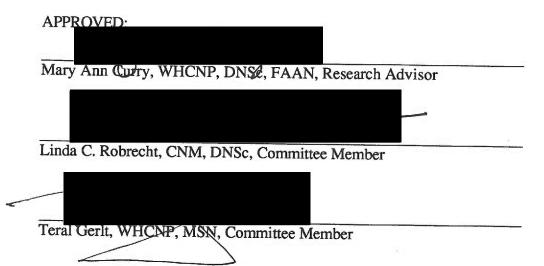
Evaluation of Women's Overall Satisfaction with the Innovative Prenatal Program at Southeast Health Center

Catherine Harvey Cromett, Michele Morrell & Sally Gambill Pinder

Oregon Health Sciences University

Running Head: Satisfaction Evaluation



Introduction

Prenatal care has been shown to reduce the incidence of low birthweight and to be cost effective when compared to the cost of caring for a premature and/or sick newborn (1). Providing adequate prenatal care to all women has been a national goal since 1979, but as a nation we have fallen short of this goal (2). The Bureau of the Census (3) reported that in 1975 the percent of prenatal care initiated in the first trimester was 72.4 and in 1985 the figure had increased minimally to 74.4. For Multnomah County in 1989 inadequate care (less than 5 visits) was reported as occurring at a rate of 88.4 per 1,000 births, significantly higher than the 73.3 state value (4).

In the spring of 1990, an innovative program of prenatal care was implemented in Multnomah County's Southeast Health Center (SEHC). The program consists of two components: a) a reduced number of routine prenatal visits for low to moderate risk women, and b) access to a free drop in center staffed by community health nurses (CHNs). The program's goal is to improve accessibility and acceptability of prenatal care. This paper will describe a project that evaluated the women's satisfaction with the program.

Program description

The program at SEHC was the first of its kind in the U.S.. It challenges existing prenatal care standards regarding the number and timing of prenatal visits. Prior to implementation, women had to wait 4-6 weeks for their first appointment, and on the average did not have that appointment until they were nearly 18 weeks pregnant (5). By a reduction in the number of routine prenatal visits, and offering

an on-site drop-in-center staffed by CHNs, the program aims to provide more accessible and acceptable care to women seeking prenatal care.

The reduction in prenatal visits was based on the Public Health Service Expert Panel's recommendations that the number of routine prenatal visits for low risk women could be reduced (6) and the lack of scientific evidence for a routine number of prenatal visits (7). Further support came from two programs in Scotland that reduced the number of routine visits for low-risk women without negative effects on outcomes (8, 9).

Peoples-Sheps (7) in an extensive review of the literature examined the components of prenatal care and identified the areas for which sufficient evidence exists to mandate inclusion in maternity care. Prenatal surveillance, formal risk assessment, and screening tests are the basic components recommended. Prenatal surveillance involves an initial evaluation which includes the following: complete medical, obstetric, family, nutritional, and social history; physical examination including pelvic assessment; determination of an estimated due date; and standardized prenatal lab tests. Formal risk assessment is recommended to differentiate between low risk and high risk pregnancies and should be ongoing throughout pregnancy. Return visits are used to detect signs and symptoms of pregnancy complications. Prenatal education, behavior change strategies, as well as stress management, are also identified by Peoples-Sheps as important elements of prenatal care.

Based on the recommendations from Peoples-Sheps (7), the reduced visit protocol is for medically and obstetrically low-risk women who begin care before 20 weeks. It recommends 5 routine visits: a) initial visit; b) 20 weeks; c) 28 weeks:

d) 36 weeks; and e) 40 weeks. The screening protocol used to determine eligibility for the reduced visit protocol was developed in cooperation with the Oregon Health Sciences University Perinatal Project (Appendix A).

The drop-in-center has two primary functions: a) to conduct all the initial prenatal histories, and b) serve as a resource for clients. The CHNs provide counseling, education, screening, and evaluation between scheduled visits. Women can access the drop in center for any reason without an appointment. In addition, they can be "appointed" to the center by a provider.

Background

Satisfaction with prenatal care and barriers which may impact satisfaction will be addressed in the review of literature. Studies specifically addressing satisfaction with prenatal care are limited. The majority are British studies thus limiting the generalizability to a U.S. population. The difficulty measuring satisfaction was a common theme throughout the literature. Studies exploring barriers are numerous, yet the relationship to satisfaction is not clearly documented. Satisfaction with Prenatal Care

Shearer (10) points out in an editorial edition of <u>BIRTH</u>, that measuring satisfaction with prenatal care is difficult and has "no standardized or validated scales" (1983, p. 72). Satisfaction to some women may mean no waits, no painful procedures, some consideration given by the care provider, or a healthy baby. Different levels of satisfaction may be elicited depending on the women's mood, time elapsed and/or how she was asked. Answers may be biased by birth experiences, temperament of baby, or the length of the recovery period (10).

Porter and MacIntyre (11) interviewed 232 pregnant women at 36 weeks gestation and evaluated their satisfaction with an alternative prenatal program in Aberdeen, Scotland. This program serves as a model for the program being evaluated in this project. Satisfaction was examined in a number of ways including what they liked and disliked about their care and suggestions for improvement. Multiparous women were asked to compare the care they received with previous pregnancies and all women were asked to rate their care on a negative/positive scale including opinions of staff's care. It was noted that these pregnant women were uncritical, and seemed to accept the care given to them thinking that it was probably the best for them. Porter and MacIntyre called these responses deferential and conservative. They were concerned that other studies on satisfaction may also elicit deferential and conservative responses since numerous patients state they are satisfied no matter what kind of care they received.

Common themes found in the review of the prenatal care satisfaction literature are communication, continuity of care, and clinic waiting time. These were conceptualized as both impacting satisfaction and acting as barriers to care.

Communication. The quality of communication with the care provider is a major indicator of satisfaction with prenatal care. Kirke (12) studied women's views on obstetrical care and found an association between good communication and stated overall satisfaction with care. During antenatal care 75% of women felt they had sufficient time to ask doctors and midwives questions. Sullivan and Beeman (13) found the quality of communication was related to satisfaction with maternity care. When more time was spent discussing problems and the provider showed more empathy toward the client, reported satisfaction was higher. Reid

and McIlwaine (14) also found that women's satisfaction focused on communication with their care providers. Over one third of the women interviewed felt they were not able to ask all they wanted from their doctor. These studies supported the relationship between communication and satisfaction. Patients also reported that a lack of continuity of care was not conducive to good communication.

Continuity of care. The issue of continuity of care as it relates to satisfaction has been addressed in several studies. Reid and McIlwane (14) found that 85% of women favored continuity of care. Women expressed that the consistent opinion of one doctor was reassuring, however a small amount of women, 8%, preferred a variety of opinions from different doctors. O'Brien and Smith (15) found receiving care from one or two people was more satisfying than seeing different people at each visit. Women reported being able to discuss concerns more easily when care was provided by one or two people. Lazarus and Philipson (16) compared the prenatal care of Puerto Rican and white women and found that a majority of women stated that seeing different doctors at each visit led to poor communication, and the differing opinions of doctors led to confusion. The division of labor in the clinic also added to the communication problem, especially when conflicting information was given by the nurse and doctor. Confirmation of the relationship between continuity of care and satisfaction is apparent in the above studies.

Clinic waiting time. A major complaint in the studies measuring satisfaction with prenatal care was the long clinic waits. Women from the Lazarus and Philipson (16) study were dissatisfied with the long clinic waits that made it difficult to plan days, especially when they had children. Criticism of another

program centered around the long clinic waits that contributed to the production line atmosphere (11). Although Reid and McItwane (14) found that women were prepared to spend a considerable amount of time waiting to be seen, it was still a factor in their satisfaction with prenatal care. These studies exemplify the relationship of clinic waiting time and satisfaction.

Barriers to Prenatal Care

Barriers to care have been studied extensively with the goal of improving the number of women accessing prenatal care. When barriers are decreased, there is a possibility that satisfaction with care maybe improved. The following are repeatedly identified in the literature as types of barriers to accessing prenatal care: structural, personal, and socio-demographic (1, 17-22)

Structural Barriers. Structural barriers are defined as organizational and financial factors in the healthcare system which prohibit easy access to care. These include: financial, system capacity, organizational, transportation, childcare problems, waiting time, provider continuity, location of clinics, and clinic times (1, 2, 17-20, 22).

Financial barriers are identified as problems with private insurance, medicaid or having no coverage. Several sources site financial barriers as the greatest obstacle for low-income women seeking antenatal care (19, 22). Eliminating the financial barrier alone, however, does not guarantee adequate prenatal care for this at-risk population (17, 18, 20).

Inadequate system capacity is another identified barrier (1). There are several presumed reasons for the inadequacy. One is that the amount of

women seeking care is greater than what the clinics can handle. There is also an uneven distribution of prenatal care providers serving low-income women who either have medicaid or no coverage. Other factors include the risk of malpractice, lack of adequate reimbursement from Medicaid, and the restriction on the scope of practice for CNMs and NPs in some states (1).

Organizational problems are also structural barriers. A major problem is lack of coordination among programs. Women eligible for various programs frequently do not use them because the lack of coordination causes difficulty and confusion for both clients and providers. Low-income women frequently lack a health care provider willing to help coordinate their care, so they rely on the system for guidance. Another problem is the application procedure for medicaid. It can be long and difficult and inhibits some women from applying (1).

Clinic location and operating hours pose an organizational barrier for some women. Location and times of operation are frequently inconvenient for the population served. Inaccessible location of clinic is due to either the actual distance women must travel or the safety of the area. Frequently women take time off work without pay to go to their appointments, and women with children must deal with childcare issues (2). Other structural barriers include: transportation, child care, language barriers, waiting time, provider continuity, and the practices and attitudes of some providers (1, 2, 17-22).

<u>Personal Barriers</u>. Personal barriers are categorized as obstacles that the particular individual contributes to the situation. These include: cultural, motivational, attitudinal, and psychological barriers.

Cultural differences have been addressed numerous times as a barrier to prenatal care (1, 2, 18, 19). Women and providers both bring social and cultural biases to the relationship. If these are not recognized, miscommunication is likely to occur, especially if a language barrier coexists.

Motivational barriers are factors which predispose a woman not to actively seek out healthcare. Substance abuse, family problems, and lack of social support have all been cited as influencing a woman's inducement to seek prenatal care (2, 18, 19, 22). Women's attitudes toward their pregnancy and the healthcare system can influence their access to care. Ambivalence, unhappiness, or denial of the pregnancy was seen as influencing access to prenatal care among low-income women in an urban Midwest city (20). Women's prior experience with the healthcare system either personally or through family and friends can also negatively impact their willingness to seek care (19). A psychological encumbrance for women seeking prenatal care is the negative stigma of receiving care at a public clinic (21).

<u>Socio-demographic Barriers</u>. Finally, there have been several socio-demographic factors addressed in the literature that correlate with inadequate prenatal care. These are multiparity, lack of education, low income and young age (17, 19, 20, 22).

Summary

Concepts identified in the literature which impact women's satisfaction with prenatal care include: a) waiting time spent in the clinic, b) communication with providers, c) continuity of care, d) transportation, and e) childcare. In addition, many women experience structural, personal, and or socio-demographic barriers when accessing care. Women are consistently told that prenatal care is essential, but may get the impression there is no value in it when accessing it is made difficult (23). This often overlooked aspect of women's satisfaction with prenatal care must be included in the evaluation of prenatal care programs if we expect to design care women will attend.

The purpose of this study was to answer the following research question: What are women's expressed satisfaction with the structure and content of an innovative prenatal program at SEHC; specifically with regard to the number of their prenatal appointments, the drop-in-center, amount of waiting time, continuity of care, communication with care providers, transportation, and childcare?

Methods

Design

A qualitative, retrospective design was used to describe women's expressed satisfaction with the prenatal care they had received at SEHC. This type of design is limited to describing phenomena regarding women's satisfaction with care received at a particular clinic. It does not compare women's satisfaction in this program with another group receiving prenatal care based on the former clinic protocols.

Subjects

The target population was all women that participated in the innovative prenatal program. The women were at least two weeks postpartum at the time of data collection and met inclusion criteria which were: a) had 9 or fewer prenatal visits, b) spoke English, and c) had telephone access. Due to the cost and time constraints of the researchers, interpreters were not utilized nor were home visits conducted. At the time of the evaluation 48 women had participated in the program. Of the 48 participants, 26 were ineligible based on the inclusion criteria. Of the remaining 22, 11 were unable to be contacted. Seven participants had moved without forwarding numbers available, two had message phone numbers and after several attempts contact was unsuccessful, and two phone numbers were incorrect. The remaining eleven women were contacted and all agreed to participate in the evaluation.

<u>Instruments</u>

An interview guide (appendix B) was used to elicit information from the study participants. The instrument was pilot tested on three women and improvements were made in content, wording and format. Interrater reliability in recording information was established among the three researchers. One pilot interview was audiotaped and transcribed by each researcher. Each tape was played back and transcribed by the other two researchers. Comparisons of the transcribed responses demonstrated 100% agreement.

The open-ended questions making up the guide elicited information about the participants' overall satisfaction of care, specifically addressing waiting, communication with provider, continuity of care, childcare, and transportation.

Satisfaction with the program was solicited by asking open-ended questions regarding the number of appointments they had received and the drop-in-center.

Potential biases of the study include the women's labor and delivery experiences, infant outcome, different providers, and personal biases. The interview guide is unable to detect these biases since no specific reference is made to them.

Procedures

When each woman was contacted, she was assured that her participation was voluntary, confidential, and would not impact her future care at SEHC. It was also explained that the researchers were working independently of the clinic. The interviews averaged ten minutes in length. Confidentiality was assured by assignment of code numbers to each participant questionnaire along with their Multnomah County medical record number. The questionnaires and the face sheets were kept separately and were accessible only to the investigators.

Analysis

All telephone interviews were audio taped. Interview guides were briefly filled out during the interview and then completed after reviewing the audio tape. The data were then coded and frequencies were described. See appendix C for a description of the raw data.

Results

Women's expressed satisfaction with the structure and content of the innovative prenatal program in SEHC, specifically in reference to the number of prenatal appointments, the use of a drop-in-center, amount of waiting, continuity of care, communication with providers, transportation, and childcare was explored.

The eleven women who were contacted by phone all agreed to be interviewed.

Three of the participants were first time mothers (primiparous) while the remaining eight were having their second to fourth child (multiparous). The majority of the subjects had completed the twelfth grade and several had attended trade school or junior college. See Table 1.

Table 1. Demographic Data

PARITY	
	primiparas 3
	multiparas8
EDUCATION	
	less than 12th grade completed3
	completed 12th grade3
	greater than 12th grade5
AGE	
	< 18 1
	18-255
	26-30
	31-35
	36-40
	mean age = 27

Satisfaction

Women's expressed satisfaction regarding their care at SEHC was rated using a scale of 1-10; with 1 being very dissatisfied and 10 being very satisfied. The responses were overwhelmingly positive with scores ranging from 6-10. The majority of scores were 8 or greater (Figure 1). Satisfaction with staff, clinic efficiency, and overall care were stated as reasons impacting satisfaction. The reduced number of visits was not specifically given as a factor influencing satisfaction. Specific reasons given by the participants included "the nurses were

concerned about me, and if I had any questions they really helped me." Another woman expressed that she felt very welcomed at the clinic because of the "family atmosphere" and the staff addressed her by name. One woman who stated "I never think anything is a ten, nothing is ever perfect" rated her satisfaction as 9, stating "the clinic was both good and affordable with flexible payment options". When asked what would make their satisfaction a 10, all responses focused on the structural barriers of the clinic. These identified barriers were: the degree of difficulty in making appointments, the length of time spent waiting for care, and feelings of impersonal customer relationship.

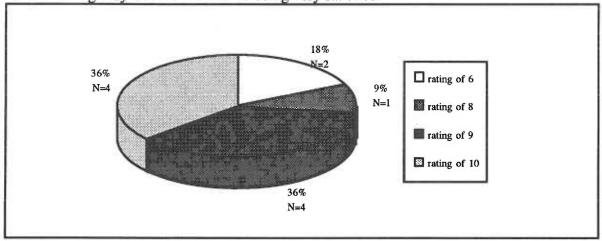
Two women reported their satisfaction as 6. One stated that she had difficulty scheduling appointments, and the other participant stated "they see so many different people, they can't really remember who you are." It is interesting to note that both women had five prenatal visits.

In an additional effort to elicit women's perceived satisfaction, the women were asked if they would recommend SEHC to a friend. Ten women stated they would recommend the center. The reasons for recommendation included: receiving good prenatal care, the capability of getting answers right away, expediency of the drop-in-center appointments and short waiting time. One woman stated that "it was just as good as the private doctor I saw for my first pregnancy," and another said "My provider would offer to look up questions if she didn't know the answer."

The woman who would not recommend the clinic and rated her satisfaction as a 6 based it on the difficulty in scheduling appointments. It is interesting to note that the other woman who rated her satisfaction as a 6 because of the impersonal service later stated that she would recommend it to a friend because the staff "seemed to

care a lot about me." This contradictory response regarding satisfaction was an isolated case.

Figure 1. Expressed satisfaction of eleven women receiving care at SEHC. Scale 1-10: 1 being very dissatisfied and 10 being very satisfied.



Perceptions of reduced visits

The majority of women were pleased with having a reduced number of prenatal visits (Figure 2). The number of visits ranged from five to nine: five visits N=3, six visits N=5, seven visits N=1, nine visits N=2. When asked to rate the number of visits as either "too few, too many, or just right," eight women, seven of whom were multiparous, stated that the number of visits were just right. The two women who stated the visits were "too few" were both primiparous and had five and nine visits. One multiparous woman who had six visits, expressed mixed feelings. There were no responses of "too many."

Women who perceived the number of visits as just right gave the following reasons: "It was nice not having to go in as often", "less expensive", "with two

kids it was convenient and I didn't have to find childcare". Three women expressed that the number of visits was just right because they had confidence in their care provider. Another stated that the drop in center relieved her concerns about the frequency of appointments. Another woman stated that this was her third pregnancy and she wasn't as nervous. It is interesting to note that all but one of the multiparous women stated that the number of visits were just right. It appears that prior experience with pregnancy may contribute to the level of comfort with a reduced number of visits. The woman with mixed feelings stated that she felt nervous towards the end and would have liked more appointments, but understood that she didn't need it. Although this woman stated that she was informed about the drop in center in her first trimester she did not utilize it.

number of participants

too few just right too many mixed feelings

Figure 2. Perceptions of the reduced number of visits.

Drop-in-center

Six of the eleven women reported using the drop-in-center. All of the primiparous women used it. The number of visits ranged from one to three.

Reasons given for utilizing the center were all medical concerns such as back pain, contractions, blood pressure, flu symptoms, and baby's position. Women did not state that they used the center for psychosocial or educational concerns. Only positive feedback was given regarding use of the center, such as, ease of being seen, quick answers to questions, and reassurance between visits. Suggestions for improvement included child care, lending library of books and videos, support groups and classes, open longer hours, better advertisement of services available as well as being reminded to use the center. Of the five women who did not use the center, two stated they had never heard of the drop-in-center, and the remaining three knew of the center but chose not to use it. These latter three women were multiparous.

Barriers

Barriers explored through the questionnaire were continuity of care, communication, transportation, waiting time and child care. These well documented barriers were not perceived by this sample as major obstacles during their prenatal care.

Continuity of care and communication. All the subjects generally saw the same provider and communication was rated positively. They stated they enjoyed the ability to develop relationships with the providers because of the continuity of care. One woman expressed that she liked it and was comfortable seeing the same person. Another woman liked it because the providers "get to know you on a personal level".

From the women's responses it appears that continuity of care can enhance communication. One participant stated that the communication was excellent "we

had an established relationship from my last pregnancy and I could ask her things that I couldn't ask others as easily." The reason for rating communication as "great" by one woman was that "she (provider) was able to sense when I had questions or concerns and draw it out from me."

Transportation. Transportation did not appear to be a barrier in this particular sample. Only two women stated transportation was a problem. One woman had a one hour bus ride which "was a pain and a drag." The other subject walked and stated that the weather could be a problem. However they rated their satisfaction as 9 and 10.

Waiting time. Women were asked how long they initially waited in the clinic waiting room and how long they waited for their provider (secondary wait). The initial wait ranged from 5 to 90 minutes with nine women waiting less than 30 minutes. Secondary waiting ranged from 5 to 45 minutes. Six women reported waiting 10 minutes or less, 4 women waited 15 to 30 minutes, and one woman reported waiting up to 45 minutes. When asked how they felt about the waiting time there were a variety of responses. Three women reported that they expected to wait, "It's the same at the University, it's what you have to do". Another woman thought the combined waiting was too long since, "The actual appointment only took 10 to 15 minutes." This subject estimated her total waiting time as 30 to 45 minutes. She rated her overall satisfaction as a 9 and reported that less waiting time would have made her score a 10. One positive comment included, "With other health clinics there are long waits, so this clinic was wonderful."

<u>Child care.</u> Child care during prenatal appointments was not a problem for the majority of women. Of the three multiparous women who reported child care as

a problem "sometimes", one woman stated, "It's a hassle to always bring children and it's difficult to afford a baby-sitter." Suggestions offered by the three women that would have made child care easier included greater flexibility in scheduling appointments, having a car, affording a baby-sitter and activities for children in the waiting room.

Recommendations

Overall, it is recommended that the SEHC continue the reduced visit protocol and continue to provide the continuity of care and personal service that appears to keep women satisfied with the care they receive. As a result of this evaluation several suggestions can be made.

Primiparous women voiced a concern regarding the length of time between visits, and although they felt fine, they were concerned because this was their first pregnancy. It is recommended that for this population, the drop-in-center should be utilized more between visits. Providers could schedule appointments at the drop-in-center after their initial visit to help ensure use. This time could be utilized to view educational films, discuss use of the drop-in-center, and become acquainted with the staff. Additionally, multiparous women might also benefit from the same regime or perhaps a visit to the drop-in-center while waiting for their appointment would be sufficient.

Multiparous women seemed to be very satisfied with the reduced visit protocol and therefore it is recommended to continue the project with this population. The availability of the drop-in-center should also be reinforced throughout the pregnancy, as several women stated that they forgot about it.

Advertising and handouts may help promote awareness. Because child care issues

during appointments were expressed by a few of the women, child care options such as a supervised play area should be explored for both clinic time and drop-incenter visits.

Summary

The innovative program at Multnomah County's SEHC was initiated in the spring of 1990. The goal of the program was to improve accessibility and acceptability of prenatal care. Acceptability was explored through an evaluation of women's expressed satisfaction with their care, as well as the barriers which potentially impact satisfaction. A qualitative, retrospective design was used to illicit perceived satisfaction through telephone interviews. Of the eleven women who participated in the satisfaction evaluation, nine rated their satisfaction highly and ten stated they would recommend the clinic to a friend. Results indicate women are very satisfied with the care they received at SEHC.

References

- 1. Institute of Medicine (1988) <u>Prenatal care: Reaching mothers, reaching infants.</u> Washington, D. C.: National Academy Press.
- 2. American Nurses' Association, (1987). Access to prenatal care: key to preventing low birthweight. Kansas City, Missouri: American Nurses' Association.
- 3. U.S. Bureau of the Census, <u>Statistical Abstract of the United States: 1990 (110th edition.)</u> Washington, D. C., 1990.
- 4. <u>Oregon Department of Human Resources Health Division Health Status</u>
 <u>Monitoring Center for Health Statistics</u>, Oregon Vital Statistics County Data 1989.
 Portland, Oregon, 1990.
- 5. Curry, M. A. (1991). <u>Report of evaluation of innovative prenatal care project:</u> <u>South East Health Center</u>. Portland: Oregon Health Sciences University.
- 6. Public Health Service Expert Panel. (1989). Caring for our future: The content of prenatal care. Washington, DC: Public Health Service Department of Health and Human Services.
- 7. Peoples-Sheps, M. (1986). The content of prenatal care: evidence of effects and recommendations for essential components. Paper prepared for the Bush Institute for Child and Family Policy Conference on Prenatal Care. Washington, D.C. May 27-28, 1986.
- 8. Hall, M.H., Chang, P.K., & MacGillivray, I. (1980). Is Routine antenatal care worth while. The Lancet, 2, 78-80.
- 9. Hall, M., Macintyre, S., & Porter, M. (1985). <u>Antenatal care assessed</u>. University Press: Aberdeen.
- 10. Shearer, M. H. (1983). The difficulty of defining and measuring satisfaction with perinatal care. <u>BIRTH</u>, 10, 77.
- 11. Porter, M., & MacIntyre, S. (1984). What is, must be best: A research note on conservative or deferential responses to antenatal care provision. <u>Social Science and Medicine</u>, 19, 1197-1200.
- 12. Kirke, P. N. (1980). Mother's view of obstetric care. <u>British Journal of Obstetrics and Gynaecology</u>, <u>87</u>,1029-1022.
- 13. Sullivan, D. A. & Beeman, R. (1982) Satisfaction with maternity care: A matter of communication and choice. <u>Medical Care</u>, 20, 321-330.

- 14. Reid, M.E., & McIlwaine, G.M. (1980). Consumer opinion of a hospital antenatal clinic. <u>Social Science and Medicine, 14A</u>, 363-368.
- 15. O' Brien, M., & Smith, C. (1981). Women's views and experiences of antenatal care. The Practitioner, 225, 123-125.
- 16. Lazarus, E. S. & Philipson, E. H. (1990). A longitudinal study comparing the prenatal care of Puerto Rican and white women. <u>Birth</u>, <u>17</u>, 6-11.17.
- 17. St. Clair, P.A, Smeriglio, V.L., Alexander, C.S., Connerll, F. A., & Niebyl, J. R. (1990). Situational and financial barriers to prenatal care in a sample of low-income, inner-city women. <u>Public Health Reports</u>, 105, 264-267.
- 18. Curry, M. A. (1989). Nonfinancial Barriers to prenatal care. Women & Health, 15, 85-99.
- 19. Kalmuss, D., & Fennelly, K. (1990). Barriers to prenatal care among low-income women in New York City. Family Planning Perspectives, 22, 215-231.
- 20. Lia-Hoagberg, B., Rode, P., Skovholt, C.J., Oberg, C. N., Berg, C., Mullett, S., & Choi, T. (1990). Barriers and motivators to prenatal care among low-income women. <u>Social Science Medicine</u>, <u>30</u>, 487-495.
- 21. Miller, C. L., Margolis, L. H., Schwethelm, B., & Smith, S. (1989). Barriers to implementation of a prenatal care program for low income women. American Journal of Public Health, 79, 62-64.
- 22. Poland, M. L., Ager, J. W., & Olson, J. M. (1987). Barriers to receiving adequate prenatal care. <u>American Journal of Obstetrics and Gynecology</u>, 157, 297-303.
- 23. Garcia, J. (1982). Women's view of antenatal care. In M. Enkin & I. Chalmers (Eds.), <u>Effectiveness and satisfaction in antenatal care</u> (pp. 81-91). Philadelphia: Lippincott.

Appendix A

Risk Criteria for Innovative Prenatal Program

The following criteria will be used to determine if a woman is eligible to participate in the reduced number of visits portion of the program. The criteria are not weighted. Women will automatically be disqualified if any of the criteria marked with * are in her history or arise during pregnancy. Women may be disqualified if any of the criteria marked with ** are in her history or arise during pregnancy. The remaining criteria, while included in many standard risk indexes, are not factors which will disqualify women from receiving a reduced number of standard visits. Providers are expected to use their judgment, either alone, or in consultation with a physician, to determine which women qualify for a reduced number of prenatal visits. Some women may not qualify initially, but by 28 weeks be eligible. The reverse is also possible, with women qualifying initially, but becoming ineligible during the pregnancy.

General Factors
Prepregnancy weight < 100 pounds
Prepregnancy weight > 20% of ideal weight
Age <17 or >35
Nulliparity
High life stress/low social support
Lack of early care (women must have first visit by 20 weeks to be eligible)

Obstetrical History
Previous premature infant < 35 weeks*
Previous IUGR infant
Previous stillbirth
Infant with congenital anomaly
Eclampsia or severe PIH**
Mild PIH
Isoimmunization*
Prior Cerclage*

Gynecological History Nulliparous DES exposed Uterine or cervical malformation Medical History
Chronic Anemia (Hct <30)
Asymptomatic heart disease
Symptomatic heart disease*
Thromboembolitic heart disease*
Pulmonary disease**
Severe renal disease*
Diabetes Mellitus (Type I)*
Diabetes Mellitus (Type II)*
Seizure disorder
Psychiatric problem*
Drugs with fetal effect**
Hemoglobinopathies**

Substance Abuse Alcohol Tobacco > 1ppd Recreational drugs

Factors Arising During Pregnancy Weight gain < 20 pounds (excluding obesity)** Diabetes Mellitus (Type I)* Diabetes Mellitus (Type II)* Pregnancy Induced Hypertension* Acute hepatitis** **Syphilis** Rubella, Toxoplasmosis, CMV Premature Onset of Contractions* Small for gestational age infant ** Large for gestational age infant Documented IUGR* Pyleonephritis Oligiohydramnios* Polyhydramnios* Placenta Previa* Placenta Abruption* Multiple Gestation* Cervical Cerclage*

	 "	Appendix B	3			
Ŋ	MR #POSTPAI	TUM INT	FRVI	CODE#		- :
DEMOGRAPI	HIC DATA:			J V V		
PARITY	EDUCATION	AGE _				
FAMILY SIZE	NUMBI	ER OF PEOP	LE IN F	HOUSEH	OLD	
NUMBER OF I	DROP-IN CEN	1EK VISI15				
ŀ	OW WOULD	YOU RATE	YOUR	SATISFA	CTION WI	TH THE CARE
YOU RE	ECEIVED AT T	THE SOUTH	EAST H	EALTH (CLINIC ON	A SCALE OF 1-
10?; 1 B	EING VERY					
	12,300	W	HAT W	OULD M	AKE IT A	10 ?
I	HOW WOULD	YOU DESC	RIRE V	OUR COM	MMINICA'	TION WITH
	RIMARY PRO		KIDL I	JOIL COL	VIIVIOINICA	HON WITH
V	VHAT MADE'	THIS GOOD	OR BA	D FOR Y	OU?	
	DID YOU GEN	EDALLACE	E THE	CAME DD	OVIDED	OD VOLID
	TMENTS?					OK TOOK
11110111			** *******	*****	on roo.	
V	VHY OR WHY	NOT?				
Ľ	IOW DO YOU	EEEI ADOI	TT TUE	VII IVADE.	D OE DDEN	TATAT
	TMENTS?	FEEL ABOU	JIINE	NUMBE	K OF PREN	IATAL
MIOH	TWILITID:					
TOO FE	W, JUST RIGH	IT, TOO MA	NY? W	/HY?		
п	IOW DID YOU	GET TO V	רו ום כיו	INIC ADI	DOINTMEN	TT9
1.	IOW DID TOC	OLI IO IV	OUR CL	ANIC AFI	CHAIME	(1:
H	IOW LONG DI	D IT USUA	LLY TA	KE YOU	?	
						10.25
						OW LONG DID
11 USUF	ALLY TAKE B	EFURE 10	U WEKI	2 SEEN B	IHENU	KSE!
————	IOW LONG DI	D IT USUAI	LLY TA	KE FOR	YOUR PRO	VIDER TO SEE
YOU?						
						·
H	IOW DO YOU	FEEL ABOU	JT THE	WAITIN	G TIME?	

WAS CHILD CARE A PROBLEM FOR YOU DURING YOUR PRENATAL APPOINTMENTS? WHAT WOULD HAVE MADE I EASIER?
DID YOU USE THE DROP-IN CENTER DURING YOUR PREGNANCY WHY OR WHY NOT
WHAT DID YOU LIKE THE BEST ABOUT THE CENTER?
LEAST
WHAT CHANGES IN THE CENTER WOULD MAKE IT BETTER?
WHAT WOULD YOU LIKE TO SEE THERE? (FILMS, LENDING LIBRARY, CLASSES, SUPPORT GROUPS)
WERE THE HOURS GOOD FOR YOU? WHY OR WHY NOT?
HOW COULD WE GET MORE WOMEN TO USE THE CENTER?
WOULD YOU RECOMMEND THIS CLINIC TO A FRIEND WHO NEED PRENATAL CARE? WHY OR WHY NOT?

Appendix C

DEMOGRAPHIC DATA:

PARITY

primiparas =3,

multiparas =8

EDUCATION

less than 12th grade completed =3

completed 12th grade =3 greater than 12th grade =5

AGE

< 18 =1 18-25 =5 26-30 =3 31-35.=0 36-40 =2

HOW WOULD YOU RATE YOUR SATISFACTION WITH THE CARE YOU RECEIVED AT THE SOUTHEAST HEALTH CLINIC ON A SCALE OF 1-10?; 1 BEING VERY UNSATISFIED AND 10 BEING VERY SATISFIED

Rating of 6 =2 Rating of 8 =1 Rating of 9 =4 Rating of 10 =4

(IF 10, WHAT MADE IT A 10) OR WHAT WOULD MAKE IT A 10?

Reasons given for giving score of less than 9 or 10:

*Difficulty in making appointments

*Too long waiting to be seen by provider

*Impersonal feeling

Positive comments (categories) from scores of 9-10:

*Personal service

*Satisfaction with drop-in-center

*Efficient clinic

*Overall care

DID YOU GENERALLY SEE THE SAME PROVIDER FOR YOUR APPOINTMENTS?

All 11 generally saw the same provider

HOW WAS THAT FOR YOU?

All positive remarks ranging from fine to absolutely wonderful.

HOW WOULD YOU DESCRIBE YOUR COMMUNICATION WITH YOUR PRIMARY PROVIDER?

No negative comments

Reasons for positive feelings regarding communication:

7 spoke about the rapport that developed by seeing same provider

2 offered positive comments because they had an uncomplicated pregnancy and felt okay

HOW DO YOU FEEL ABOUT THE NUMBER OF PRENATAL APPOINTMENTS YOU HAD?

Too few =2 (both primiparas)
Just right = 8
Too many =0
Mixed feeling =1

Positive feelings:

*Two women felt that what their providers recommended was the best for them (deferential positive)

*Just right because of convenience (multiparous)

*drop-in-center as backup made less appointments okay
*Multiparas felt comfortable because of previous experience

*Economics

Reasons for too few:

*auxiety, worry between appointments, insecure about pregnancy

HOW DID YOU GET TO YOUR CLINIC APPOINTMENT?

Drove =4 Someone else drove =3 Car/Bus mix =2 Cab =1 Walked =1

HOW LONG DID IT USUALLY TAKE YOU?

Less than 15 minutes =2 15 minutes - half hour =5 Mixed times due to car/bus 15 mins - 1 hour on bus.

WAS THIS EVER A PROBLEM?

4 of the 11 women viewed transportation as a problem with the following reasons: the woman who walked had to rely on family or friends to drive if the weather was bad, the woman who took the cab saw transportation as a problem financially, one woman voiced negative feelings regarding riding the bus "they're a pain, a drag", one woman had to rely on her husband for rides since they depended on his company's truck.

WHEN YOU ARRIVED FOR YOUR APPOINTMENT HOW LONG DID YOU WAIT IN THE WAITING ROOM?

Less than 15 minutes =5 15-30 minutes =4 30 minutes -1 hour =1 longer than 1 hour =1

HOW LONG DID IT USUALLY TAKE FOR YOUR PROVIDER TO SEE YOU?

10 minutes or less =6 15 minutes - half hour =4 half hour - 45 minutes =1

HOW DO YOU FEEL ABOUT THE WAITING TIME?

No problem with waiting time =5 (longest time spent in waiting room was 15, to see provider majority 10 minutes, one 25 minutes) Expected the wait =3 "It's what you have to do"

WAS CHILD CARE A PROBLEM FOR YOU DURING YOUR PRENATAL APPOINTMENTS?

No =5 (multiparas only) Yes =3 (multiparas only)

WHAT WOULD HAVE MADE IT EASIER?

greater flexibility in scheduling, having a car, being able to afford a baby-sitter, one mother suggested having toys and books in the waiting room for kids to play with

DID YOU USE THE DROP-IN CENTER DURING YOUR PREGNANCY?

Yes =6: 5 used it 2-3 times and one woman used it once

Uses: obstetrical advise =5

Unsure =1

Nutrition/Weight =1

Medication advise =1

No =5: one woman did not know of the DIC, the other women remember hearing about the center at their first prenatal appt., one woman thought that since her provider said she was healthy that she didn't need to use it

WHAT DID YOU LIKE THE BEST ABOUT THE CENTER?

No appointment necessary; sense of security; decreased anxiety having questions answered quickly; didn't have to go through operators; "the nurse was real good and assuring"; can get an appointment that day without waiting.

The only response to what they liked least about the center was one woman had difficulty getting through when they had a phone number change

WHAT CHANGES IN THE CENTER WOULD MAKE IT BETTER?

Childcare was suggested by one woman and another said she would have liked knowing about the center.

WHAT WOULD YOU LIKE TO SEE THERE? (FILMS, LENDING LIBRARY, CLASSES, SUPPORT GROUPS)

- *4 women did not recommend any additional services for the dropin-center
- *3 women felt that including all: lending library of both books and videos, classes, and support groups would be useful
- *3 women thought the lending library would be useful
- *1 woman was in favor of having support groups offered at the center

WERE THE HOURS GOOD FOR YOU?

- 4 women responded yes
- 3 women could not remember
- 1 woman did not know of the center
- 3 did not answer

HOW COULD WE GET MORE WOMEN TO USE THE CENTER?

more advertisement was suggested by several women: posters, flyers, have the providers at the center, open more hours, to mention it more often throughout care was also suggested several times, reinforcement by provider

WOULD YOU RECOMMEND THIS CLINIC TO A FRIEND WHO NEEDS PRENATAL CARE? WHY OR WHY NOT?

10 women said they would recommend SEHC to a friend for PNC, reasons given were friendly atmosphere, staff (7); good prenatal care (1),; financial reasons (2)

The one woman who would not recommend the clinic to a friend stated the reason as the wait to get an appointment is too long. She had rated her satisfaction as a 6 and felt the waiting time was a problem.

ADDITIONAL COMMENTS

One women stated that if you asked to see the same provider that they would accommodate you.

Another woman would not recommend reduced visits for primiparas because of the newness and all the questions and uncertainties. A client expressed concerns that her baby was breech so had to have C/S. Wasn't sure if position of baby could have been detected earlier or if it was a last minute thing. Didn't think anyone was at fault.