

UNIVERSITY HONORS PROGRAM

SENIOR PROJECT - APPROVAL

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PROJECT TITLE: Barriers to the Procurement of Prenatal
Care

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Running head: BARRIERS TO PRENATAL CARE

Barriers to the Procurement of Prenatal Care

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Barriers to the Procurement of Prenatal Care

Pregnancy is a time of rapid changes for a woman. She must make rapid adjustments physically, emotionally, socially, and financially as she prepares for the birth of the baby. In order for these changes to be successful and fulfilling, the woman must know what to anticipate during this period of her life and what lifestyle changes should be made to protect both her health and the health of her baby. Health care professionals provide this guidance and health teaching through prenatal care and childbirth education classes. This care has existed in its current structure in this country since the 1960s. Its focus is on preparing women for a natural childbirth experience (Koehn, 2002). However, in order for women to derive the most benefit from childbirth education, it should prepare them for the pregnancy, the labor and delivery, and the early weeks of providing care for a newborn.

Prenatal Care

Every pregnant woman should receive comprehensive prenatal care throughout her pregnancy. Frequent and ongoing contact with her doctor and other health care providers allows for the early detection of problems, continual health teaching to prepare the woman for expected changes, an opportunity to answer questions and prepare her for the upcoming delivery, and the chance to form a trusting relationship between the woman and her doctor. However, only 74 percent of women in the United States receive adequate prenatal care (March of Dimes). This lack of care to approximately 26% of the pregnant population will be discussed later in this paper.

Schedule of Visits

The recommended schedule of visits varies based on risk factors to the health of the woman and her baby. The schedule for a normal, healthy pregnancy recommended by the American College of Obstetricians and Gynecologists (2000) is visiting the doctor every four weeks for the first twenty-eight weeks of the pregnancy. From twenty-eight weeks until the thirty-sixth week, the woman will visit her doctor every two to three weeks. Beginning with the thirty-sixth week, the woman should visit her doctor weekly. Pregnancies complicated by any high-risk condition will necessitate more visits. The physician or nurse practitioner determines individual schedules.

Prenatal Visits

During these visits, the doctor will collect a variety of information to assess the status of the pregnancy as well as provide education. During the first visit, the doctor will take a medical history, perform a physical and pelvic exam, perform an ultrasound, run lab tests, and provide health education and counseling (Gifford, 2001). The medical history includes current medications; allergies; preexisting medical conditions; vaccination schedule; childhood illnesses; menstruation patterns; tobacco, alcohol, and illegal drug use; toxic substance exposure risk; and the history of any past pregnancies (American College of Obstetricians and Gynecologists). These items help the doctor determine if any risk factors exist that would place this pregnancy at high risk. The physical exam includes all major organs with special attention to the pelvic exam (American College of Obstetricians and Gynecologists). The ultrasound is used to help determine the age of the fetus and its due date (American College of Obstetricians and Gynecologists). Laboratory tests include blood analysis, a urinalysis, and a Pap smear. These tests indicate complications such as anemia, sexually transmitted diseases,

diabetes, urinary tract infections, and cervical cancer. The woman's blood type is also determined at this time (American College of Obstetricians and Gynecologists). Health education and teaching should be based on the most immediate and pressing educational needs.

The content of future visits are based on the individual needs of the woman, but will include monitoring the woman's weight and blood pressure, monitoring for the development of gestational diabetes, measuring the height of the uterus to insure adequate fetal growth, observing for excessive edema, listening to the fetal heart rate, determining the position of the fetus, completing additional lab tests as needed, and performing specialty tests such as a non-stress test, a contraction stress test, and a biophysical profile (American College of Obstetricians and Gynecologists).

Importance of Prenatal Care

Research has shown variable results regarding the effectiveness of prenatal care (Schmied, Myers, Willis, & Cooke, 2002). In 1989, the Public Health Service Expert Panel on the Content of Prenatal Care was the first to suggest a link between receiving childbirth education and increased birth weight (Smith & Carey, 1999). Since that time, many studies have been conducted to determine the link between prenatal education and birth outcomes.

According to Vonderheid, Montgomery, and Norr (2003), despite the fact that prenatal care has been linked to many positive benefits in the past, it has failed to show the hoped for benefits in the last decade. An increasing number of women have utilized prenatal services in the past ten years, but the indicators of a healthy pregnancy and

delivery, such as delivering a term infant, adequate birth weight, and low infant mortality rates, have remained stagnant (Vonderheid, Montgomery, & Norr).

The difficulty in determining the efficacy of prenatal education is in determining how to measure its value. Teaching interventions have a wide range of effects and contributing factors, making it difficult if not impossible to establish a direct cause and effect link. Some of the areas that prenatal education can impact include birth outcomes, parenting skills, and self-confidence in abilities (Dumas, 2002).

Despite this recent controversy, a number of studies have demonstrated benefits for both mother and baby. Prenatal education reduces poor birth outcomes for mother and infant, makes the delivery experience better for the parents, and also makes the couple more comfortable in their new role as parents (Dumas, 2002). According to the Smith and Carey (1999), the ability to recall vital points of prenatal care reduces the incidence of preterm and low-birth weight babies. Health care professionals have an obligation to educate these women and their partners so that they are prepared for this time of transition in their lives and are equipped to handle it successfully.

As with most preventative health services, prenatal care also offers economic savings to society and individuals. It “offers a cost savings estimated to be \$3.88 for every dollar spent on hospital care” (Gifford, 2001). Insurance companies and the government are constantly looking for ways to get the most value for the money that they are spending. Obviously with such a cost savings, prenatal care offers an affordable way to educate women and avoid poor birth outcomes. In addition, by avoiding these poor outcomes, there are additional savings related to not having to take care of a special needs child for the rest of his or her life.

One of the most vital portions of prenatal care is the education that is provided during the visits or as separate childbirth education classes. This education enables a woman to make informed choices that will impact the future health and well-being of herself and her child.

Disparities of Prenatal Education

Socioeconomic factors have a significant impact on the content of prenatal education. According to Vonderheid et al (2003), the groups of women most at risk for receiving inadequate prenatal education are Africans Americans, those without high school education, those who already have at least two children, those at least 35 years old, those who received prenatal care from a private doctor's office compared to those who received care from a prenatal clinic, and those who went to none or only a few prenatal visits. When looking to improve the outcomes of prenatal education, these are the groups that should be targeted when planning interventions.

Another problem with prenatal education is information overload. Often much education is provided through the forum of childbirth education classes. These classes are typically held late during the pregnancy. Women feel that too much information is presented during this limited number of classes. They are unable to assimilate this information in a meaningful way so that they can apply the concepts during their delivery. During these classes, the educator is unable to individualize the information to the woman's particular needs and situation (Lavender, Moffat, & Rixon, 2000).

While prenatal education offers great benefits for both mother and infant, the United States is not currently seeing these benefits. Various reasons for this have been suggested. These reasons include inadequate prenatal care, no standard method to

measure outcomes, socioeconomic factors, and information overload during the third trimester.

Significance

Prenatal education has far reaching effects for both the health of the mother and the baby. An increase in the number of topics discussed during prenatal education was associated with an increase in healthy behaviors during pregnancy and also with an increase in satisfaction with education. When topics are omitted during prenatal education, incidences of low-birth-weight infants increase (Vonderheid et al, 2003). The education is also positively associated with a child's health and growth during their early years (Dumas, 2002).

Prenatal education offers even greater benefits for those women considered at-risk for poor outcomes, such as those with limited incomes, limited education, teenagers, and single women (Smith & Carey, 1999). These women are particularly vulnerable to complications and should be educated on maintaining health.

Teenagers have the best outcomes when they receive comprehensive care from a teen-centered clinic. Appropriate education and support can help teenagers by "enhancing contraceptive vigilance; reducing early repeat pregnancy, child maltreatment, and welfare dependence; and increasing continued education or employment" (Bensussen-Walls & Saewyc, 2001, p. 425). These outcomes improve the quality of life for both the teenaged mother and her child.

Contributing Factors

A number of problems contribute to women not receiving the prenatal education needed to improve the outcomes of their pregnancies. A problem that health care

providers are always citing is a lack of time during the visits. Visits to any doctor are short and doctors claim they do not have enough time to discuss everything that needs to be taught. However, in this particular situation, childbirth education classes are used to provide much of the information, yet a lack of information still exists.

Part of the problem is a difference between what women want to know and what health care professionals teach. Women feel that the information provided is not realistic and therefore hard to integrate into their lives. Health care providers need to understand the woman's life situation and provide practical advice that the woman can actually use. Another criticism by women is that information related to postpartum and infant care was scant (Lavender et al, 2000). When women take their new babies home, they are overwhelmed trying to care for them. They feel that health care providers should offer more advice and guidance, prenatally, to prepare them for this transition period. Women also are confused by the conflicting information that they are provided and find it frustrating (Lavender et al, 2000). Health care providers should insure that they are providing consistent information so that women are clear on what to do.

Delays in seeking prenatal care prevent a woman from receiving proper and timely prenatal education. These delays can be due to not recognizing the pregnancy, wanting to hide the pregnancy, or inability to find a health care provider. This delay also decreases the likelihood that the woman will incorporate healthy lifestyle activities such as stopping substance abuse (Gifford, 2001). A prevalent problem, especially among teenagers, is only going for one or two prenatal visits (Gifford, 2001). About one in three pregnant teenagers do not receive consistent prenatal care (Ford, Weglicki, Kershaw, Schram, Hoyer, & Jacobson, 2002). If the women are not receiving prenatal care, they do

not receive prenatal education. The babies born to these mothers are more likely have low birth weights and subsequent health problems (Ford et al, 2002).

Relevant Literature

An Evaluation of Prenatal Education and Coping Strategies for Labor

This study attempts to correlate the actual use of coping strategies during labor with what was taught during prenatal classes. In addition, the study looks at the satisfaction of the women with the amount of practice that they are allowed during classes (Spiby, Henderson, Slade, Escott, & Fraser, 1999).

The study uses an exploratory within-subjects design to determine the relationship of the variables at different times. Eligible participants were primiparous women who attended at least four of the five prenatal classes offered at the participating hospital. One hundred twenty one agreed to participate. The women completed a survey at their fifth prenatal class and were interviewed within 72 hours of delivery. The survey asked women about their confidence with coping strategies, their expectations for labor, their satisfaction with the amount of practice allowed during classes, and other psychological factors. The interview allowed the women discuss their labor and the use of coping strategies (Spiby et al, 1999).

The majority of women did not feel that they had enough practice using coping strategies during prenatal classes. They also reported a lack of confidence in their ability to cope. This study found that being prepared prenatally does not guarantee actual use of coping strategies (Spiby et al, 1999). This finding is concerning and should be researched to determine the reasons.

This study has good internal validity due to its high proportion of participation and low attrition rate (Spiby et al, 1999). A weakness with this study is that the sample was homogenous, limiting the ability to generalize the findings to other settings.

This study demonstrates that women needed to be presented information in a manner that allows them time to reflect on and practice what they were taught. By doing so, the women will be more confident in themselves and better able to cope with the stresses of labor and motherhood.

Comparison of Two Models of Prenatal Education

This study compared two models of prenatal education: a traditional hospital program and a pilot program designed to prepare couples for the early weeks of parenting. The pilot program is based on adult learning principles building on the knowledge that the couples already have. Gender-specific sessions are also incorporated into the program (Schmied, Myers, Wills, & Cooke, 2002).

The sample of participants came from couples attending all sessions of the programs during a two-month period. Nineteen couples completed the questionnaire from the pilot program and 14 couples from the traditional program. The questionnaire was mailed to participants eight weeks after the birth of their child. It asked them about their labor and delivery experience, the use of interventions during this period, their satisfaction with the process, their participation in decisions, and their demographics. They were encouraged to add written comments to the questionnaire (Schmied et al, 2002).

This study found some differences between the two groups of couples. The women in the pilot program were more comfortable in their role as parent and were more

satisfied with the management of their labor. However, no difference was found in the use of pain relief during labor and perceived involvement in making decisions (Schmied et al, 2002).

This study's strength was that the two groups were similar except in the type of class in which they participated so that any differences can be attributed the educational model. A limitation in the study is the small number of participants, which limits its ability to determine significant differences. Also the group assignments were not randomized, introducing the possibility of bias (Schmied et al, 2002).

This study presents a model program that should be further tried and tested to determine its effectiveness. By building on the knowledge the parents already have, the educator is capitalizing on existing strengths and therefore maximizing the value of the time spent with the couple. Also this model introduced information regarding the early weeks of parenting so that the couple was better prepared for the transitions.

Prenatal Education for Mothers with Disabilities

This study uses a qualitative design to address the needs of mothers with disabilities for prenatal education. Eight women with chronic illnesses in Canada were interviewed about their experiences while they were pregnant. All mothers had a child two years old or younger. The women were asked open-ended questions concerning services used during or after pregnancy, services that would have been helpful, and barriers to being a mother during or after pregnancy (Blackford, Richardson, & Grieve, 2000).

These women stated that they received little information on how to care for themselves while they were pregnant, especially regarding continued use of their

medications. The women also stated that their anxiety was a barrier to effective communication with their health care professionals and kept them from participating in childbirth education classes. The women also reported that they did not receive information on how to care for their new baby. This lack of information produced further anxiety because they felt they were not prepared to be parents. The main complaint of these women was that their prenatal education was not individualized to meet their special needs (Blackford et al, 2000).

This study provides a comprehensive look at the topic of prenatal education for women with disabilities. The women are given ample opportunity to express their feelings. Yet the study has limited scope due to the small sample size (Blackford et al, 2000). This study highlights the special educational needs of women with disabilities and the current lack of support for these mothers.

Effects of Prenatal Care for Adolescent Mothers

This study evaluated the prenatal care that teenagers receive in a teen-centered clinic. The 282 participants were randomly assigned to either the teen-centered clinic or to a traditional prenatal care center. The outcomes measured during the study include birth weight of the infants, schooling completed at one year after birth, planned and unplanned pregnancies one year later, employment and school attendance one year later (Ford, Weglicki, Kershaw, Schram, Hoyer, & Jacobson, 2002).

The teen-centered model provides care to groups of six to eight teenagers with similar due dates. These teens came to the clinic and were allowed to actively participate by performing care on each other. They received individual care only for problems. Prenatal education was provided in a group setting as well (Ford et al, 2002).

The teenagers in the teen-centered program had fewer low birth weight infants. This group also had fewer planned and unplanned pregnancies one year after birth. In addition, more members of this group were attending or had completed school one year later. These findings support the use of a teen-centered clinic to provide comprehensive care and prenatal education to pregnant teenagers (Ford et al, 2002).

The act of randomizing the group to which participants were assigned increases the validity of the study by eliminating any research bias. A limitation is that less than half of the participants completed the telephone interview at one year postpartum. Many of the participants had moved and could not be located for the interview (Ford et al, 2002).

This study is an example of how to individualize care for special groups of mothers. It demonstrates the positive outcomes that are achieved when the needs of the mother are considered. Studies should be done to determine if similar benefits can be achieved by running special programs out of a traditional prenatal clinic.

Proposed Changes

Prenatal education is designed “to provide information to improve pregnancy and birth outcomes, inform parents about what they will encounter in the maternity care system, provide coping strategies and to promote a positive birth experience” (Lampron, 2002, p. 20). The current educational system is not meeting the needs of many women and is not producing positive outcomes. Changes must be made in order to meet the needs of pregnant women. Health care providers are in an excellent position to provide prenatal education to women due to their frequent and continual contact with the mothers.

Prenatal education should focus heavily on health promotion teaching because it is a time when parents are open to learning (Dumas, 2002). This teaching should begin at the initial prenatal visit (Gifford, 2001). The amount of time spent with the woman during each visit is limited. Therefore, each visit is a valuable opportunity to educate the woman about upcoming changes. Recent research by Vonderheid et al (2003) suggests that the content that is covered, not the actual number of visits, is what affects the birth outcomes. This finding allows the educator to use creativity in deciding how to present the information to women and the opportunity to individualize the program.

Typical content of a prenatal program includes expected changes during pregnancy, preparing for labor and delivery of the baby, procedures used prenatally and during labor and delivery, pain control options during labor, breastfeeding, home care for mother and baby after delivery, and changes that occur as a result of becoming parents (Dumas, 2002). All these areas of content are important to the woman during the course of her pregnancy and should be presented to the woman at the appropriate time in a way that is conducive to learning.

The actual content that is presented to the women is another area that needs to be revised. Women feel that they are receiving redundant information on topics such as taking multivitamins, eating patterns, drinking water, and stopping substance use (Vonderheid et al, 2003). While these are important topics, they take away from other topics that women may not understand as well. The educator should verify that the woman has current information on these topics and reinforce that the woman already knows many ways to help her baby be healthy. This method empowers the woman and makes her feel as if she is an important member of the team for her baby's health.

According to Vonderheid et al (2003), women wanted more information on using seatbelts, dealing with stress and conflict, contraception use, infant care, safe sex, and attending childbirth education classes. Childbirth educators should incorporate these topics into their teaching during the third trimester of pregnancy when the woman is ready to consider life with the infant.

In a study by Schmied et al (2002), new parents identified the following areas as most difficult to handle: fatigue, difficulty with breastfeeding, and changes in the marital relationship. Educators need to provide anticipatory guidance to couples about these changes so that they are prepared for difficulties in the early weeks of parenting.

The most effective teaching method is discussion of topics rather than lecture. The couple should discuss the topic both with the professional and between themselves. By discussing with the couple rather than lecturing to them, the educator is showing respect for the couple's knowledge and autonomy. The ultimate decision-making authority rests with the couple (Dumas, 2002)

Further research needs to be conducted to determine effective strategies for providing prenatal education, pertinent and salient topics to be included, and optimal timing for prenatal education. Very little research has been conducted and a significant portion of existing research is from countries outside of the United States. In order to provide the most cost-effective and meaningful education for pregnant women, health care providers must actively research and implement new educational programs.

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Annotated Bibliography

American College of Obstetricians and Gynecologists. (2000). *Planning your pregnancy and birth* (3rd ed.). Washington, D C: Author.

This book is designed for women to use as a self-help guide to pregnancy. It discusses lifestyle changes, conception, the changes of pregnancy, the labor and delivery process, postpartum care, care of a newborn, and special care situations.

Bensussen-Walls, W., & Saewyc, E. M. (2001). Teen-focused care versus adult-focused care for the high-risk pregnant adolescent: An outcomes evaluation. *Public Health Nursing, 18*, 424-435.

This article describes a retrospective, matched case comparison study of pregnant teens. Outcomes and cost-effectiveness are compared between comprehensive, interdisciplinary teen-centered prenatal care clinics and traditional adult-centered obstetric services. Outcomes are better in the teen clinics. Costs are lower for teen clinics when based on outcomes; cost-savings related to preterm labor are similar.

Blackford, K. A., Richardson, H., & Grieve, S. (2000). Prenatal education for mothers with disabilities. *Journal of Advanced Nursing, 32*, 898-904.

Eight women with chronic illnesses in Canada are asked to describe their maternity experiences. A qualitative analysis of their interviews is completed. The women report that the information that they received about their pregnancy and illness was inadequate and inappropriate. They feel that the nurses doubted their abilities to be proper mothers. They suggest methods to improve the quality of prenatal care for mothers with disabilities.

Bragat, R., Johnson, J., Grewal, S., Pandher, P., Quong, E., & Triolet, K. (2002).

Mobilizing the community to address the prenatal health needs of immigrant Punjabi women. *Public Health Nursing*, 19, 209-214.

One of the groups in Canada that does not access the prenatal education provided to all pregnant women is the immigrant Punjabi women. Simply translating the existing classes does not meet their needs. Community mobilization strategies using representatives from service agencies created a platform to communicate to the community. The prenatal sessions build on the existing knowledge of the women.

Dumas, L. (2002). Focus groups to reveal parents' needs for prenatal education. *The Journal of Perinatal Education*, 11(3), 1-9.

The parents in Western Quebec are offered prenatal, government-paid, community health education. The program is required to be innovative, user-friendly, effective, and efficient. The article includes a review of the literature as well as summaries of the focus groups that were conducted with perinatal health professionals and parents in the area. It contains a proposal for a specific program designed to empower parents.

Ford, K., Weglicki, L., Kershaw, T., Schram, C., Hoyer, P. J., & Jacobson, M. L. (2002). Effects of a prenatal care intervention for adolescent mothers on birth weight, repeat pregnancy, and educational outcomes at one year postpartum. *The Journal of Perinatal Education*, 11(1), 35-38.

This article describes a study that followed pregnant teens in both peer-centered prenatal care and individual prenatal care. Outcomes that are measured include: birth weight, years of school completed at one-year postpartum, planned and

unplanned pregnancy at one-year postpartum, and employment and school attendance one-year postpartum. The participants in the peer-centered prenatal care program show some positive outcomes compared to the other group.

Gifford, B. D. (2001). Quality care in a Medicaid managed care program: Adequacy of prenatal care for teens in Chicago. *Public Health Nursing, 18*, 236-242.

This article compares the prenatal care that pregnant teens in a Medicaid managed care program receive compared to the care that non-Medicaid patients receive.

Data was gathered through telephone surveys of obstetrician offices and demographic and practice background data. Medicaid patients are less likely to receive blood tests and urinalyses at their first visit, which is concerning because teens are more likely to drop out of prenatal care at their visit and have worse birth outcomes.

Koehn, M. L. (2002). Childbirth education outcomes: An integrative review of the literature. *The Journal of Perinatal Education, 11*(3), 10-19.

This article reviews 12 recent empirical studies of childbirth education outcomes. Inconclusive evidence exists regarding the effectiveness of these classes. None of the studies used a theoretical framework that proposed multiple factors, as opposed to childbirth education alone, that impacted the outcomes.

Lampron, A. P. (2002). What did you learn from childbirth class: Assessing outcomes. *International Journal of Childbirth Educators, 17*(4), 20-22.

This article describes a model that can be used to measure outcomes that are the result of a pregnant woman attending childbirth outcomes. It begins with a review of relevant literature and then proposes possible benefits of childbirth classes.

Lavender, T., Moffat, H., & Rixon, S. (2000). Do we provide information to women in the best way. *British Journal of Midwifery*, 8, 769-775.

Women have historically expressed dissatisfaction with the information that they have received during prenatal care. This article explores the amount, timing, and format of the information presented to pregnant women regarding pregnancy, labor, and parenting. The results indicate that women often receive information that was not individualized to their needs, presented at inappropriate times, and was unrealistic.

March of Dimes. (2004, March 15). March of Dimes: Perinatal statistics. Retrieved from <http://www.marchofdimes.com/professionals/680.asp>

This website is published by the March of Dimes and contains data about all kinds of birth indicators and perinatal risk factors.

Schaffer, A. L. (2002). Prenatal education program: Special challenges. *International Journal of Childhood Education*, 17(4), 34-37.

This article describes an innovative prenatal education program started by one hospital to meet the needs of women who typically do not participate in prenatal education classes. The entire process of implementing these classes is described in this article. The article also discusses future goals of these classes.

Schmied, V., Myors, K., Wills, J., & Cooke, M. (2002). Preparing expectant couples for new-parent experiences: A comparison of two models of antenatal education. *The Journal of Perinatal Education*, 11(3), 20-27.

This article compares two groups of pregnant couples: one group participated in

pilot prenatal program that prepared them for the early changes associated with lifestyle changes and parenting and one group participated in the traditional hospital program. Women in the pilot program were much more satisfied with the parenthood.

Smith, J. (1999). Antenatal classes and the transition to fatherhood: A study of some fathers' views. *Midwifery Digest*, 9, 327-330.

This article describes the views that men have of prenatal education classes. Men find information on their role during labor and practical tips on how to care for a newborn the most helpful. About half of the men are interested in men-only sessions. This article suggests that classes discover what men want to learn and incorporate this information into existing classes.

Smith, S., & Carey, B. (1999). Prenatal education: Quality materials empower patients to improve outcomes. *Case Management*, 6(4), 1, 3-7.

This article is designed to help case managers choose quality teaching materials that are relevant to pregnant women and will help them to feel empowered for their labor. This information needs to be based on scientific studies that have determined what information is most helpful to pregnant women.

Spiby, H., Henderson, B., Slade, P., Escott, D., & Fraser, R. B. (1999). Strategies for coping with labour: Does antenatal education translate into practice. *Journal of Advanced Nursing*, 29, 388-394.

This article discusses a study that was conducted with 121 first-time mothers. The participants filled out a questionnaire before delivery and were interviewed shortly after delivery. The women were unhappy with the amount of involvement

from their midwives and with the lack of practice of coping strategies during prenatal classes.

Vonderheid, S. C., Montgomery, K. S., & Norr, K. F. (2003). Ethnicity and prenatal health promotion content. *Western Journal of Nursing Research*, 25, 388-404. This study examines the prenatal experiences of Mexican American and African American women. Both groups of women wanted more content on health promotion activities. The content of prenatal education was related to ethnicity, number of topics that the women wanted to discuss, whether a woman had a primary provider, and the type of prenatal provider model.