaction rates and perceptions on group prenatal care by adolescent women who attended a CP program in an upstate New York program from 2006-2009. It provides further information describing methods of delivering prenatal care. Traditional and CP care from an adolescent perspective and a review of the current literature on maternal and neonatal outcomes associated with CP, cost benefits, and client

satisfaction is provided. The purpose of this study is to analyze the perceptions and satisfaction rates for a population of adolescent pregnant women and postpartum patients in Upstate New York who attended CP sessions over the course of 30 months.

Traditional Prenatal Care and the American College of Obstetricians and Gynecologists (ACOG) Guidelines for Prenatal Care

The traditional model of prenatal care is the means by which many women receive prenatal guidance. In the traditional model, care is given one-on-one with a health care provider in a private exam room. These sessions usually last about fifteen to twenty minutes consisting of about eight to twelve visits per pregnancy (Baldwin, 2006). Each visit minimally involves assessment of fundal height, fetal heart rate, blood pressure, and weight. The initial visit is more comprehensive and includes assessment of family and medical history, a physical exam, blood work, cultures, and education about expected prenatal care and risky behaviors including smoking and substance abuse. Subsequent visits include additional teaching about nutrition, labor, infant care, and pregnancy complications. When indicated, screenings and fetal assessment tests may be recommended such as an amniocentesis or diabetes screen (American Academy of Pediatrics and ACOG Guidelines for Perinatal Care, 2007).

The American College of Obstetricians and Gynecologists (ACOG) is a nonprofit organization that sets the standards for practice in women's health care. Their recommendations include universal access to affordable care, high quality and compassionate care, early screening and interventions and preventative health care (Varney, 2005). CP is a vehicle to implement comprehensive prenatal care. CP care is affordable, can be provided at convenient times for better access, offers effective prenatal care, and is directed at meeting any special needs the

group may have. CP care can provide an effective means of providing quality care as well as decreasing health disparities in the minority population (Varney, 2005).

CenteringPregnancy®

According to Rising (1998), the founder of CenteringPregnancy®, attending prenatal sessions can result in better pregnancy outcomes, with less maternal stress, less substance abuse, improved labor progress, higher infant birth weights, and higher five minute Apgar scores. In addition to these, prenatal care is supportive and empowering to women. Rising recognized this and developed CP in 1993. CP is a unique model that includes essential components of traditional prenatal care within a group framework. It includes the three major components of prenatal care: risk assessment, education, and support- but most importantly supports responsibility and empowerment in involved women (Rising, 1998). CP groups are comprised of eight to twelve pregnant women of approximately the same gestational age. After their first one-to-one prenatal session with the physician, certified nurse midwife, or nurse practitioner these women begin attending one and a half to two hour group sessions, totaling approximately ten sessions during their pregnancy. These groups, usually lead by a clinician and a nurse, meet every four weeks until the 28th week and then meet every two weeks until delivery. Groups are usually held in the late afternoon or early evening to better accommodate working or school age women and their families (Reid, 2007).

At the beginning of each session, the women “weigh in” and have their blood pressure taken. The clinician individually measures fundal height and auscultates fetal heart tones. This is a time when the woman can ask private questions. While this is occurring, the other women have a chance to chat or watch a short educational video while enjoying a nutritious snack. Once individual checks are done, discussion for the session begins. Topics discussed include: nutrition,

exercise and relaxation, childbirth preparation, discomforts of pregnancy, infant care and feeding, postpartum issues, contraception, communication and self-esteem, and parenting skills. Women are encouraged to bring questions; this benefits others who may have the same concerns. They are also encouraged to bring along a partner or a family support person. Additional prenatal visits are only necessary if problems in the pregnancy arise or if the patient requires a confidential, private exam (Reid, 2007).

CenteringPregnancy® versus Traditional Prenatal Care

The primary differences between CP and traditional prenatal care are the time spent in care and the opportunity for group interaction. Traditional visits usually last fifteen to twenty minutes for each individual appointment; where as CP visits are approximately two hours in length (Stemig, 2008). In total that is a difference of approximately three hours versus twenty hours for traditional versus CP, respectively. This extensive amount of time for CP allows women to get to know and become comfortable with their clinicians and each other, allows more time for learning and topic discussion, and has proven to be an effective strategy for delivering prenatal care (Stemig, 2008). According to Massey, Rising and Ickovics (2006), “providing care in the group setting has reduced time pressure by seeing patients more efficiently and enhanced the rewards of prenatal care by adding the opportunity to provide greater depth and scope of services” (p 293).

Being with a group of several women has many benefits as well. Women in groups tend to learn from each other’s questions, as they most likely have similar concerns (Stemig, 2008). Feedback from multiple people can also provide more thorough answers or suggestions to address these concerns. Having these women as a support system is also beneficial. Pregnancy can be an intimidating time when women may feel unsure and uneasy. Belonging to a group of

women may help a person feel valued, important, and may provide a positive support system for the pregnancy (Reid, 2007).

Special Needs for Pregnant Adolescents

Adolescents are very unique in their learning needs based on their developmental level (Grady and Bloom, 2004). Developmental tasks of this age group include gaining peer acceptance, dealing with physical and emotional changes, and achieving independence (Grady and Bloom, 2004). Teenagers tend to be egocentric, not thinking about the consequences that accompany their actions. When they are faced with pregnancy they are challenged to adjust to major physical, social, and emotional changes.

Risk factors associated with adolescent pregnancy include low socioeconomic status, single status, and poor academic performance (Grady and Bloom, 2004). Often times they may not receive sufficient prenatal care. To address this problem, prenatal care needs to be accessible and affordable. CP may be an optimal form of care for this group given the peer cohort concept. Not only is it offered at convenient times but it also is geared toward adolescents' developmental level and needs (Grady and Bloom, 2004).

Literature Review

The current literature on CP primarily emphasizes the benefits of group prenatal care. Benefits most emphasized are: positive perinatal outcomes for the mother and baby, cost benefits, and high satisfaction rates by participants. The literature used in this study was mostly from 2003-2009 and found using CINAHL and Medline databases.

Maternal and Neonatal Outcomes

Years ago the primary purpose of prenatal care was prevention of preeclampsia (Novick, 2004). This trend has now changed to prevention of low birth weight (LBW) infants given the

associated high rates of infant mortality in the United States. A few studies (Ickovics et al 2003 and 2007; Grady and Bloom 2004; and Baldwin 2006) have shown that incorporating the CP model of care is an effective way of decreasing LBW infants.

A 2003 matched cohort study (Ickovics et al) compared birth weights of infants born to mothers in either traditional or CP care. This included 458 women who were predominantly African American and Latina and of low SES. One half (n= 229) of the women voluntarily received CP care and a matched, randomized control group of 229 received traditional prenatal care. Upon evaluation of birth outcomes, there was no significant difference in average birth weights of infants carried to term (3312.5 grams in CP versus 3283.4 grams in traditional care) however there was significant difference in preterm birth weights (mean 2397.8 grams versus 1989.9 grams). CP infants were also less likely to be of LBW or less than 2,500 grams (16 (7%) versus 23 (10%) infants), very low birth weight or less than 1,500 grams (three (1.3%) versus six (2.6%) infants) and early preterm or less than 33 weeks (two (0.9%) versus seven (3.1%) infants). Therefore, it was concluded that CP care may result in higher birth weights of infants, especially those that are premature or born at less than 37 weeks gestation.

Grady and Bloom (2004) evaluated preterm birth and birth weight in pregnancies of adolescents enrolled in CP care in comparison to traditional care. In the study done between March 2001 and April 2003, thirteen groups of adolescents in a CP program (n=124) at Barnes Jewish Hospital in St. Louis were evaluated for attendance rates, perinatal outcomes, and satisfaction rates. Perinatal outcomes were evaluated by analyzing patient's medical charts and prenatal records. These outcomes were then compared with outcomes of two groups of adolescents from Barnes Jewish Hospital from 1998 and 2001 who did not receive CP care. Results showed that CP groups had higher birth weights and fewer preterm births when

compared to both the traditional groups. The rates of preterm births (<37 weeks) was 13 (10.5%) for CP deliveries compared to 37 (25.7%) for the 2001 group and 54 (23.2%) for the 1998 group. The instances of low birth weight (<2,500 grams) for the CP group was 11 (8.87%) compared to 33 (22.9%) in the 2001 group and 42 (18.3%) in the 1998 group. When compared to the 1998 group, the CP group had almost double the rates of breastfeeding (46% versus 28%). This study supports that CP care produces improved outcomes for infants when compared to traditional care groups. Other studies describe the educational benefits of CP.

Baldwin (2006) compared knowledge outcomes between women in CP care versus traditional care. The study hypothesis was that CP care provides greater knowledge of pregnancy, social support, fetal health locus of control, perception of participation in CP care, and satisfaction. Information was gathered from 98 participants (50 in CP, 48 in traditional care) using four evaluation tools. Although the data did not provide many significant differences between groups it was concluded that a greater knowledge of pregnancy was demonstrated in the CP group. A twelve item pre and post test on knowledge about pregnancy was given to individuals of both groups. The traditional groups mean pretest score was 10.48 and their posttest score 10.88 while the CP groups mean pretest score was 10.4 and their posttest score 11.38 ($P=.03$). The higher posttest scores with CP compared to traditional care is significant. CP provides women with more knowledge according to this study.

A more recent study by Ickovics et al (2007) explored outcomes such as preterm birth, knowledge, and breastfeeding rates among 1,047 participants. The mean age of participants was 20.4 years and 80% were African American. The women were randomly assigned to either traditional or CP care. Information was gathered through structured interviews, client records, self report, ultrasounds, Apgar scores, and assessments tools such as the Pregnancy Distress

Questionnaire (Lobel, 1996). Results showed a significant difference in the incidence of preterm birth in those patients in CP care versus those in traditional care (9.8% versus 13.8% respectively). This four percent decrease in patient deliveries is significant.

In terms of knowledge, the CP group reported more knowledge and felt more prepared for labor and delivery ($P < .001$). There was also a significant difference in self reported breast feeding initiation rates (66.5% of CP versus 54.6% of traditional clients, $P < .001$).

The literature supports improved neonatal and maternal outcomes for those engaged in centering prenatal care (Ickovics et al, 2007). Infants born to mothers in CP care had significantly higher birth weights and fewer preterm births when compared to traditional care infants. They were also breast fed more frequently. The mothers also benefited from the program, gaining better knowledge and confidence in caring for their infant after birth.

Cost Benefits

The main health care issues for minority prenatal populations are accessibility and affordability (Grady and Bloom, 2004). In terms of affordability, cost benefits can be seen by both the group members and the facility organizing the care. Stemig (2008) states that “group care does not cost any more to the patient than individual care” (p 183). According to the Centering Healthcare Institute’s (CHI) website, CP programs bill the same way that traditional prenatal sites do (2009).

Facilities also experience cost benefits from this program. The pattern of scheduling is cost effective (Massey, Rising and Ickovics, 2006). In traditional care, the clinician is able to see approximately six people in a two hour time frame, depending on how much time is spent with each patient. In CP care, anywhere between eight and twelve women may be seen in the same amount of time. In addition, these women are each gaining extensive knowledge in these two

hours, potentially resulting in fewer phone calls and emergency room visits, therefore decreasing overall systems costs (Rising, 1998). Also, the group's use of conference room space frees up exam rooms for patients most in need (Massey, Rising and Ickovics, 2006).

Start-up and on-going costs for CP groups can be a burden for some facilities, therefore initial funding is essential. The Centering Healthcare Institute can help programs to write grants and obtain any funding they may need. Sources of funding in the past include local foundations, state agencies, the March of Dimes, and Health Start (Centering Healthcare Institute, 2009).

Patient Satisfaction

Several studies have reported high levels of patient satisfaction with CP care. In 1998, Rising evaluated CP care satisfaction along with pregnancy outcomes, emergency room use and evidence of learning. This pilot study assessed evaluation forms of 111 women with the majority of the women in their twenties 71 (64%) and 28 (25%) in their adolescent years. Rising's study indicated that 98% were satisfied with their physical assessment in group and that 93% were open to male partners present in group. The evaluation also produced many written responses such as "We watched each other grow; everybody loved it; oh, you're a lot bigger this week" and "I think it [listening to the fetal heart beats] was as much of a reassurance to us as it was for each individual mother" (p. 50).

In the 2004 study by Grady and Bloom, investigators asked the question, "What is the level of satisfaction for teens in Centering groups?" (p. 414). The thirteen groups (n=124) of adolescents were asked to fill out two standard evaluation forms developed by Sharon Rising to assess patient's satisfaction with the group. The first evaluation form was filled out after session 7. The survey asked for feedback about patient's weeks of gestation, what patients liked best about group, what could be changed, and rated these variables on a scale of one through 10 with

one being the worst and ten being the best. Five additional questions asked about organization of care, learning new knowledge, enjoying group, preparation for labor and caring for an infant. These questions could be answered with “agree”, “disagree”, or “uncertain.” This second evaluation form was given at the last session. Additionally on the second evaluation form the teens could rate 11 different topic areas such as pregnancy issues and childbirth preparation as “well-covered”, “covered”, or “needed more.” There are also yes/no questions inquiring about enjoying having peers in the group, adequacy of assessment in group, and men attending group. Questions about attendance, other pregnancies and desired changes in the program, were also included.

The results of this 2004 study (Grady and Bloom) showed that almost every teen was satisfied with the level of care provided in CP. According to evaluation form one, the mean satisfaction rating on a scale of one to ten with ten being the best was a 9.2 rating. Of the five other questions asked, 100% of participants believed that they had learned much about prenatal care, and all but one person believed she was prepared for the labor and delivery process. On evaluation sheet two, the majority of women believed that the eleven topics were either covered or well covered. Ninety-six percent of women were comfortable with being assessed in a group setting and 99% felt satisfied that the prenatal assessment was adequate. The majority also felt comfortable with partners being allowed in group and wanted to meet again postpartally. The qualitative portion of the evaluation provided patient responses such as, “The best thing about this group is that it lets girls know that they are not the only ones who are pregnant. It builds self-esteem and courage to go through parenting at a young age” and “It’s really fun to come to a program that teaches you a lot of things you thought you knew until you come here” (p. 415).

Another study done by Ickovics et al compared CP versus traditional care perinatal outcomes and satisfaction rates of 1,047 randomly assigned women between the ages of 14 and 25 years (2007). Satisfaction rates were measured by tools developed by Littlefield (1987). The results showed that the women who attended group care had higher satisfaction with their care when compared to traditional care ($P < .001$).

The literature supports satisfaction with CP care. Not only does it provide women with a chance to get to know other women in the same situation, but it allows them to reassure each other, gain a sense of empowerment, involve their partners, and be prepared for becoming a mother.

Current Study: Methodology

This study collected data from an Upstate New York outpatient adolescent prenatal program. This site provides both traditional and CP care for pregnant adolescents. CP care is the designated delivery for prenatal care unless contraindicated due to individual time constraints or discomfort in a group setting. The outpatient prenatal program includes young women between the ages of twelve and nineteen years of age, of various ethnicities. The approximate ethnicity breakdown is primarily African American (65%), Caucasian (20%), Latino (10%), and Southeast Asian (5%). A vast majority of these adolescents are receiving WIC (Women and Children's Supplemental Program) and Medicaid or Blue Choice option. These are federally funded programs for minority women who cannot afford health insurance.

Two instruments were used for data collection: The CP Program evaluation forms one and two, developed by Rising (1998). Both were given to the patients on their last day of CP care. Evaluation form one first asks the women what pregnancy week they are in. It then asks five questions about organization of group, amount of knowledge gained, enjoyment, preparation

for labor/delivery and caring for a new baby. Women are asked to rate these five questions as either “agree”, “disagree”, or “uncertain.” It also asks two open-ended questions about what they like best about group prenatal care and what they would change about it. They are then asked to rate the program overall on a likert scale of 1 to 10 with 1 being the worst and 10 being the best. Seventy-eight women completed evaluation form one, although some did not answer all the questions (See form 1).

Evaluation form two is more detailed. It first asks the women to rate the eleven program areas (e.g. pregnancy issues, nutrition, exercise) as being “well-covered”, “covered”, or “needed more” information. It then asks a series of yes or no questions. This includes questions about getting to know other women, comfort with having assessments done in a group setting, satisfaction with assessments, male presence during group, getting the group together after delivery, and plans to keep in contact with the other group members. The evaluation form also asks about session attendance and which baby they are having, first, second or more. It ends by asking the women to comment on what they really liked about the program and what they would like to see changed. Sixty-five women completed the front of this evaluation while only fifty completed the back due to the fact that some evaluations were only single sided (See form 2). As with the first evaluation form, not everyone answered every question.

Permission to use these evaluations was obtained from Sharon Rising, executive director of the Centering Healthcare Institute. To evaluate the data, answers to the quantitative questions were tallied and evaluated based on numbers and percentages of those that answered that question. Qualitative responses of satisfaction were also collected and evaluated. The evaluation forms used were collected from 2006-2009.

Form 1

CENTERING PREGNANCY PROGRAM

EVALUATION SHEET I

Pregnancy weeks _____

We are eager for feedback on our prenatal program. For each question, please circle the word that best describes how you are feeling at this point in your pregnancy.

I like the organization of my prenatal care in this way (group sessions).

agree disagree uncertain

I feel that I have learned a lot about prenatal care during the sessions.

agree disagree uncertain

I am enjoying being with the other pregnant women in this group.

agree disagree uncertain

I feel as if I am being prepared well for the labor/delivery process.

agree disagree uncertain

I feel as if I am being prepared well for caring for a new baby.

agree disagree uncertain

What I like best about my prenatal care is _____

What I would like to change about my prenatal care is _____

On a scale of 1-10, with 1 being the worst and 10 being the best, I would give this prenatal program an overall rating of:

(Worst) 1 2 3 4 5 6 7 8 9 10 (Best)

Form 2

**CENTERING PREGNANCY PROGRAM
EVALUATION SHEET II**

As you are completing your prenatal program, we would like you to provide additional evaluation comments for us.

At the start of the program we listed the topics to be covered. Please rate each of these topic areas based on your understanding from the program. **Check one column - well covered, covered, or needed more - for each program area.**

Program area	Well - covered	Covered	Needed more
pregnancy issues			
nutrition			
exercise / relaxation			
childbirth preparation			
pregnancy problems			
infant care / feeding			
postpartum issues			
contraception			
communication / self-esteem			
abuse issues			
parenting			

We wanted to provide time for you to get to know other women. Did this happen for you? Yes__ No__ Please comment.

We did most of the assessment within the group: weight, blood pressure, measuring uterus, baby's heart beat.

Were you comfortable doing this in the group setting? Yes__ No__
 Would you rather have done this in an exam room? Yes__ No__
 Did you feel satisfied that the assessment was adequate? Yes__ No__

Some women had male support persons attend the group.

Was it okay with you to have men in the group? Yes__ No__

Was it okay to have men present in the room during the assessment?

Yes__ No__

Do you think it is important to get the group together once or twice after you deliver?

Yes__ No__

Are you planning to keep in contact with any of the other group members?

Yes__ No__

The Centering Pregnancy Program met for about 10 sessions.

Please circle the word that best describes your attendance:

All sessions

Most sessions

A few sessions

Only 1 or 2 sessions

Which baby is this for you? First__ Second or more__

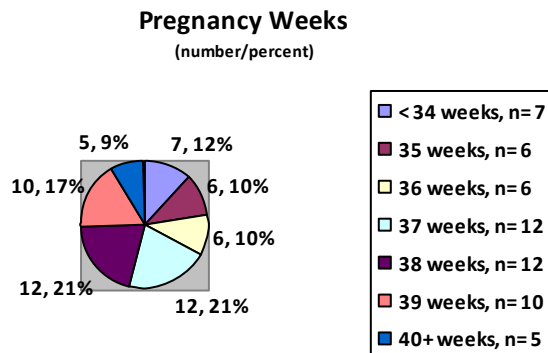
We're interested in what you really liked about the program, as well as what you'd like to see changed. Please comment.

Thanks for your help.

Results

Responses to the evaluation forms were very positive overall. According to evaluation form one, almost everyone was satisfied with CP care. Seventy-eight women answered at least three of the questions on evaluation form one. Of these people, 58 answered the question concerning pregnancy weeks. The majority were 37-39 weeks pregnant. These results are seen in figure 1.

Figure 1



Everyone who answered the questionnaire felt that they had learned much about prenatal care and that they were prepared to care for a new baby. The mean satisfaction rate on a scale of one to ten with ten being the best was 9.29.

Responses to other questions can be seen in Table 1. When asked what they liked best about CP care some responses included “They [nurses/ nurse practitioners] talk to us like we are adults. They relate to us as much as possible and answer all questions we have”, “being able to relate with others around me”, and “that it relieves me from all my worries.” These responses show that the teens involved in group are satisfied with the nurses/nurse practitioners that ran group and feel that they clear up any concerns they may have. They also feel that CP makes their concerns seem common, therefore relieving the anxiety they may have.

Common themes for what the teens liked best included the people (peers and practitioners), being able to relate to others in the same situation, the snacks provided, hearing the babies heartbeat, having all their questions answered, knowing that their baby was in good health, and having the opportunity to learn. When asked on the evaluation form what they would change about their prenatal care the majority of the girls (45 or 57.7%) stated “nothing” and many others left the question blank. Of those that would like something changed their answers included the timeframe, getting people to open up a little more, and having more than one ultrasound performed.

Table 1

Responses to Evaluation form one

(Total n= 78)

	Agree n (%)	Disagree n (%)	Uncertain n (%)
I feel that I have learned a lot about prenatal care during the sessions	78(100)	0(0)	0(0)
I feel as if I am being prepared well for caring for a new baby	78(100)	0(0)	0(0)
I feel as if I am being prepared well for the labor/delivery process	77(98.72)	1(1.28)	0(0)
I like the organization of my prenatal care this way (group care)	76(98.70)	0(0)	1(1.30)
I am enjoying being with the other pregnant women in this group	71(92.21)	0(0)	6(7.79)

Evaluation form two was completed by sixty-five people; however only fifty had the second page available to complete. Of the fifty people who answered the question about which baby it was for them, 45 (90%) were having their first baby. Attendance in the program was excellent with 95% of people attending either all or most sessions. Almost everyone felt that the eleven areas were covered during CP sessions. Table 2 shows these results in more detail. One

aspect of CP care is to provide time for women to get to know each other; 62 (95.39%) felt that this happened for them. Sixty-four (98.46%) felt comfortable having assessments done in the group setting yet six (9.38%) stated that they would have rather had the assessment done in an exam room. Forty-two (93.33%) believed it was ok to have men in group and more than half of the women were planning on keeping in contact with other group members after delivery (22/52.38%). See table 3 for more detailed results.

The qualitative piece of the evaluation allowed women to comment on whether or not they got to know the other women, what they liked, and what they would like to see changed. Comments included “I got a chance to meet other girls with the same concerns as myself” and “Being with other girls due around the same time as me gave us a chance to relate to each other and made talking more comfortable.” The women stated that they enjoyed being with the other girls, sharing information, and being able to relate to others in the same situation as them. When asked what they really liked about CP responses included “how we were all first time mothers, young and pregnant together, learning and exploring together”, “I liked the way the midwives treated us. They were really nice and were always able to answer all our questions”, and “The program was well organized. Each of our needs and wants were met.” Common themes about likes were similar to those on evaluation form one. In terms of changes, many people felt that nothing needed to be changed but some answers included “I liked everything except for the time [of group]. I feel that group lasted too long”, “I wish they had more available transportation instead of buses”, and “I think that after 36 weeks we should have [weekly] internal exams.”

Table 2

Evaluation Form two results: Topics Covered

(Total n= 65)

Topics	Well Covered n (%)	Covered n (%)	Needed More n (%)
Pregnancy Issues	55 (87.3)	8 (12.7)	0 (0)
Pregnancy problems	55 (87.3)	7 (11.11)	1(1.59)
Nutrition	54 (87.1)	8 (12.9)	0 (0)
Parenting	53 (84.13)	9 (14.29)	1(1.59)
Childbirth preparation	49 (77.77)	10 (15.87)	4(6.35)
Infant care/feeding	48 (76.19)	15 (23.81)	0 (0)
Contraception	48 (76.19)	11 (17.46)	4 (6.35)
Exercise/relaxation	43 (68.25)	18 (28.57)	2 (3.17)
Postpartum issues	40 (64.52)	19 (30.65)	4 (6.45)
Communication/self-esteem	39 (63.93)	20 (32.79)	2 (3.28)
Abuse issues	33 (54.1)	23 (37.7)	5 (8.2)

Table 3

Evaluation Form two results: Group Care Assessment

(Total n= 65)

Question	Yes n (%)	No n (%)	Unsure n (%)
Were you comfortable doing this in the group setting?	64 (98.46)	1 (1.54)	
Did you get to know other women in the group?	62 (95.39)	3 (4.62)	
Did you feel satisfied that the assessment was adequate?	61 (96.83)	2 (3.17)	

Do you think it is important to get the group together after delivery? 42 (85.71) 5(10.2) 2(4.08)

Was it ok with you to have men in the group? 42 (93.33) 3 (6.67)

Was it ok to have men present in the room during the assessment? 41 (95.35) 2 (4.65)

Are you planning to keep in contact with other group members? 22 (52.38) 15 (35.71) 5(11.9)

Would you rather have done this in an exam room? 6 (9.38) 58 (90.63)

*Please note that questions 4-7 only had 50 people respond due to copying issues of form two; the percentages have been calculated accordingly

Discussion and Implications

The CP model is an evidence-based methodology to provide quality prenatal care, especially to young, adolescent women. For most of these women it is their first time being pregnant and seeking individual health care. Therefore it is important to provide these women with adequate knowledge on self care and caring for their new infant. By attending twenty hours of CP prenatal care these women have demonstrated high satisfaction rates.

As expected, based on previous studies on patient satisfaction, this study provided evidence of client satisfaction with an Upstate New York adolescent CP program. Although the study did not compare satisfaction rates with those of traditional prenatal care the results are still meaningful. On evaluation form one all five of the satisfaction questions were answered “agree” in more than 92% of cases. Evaluation form two indicated data that 8.2% or less of participants felt that any of the eleven prenatal topics were not covered or covered well. Almost everyone felt comfortable being in the group setting and that the physical assessments were adequate. The high satisfaction rates can be interpreted as evidence that the program is meeting the needs of pregnant adolescent women.

There are many components that can make the experience of CP prenatal care satisfying. In the program women have a chance to discuss any issues they have and to hear about other women's concerns. In doing this, it helps to normalize their concerns and provide women with a sense of comfort in knowing they share the same worries. CP care provides adequate time and opportunity to discuss a wide range of topics, providing more holistic information. By meeting in groups, women are able to learn from each other and may build supportive friendships.

CP meets the needs of many adolescent women because it is available in the late afternoon after school and allows for participation of partners and friends. This provides women with a sense of empowerment, preparedness, and control through involvement in their care (Rising, 1998). This can be especially satisfying for young women who establish identity through their peers.

Still there are some barriers to CP care that may affect women's satisfaction. Some practitioners may not relish teaching in a group setting because they are so accustomed to one to one care. Registered nurses have been found to take on the role of prenatal facilitator quite well but may be expected to meet multiple demands such as preparation, snacks, and follow-up. Finding space to hold group sessions can sometimes be challenging. Churches, schools, hospitals, or community centers could be other options. Some women who attend group may have other children so finding child care for two hour group sessions could be challenging. To accommodate these women, some CP facilities may include child care during this time (Reid, 2007).

Continued research and evaluation of CP is important. There are only a few major studies to date on the outcomes of CP prenatal care and satisfaction rates. Further replication of studies especially on variables such as decreased BW and preterm births, knowledge, cost benefits,

breast feeding rates, and satisfaction are needed. Randomized and controlled studies of comparisons between CP and traditional prenatal care should also be conducted. This will allow CP to demonstrate research for application in more institutions and allow for expansion and development.

Limitations

There are many limitations in this study. Some of the evaluation forms were not complete (single sided copy). Many of the young women did not complete all of the questions. The administration of the evaluation forms was also not at the suggested times as per the CP guidelines. Evaluation form one is meant to be given at the end of session six and the second form at the end of session ten. In our study however both forms were given on the last (tenth) session. Also this study did not evaluate maternal or neonatal outcomes. Another limitation was that Rising's standard evaluation forms were not well developed for good analyses.

In terms of our sample, we used the most convenient, readily available subjects who were already enrolled in CP care. We also did not have exact race and SES information on the women who completed the evaluations, only general approximations by providers. According to the providers, our sample was comprised by primarily teenage minority women of low socioeconomic status (SES). For the results to be generalized, a large study including women of all ages and backgrounds would need to be done with inclusion of variable SES data. A randomized controlled study would be best by assigning matched populations to either group or traditional care and evaluating psychosocial, cognitive, and perinatal outcomes.

Conclusion

Although this is a preliminary pilot study of patient satisfaction rates in a teen pregnancy program, the results are meaningful. Based on interpretations of evaluation forms one and two

the majority of the teens were very satisfied with their care. CP seems to be effective and satisfying in teaching adolescent women what they need to know about being pregnant, mothering, and caring for a newborn. In addition to high satisfaction rates, other studies reported benefits of CP prenatal care to include improved neonatal and maternal outcomes and cost effectiveness. This new approach to prenatal care has the potential to evolve into a highly utilized and well recognized program to meet the unique needs of adolescents as well as the developmental needs of pregnant women. Through further research, supporting evidence will exemplify the pragmatic benefits of CP prenatal care.

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