This is to certify that the

thesis entitled

MOTIVATI N AND BARRIERS TO PRENATAL CARE
FOR MIDDLE INCOME [illegible] PREGNANT WOMEN
OF BENZIE COUNTY MICHIGAN

presented by

ELLEN MARIE HERRING

has been accepted towards fulfillment
of the requirements for

MASTERS degree in NURSING

Rachel F Kauffman
Major professor

Date July 24, 1995

MOTIVATION AND BARRIERS TO PRENATAL CARE FOR MIDDLE INCOME PREGNANT WOMEN OF BENZIE COUNTY MICHIGAN

By

Ellen Marie Herring

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirement
for the degree of

MASTER OF SCIENCE IN NURSING

College of Nursing
1995

ABSTRACT

MOTIVATION AND BARRIERS TO PRENATAL CARE FOR MIDDLE INCOME WOMEN OF BENZIE COUNTY MICHIGAN

By

Ellen Marie Herring

The purpose of this study was to describe pregnant middle income women's perceptions about motivation and barriers to prenatal care in Benzie County Michigan. Eight women participated in a focus group and completed two instruments. Women in this study were motivated to access prenatal care by a desire for a healthy baby and the use of home pregnancy tests. Barriers were seen as inconveniences, problems or obstacles and were overcome by available resources. The women thought childbirth education classes should be part of prenatal care cost and the women with previous pregnancy experience felt they could make their own decisions about accessing prenatal care.

Further research is needed to confirm the results of this study. Implications from this study include educating women on when to access the system after home pregnancy testing, empowering women who have had previous pregnancies to make informed decisions about prenatal care, and changing the way prenatal care is delivered in Benzie County Michigan.

TABLE OF CONTENTS

Table of Contents (Cont.)

List of Tables

LIST OF FIGURES

Introduction

Background of the Problem

Prenatal care is essential to improving outcomes for infants since utilization of prenatal care reduces the risks to newborns, including those of low birth weight and infant morbidity (Witwer, 1990). In Benzie County, a small rural community, access to prenatal care is limited and little is known about middle income pregnant women's perception of barriers and motivation to prenatal care. All pregnant women in Benzie County travel up to 45 miles one way to deliver their infants, either in Traverse City or Manistee, because the local hospital and general practitioners stopped delivering infants in 1986. The same travel distance is required for prenatal care by more than 75 percent of the pregnant women. The purpose of this study was to identify possible barriers and motivation to seek prenatal care as perceived by pregnant women of middle income in Benzie County Michigan.

In 1992 Benzie County, Michigan was identified as one of the top 10 counties in the state with the highest, low birth weight rates at 77.7 per 1000 (KIDS COUNT in Michigan, 1992). The 77.7 is a three year average compared to a base average of a three year number of 8. In 1993 there was a 37.5% increase in the rate of low birth weight babies born in Benzie County (KIDS COUNT in Michigan, 1993) and infant mortality increased by 6.3%. In 1994, Benzie County was no longer among the top 10 Michigan counties for low birth

weight rate but the low birth weight rate continues to increase. In 1992, 45% of the pregnant women in Benzie County received inadequate prenatal care (Michigan Department of Public Health, 1992). In 1994 inadequate prenatal care worsened in Benzie County by 53.2% (KIDS COUNT in Michigan, 1994). The infant mortality rate for Benzie County increases yearly, in 1992 it was 9.7 per 1000; the rate increased in 1993 to 11.6 and increased again in 1994 to 15.5 (KIDS COUNT in Michigan 1992, 1993, 1994).

The cause of these poor perinatal statistics in Benzie County may be multifactorial. Inadequate access to prenatal care may play a role particularly since Benzie County is a rural area. For rural women who become pregnant each year, access to prenatal services has diminished. Motivation to seek prenatal care may be diminished and barriers to access prenatal care in rural areas may be substantial for all pregnant women due to long drives and limited availability of prenatal care providers. If motivation to seek prenatal care and barriers are identified and understood for middle income women, interventions can be planned that will benefit all pregnant Benzie County women.

It has been well documented that low income women have barriers to prenatal care (Aved, Irwin, Cummings, & Findeisen, 1993; Johnson, Primas, & Coe, 1994; Joyce, Diffenbacher, Greene, & Sorokin, 1983; Leatherman, Blackburn, & Davidhizer, 1990; Lia-Hoagberg, Rode, Skovolt, Oberg, Berg, Mullett, & Choi, 1990; Young, McMahon, Bowman,

& Thompson, 1990). In rural areas, middle income pregnant women may also have barriers to access prenatal care and less motivation to start due to unavailability of health care providers.

Prenatal care is limited in Benzie County. All income levels of pregnant women were affected when the only hospital in the county closed the obstetrical unit in 1986. This caused all pregnant women in the county to travel up to 45 miles one way for obstetrical services in Traverse City or Manistee. As of 1995, there are two physicians who provide first and second trimester prenatal care and one certified nurse midwife who provides full prenatal care services.

With the changing and expanding role of the advanced practice nurse (APN), services including prenatal care, case finding, case management, and education of pregnant women could be partially provided by the APN to help fill the gap in this small community. In Benzie County, information about motivation to seek prenatal care and the barriers pregnant middle income women may encounter will increase the knowledge base to plan for intervention strategies for all women in the county.

Statement of the Problem

Prenatal care services are fundamental and need to be a priority in the United States. In 1980, the U.S. Surgeon General issued goals for 1990, stating at least 90% of women should receive prenatal care in the first trimester and

nationally no more than 5% of the newborns should weigh less than 2,500 grams (Witwer, 1990). In 1991, Healthy People 2000 (Public Health Service, 1991) again restated almost the same goals with no more than 7 infant deaths per 1000 live births for the year 2000 because the 1990 goals were not met. Singh, Torres, & Forrest (1985) report in the 1980 National Natality Survey that 33% of all births occurred to women in rural areas. Pregnant women in rural areas were less likely to start their prenatal care in the first trimester, 75% compared to 79% of urban dwellers (McManus & Newacheck 1989). McDonald and Coburn (1988) found that rural living was a significant predictor of adequacy of prenatal care even when variables of education, income and insurance were controlled. Research has shown that all rural women have less access to prenatal care (Bushy, 1990; McClanahan, 1992; McDonald & Coburn 1988; Nesbitt, Connell, Hart, & Rosenblatt, 1990; Nesbitt Larson, Rosenblatt, & Hart, 1993).

It cannot be confirmed through available statistics the number of Benzie County middle income women who had inadequate prenatal care. Of the 178 women who delivered infants in 1992, 45% (n=70) who resided in the county received less than adequate prenatal care (Michigan Department of Public Health, 1992). Approximately one half of the 178 births were to women with private insurance (Michigan Department of Public Health 1992). While it is not known what the adequacy of prenatal care was for the

middle income women, some did not receive adequate care. The data for adequacy of prenatal care by mode of payment is unavailable by state statistical procedures and local hospital records. Of the 178 pregnant women in Benzie County, 98 had adequate care (Michigan Department of Public Health 1992). Some of these women would have to have private insurance and others Medicaid. The percentages cannot be determined with the data available but it can be said that some privately insured women, who are most likely middle income, in Benzie received less than adequate care.

Limited literature exists that compares privately insured, uninsured and Medicaid insured women for motivation, barriers and adequacy of prenatal care. While women with private insurance are more likely to have adequate care, Oberg, Lia-Hoagberg, Hodkinson, Skovholt, and Vanman (1990) found that 18% of privately insured women did not have adequate prenatal care. They also found privately insured women reported psychosocial barriers but less frequently than low income women.

Research Question

The descriptive questions were as follows: (1) What motivates middle income pregnant women of Benzie County, Michigan, to seek prenatal care? and (2) What do middle income pregnant woman of Benzie County, Michigan perceive as barriers to prenatal care?

Conceptual Framework

Theoretical Definition of Variables

A theoretical definition of the variables of barriers and motivation to prenatal care based on synthesis of existing literature and within the conceptual framework of the Health Belief Model was formulated. First, theoretical definitions are presented for barriers to prenatal care and motivation to prenatal care. Second, those definitions are incorporated into the theoretical model of the Health Belief Model to clarify and strengthen the relationships between the variables under study.

Motivation to Seek Prenatal Care

There is very little information about motivation to seek prenatal care. Literature is lacking about pregnant populations in regard to motivation. Motivation is not usually the major variable under study in research. Leatherman et al. (1990) used motivation to describe pregnant women's lack of care and Johnson et al. (1994) did not describe what women perceived as motivation to care but reported their perception of the woman's attitudes of low motivation as a reason for delaying prenatal care.

Motivation to seek prenatal care can be internal or external. In the literature there were few definitions of motivation, most authors described motivation in terms of what they found in their research. Patterson, Freese, & Goldenburg, (1990) did not define motivation but used the

terms seeking safe passage and defined that as the paths to enrolling in prenatal care. Lia-Hoagberg et al., 1990 defined motivation as those factors which encourage mothers to obtain and continue prenatal care. In this study, motivation to initiate prenatal care was defined as internal and external factors in a pregnant woman's life that influence her to seek prenatal care.

Barriers to Prenatal Care

Most of the literature defined barriers to prenatal care in terms of what barriers were to certain populations of pregnant women. Many words were used to describe barriers such as: deterrents (Oxford, Schinfeld, Elkins, & Ryan, 1985), factors (Goldenburg, Patterson, & Freese 1992), determinants (Cooney, 1985), and reasons women delay prenatal care (Young et al., 1990). Barriers were then listed and most authors divided barriers into categories such as: psychosocial, sociodemographic, external, internal, demographic, systems or situational (Curry, 1989; Goldenburg et al., 1992; Johnson et al., 1994; Joyce et al., 1983; Lia-Hoagberg et al., 1990; Oberg et al., 1990; Young et al., 1990). There was not agreement in the literature on which barriers go in each category but there were common barriers in each category. Some overlapped; one author categorized a certain barrier as situational (Goldenburg et al., 1992) while other authors named the same barrier as systems (Brown, 1989; Curry, 1989; Lia-Hoagberg et al.,1990; Poland, Agar, & Olson, 1987). Others did not categorize barriers

(Aved et al., 1993; Leatherman et al., 1990). There was no consistent definition of barriers.

Lia-Hoagberg et al. (1990) defined barriers as those factors, perceived and unperceived, which were associated with delays in starting care or with infrequent care. Brown (1989) defined six types of barriers: financial, inadequate capacity of the financial systems, services not consumer friendly, unwanted or unintended pregnancy, personal beliefs and attitudes, and poverty.

Situational variables were defined by Goldenburg et al. (1992) as: transportation, financial reasons, and absence of child care. Joyce et al. (1983) and Johnson et al. (1994) named these external barriers. Lia-Hoagberg et al. (1990) defined these same barriers as structural factors. Poland et al. (1987) named them sociocultural variables and included attitudes, inability to detect pregnancy, and delay in telling others about the pregnancy. Curry (1989) delineated these barriers as nonfinancial barriers.

Demographics was a common but illogical way to categorize barriers. Demographics are usually proxy variables which substitute for underlying concepts that are difficult to measure. Demographics do not measure the woman's perception of barriers. In the literature, demographics were frequently reported as reasons some women do not receive adequate care. Cooney (1985), Goldenburg et al. (1992), Lia-Hoagberg et al. (1990) and Poland et al. (1987) cited six demographic variables that are related to

inadequate prenatal care: maternal age, parity, maternal education, family income, marital status and race. Brown (1989) combined social variables and demographics and labeled them as sociodemographic barriers.

Another common way to categorize or define barriers was system barriers, such as difficulty finding a provider, scheduling an appointment, and relating to doctors and nurses. Curry (1989) defined these barriers as the interrelatedness of the many factors that influence how hard or easy it is to access prenatal care. Brown (1989) described system barriers as health care insurance, provider, availability of child care, transportation, and office staff problems. Among the psychosocial factors defined were: unwanted pregnancy, emotional problems, fear, and belief systems (Aved et al., 1993; Lia-Hoagberg et al., 1990; Oberg et al., 1990; Oxford et al., 1985; Young et al., 1990). In this study, barriers were categorized as psychosocial, situational, and systems barriers. Psychosocial barriers were defined as the pregnant woman's perception of her personal problems such as depression, embarrassment of pregnancy, unwanted pregnancy, substance abuse, and thinking prenatal care was not necessary.

Situational barriers, in this study, were defined as: (a) difficulties in the woman's life that make it hard for her to initiate or continue prenatal care; (b) financial problems; (c) not knowing where to go for care; (d) child care problems; and (e) transportation difficulties that the

pregnant woman perceives as reasons that keep her from initiating or continuing prenatal care.

System barriers, in this study, were defined as: (a) the clinics, doctors' offices and the pregnant woman's work setting with which she may have to come in contact with or negotiate with to initiate prenatal care; (b) perception of the difficulty scheduling an appointment; (c) fear of being reported to the police by the system; (d) dislike of doctors, clinics or hospitals; and (e) difficulty getting time off work.

Theoretical Model

In this study the Health Belief Model (HBM) was used to describe the relationships among the variables of motivation and barriers to prenatal care. The Health Belief Model was developed by Rosenstock, Hochbaum and Kegeles in the 1950's to explain personal health behavior (Pender, 1987). The model has been adapted by various theorists and authors and modified to explain certain health seeking behaviors. The original model, modified by Becker, Haefner and Kasl (1977) was the theoretical framework which guided this study. The HBM was selected to describe and explain the connections between the concepts in this study. Selected components of the HBM were used in this study. The HBM is not a causal model and this study did not look at causal relationships. This study looked at pregnant women's perceptions of motivation and barriers to prenatal care. The HBM was used

as a model to explain the relationship between these concepts (see Figure 1).

The HBM, developed by Becker et al. (1977), postulates that the likelihood of undertaking a health behavior is a function of beliefs among: individual perceptions, modifying factors, and likelihood of action. Individual perceptions include perceived level of personal susceptibility to having a healthy baby (box A, Figure 1). Modifying factors include: demographic variables (middle income rural pregnant women) (box D, Figure 1), perceived threat of the pregnancy (box B) and motivation or cues to action: desire for a previous pregnancy problems (box E). Likelihood of action includes: perceived barriers (psychosocial, systems, and situational) (box F) and likelihood of starting and staying in prenatal care (box C). The variables of middle income women's barriers and motivation determine their perceived susceptibility of having a healthy baby (box A), the perceived threat of the pregnancy (box B) which influence the likelihood of starting or staying in prenatal care (box C). Although box A, B and C components are not variables under study, they are required to explain the perceptions of middle income rural women's motivation and barriers to prenatal care.

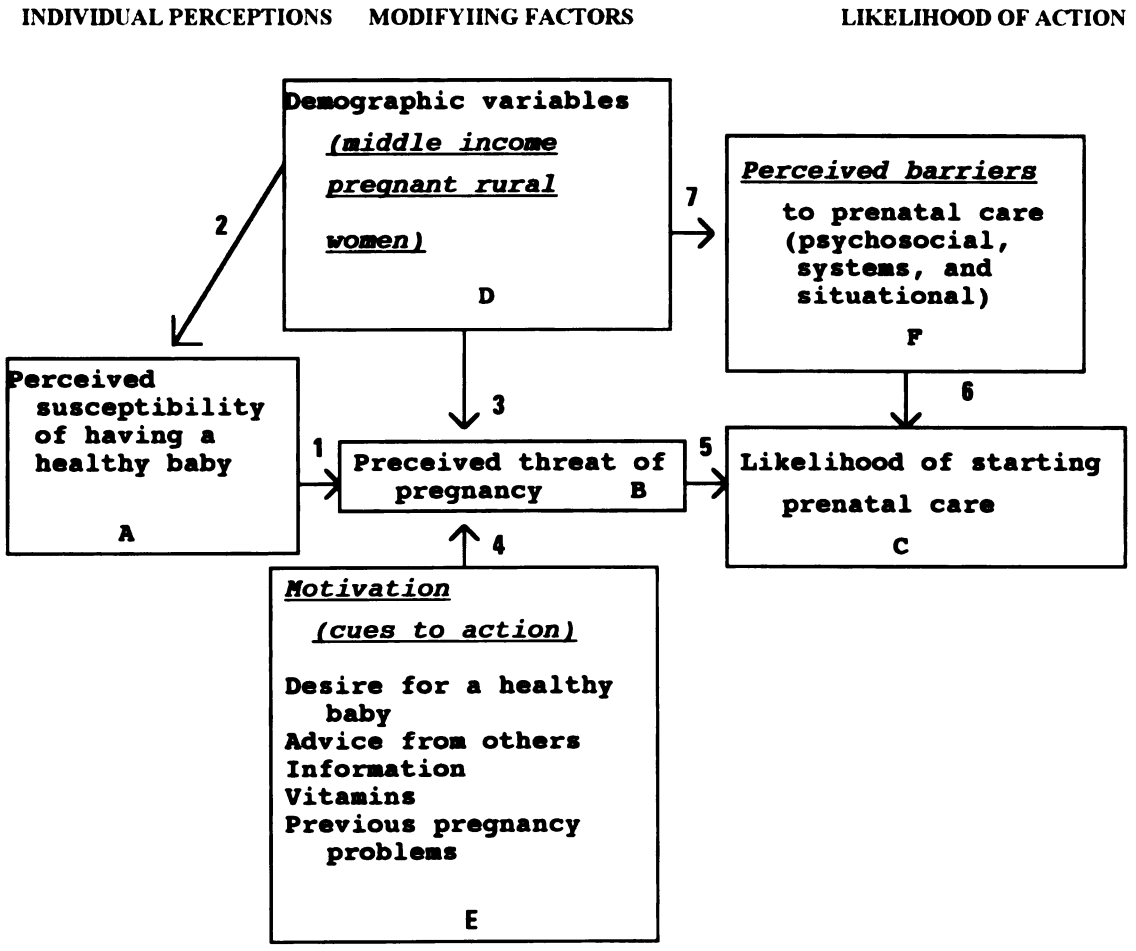

Figure 1

Barriers and Motivation to Prenatal Care:

Application to the Health Belief Model (Becker et al. 1977)

Modifying Factors and Motivation to Seek Prenatal Care

The modifying factors specific for this study include demographic variables (box D, Figure 1) middle income, rural pregnant women and motivation (cues to action) (box E). Perceived threat of the pregnancy (box B) is not a component of this study but as part of the HBM it is needed to explain

the relationship between the demographic variables (box D) and motivation (cues to action) (box E). The demographic variables affect the perceived susceptibility of having a healthy baby (box A) and perceived seriousness of the pregnancy (box B) by the experiences and beliefs each middle income rural woman has that impact her perceived susceptibility of having a healthy baby and perceived threat of the pregnancy. This relationship is shown by arrows number 1, 2, 3, and 4 (see Figure 1).

Motivation, is a cue to start prenatal care and is necessary for the woman to start looking for prenatal care. In this study, motivation of the pregnant woman to seek prenatal care may be the desire for a healthy baby, advice she has received from others, desire for information, to get vitamins, or she may have had previous pregnancy problems that motivate her to seek prenatal care. The demographic variables (box D) and motivation (cues to action) (box E) influence the perceived threat of pregnancy as described by arrows 3 and 4 (see Figure 1). Her perceived susceptibility (box A) and demographic variables of being a middle income woman (box D) determine whether she will undertake the task of the preferred action of starting prenatal care which is arrow 5 (see Figure 1).

Likelihood of Action and Perceived Barriers

Likelihood of action in this study is the pregnant woman's psychosocial, systems and or situational barriers (box F, Figure 1) which in part determine the likelihood of

starting and continuing prenatal care (arrow 6, Figure 1). The likelihood of starting prenatal care is determined by the demographic variable of being rural middle class (arrows 7 and 3), motivation to start prenatal care (arrow 4), the perceived threat of the pregnancy (arrow 5) and the woman's perception of the barriers that may keep her from starting and continuing care (arrow 6).

In summary, middle income women's likelihood of starting and staying in prenatal care is determined by her perceived susceptibility to having a healthy baby and by her perception of the threat of the pregnancy. Variables that affect rural middle income women's likelihood of starting prenatal care are motivation and perceived barriers.

Review of the Literature

The available literature on motivation and barriers to prenatal care was reviewed. Motivation was not a variable often studied in relation to prenatal care and there was little research available on motivation. While much research has been done with low income women's barriers to prenatal care, little is known about middle income women living in rural areas. The literature primarily reflected the nation's concern for low income urban women and children. In the more recent literature, some studies were done with barriers for rural low income pregnant women. Studies that involved pregnant women other than low income were usually census tract or hospital record review studies. The data, from census tracts and hospital reviews, were used

as a comparison to show that low income women statistically have a higher incidence of inadequate prenatal care and more barriers to prenatal care than the population of women as a whole (Fingerhut, Makuc, & Kleinman, 1987; Greenburg, 1982; Kiefer, Alexander, & Mor, 1992; Oberg et al., 1990).

Barriers to Prenatal Care

Most of the literature available described samples of low income urban women (Aved et al., 1993; Curry, 1989; Johnson et al., 1994; Joyce et al., 1983; Lia-Hoagberg et al., 1990; Poland et al., 1987; Young et al., 1990) and some of the studies did not designate whether urban or rural populations were studied (Leatherman et al., 1990; Oxford et al., 1985; Patterson et al., 1990; Young et al., 1989). When the studies used hospital statistics or state statistics there was no mention of middle income women's barriers. The literature abounds with information about barriers of low income women that help explain why these women obtain inadequate care.

Psychosocial Barriers

Lia-Hoagberg et al.'s (1990) study of low income women and Oberg et al.'s (1990) study with private insured and Medicaid insured women found similar psychosocial barriers such as the women considered an abortion, the pregnancy was unplanned and the women were ambivalent about having the baby. However one difference between the two studies was the population studied, Oberg et al. (1990) reported that uninsured and Medicaid insured women had higher percentages

for the identified factors of psychosocial barriers; but privately insured women also reported psychosocial barriers. Twenty six percent of the insured women were ambivalent about having the baby and 44% reported an unplanned pregnancy. Lia-Hoagberg et al. (1990) studied only low income women.

Oxford et al. (1985), Young et al. (1990), Joyce et al. (1993), and Johnson et al. (1994) reported similar psychosocial barriers in urban populations such as, lack of education, fear, depression, unwanted pregnancy and denial of pregnancy. Young et al. (1989) found that inability to accept the pregnancy was the most frequent psychosocial barrier reported.

Situational Barriers

Transportation and financial problems were the most frequently cited situational barriers while child care problems, lack of medical resources and family responsibilities were less frequently cited as situational barriers to prenatal care (Aved et al., 1993; Curry, 1989; Johnson et al., 1994; Leatherman et al., 1989; Lia-Hoagberg et al., 1992; McManus et al., 1989; Oxford et al., 1985). Low socioeconomic women were the sample population for all with the exception of Oxford et al. (1985) and Leatherman et al. (1990). These latter studies did not report the economic status of the samples. None of the studies defined a rural or urban population.

System Barriers

Curry (1989) reported systems barriers as fragmented uncoordinated care, inconvenient locations, long waiting times, negative staff attitude, limited appointments, eligibility requirements, and inadequate social support services. McClanahan (1992) cited inconvenient hours, long waiting times and negative staff attitudes as system barriers to prenatal care.

System barriers identified by McDonald and Coburn (1988) were financial, by type of prenatal care coverage and where the mother lived in relation to prenatal care sites. Rural women were less likely to receive the required number of prenatal visits. Johnson et al.'s (1994) study included negative previous prenatal care experiences, time consuming application processes and appointment scheduling difficulties. Oxford et al. (1985) reported fear of medical procedures, dissatisfaction with clinic conditions of long waits and a negative attitude among the staff. In Aved et al.'s (1993) study of women who showed up at the hospital without a prenatal care provider, the single greatest cited barrier was, as expected, the inability to find a physician. McDonald and Coburn (1988) made a distinction between rural and urban and medicaid and insured women and found low income uninsured women have fewer barriers to prenatal care regardless of urban or rural status. The rest of the authors used low income samples and didn't state rural or urban.

Motivation to Seek Prenatal Care

While a few studies addressed low income pregnant women's motivation to seek prenatal care, the literature is sparse for middle income rural women's motivation to seek prenatal care. Studies of low income women report the most prevalent motivational reason for lack of prenatal care was that most did not believe they needed care because they felt fine or they had no difficulties with a previous pregnancy (Aved et al., 1993; Johnson et al., 1994; Leatherman et al., 1990). Lia-Hoagberg et al. (1990) reported the strongest reason for getting prenatal care was to ensure a healthy baby. Patterson et al. (1990) did not use the term motivation but described various events that end a waiting period to seek prenatal care as a push from others, physical signs, and need for information. Omar and Schiffman (1993) reported a desire to obtain prenatal vitamins as motivation to prenatal care.

Critique of the Literature

Gaps exist in the literature in relation to barriers and motivations for rural middle income pregnant women to start or continue prenatal care. The samples included in the literature were usually inappropriate for comparisons for middle income rural women because they were usually low income urban women or not stated. Sample size was usually small ranging from 10 to 45 (Johnson et al., 1994; Leatherman et al., 1990; Omar & Schiffman, 1993; Patterson et al., 1990) unless hospital or vital statistical records

were used (Cooney, 1985; Fingerhut et al., 1989; Greenberg, 1982; McDonald & Coburn, 1988; Nesbitt et al. 1993). Overall the literature was methodologically adequate but there were many studies that had substandard and defective methods sections. The overall deficiency in the method sections was lack of enough detail to be able to duplicate the study by not having the instrument in the article or references (Aved et al., 1993; Curry et al., 1989; Fingerhut et al., 1987; Oberg et al., 1990; Patterson et al., 1990; Poland et al., 1980; Young et al., 1990). These studies stated an interview was conducted or a questionnaire was constructed but no instrument was provided for the reader. Partial information was given but not enough detail to replicate the study (Aved et al., 1993; Curry et al., 1989; Fingerhut et al., 1987; Johnson et al., 1994; Young et al., 1990). Others reported using statistical information such as census tracts as the method to gain information about the variables under study but then no information was given on what statistics were used and how they were analyzed (Greenburg, 1982; Joyce et al., 1983; Keifer et al., 1992; Nesbitt et al., 1993).

Statistical analysis sections were often substandard and frequently defective. The type of statistical method was left out or the results lacked sufficient detail of the findings and no charts or summarizations of the analysis were included in the report (Aved et al., 1993; Curry, 1989;

Fingerhut et al., 1987; Johnson et al., 1994; Joyce et al., 1983; Oberg et al., 1990; Young et al., 1990).

Middle income rural women of Benzie County may have barriers to prenatal care because of rural settings and limited prenatal and delivery services in the county. Motivation to seek prenatal care may be lower due to travel distances. Middle income rural women's identification of barriers and motivation to prenatal care can help to identify gaps in health care services for rural women to plan for development of maternal and child health programs that would benefit rural women and children, especially in Benzie County.

A definite gap in literature exists in regards to information about middle income rural pregnant women. This study will add to knowledge about motivation and barriers middle income pregnant women experience in rural areas.

Methods

Design

This was a descriptive study utilizing a combination of qualitative and quantitative approaches. The purpose was to describe what pregnant middle income Benzie County rural women perceive as motivation and barriers to seeking and staying in prenatal care. This study was one portion of a study of rural middle income women's perceptions of barriers, motivation, expectations and satisfaction with prenatal care (Omar & Schiffman, 1994).

Three investigators were responsible for the study. The faculty principal investigator was responsible for the entire study. One graduate student investigator was responsible for identification of expectations and satisfaction with prenatal care (the companion study); the investigator for this study, another graduate student was responsible for identifying motivation and barriers to prenatal care for pregnant rural women in Benzie County. Two investigators, one from this study and one from the companion study recruited the subjects. The focus group questions were developed by the three investigators, one from this study, one from the companion study and one from the total study. The focus group was conducted by the three investigators. First, the women filled out two questionnaires, one for motivation, satisfaction and expectations and the other for barriers. A focus group was conducted after the questionnaires were completed.

Sample

The sample consisted of 8 subjects who were patients of three Grand Traverse County providers and one Manistee County provider. None of the subjects were patients of Benzie County providers for their prenatal care. Six were referred by prenatal class attendance and two self-referred to the study. Subjects met the following criteria: (1) confirmed pregnancy, first, second or third trimester, who completed at least two prenatal care visits; (2) were able to read, write and understand English; (3) resided in Benzie

County, Michigan; (4) gave consent to participate; and (5) were middle income, not eligible for the Women, Infant and Children (WIC) program (see Appendix A for income levels for WIC). If the woman's income was above the WIC guideline for the number in the household and not greater than $80,000 gross family income per year she was eligible to participate.

Operational Definitions

Motivation

Motivation to seek care was operationalized in two ways: (a) by the motivation scale of the Patient Satisfaction with Prenatal Care (PSPC) instrument, and (b) by focus group questions (see Table 1). Motivation was identified by the pregnant women from the (PSPC) instrument (Omar & Schiffman, 1992) (Appendix C) items 1, 2, 3, 4, and 5. The motivation scale of the PSPC instrument was scored using a six point Likert scale ranging from 1 (strongly agree) to 6 (strongly disagree). The lower the score the higher the motivation. The total motivation scale consisted of items 3, 4 and 5 as determined by factor analysis (Omar & Schiffman, 1994) and indicated how highly motivated the women in the sample were to receive prenatal care. Mean scores for each item and for the total score indicated the sample's motivation. The focus group questions about motivation (see Table 1) were developed to be consistent with the instrument. Questions were constructed to get the women to think about what it was that got them to make

Table 1

Sample Questions from the Focus Groups

Warm up
To get things started we'll start with introducing ourselves, by telling who you are, when your baby is due and what you're hoping for.
Motivation
What were some of the reasons that motivated you to make that phone call to a provider?
System Barriers
Was there anything that was difficult in getting or keeping your appointments at your prenatal care providers? When you went to the providers was there anything that interfered with or made it difficult for you in any way?
Situational Barriers
Benzie County is a long way from Traverse City and Manistee to travel to your prenatal appointments. Would you share with us any difficulties this may have placed on you and your family?
Psychosocial Barriers
Is there anything that you may not have felt you wanted to share with your provider, such as you just didn't feel like going, or maybe something you were doing like smoking, that delayed you from going to that first appointment?

the first phone call to access a prenatal care provider.

Barriers

Barriers to care were operationalized in two ways, by the Ten-Item Checklist and by focus group questions. The barriers were those identified by the pregnant women from the Ten-Item Checklist (Richwald, Reynolds, & Kersey, 1987) (Appendix B). The respondents were given the first page of the Ten-Item Checklist and the additional data sheet for item 6, the transportation barrier and they were instructed to check all barriers that applied and fill out additional data for item 6. For each item identified as a barrier, the respondents were given additional questions about that item. If no barriers were identified from the Ten-Item Checklist no follow up questions except item 6 were given to the respondents. Psychosocial barriers were measured by items 1 and 10, situational barriers were measured by items 2, 3, 5, and 6, and system barriers were measured by items 4, 7, 8, and 9. A total score, number of barriers marked in each category, was determined for each category of psychosocial, situational and systems barriers that the respondents marked. This was a standardized check list used in other studies to identify barriers to prenatal care. The focus group questions (see Table 1) about barriers were consistent with the Ten-Item Checklist. Questions for each type of barrier were developed to be specific to middle income women taking into account their rural lifestyle, education level, income level, work and marital status.

Instruments

Two instruments were administered to the women. They were: (1) The Ten-Item Checklist (Richwald et al., 1987) (Appendix B); and (2) the Patient Satisfaction with Prenatal Care (PSPC) instrument (Omar & Schiffman, 1992) (Appendix C). The Ten-Item checklist (Richwald et al., 1987) deals with ten reasons women do not seek prenatal care: financial, work or school, baby-sitter problems, lack of information about where to go for prenatal care, transportation, scheduling, fear, personal problems, dislike of doctors, clinics or hospitals and lack of understanding of the need for prenatal care. On the front page of the instrument the subjects checked all items that applied to them. For each item checked an additional data sheet which solicited more detailed information about the barrier were given to the subjects. For this study the front page and additional data sheets for the items were utilized for all the subjects. There is no published information on the instrument's reliability and validity.

The Patient Satisfaction with Prenatal Care (PSPC) Instrument (Omar & Schiffman, 1992) is an 108 item, five subscale instrument designed to assess a patient's motivation to seek, satisfaction with and expectations of prenatal care. This study used only the motivation scale. Factor analysis determined one factor consisting of 3 items (items 3, 4 and 5) with a coefficient alpha of .40. All items were completed for the study. Sociodemographic

information was obtained from demographic questions 92 through 108 at the end of the PSPC Instrument (Appendix C). Information requested included age, education, marital status, insurance, work status, number of pregnancies and number of children. Questions were added by the principal investigators to determine income level, number of people in the household, whether the women saw a Benzie County provider for their initial pregnancy test or first 32 weeks of prenatal care and then transferred to an out of county provider for the remainder of their prenatal care and delivery.

Focus Group Questions

The focus group questions for motivation and barriers (see Table 1) were developed using the Ten-Item Checklist (Appendix B) and the motivation scale of the Patient Satisfaction with Prenatal Care Instrument (Appendix C) by the three principal investigators with suggestions and revisions by the thesis chair and thesis committee members. The focus group questions were consistent with the instruments and theoretical concept definitions. Questions started with a general question to give all participants a chance to speak. The questions progressed from general to specific and then from non-threatening to more threatening (Kingry, Tiedje, & Friedman, 1990).

Procedure

Recruitment of Subjects

Subjects were recruited from two Benzie County prenatal care providers, childbirth classes and by self referral.

Recruitment proceeded as follows:

A. The two Benzie County prenatal care providers identified and elicited interest from their patient population on the basis of identified criteria. They obtained verbal consent to release the patient's name and phone number to the investigators.

   1. The providers notified the investigators of the name and phone number of the potential subjects.

   2. The investigators contacted the women by phone and explained the study to them.

   3. The investigators confirmed income eligibility by asking the number of people in the family. Using WIC program guidelines (Appendix C), the investigators asked the woman if her family income was above the specified amount for her household size. If the family income was above the WIC guidelines, the investigators asked if the income was above $80,000 gross. This was to be sure they were within the income guidelines and not above middle income.

4. The investigators asked about the number of prenatal visits completed.

5. The investigators confirmed Benzie County residency by asking the street and town address

B. Recruitment of subjects from prenatal classes.

1. Subjects were recruited from lists of women enrolled in prenatal classes given at Munson Hospital and Community Hospital in Traverse City .

2. Prenatal care educators from Munson Medical Center and Community Hospital sent lists of Benzie County residents who were enrolled in the classes to the investigators.

3. The investigators confirmed Benzie County residence, number of prenatal care visits and income in the same manner as provider referrals.

C. Self referral

1. Flyers about the study were distributed around the county in selected physicians' offices.

2. Women who saw the flyer (Appendix D) and qualified called the investigators. The investigators confirmed Benzie County residency, number of prenatal visits, and income in the same manner as provider referrals.

D. The potential participants were informed of a cash gift of $25.00 that would be given to them for their participation in the focus group and for completing the questionnaire.

E. A follow up letter and phone call within two weeks of referral was made by the investigators as a reminder of the date of the focus group.

Conduction of Focus Groups

Two focus groups were held at the Counseling Center in Benzonia, Michigan using the guidelines set forth by Krueger (1988) and Kingry et al. (1990). The first focus group was held on December 7, 1994. It consisted of 6 participants and lasted one and a half hours. A total of 13 potential participants had agreed to participate; of those, 6 were actual participants. A second focus group was held on January 3, 1995 and lasted one hour. It consisted of 2 participants from a potential pool of 8. The weather was stormy that night and one potential participant went into labor. Activities surrounding the focus group went as follows:

A. Written consent was obtained as subjects arrived for the groups (Appendix E).

B. After consent was obtained the Ten-Item Checklist and Patient Satisfaction with Prenatal Care instrument were administered in both groups. The women were given the first page of the Ten-Item Checklist instrument and additional data sheet for item 6, transportation barrier and instructed to check any of the 10 items that applied to their situation and to fill out item 6, transportation barrier. The entire PSPC instrument was completed

by the participants but for this study only the motivation scale was used for analysis.

C. After completion of these instruments the subjects participated in a focus group conducted by the principal investigator for this study, the principal investigator for a companion study and the principal investigator responsible for the total study (Omar & Schiffman, 1994). For sample questions from the focus group see Table 1.

D. Refreshments were served at both focus groups.

E. All the women were invited to introduce themselves and answer the first question. The investigator for the total study started and each woman was given a chance to speak as the investigator directed the conversation around the room.

F. Questioning began with a general question to elicit short responses for all to have a chance to speak. The questions then progressed from general to specific, and non-threatening to more threatening (Kingry et al., 1990).

E. At the completion of the focus groups a cash gift of twenty-five dollars was given with a signed receipt.

Data Analysis

Two focus groups were held at separate times, but for the analysis the groups were treated as one because the number of participants in the second group was just 2.

Analysis of the focus group data was completed first followed by analysis of responses to the questionnaires. Data was analyzed from three sources: the PSPC Instrument (Appendix C), the Ten-Item Checklist (Appendix B) and the focus group questions (see Table 1). The SPSS/PC (Norusis, 1991) computer program was used to analyze the motivation scale and demographic information from the instrument. There was just one barrier checked on the Ten-Item Checklist and the data was analyzed by hand. The demographic characteristics of the participants and the variables under study were analyzed using descriptive statistics which included frequencies, percentages, means, ranges and standard deviations as appropriate.

First, the audiotapes from the focus groups were transcribed verbatim. Preliminary coding categories were established by a team consisting of the three principal investigators using the definitions of the variables. The set of coding categories were determined from the transcripts by summarizing and defining codes and themes for the concepts of motivation and barriers. Content analysis was used to look for the concept variables in the transcripts. Basic conceptual themes were isolated and summarized on the transcripts from the two focus groups. The Ethnograph computer program (Seidel, Kjolseth, & Seymour 1988) was used to manage the data. The data were organized and subdivided into meaningful segments. Interpretation was then done by organizing the textual data into useful

subdivisions and searching for patterns within and between these divisions to draw meaningful conclusions. Data were examined for themes, patterns and categories about motivation and barriers to prenatal care. Verification of the coding was accomplished by the thesis chair, as a co-investigator and independent reviewer, and the principal investigators to check for inconsistencies. Inconsistencies were resolved by consensus. Consistency of the responses were also examined with the responses given on the instruments.

Human Subjects Protection

Approval by the University Committee on Research Involving Human Subjects (UCRIHS) was obtained (Appendix F) for the total study on 07/01/94 and separate approval obtained for this study on 12/07/94. There were no identified psychological, social, physical, economical or legal risks for the subjects who participated in the study. The participants' anonymity and confidentiality was protected by numbering the questionnaires and deleting all identifying information from the transcripts of the focus groups. The audiotapes were destroyed after transcription.

If the participants were to become anxious about their prenatal care, they were informed the investigators would be available by phone or personal contact to address the issues. No participants contacted the investigators.

Limitations/Assumptions

Assumptions included:

A. The participants were truthful about reporting their income levels.

B. The participants answered the questionnaire and focus group questions honestly.

C. Motivation and barriers to prenatal care can be identified by the conduction of a focus group.

Limitations included:

A. The sample was a convenience sample limited to participants who chose to participate.

B. There was a chance of bias in analysis of the focus group transcript. The team approach to compare and validate codes reduced the risk of bias.

C. In order to get a sample of 6-10 pregnant women, the timing of the focus group and administration of the questionnaire may have been too premature for the women to assess their barriers to continuing prenatal care if they had just two prenatal care visits.

D. The women were already seeking prenatal care and some had participated in prenatal classes so they may have had more motivation and fewer or different barriers to care than women not in care and prenatal classes.

E. The Health Belief Model was a cognitive model and not all pregnant women may behave in a cognitive manner.

Results

Demographics

The eight subjects were patients of three Grand Traverse County providers and one Manistee provider: two joint Doctor of Osteopathy practices, one solo Obstetrician practice and one solo midwife practice. All the women in this sample traveled to Manistee or Traverse City for their prenatal care. None chose to start prenatal care in Benzie county and transfer to an out of county provider at 32 weeks. While some of the potential participants were recruited from Benzie County providers none of those women chose to participate.

Tables 2 and 3 describe the women by socio-demographic and pregnancy characteristics. The sample consisted of 8 Caucasian middle income, married pregnant women with a mean age of 28.75 years. One participant checked an income level of $10,000-13,616. This was probably checked in error because she also checked that she worked full time and reported during the phone call for recruitment that her income level was appropriate. She reported in the focus group that she was a health care professional.

All the women had private insurance and one had Mich-Care along with her private insurance. Mich-Care is supplemental public insurance that covers prenatal visits,

Table 2

Frequencies and Percents of Socio-Demographic and Pregnancy Characteristics (N=8)

Characteristics	No.	%
Socio-Demographics		
Education:		
High School	3	37.5
Some College	1	12.5
College	4	50.0
Income:		
10,000-13,616	1	12.5
18,205-22,792	1	12.5
22,793-27,380	1	12.5
36,557-41,144	1	12.5
41,145-45,732	1	12.5
50,000-59,000	1	12.5
60,000-69,000	2	25.0
Married	8	100.0
Caucasian	8	100.0
Work Outside Home	8	100.0
Insurance:		
Private insurance	8	100.0
Mich-Care	1	12.5
Pregnancy		
1st viable pregnancy	3	37.5
1st viable pregnancy with previous miscarriages	2	25.00
More than one pregnancy	5	63.50
More than one pregnancy with Previous miscarriages	3	37.50

Table 3

Means and Standard Deviations of Socio-Demographic and Pregnancy Characteristics

(N=8)

Characteristics	M	SD	Range
Socio-Demographics			
Age (years)	28.75	5.50	24-41
Pregnancies	2.88	1.13	1-4
Living Children	1.00	1.07	0-3
Miscarriages	1.25	0.46	0-3
Weeks pregnant at time of study	21.50	8.82	10-36

supplemental public insurance that covers prenatal visits, deductible, and co-pay amounts not covered under private insurance, for women who meet income guidelines higher than WIC.

The women were from 10 to 36 weeks gestation at the time of the study. More pregnancies than living children were reported. The discrepancy between the number of children compared to average number of pregnancies was due to 5 of the 8 women having had previous miscarriages.

Results Related to Research Question

The research results are presented by answering the original research questions. The results of the focus group responses to motivation and barriers questions using text examples are examined first, then the results of the instruments are discussed followed by a comparison and contrast of the two.

What motivates pregnant rural middle income women of Benzie County to seek prenatal care?

Four of the 8 women stated they didn't want to take a chance with their baby as the reason to start prenatal care. Two women said it was what they were supposed to do. All but one participant did a home pregnancy test before accessing the prenatal care system. The one who did not use a home pregnancy test reported she had insurance coverage that paid for pregnancy testing and she didn't see a reason to pay for it herself. Three did home tests and then also had tests in the office. After a positive home pregnancy test, the participants started trying to access the system. For selected participant comments about motivation to prenatal care see Table 4.

The total scale score for motivation on the PSPC instrument indicated these women were highly motivated to seek prenatal care (see table 5). Individual items from the motivation scale were compared to the focus group responses. Similarities between what was said in the focus group and the answers to motivation questions on the PSPC instrument

included not wanting to take a chance with their baby. Reasons not on the questionnaire but mentioned in the focus groups were: (a) something they were supposed to do; (b) to confirm the pregnancy; and (c) home pregnancy

Table 4

Selected Participant Comments Concerning Motivation

Motivated by not taking a chance with the baby
Participant #4 "Responsibility towards your child, why to take a chance and take too long."
Participant #6 " You just expect that you want to make sure everything is okay and you want the best for your baby that you can possibly get..."
Motivated by it's what you're supposed to do
Participant #2 "Well, if you're sick you go to the doctor and if you've got a child inside you and you're pretty sure you're pregnant obviously you should seek out some type of medical care to find out what you're supposed to do then, so that's why I did it."
Motivated by pregnancy home test results
Participant #4 "Mine were irregular but I get so nervous I'm like, I've got to do it. I can't wait another day. I've got to do it, get it at the store, get home, do it."
Participant #1 "My husband brought it (home pregnancy test) home."

Table 5

Motivation Scale of PSPC Instrument (N=8)

Item	M	SD	Range
#1 Family/friends	3.25	2.21	2-6
#2 No chances	1.00	0.00	1-1
#3 Information	1.20	0.44	1-6
#4 Vitamins	1.80	1.80	1-3
#5 Problems with Prior pregnancy	2.40	2.20	1-6
Total scale score	1.50	0.53	1-2.25

Note. The total scale score mean was calculated using items 3 4 & 5 as identified by factor analysis when the instrument was developed.

test results. Reasons not mentioned in the focus group but with high response scores on the questionnaire were to get information and to get vitamins.

What system, situational, and psychosocial barriers to prenatal care do middle income pregnant rural women of Benzie county perceive?

This question was broken down into 3 sub-questions and examined by the Ten-Item Checklist (Appendix B) and focus group questions concerning barriers (see Table 1). At the

beginning of the focus group, two of the women said they had no barriers, then later in the focus group, all the women talked about things that made prenatal care difficult for them. All 8 women were asked to complete the Ten-Item Checklist (appendix B) but only one indicated a system barrier.

System barriers. In the focus groups, system barriers were the most discussed of all the barriers. One participant waited 10 weeks for an initial appointment with the provider she preferred for her pregnancy. This participant didn't see a problem in the long wait because as she stated, "I haven't had any trouble before, I had my daughter before and I know a lot." She was comfortable with her knowledge and saw no reason to access the system earlier.

The rest of the comments about the system were about scheduling times for their appointments, waits in the office, childbirth education classes as part of prenatal care cost, and having or not having a provider in the county (see Table 6). The women described these difficulties as obstacles, inconveniences or problems rather than barriers. when viewed in this light all the women mentioned they had some kind of system barrier. All the women worked outside the home which caused some difficulties in arranging their schedules to accommodate the office hours. To overcome this obstacle they arranged their appointments for their days off or before or after work. The women who worked Monday

through Friday didn't loose pay to go to their appointments. They used sick time or compensation time. Compensation time is the use of time worked at another time. This practice is common with companies that do not pay overtime but allow

Table 6

Selected Participant Comments Concerning System Barriers

Participant # 5 "I usually set in the waiting room probably a half hour to forty -five minutes and then you get in here and the office or in the, uh, room for probably about 20 minutes or so before you see the doctor, I mean the nurses."
Participant #6 "...Difficult because I work and I have to go out there in the mornings, that's the only time she sees patients and I have to take time off work to do that, so that makes it difficult."
Participant #1 "I just, if I don't work I don't get paid. Oh well. Usually I do it on my day off."
Participant #2 "...I just well, I just take comp time. I just usually stack up all overtime as comp time so if I need time I, so that's what I do. We have to take something, it's too regulated."
Participant #1 "I was amazed that it is, there was a cost to Lamaze because I know, I'm from down state and most of the hospitals it's free."

employees to take time earned instead of pay. Two other participants said their husbands' schedules were hard to work around the office schedules and they would have liked their husbands to participate in prenatal care.

One participant repeated three times she had a long wait in the office and when the other women who went to that same office said, "They didn't wait that long", she said, "Well, it's not really a problem". Some women mentioned they would like to see a provider who provided prenatal care as well as delivery services in Benzie County. The cost of childbirth education classes was cited in the focus group by the women as a problem. The women thought it should be part of their prenatal care and included in appointment charges.

Only one participant reported a systems barrier on the Ten-Item Checklist. This was listed as difficulty scheduling an initial appointment because the provider had a waiting list of 10 weeks. One similarity between the focus group and the instrument was that one woman cited scheduling an appointment as a problem in both. One other woman described a difficulty with making an appointment in the focus group. This woman did a home pregnancy test and called a provider and was told to wait two months and call back for an appointment. She reported she knew this was not right and immediately called another provider and got an appointment. Both women had the opportunity in the focus group to report these were not barriers but problems they were able to solve.

Situational barriers. The women verbalized situational barriers (see Table 7) in the focus groups. Some of the

Table 7

Selected Participant Comments Concerning Situational Barriers

Participant #8 "The only thing with me is, it would be nice, you know to be closer here, I think my next appointments are for 6pm and I get out of work at 3pm every time...So I have to stay in Traverse."
Participant #4 "All the way up there, I'm like Oh god."
Participant#7 "Yeah. Well, Manistee from Frankfort that's pretty far."
Participant#1 "I could walk and still make it."
Participant#5 "...That's kind of bothersome, I drive all the way to Acme."
Participant#2 "People are so used to driving up there it's no big problem."

middle income women in this sample mentioned the drive, which they all make to Traverse City or Manistee, as a problem. One mentioned the long drive as bothersome. Another said it was a long way while another said most Benzie County people are used to driving for other things and it was part of living in the county. Some scheduled

appointments, shopping and other activities, such as going to a movie on their appointment days (see Table 7). The weather was not seen as a barrier to getting to their appointments because they would drive in most any weather. They would just drive slow.

Two women thought "it would be nice" to have a hospital and doctors who provided delivery service in Benzie County because they felt they wanted the same doctor who did their prenatal care to be with them during labor and delivery. Most of the women were not aware of the availability of prenatal care in Benzie County and, therefore, didn't look in the county for their prenatal care.

Even though all the women were asked to fill out the transportation barrier #6 on the Ten-Item Checklist (Appendix B), no one indicated transportation barriers. All but one checked that she had her own car. The similarities between the focus groups and the Ten-Item Checklist were that the women didn't report situational barriers.

Psychosocial barriers. In the focus group, four women responded that they did not perceive psychosocial barriers for themselves. Two women reported they had been through pregnancy before without problems and did not see a reason to access the system early (see Table 8). No one checked psychosocial reasons for delaying prenatal care on the questionnaire. This was consistent with the focus group discussion.

Table 8

Selected Participant Comments Concerning Psychosocial Barriers

Participant #6"...didn't rush into it, I waited a couple of months as I have been through it all before and I was pretty sure everything as okay, but it's just something you just do guess. But yeah, I waited a couple of months before I went but, I work in the medical field so I was, I have been through it 3 times before so I pretty much knew but I always knew I would go to the doctor just to make sure everything was okay especially with my age and everything."
Participant #8 "Not really, because, you know, I haven't had any trouble before I had my daughter before and I know a lot."

Discussion

Interpretation of the Findings

Motivation to seek prenatal care for this group of women was to have a healthy baby which was different from low income women. Low and middle income women's motivation for prenatal care was to receive vitamins (Omar & Schiffman, 1993). Encouragement from important people (Lia-Hoagberg et al., 1990) to end a waiting period, physical signs, and need for information (Aved et al., 1993; Johnson et al., 1994; and Leatherman et al., 1990) motivated low income women to

seek prenatal care. Five 8 of the eight women had previous miscarriages which could have accounted for their high motivation to have a healthy baby and to start prenatal care. Home pregnancy testing was used by this group as a reason to start looking for a provider to confirm the results of the test. The cost of the test is not a deterrent to this group of women but may be to low income women. Home pregnancy testing has become widely used in the last 5 years and may not have been a factor when the PSPC instrument was developed. All were married and their motivation to start prenatal care might be different than unmarried women. All the women had insurance so they didn't have to go through the long application process that low income women do for Medicaid.

Just one barrier was cited on the questionnaire but when the women came together for the focus group, after being sensitized by the questionnaire, they started talking about things that were "obstacles", "problems", "annoyances" and "inconveniences" about the process of seeking and staying in prenatal care as rural women of Benzie County. The obstacles, annoyances and inconveniences were the long drives, the weather, waits in the office and scheduling an appointment around personal and work schedules. In the focus group, the items the researchers labeled as barriers were labeled as "inconveniences", "problems" and "obstacles" by the women indicating they were not as troublesome as the researchers thought they may be for this population. The

women who participated had resources available to them that helped them overcome any barrier that may have gotten in the way of their prenatal care. These women had double incomes, their own cars, husbands to help with the arranging of schedules, and family and work support.

McClanahan, (1994), Oxford et al. (1985), and Johnson et al. (1994) cited some of the same system problems for low income women as the middle income women talked about in the focus group such as inconvenient hours and long waits in the office. System barriers that may be too overwhelming for low income women to access or stay in care are seen by middle income women as inconveniences that do not stop them from getting care. Some of the same system barriers are posed for all women but the middle income women have the ability to overcome obstacles put before them and make reasonable decisions about the "inconveniences" posed. This sample's mean age was 28.5 years and all were at least high school educated and because of their life experiences and educational levels, they were able to make decisions, solve problems and all had resources to implement their decisions.

On the Ten-Item Checklist there was no opportunity for the women to discuss their reactions and feelings about a reported barrier. The women had the opportunity to explain, in the focus group discussions, their thoughts and feelings about these problems. The Ten-Item Checklist didn't allow them to report other things that were not part of the checklist but were bothersome to them about the system such

as the cost of childbirth education classes and having the classes at the same site they were receiving their prenatal care.

Situational or transportation was the barrier expected to effect Benzie County's rural middle income women's seeking or staying in care because of the long distances involved. It was expected that even with the resources the women had available to them, the long drive and sometimes the weather would be the most likely things to keep the women from seeking or staying in care. This was not the case as was brought out in the focus group and on the Checklist. The women described the distances they had to drive as expected and as with the system barriers "an inconvenience or a bother" rather than a barrier. These women had their own cars to get them to their appointments and didn't have hardships with baby-sitting or getting time of from work to go to their appointments. Because they didn't see the drive as a hardship they made the best of it because they could afford to shop or go to the movies on their appointment days. If the sample would have included some women that were receiving their care in county the drive would not have been a bother or inconvenience until they would have had to start driving at 32 weeks gestation.

The psychosocial barrier the women cited in the focus group of waiting to start prenatal care because they had been pregnant before and knew what to do is considered by researchers and in the literature as a barrier for low

income women, but in reality maybe not enough credit is given to women who have experience and knowledge about prenatal care and are low risk. These women may be able to make their own decisions about when to access the system. Patterson et al. (1990) also reported women felt secure in their personal ability to ensure a "safe passage" through the pregnancy and did not enroll early in prenatal care. In high risk populations, early prenatal care has been proven to reduce the risk of low birth weight infants (Witwer, 1990) but in low risk populations the same rationale for early prenatal care may not be there. Given the mean age of 28.75 years, educational level of at least a high school education, employment as professionals, and women with previous uncomplicated pregnancies, the two low risk women could reasonably make the decisions about when to begin prenatal care. The youngest participant was 24 and the oldest was 41. They all had life experiences and sought out educational experiences and references to educate themselves about prenatal care. A teen sample would not have had the life experiences needed for problem solving and the knowledge to find educational materials. They also would not have the same financial resources or the desire to educate themselves.

The findings from this study supported the literature that middle income women have fewer barriers than low income women (Cooney, 1985; Oberg et al., 1990). The literature is just beginning to look at rural pregnant women and problems

they may encounter in seeking prenatal care (Larson et al., 1991; Nesbitt et al., 1990, 1993). Again middle income women are expected to have fewer barriers.

All the women had some prenatal care, therefore, the participants comments about their motivation and barriers were given retrospectively and may have been affected by their actual experiences. The questionnaires may have given the women the start they needed to talk about their experiences. The sample size for this study of middle income rural women was small but motivation and barriers to prenatal care for middle income women in Benzie County were better understood for these women because they had a chance to expound on the experiences they had while entering and staying in prenatal care. All the women were in prenatal care with out of county providers and their views about prenatal care may be different from women who receive their initial care in Benzie County and transfer to an out of county provider. If some of the women were receiving their care from Benzie County providers the findings may have been different in relation to transportation. Women who receive in county prenatal care would not have the distances to travel and so they may not have seen that as an inconvenience. The system and psychosocial difficulties may have been the same or different depending on the sample.

This research was not without limitations and assumptions. First, a small sample was used and therefore, the results of this data may not be generalized to the rural

population and middle income women as a whole. A larger sample may have more varied in their perceptions of motivation and barriers to prenatal care. Second, the Ten-Item Checklist was without proven reliability and validity although it had been used in other studies. Third, all the women in the focus groups had some prenatal care; therefore their comments about their motivation and barriers to prenatal care were given retrospectively and may have been affected by their actual experiences. Fourth, the women were all obtaining prenatal care from out of county providers and their perceptions of motivation and barriers may be different than women receiving their care in Benzie County and transferring to another provider at 32 weeks. Fifth, all the women in the sample were in prenatal care so any barriers they may have experienced were already overcome before the focus group. Finally, self reporting by the subjects was not validated by other sources.

Theoretical Model in Relation to Motivation and Barriers of Middle Income Women in Benzie County

The Health Belief Model (Figure 1) as it was modified by Becker et al. (1977) provided an excellent conceptual framework for the variables in this study. However, given the findings, modifications could be made (see Figure 2). Box E motivation or cues to action would be changed to reflect the findings of the study of a desire for a healthy baby and home pregnancy testing. In box F the title would be changed to perceived obstacles, problems or

inconveniences to reflect the findings from this study. Psychosocial barriers could be omitted leaving systems and situational.

The hypothesized relationship between individual perceptions of having or not having a healthy baby, modifying factors of middle income pregnant rural women, and

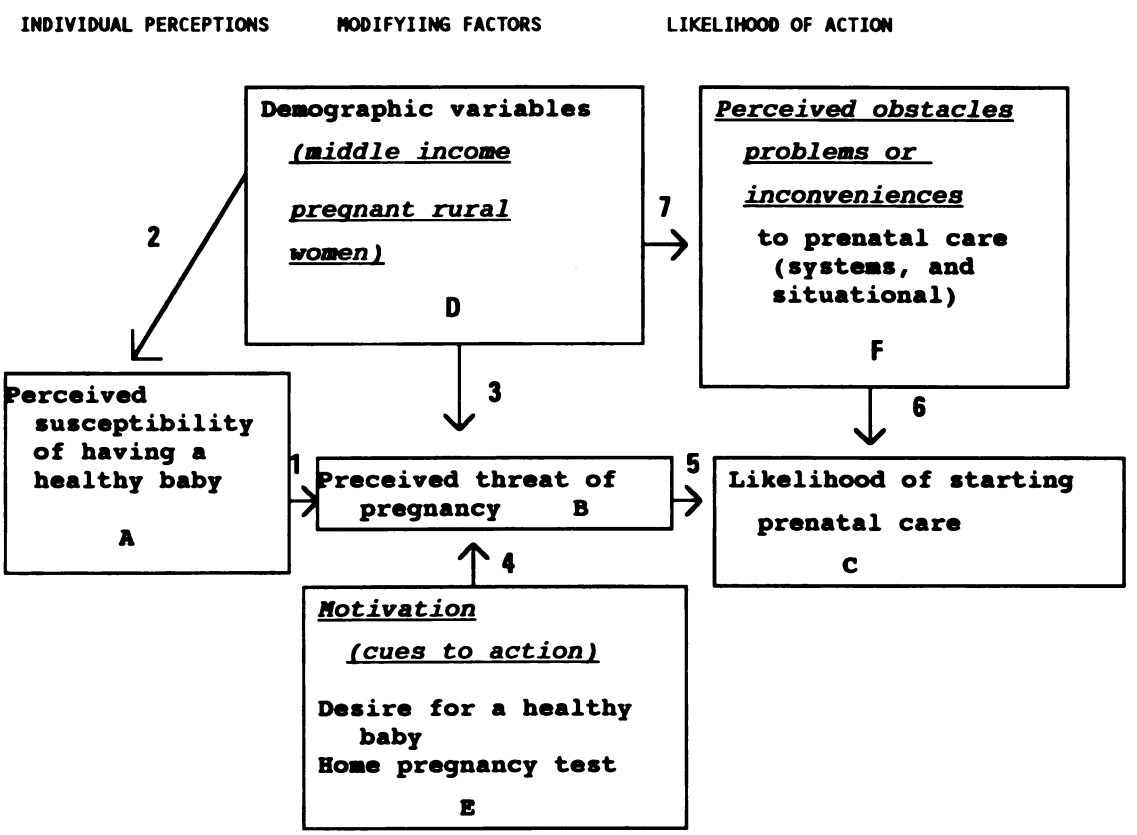

Figure 2.

Modification of the Health Belief Model Based on Study Findings: Application to the Health Belief Model (Becker et al. 1977)

likelihood of action to overcome perceived barriers to start prenatal care were supported (see Figure 2 arrows 1, 2, 3, 4, 5, 6 & 7). The rural middle income women's (box D) individual perceived threat of not having a healthy baby was low for the women who had healthy babies in the past. The women who had previous healthy babies felt comfortable in waiting to access the system and those who had previous miscarriages or hadn't had a baby before accessed the system earlier (see Figure 2 arrow 1 and 5). The middle income rural women (box D) were motivated (box E) to seek prenatal care (box C) by doing a home pregnancy test and a desire for a healthy baby. In the modified model (see Figure 2) just these two items would be included.

Because this was a sample of middle income women (box D) their individual perceptions of barriers (box F) to accessing the prenatal care system were considered by the sample as inconveniences rather than barriers. These women didn't have perceived barriers to prenatal care of psychosocial, system and situational because they didn't see them as barriers. By virtue of their demographics they had resources available to them and no perceived barriers (box F, arrow 7) so they were likely to start and continue prenatal care (box C, arrow 6).

Implications for Advanced Practice Nurses

This study found that this sample of middle income women were motivated to seek prenatal care by a desire to have a healthy baby and by the use of a home pregnancy test.

The Advanced Practice Nurse (APN) provides primary care to women before, during, and after pregnancy. In the role of a primary health provider the APN is a facilitator, clinician, and educator of individuals, and families. The APN provides the women with the information and care needed to help them ensure a healthy baby during visits for routine health care for themselves and other family members and through a variety of other mechanisms.

Home pregnancy testing can be tool used to encourage women to access the system. Education on when to use home pregnancy tests and when to access the system after a positive result could be helpful to all women. Community presentations to groups such as schools, community agencies, Zonta, Rotary, La-Leche League, and parent groups could help accomplish this task. The use of local radio spots to advertise where to go and what to do when women have a positive pregnancy test will help them make a decision about their immediate care. Drug stores and grocery stores could have posters or rip off flyers near where the home pregnancy tests are stocked on the shelves. These posters or flyers could have information about what to do if they have a positive home pregnancy test.

Validation of the women's abilities and knowledge through education could empower women who have had previous low risk pregnancies to make correct decisions about their prenatal care. This could be connected to home pregnancy testing education with explanations about uncomplicated

previous pregnancies and what these women should do when they have a positive test. Clear guidelines about when to access the system would be included so high risk or first time pregnant women would have clear instructions. Specific instructions to all women when they have a positive home pregnancy test would be to go to their primary care providers so that a plan tailored to their individual needs could be worked out focusing on self care activities. Scheduling of appointments for each woman would be individual, focusing on their individual needs. A mutually agreeable schedule with number and timing of visits subject to change if conditions change would be set forth in the beginning of prenatal care. The self care activities the women could do to be part of their prenatal care would be to test their own urine, take their own blood pressure and use Doppler's at home. They could be educated about diet, exercise, risk factors and when to access the system. The women could report to the APN by phone between visits. This would decrease the number of prenatal visits for low risk pregnancies.

The APN can impact the inconveniences, problems, and obstacles with system and situational problems of difficulty scheduling an appointment and long travel and weather inconveniences by providing prenatal care and childbirth classes at the same site, in Benzie County, as part of prenatal care. A Nurse Practitioner is qualified to provide childbirth classes and could provide the classes at the same

site or a site central to all the offices that is included in the cost of prenatal care. Flexible hours and choices of providers in Benzie County could help with difficulties scheduling an appointment. APN's could have a strong impact on improving access to and use of prenatal care. System and situational related barriers can especially be effected by many primary care services being provided by the APN in the county. Marketing would have to be done because this sample of middle income women were not aware of prenatal care services offered in the county. As an assessor in primary care, the APN can serve as a role model to other professionals by working in a collaborative role with other providers and professionals in Benzie County and Grand Traverse County to come up with innovative ways to deliver prenatal care to the women of Benzie County. If an APN was part of the system, the number of providers in Benzie County would be increased and available for women to have choices. A team approach using medical providers and other disciplines such as dietitians, psychologists, medical specialists, social workers and an APN as the case manager could be used for providing prenatal care in Benzie county at one site to provide better system coordination. The APN in the primary care site could act as the care coordinator from the time the woman enters the system through and including when she is transferred to out county providers. The transition back to in county providers could be facilitated by the APN. The women could return to have

postpartum care for themselves and care for their newborns. When women are transferred to out county providers would be individually determined with some transferring before, at, or after the 32 week mark. The APN could keep in touch with the women by phone or continue office visits after transfer and act as a consultant to the women for questions and clarification of instructions and tests. This would be accomplished by establishing a collaborative relationship with the referral provider to assure the continuity of care for these women.

This sample didn't mind the drive to prenatal care but would stay in the county if the providers were competent and there was a facility to deliver. Two of the women worked in the county where they received their prenatal care and found this both a convenience and an inconvenience. One finished work at 3:00 p.m. and waited until 6:00 p.m. for prenatal care appointments. If the hours of the office/clinic were flexible these women may choose to receive their care in Benzie County. Another woman lived close to the Grand Traverse County line but worked in Benzie County so she may find it convenient to have prenatal care available where she is most of the day. It may be more convenient for women who work in Benzie county to have prenatal care available in the county so they do not have to take a day off work to go to an appointment.

Implications for Research

If women who were receiving prenatal care from Benzie County providers were sampled different results might have been obtained and a different focus of intervention might have been brought out. If another study were undertaken in Benzie County based on the results of this study it could be an intervention study with a larger sample using quantitative and qualitative information. A larger sample could be obtained with more advertising. Benzie County has 2 Nurse Practitioners employed in primary care offices and with collaboration with other providers more women could be informed of the study and their participation elicited. The role of home pregnancy testing in the start of prenatal care and how it can be used to get women to start prenatal care earlier in Benzie County would be part of the study. Innovative ways of delivering prenatal care to low risk Benzie county women could be incorporated in the study and prenatal care classes could be part of the cost of the office visits to the women in the study.

The criteria should be middle income women receiving prenatal care for the first 32 weeks in Benzie County followed by transfer to out county providers. The comparison group could be women that receive their prenatal care from out county providers for 40 weeks to discover if their motivations and barriers are different from women who start and continue their care with out of county providers. The effectiveness of the interventions could be determined

by comparing birth outcomes and interviewing women after delivery for satisfaction with prenatal care specific to the intervention.

Summary

The following conclusions can be drawn from this study:

A. Middle income women in this study were motivated by a desire for a healthy baby to access prenatal care.

B. The use of home pregnancy tests motivated women in this study to initiate prenatal care.

C. Barriers were seen as inconveniences, problems or obstacles to prenatal care and were overcome by these women by the material problem solving resources available to them.

D. The women in this study thought childbirth education classes should be part of prenatal care with no additional cost.

E. Women who have previous low risk pregnancies can be empowered through knowledge to make responsible decisions about when they enter prenatal care.

In summary, it is clear from this study that prenatal care is an individual experience for middle income women and the provision of prenatal care for all women is an important service. The health professional in primary care through collaboration, assessment, education, consultation, and research can start to make a difference in the way prenatal care is provided to pregnant women of Benzie County.

REFERENCES

REFERENCES

Aved, B.M., Irwin, M.M., Cummings, L.S., & Findeisen, N. (1993). Barriers to prenatal care for low-income women. The Western Journal of Medicine, 158(5), 493-498.

Becker, M.H., Haefner, D.P., & Kasl, S.V. (1977). Selected psychological models and correlates of individual health related behaviors. Medical Care 15, 27-46.

Brown, S.S. (1989). Drawing women into prenatal care. Family Planning Perceptives, 21(2), 73-80.

Bushy, A. (1990). Rural determinants in family health: Considerations for community nurses. Community Health, 12(4), 29-38.

Cooney, J.P. (1985). What determines the start of prenatal care? Medical Care, 23(8) 986-997.

Curry, M.A. (1989). Nonfinancial barriers to prenatal care. Women & Health, 15(3), 85-89.

Fingerhut, L.A., Makuc, D., & Kleinman, J.C. (1987). Delayed prenatal care and place of first visit: Differences by health insurance and education. Family Planning Perspectives, 19(5), 212-234.

Goldenburg, R.L., Patterson, E.T., & Freese, M.P. (1992). Maternal demographic, situational and psychosocial factors and their relationship to enrollment in prenatal care: A review of the literature. Women and Health, 19(2/3), 133-151.

Greenburg, R.S. (1982). The impact of prenatal care in different social groups. American Journal of Obstetrics and Gynecology, 145(7), 797-801.

Public Health Service. (1991) Healthy People 2000: National health promotion and disease prevention objectives. (DHHS Publication No. PHS 91-50212) Washington, D.C.: U.S Government Printing Office.

Johnson, J.L., Primas, P.J., & Coe, M.K. (1994). Factors that prevent women of low socioeconomic status from seeking prenatal care. Journal of the American Academy of Nurse Practitioners, 6(3), 105-111.

Joyce, K., Diffenbacher, G., Greene, J., & Sorokin, Y. (1983). Internal and external barriers to obtaining prenatal care. Social Work in Health Care, 9(2), 89-96.

KIDS COUNT in Michigan 1992 Data book. County profiles of child and family well being. (1992) Lansing, MI: Michigan League for Human Services.

KIDS COUNT in Michigan 1993 Data book. County profiles of child and family well being. (1993) Lansing, MI: Michigan League for Human Services.

KIDS COUNT in Michigan 1994 Data book. County profiles of child and family well being. (1994) Lansing, MI: Michigan League for Human Services.

Kiefer, E., Alexander, G.R., & Mor, J. (1992). Area-level predictors of use of prenatal care in diverse populations. Public Health Reports, 107(8), 653-658.

Kingry, M.J., Tiedje, L.B., & Friedman, L.L. (1990). Focus groups: A research technique for nursing. Nursing Research, 39(2), 124-125.

Kreuger, K. (1988). Focus groups: A practical guide for research. Newbury Park: Sage.

Larson, E.H., Hart, L.G., Rosenblatt, R.A., (1991) Is rural residence associated with poor birth outcome? Rural Health Working Papers Series #14 (pp. 1-20). University of Washington HQ-30, Seattle, Washington.

Leatherman, J., Blackburn, D., & Davidhizer, R. (1990). How postpartum women explain their lack of obtaining adequate prenatal care. Journal of Advanced Nursing, 15, 156-67.

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. Social Science Medicine, 30(4), 487-495.

McClanahan, P. (1992). Improving access to and use of prenatal care. Journal of Obstetrics, Gynecologic and Neonatal Nursing, 21(4), 280-284.

McDonald, T.P., & Coburn, A.F. (1988). Predictors of prenatal care utilization. Social Science in Medicine, 27(2), 167-172.

McManus, M.A., & Newacheck, P.W. (1989). Rural maternal, child , and adolescent health. Health Services Research, 23(6), 807-848.

Michigan Department of Public Health. (1992). Michigan health statistics. Lansing, MI: Author

Michigan Department of Public Health. (1994). Women Infants and Children nutritional guidelines. Lansing, MI: Author

Nesbitt, T.S., Connell, F.A., Hart, L.G., & Rosenblatt, R.A. (1990). Access to obstetric care in rural areas: Effect on birth outcomes. American Journal of Public Health, 80(7), 814-817.

Nesbitt, T.S., Larson, E.H., Rosenblatt, R.A., & Hart, L.G. (1993). Local access to obstetric care in rural areas: effect on prenatal care, birth outcomes, and costs. Rural Health Working Papers Series #23 (pp. 1-24). University of Washington HQ-30, Seattle Washington.

Norusis, M.J. (1991). SPSS/PC+ studentware plus. Chicago, IL.: SPSS Inc.

Oberg, C.N., Lia-Hoagberg, B., Hodkinson, E., Skovholt, C., & Vanman, R. (1990). Prenatal care comparisons among privately insured, uninsured, and Medicaid enrolled women. Public Health Reports, 105(5), 533-535.

Omar M.A., & Schiffman, R.F. (1992) Patient perceptions of prenatal care: Instrument development. Paper presentation at the International State of the Science Congress. Washington, DC: August 6-8, 1992.

Omar M.A., & Schiffman, R.F. (1993). Prenatal vitamins, A rite of passage? Journal of Maternal Child Nursing, 18, 322-324.

Omar, M.A., & Schiffman, R.F. (1994). Barriers, expectations, and satisfaction of middle income pregnant women in Benzie County, Michigan. Alpha Psi Chapter Sigma Theta Tau Inc., International Honor Society of Nursing. E. Lansing, Michigan: Michigan State University, Department of Nursing.

Oxford, L., Schinfeld, S.G., Elkins, T.E., & Ryan, G.M. (1985). Deterrents to early prenatal care. Journal of Tennessee Medical Association, 21(5), 691-695.

Patterson, E.T., Freese, M.P., & Goldenburg. (1990). Seeking safe passage: Utilizing health care during pregnancy. IMAGE: Journal of Nursing Scholarship, 22(1), 27-31.

Pender, N. (1987). Health-protecting (preventing) behavior. In N. Pender (Ed.), Health promotion in nursing practice, (2nd ed.) (pp.37-56), Norwalk, CT: Appleton and Lange.

Poland, M.L., Ager, J.W., & Olson, J.M. (1987). Barriers to receiving adequate prenatal care. American Journal of Obstetrics and Gynecology, 157(2), 297-303.

Richwald, G.A., Rhodes, K., & Kersey, L. (1987). No prenatal care study. Unpublished manuscript, Los Angeles County/USC Medical Center Women's Hospital, Los Angeles.

Seidel, J.V., Kjolseth, R., & Seymour E. (1988). The Ethnograph: User's guide. Littleton, CO: Qualis Research Associates.

Singh, S., Torres, A., & Forrest, J. D. (1985). The need for prenatal care in the United States: Evidence from the 1980 national natality survey. Family Planning Perspectives, 17 (3), 118-124.

Witwer, M.B. (1990). Prenatal care in the United States: Reports call for improvements in quality and accessibility. Family Planning Perspectives, 22(1), 31-35.

Young, C., McMahon, J.A., Bowman, V., & Thompson, D. (1990). Psychosocial concerns of women who delay prenatal care. Families in Society: The Journal of Contemporary Human Services, 9, 408-414.

Appendix A

Appendix A

Michigan WIC Program

Income Guidelines

Effective date: February 10, 1994

ECON UNIT	WEEKLY	BIWEEKLY	MONTHLY	YEARLY
1	$262	$524	$1135	$13,616
2	351	701	1517	18,204
3	439	877	1900	22,792
4	527	1054	2282	27,380
5	615	1230	2664	31,968
6	703	1406	3047	36,556
7	792	1583	3429	41,144
8	880	1759	3811	45,732

ECON UNIT COUNTS A PREGNANT WOMAN AS ONE (1).

FOR EACH ADDITIONAL MEMBER			
OF THE ECONOMIC UNIT	+$89	+$177	+$383

Appendix B

Ten-Item Checklist

1. There are some reasons women do not get prenatal care or get prenatal care late in their pregnancy in the United States. After you have read all of the items below, check the ones which best describes your situation.

   You may choose more than one. If none of the reasons or concerns explain your situation or if you had other reasons or concerns, please tell me after you have read the list.
   (READ ALL AND CHECK ALL THAT APPLY)

_____Item 1 I didn't think prenatal care was necessary (earlier in the pregnancy).

_____Item 2 I didn't know where to go.

_____Item 3 I didn't know how I would pay for prenatal care.

_____Item 4 I couldn't take time off from school or work.

_____Item 5 I couldn't find someone to watch the children.

_____Item 6 i didn't have a way to get to the doctor or clinic.

_____Item 7 I had trouble scheduling an appointment.

_____Item 8 I don't like doctors, clinics, or hospitals.

_____Item 9 I was afraid I would be reported to the police if I went to get prenatal care.

_____Item 10 I had personal problems.

_____ None of the reasons fit my situation

2. Are there any <u>other</u> reasons that kept you from getting prenatal care earlier?

_____

_____

3. Of all the reasons you've chosen, which <u>single one</u> is the <u>most</u> important reasons or concern? [WRITE ITEM NUMBER] _____. For each reason or concern you gave, you will be given additional questions, starting with the reason you gave as most important to you.

ITEM 1 I didn't think prenatal care was necessary.

1. Below are some possible reasons that may explain why women receive prenatal car late in their pregnancy or don't think it is necessary to get prenatal care. Which ones explain why you didn't think prenatal care was necessary?

(READ AND CHECK ALL THAT APPLY)

_____1. I was in good health prior to and during this pregnancy.

_____2. I had no problems in a previous pregnancy.

_____3. I didn't think prenatal care would improve my health or the health of my baby.

_____4. I thought that prenatal care could harm me or my baby.

_____5. Since having a baby is a natural and normal event, I didn't think I needed prenatal care.

_____ None of these reasons fits my situation.

2. (6) Are there any other reasons that may explain why you didn't think it was necessary to get prenatal care (earlier)? ____NO ____YES (If yes, please write the reason(s) below.

_____

_____

_____

3. Of all the reasons you've chosen, which single one is the most important.
[WRITE ITEM NUMBER] _____

Item 2 I didn't know where to go.

1. Did you try to find out about getting prenatal care through any of the following: [READ AND CHECK YES OR NO]:

   1. Friends or family ____No ____Yes

   2. Telephone book ____No ____Yes

   3. Telephone information ____No ____Yes

   4. Health clinic ____No ____Yes

   5. Church ____No ____Yes

   6. School ____No ____Yes

   7. Did you try to find out about prenatal care in any other way? ____No ____Yes
      [IF YES, WRITE EXPLANATION]:

      _____

2. Did you hear about prenatal care through any of the following?
   [READ AND CHECK YES OR NO]:

   1. (8) Radio or TV ____No ____Yes

   2. (9) Church ____No ____Yes

   3. (10) Newspaper ____No ____Yes

   (11) Did you here about prenatal care from any other source?

   ____No ____Yes

   [IF YES, WRITE SOURCE]: _____

Item 3 I didn't know how I would pay for prenatal care.

1. Did you think that prenatal care would cost too much and that you didn't have enough money for prenatal care? ____No ____Yes [IF YES, READ A AND B BELOW]

   A. How much did you think it would cost for a single prenatal visit?
   [WRITE AMOUNT] $_____

   B. How much do you think yu could have afforded for a single prenatal visit?
   [WRITE AMOUNT] $_____

2. Were you aware of any of the following ways to get prenatal care without having cash for it? Were you aware of: [READ AND CHECK YES OR NO]

   1. Medicaid ____No ____Yes

   2. Were you aware of private doctors who take Medicaid? ____No ____Yes

   3. Were you aware of the program available from the state where you are not charged?

      ____No [NO FURTHER QUESTIONS]

      ____Yes [IF ANSWER TO "ABILITY TO PAY" PLAN IS YES:]

Below are some of the reasons people do not pursue the medicaid plan. Please check which apply to you [READ AND CHECK ALL THAT APPLY]

____A. (4) I didn't know how a person qualifies for Medicaid.

____B. (5) The process for applying for Medicid was long and complicated.

____C. (6) I couldn't get an appointment to fill out the forms.

(7) Are there any other reasons that you didn't pursue application for Medicaid?
____No ____Yes

[IF YES, WRITE REASON:]

_____

_____

Item 4 I couldn't take time off from work

1. Below are some possible reasons why some women may not be able to take time off from work to get prenatal care. Which ones explain why you could not take time off for prenatal care? [READ AND CHECK ALL THAT APPLY]

____1. My boss would not allow me to take time off for any reason.

____2. If I took time off from work, I would lose money.

____3. I was afraid I would lose my job.

____4. A member of my family wouldn't allow me to take off from work.

____ None of the reasons fit my situation.

2. Are there any other reasons that may explain why you couldn't take time off from work to get prenatal care? ____No ____Yes [IF YES, WRITE REASON]

_____

_____

_____

3. Did you try to find prenatal care that was available in the evening or on a weekend?
____No ____Yes
[EXPLANATION:] _____

_____

_____

Item 5 I couldn't find someone to watch the children.

1. Who usually watches the children when you have to go out?
[READ AND CHECK ALL THAT APPLY]

____1. Family member

____2. Neighbor

____3. Babysitter

____4. Day care center

____5. No one is usually available [IF YES, SKIP TO QUESTION 3]

2. Was this person or these people available to watch the kids while you went for prenatal care?

____1. No (6) [NO FURTHER QUESTION, SKIP TO QUESTION 3]

____2. Yes [IF YES]:

Was this person available but you could not afford to pay him/her while you went for prenatal care?

____1. (7) No, payment was not a problem.

____2. Yes, they were available but I could not afford to pay.

[EXPLANATION]: _____

3. (8) If the clinic had an area where someone would watch your children during your visit, would you have gone for prenatal care?

____No ____Yes

Item 6 I didn't have a way to get to the doctor or clinic.

1. What is your usual means of transportation? [READ AND CHECK ALL THAT APPLY]:

____1. Own car or family car

____2. Borrowed car

____3. Taxi

____4. Bus or other public transportation

____5. Walking

____6. Other [EXPLAIN] _____

2. Below are some possible reasons why women don't have transportation to the doctor or clinic for prenatal care. Which ones explain why you did not have a way to get to the doctor or clinic during pregnancy? [READ AND CHECK ALL THAT APPLY]

____1. (7) I don't have a car.

____2. (8) The person that usually takes me was not available.

____3. (9) As far as I know, there is no public transportation to the doctor or clinic from where I live.

____4. (10) I don't think it's safe to use public transportation.

____5. (11) Public transportation takes too much time.

____6. (12) I don't think it's safe to walk to the doctor or clinic.

____7. (13) It costs too much to use a bus.

____ None of these reasons fit my situation.

3. Are there any other reasons that you didn't have transportation to get to the doctor or clinic for prenatal care? ____No ____Yes [IF YES, WRITE REASON]:

_____

_____

Item 7 I had trouble scheduling an appointment.

1. Below are some possible reasons why women may have trouble scheduling an appointment for prenatal care. Which ones applied to you during your pregnancy? [READ AND CHECK YES OR NO]

   1. I couldn't find a phone number to call. Does this apply to you? ____Yes ____No

   2. I called on the phone but couldn't get through to the right person. Does this apply to you? ____Yes ____No

   3. I called for an appointment and was told that the next scheduled appointment was far in the future. Does this apply to you? ____Yes ____No
      [IF YES, READ ALL AND CHECK A,B,C,D, AND E]:

      a. So I didn't make an appointment. Is this what happened? ____Yes ____No

      b. So I made an appointment but forgot about it. Is this what happened? ____Yes ____No

      c. I made the appointment but my baby was born first. Is this what happened? ____Yes ____No

      d. Other [EXPLAIN]: _____

      e. How far in the future was the appointment?

         ____weeks or ____months [WRITE NUMBER OF WEEKS OR MONTHS]

   4. I was told that I needed to schedule an appointment for financial screening first and I didn't want to do that. Does this apply to you? ____Yes ____No

   5. I was told I was too far along in pregnancy to be seen. Does this apply to you? ____Yes ____No

   6. There was no prenatal care available on weekends or evenings when I could go. Does this apply to you? ____Yes ____No

   7. Are there any other reasons that may explain why you had trouble scheduling an appointment for prenatal care? ____Yes ____No

      [IF YES, WRITE OTHER REASON(S)]: _____

      _____

Item 8 I don't like doctors, clinics or hospitals.

1. Below are some possible reasons that may explain why women don't like clinics, doctors or hospitals and so, don't go for prenatal care (early in their pregnancy). Which ones explain why you did not go (earlier)? [READ ALL AND CHECK ALL THAT APPLY]

____1. I don't like the long waits for care.

____2. I find doctors and nurses are unpleasant.

____3. I don't like to go to male doctors for prenatal care.

____4. People don't understand me in the doctor's office or clinic.

____5. I am afraid of doctors or nurses, or clinics, or hospitals.

____6. I've had a bad experience in the past from a doctor, clinic, or hospital.

____ None of these reasons fits my situation.

2. (7) Are there any other reasons that may explain why you don't like clinics, doctors, or hospitals?
____No ____Yes [IF YES, WRITE REASON]:

_____

_____

Item 9 I was afraid I would be reported to the police if I tried to get prenatal care.

1. Below are some possible reasons that may explain why women are afraid they would be reported to the police if they tried to get prenatal care. Which ones explain why you did not get prenatal care? [READ ALL AND CHECK ALL THAT APPLY]

____1. If I signed up for prenatal care the police could find out my address.

____2. I have been on drugs.

____3. I have been in trouble before.

____ None of these reasons fits my situation.

2. (4) Are there any other reasons that may explain why you were afraid you would be reported to the police if you tried to get prenatal care? ____No ____Yes [IF YES, WRITE REASON]:

_____

_____

_____

Item 10 I had personal problems

1. Below are some possible personal problems that may prevent women from getting prenatal care. Which ones explain why you did not obtain prenatal care?
[READ ALL AND CHECK ALL THAT APPLY]

____1. I was too depressed during my pregnancy to get care.

____2. I was too embarrassed by my pregnancy to get care.

____3. I didn't want to have this baby and this kept me from getting care.

____4. I had a problem with alcohol or drugs that kept me from getting care.

____5. I didn't want other people to know I was pregnant.

____6. I felt too sick to go out and get prenatal care.

____ None of these reasons fits my situation.

2. Are there any other personal problems that may have prevented you from getting prenatal care? ____No ____Yes [IF YES, WRITE OTHER REASON(S)]:

_____

_____

_____

Appendix C

PATIENT SATISFACTION WITH PRENATAL CARE

COLLEGE OF NURSING
MICHIGAN STATE UNIVERSITY

Mildred A. Omar, R.N., Ph.D.

Rachel F. Schiffman, R.N., Ph.D.

You indicate your voluntary consent to participate in this study by completing and returning this instrument. All responses to this survey will be kept strictly confidential.

Preparation of this instrument has been done with the assistance of Sigma Theta Tau International Honor Society of Nursing Research Grant, Mead Johnson Perinatal Nutritionals Research Grant, and Michigan State University College of Nursing Research Initiation Grant.

Subject ID __ __ __ __
1 2 3 4

PATIENT SATISFACTION WITH PRENATAL CARE

Omar and Schiffman
1992

Listed below are several reasons women come for prenatal care. We want to know to what extent each of these statements describes <u>your</u> reasons for coming for prenatal care.

For each statement please circle the number under the response which best describes how <u>you</u> feel about the statement. Remember, there are <u>no</u> right or wrong answers.

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
I COME FOR PRENATAL CARE:						
1. because my family/friends urged me to come.	1	2	3	4	5	6
2. because I do not want to take chances with my baby.	1	2	3	4	5	6
3. to get information that I need to care for myself during my pregnancy.	1	2	3	4	5	6
4. to get my vitamins.	1	2	3	4	5	6

IF THIS IS <u>NOT</u> YOUR FIRST PREGNANCY, ANSWER THE NEXT QUESTION (#5). IF THIS IS YOUR <u>FIRST</u> PREGNANCY, SKIP TO THE NEXT PAGE.

5. because of problems with previous pregnancy(ies).	1	2	3	4	5	6

PLEASE CONTINUE ON NEXT PAGE

Listed below are expectations many women have about prenatal care. We want to know to what extent each of these statements describes what you expected to happen with your prenatal care. For each statement, please circle the number under the response which best describes how you feel about the statement.

Please note: When the word "provider" is used, it means either the doctor, the nurse midwife, or the nurse practitioner who does your exam, that is, who measures your abdomen, does your pelvic exam, listens to your baby's heartbeat. If you see more than one provider, answer the following items for whom you see most often.

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
I EXPECTED:						
6. to have problems getting prenatal care.	1	2	3	4	5	6
7. to be seen sooner for my first prenatal visit.	1	2	3	4	5	6
8. to have my prenatal visits take a long time.	1	2	3	4	5	6
9. to get more from my prenatal visits then just being weighed and having my baby's heart checked.	1	2	3	4	5	6
10. to receive information during my visits without having to ask so many questions.	1	2	3	4	5	6
11. to have one provider that I routinely see for my prenatal visits.	1	2	3	4	5	6
12. to have the provider that I routinely see deliver my baby.	1	2	3	4	5	6
13. to have personalized attention from my provider.	1	2	3	4	5	6
14. my provider to care how I felt mentally as well as physically.	1	2	3	4	5	6

PLEASE CONTINUE ON NEXT PAGE

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
I EXPECTED:						
15. my provider to be gentle during my physical exam.	1	2	3	4	5	6
16. to receive poor care.	1	2	3	4	5	6
17. someone to listen to my problems.	1	2	3	4	5	6
18. a referral when I tell the clinic/office staff about a problem.	1	2	3	4	5	6
19. the services of a social worker to be part of prenatal care.	1	2	3	4	5	6
20. the services of a nutritionist to be part of prenatal care.	1	2	3	4	5	6
21. the services of a public health nurse to be part of prenatal care.	1	2	3	4	5	6
22. childbirth education classes to be part of prenatal care.	1	2	3	4	5	6
23. to come for prenatal visits once a month during the first six to seven months.	1	2	3	4	5	6
24. to come for prenatal visits more than once a month during the last two to three months.	1	2	3	4	5	6

PLEASE CONTINUE ON NEXT PAGE

Some women are quite happy and satisfied with their prenatal care while others are not. Listed below are several situations which may describe the relationship you have with your prenatal care provider. For each statement, please circle the number under the response which best describes how you feel about the statement.

Please rate the "PROVIDER" as the individual you see most often for prenatal exams, that is, the doctor, the nurse midwife, or the nurse practitioner who measures your abdomen, does your pelvic exam, listens to your baby's heartbeat. If you see more than one provider, answer the following items for whom you see most often.

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
I AM SATISFIED WITH:						
25. the explanation my provider gave to me of what was going to happen during my prenatal visits.	1	2	3	4	5	6
26. the explanation my provider gave to me about medical procedures.	1	2	3	4	5	6
27. the explanation my provider gave to me about what I can expect with my pregnancy and prenatal care.	1	2	3	4	5	6
28. the way my provider involves me in decisions about my prenatal care.	1	2	3	4	5	6
29. the way my provider treats me.	1	2	3	4	5	6
30. being able to ask questions without embarrassment.	1	2	3	4	5	6
31. the respect that I am shown by my provider.	1	2	3	4	5	6
32. the quality of care that I receive from my provider.	1	2	3	4	5	6
33. the way I am made to feel that I am not wasting my provider's time.	1	2	3	4	5	6
34. the time my provider spends talking about things of interest to me.	1	2	3	4	5	6
35. the information my provider gave to me about how things are going with my pregnancy.	1	2	3	4	5	6
36. the kinds of things my provider discussed during my prenatal visits.	1	2	3	4	5	6
37. the way my provider expresses concern about my overall personal situation.	1	2	3	4	5	6

PLEASE CONTINUE ON THE NEXT PAGE

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
I AM SATISFIED WITH:						
38. the way my provider explains test results to me.	1	2	3	4	5	6
39. the way my provider has prepared me for labor and delivery.	1	2	3	4	5	6
40. the explanation my provider gave to me about of what I can expect about parenting a newborn.	1	2	3	4	5	6
41. the interest and concern my provider has shown to me.	1	2	3	4	5	6
42. the way my provider treats my situation with privacy.	1	2	3	4	5	6
43. my provider's method of performing my physical exams.	1	2	3	4	5	6

For each statement below, please circle the number under the response which best describes how you feel about the statement. Some statements, however, may not apply to everyone. If the statement does not apply to your particular situation, circle the "9" in the column marked "N/A".

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree	N/A
I AM SATISFIED WITH:							
44. the way my provider takes my complaints seriously.	1	2	3	4	5	6	9
45. the understanding shown by my provider about transportation problems for coming to my prenatal visits.	1	2	3	4	5	6	9
46. the time my provider takes with me even though I do not have problems with this pregnancy.	1	2	3	4	5	6	9
47. the way my provider deals with all my medical problems.	1	2	3	4	5	6	9

PLEASE CONTINUE ON THE NEXT PAGE

Some women are quite happy and satisfied with their prenatal care while others are not. Listed below are several situations which may describe the relationship you have with the office/clinic staff. For each statement please circle the number under the response which best describes how you feel about the statement.

Please note: "STAFF" refers to the nurse, receptionist, aide, nutritionist, social worker, lab technician and other people that you may come in contact in the office or clinic.

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
I AM SATISFIED WITH:						
48. the explanation the staff gave to me of what I can expect with my pregnancy and prenatal care.	1	2	3	4	5	6
49. the way the staff involves me in decisions about my prenatal care.	1	2	3	4	5	6
50. the way the staff treats me.	1	2	3	4	5	6
51. being able to ask questions of the staff without embarrassment.	1	2	3	4	5	6
52. the respect that I am shown from the staff.	1	2	3	4	5	6
53. the quality of care that I receive from the staff.	1	2	3	4	5	6
54. the way I am made to feel that I am not wasting the staff's time.	1	2	3	4	5	6
55. the time the staff spend talking about things of interest to me.	1	2	3	4	5	6
56. the way the staff expresses concern about my overall personal situation.	1	2	3	4	5	6
57. the way the staff explains test results to me.	1	2	3	4	5	6

PLEASE CONTINUE ON NEXT PAGE

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
I AM SATISFIED WITH:						
58. the way the staff have prepared me for labor and delivery.	1	2	3	4	5	6
59. the interest and concern the staff have shown to me.	1	2	3	4	5	6
60. the way the staff treats my situation with privacy.	1	2	3	4	5	6

For each statement below, please circle the number under the response which best describes how you feel about the statement. Some statements, however, may not apply to everyone. If the statement does not apply to your particular situation, circle the "9" in the column marked "N/A".

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree	N/A
61. the way the staff takes my complaints seriously.	1	2	3	4	5	6	9
62. the understanding shown by the staff about transportation problems for coming to my prenatal visits.	1	2	3	4	5	6	9
63. the time the staff takes with me even though I do not have problems with this pregnancy.	1	2	3	4	5	6	9
64. the way the staff deals with all my medical problems.	1	2	3	4	5	6	9

PLEASE CONTINUE ON NEXT PAGE

Listed below are statements that describe the availability and types of prenatal care. We want to know to what extent each of these statements describes <u>your</u> satisfaction with prenatal care services.
For each statement, please circle the number under the response which best describes how <u>you</u> feel about the statements.

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
I AM SATISFIED WITH:						
65. how easy it was to find a prenatal care provider.	1	2	3	4	5	6
66. how easy it was to get prenatal care early in my pregnancy (that is before the fourth month).	1	2	3	4	5	6
67. the location of the office/clinic.	1	2	3	4	5	6
68. my ability to schedule prenatal visits at a time convenient for me.	1	2	3	4	5	6
69. how easy it is to reschedule my prenatal visits.	1	2	3	4	5	6
70. the amount of time I wait to be seen by my provider.	1	2	3	4	5	6
71. the <u>total</u> amount of <u>time</u> I spend at the office/clinic.	1	2	3	4	5	6
72. my options for choosing the provider I wanted for prenatal care.	1	2	3	4	5	6
73. the frequency with which I see the same prenatal provider for my care.	1	2	3	4	5	6
74. <u>not</u> having to repeat my story everytime I come for a visit.	1	2	3	4	5	6
75. having all the recommended tests.	1	2	3	4	5	6
76. the number of prenatal visits I made during the first six to seven months.	1	2	3	4	5	6

PLEASE CONTINUE ON NEXT PAGE

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
I AM SATISFIED WITH:						
77. having to come for more prenatal visits during the last two to three months.	1	2	3	4	5	6
78. the parking facilities of the office/ clinic.	1	2	3	4	5	6
79. the waiting room facilities of the office/ clinic.	1	2	3	4	5	6
80. the examination room of the office/ clinic.	1	2	3	4	5	6
81. being able to call someone at the office/ clinic day or night if I have problems.	1	2	3	4	5	6
82. the activities available to me while I wait to be seen by my provider.	1	2	3	4	5	6

For the following statement, please circle the number under the response which best describes how you feel about the statement. If the statement does not apply to your particular situation, circle the "9" in the column "N/A."

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree	N/A
83. the transportation provided to help me get to prenatal visits.	1	2	3	4	5	6	9

IF THIS IS YOUR FIRST PREGNANCY, SKIP TO THE NEXT PAGE.
IF YOU HAVE CHILD(REN), ANSWER THE NEXT QUESTION, #84.

84. the way my child(ren) are treated when they come with me to my prenatal visits.	1	2	3	4	5	6

PLEASE CONTINUE ON NEXT PAGE

For each statement below, please circle the number under the response which best describes how you feel about the statement. Space is provided if you would like to make comments to tell us more about your experience and prenatal care received.

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
85. Based on my experience and information that I have received during prenatal care, I am confident I will be a good mother.	1	2	3	4	5	6
Comments:						
86. I am satisfied with my overall prenatal care and would come here for another pregnancy.	1	2	3	4	5	6
Comments:						

PLEASE CONTINUE ON NEXT PAGE

For the statements below, please check the response which best describes the provider you see most often, that is, who measures your abdomen, does your pelvic exam, listens to your baby's heartbeat. If you see more than one provider, answer the following items for whom you see most often.

---

87. The provider that I see most often for my prenatal exams is a:

____doctor

____nurse midwife

____nurse practitioner

____I see both a doctor and a nurse midwife/nurse practitioner about the same number of times

____do not know

88. The provider I checked above is a:

____woman — If you answered that your provider was a woman, SKIP TO QUESTION #90.

____man — If you answered that your provider was a man, GO TO NEXT QUESTION, #89.

____ — I see both a male and a female provider, GO TO NEXT QUESTION, #89.

89. If the provider that you checked above is a man, would you say that:

____this made no difference to you

____this made some difference to you

____this bothered you a lot

PLEASE CONTINUE ON NEXT PAGE

90. There are a variety of individuals who provide information at the office/clinic you attend for your prenatal care. We want to know how helpful these persons are to you. Please read the list of persons below. Decide how helpful that person is to you. For each statement, please circle the number under the response which best describes how you feel about the person. Circle the "9" in the column marked "not applicable" only if you had no contact with that person during your pregnancy.

	Very Helpful	Helpful	Somewhat Helpful	Not at All Helpful	Not Applicable
____doctor	1	2	3	4	9
____nurse	1	2	3	4	9
____nurse midwife	1	2	3	4	9
____nurse practitioner	1	2	3	4	9
____nutritionist	1	2	3	4	9
____public health nurse	1	2	3	4	9
____social worker	1	2	3	4	9
____OTHER	1	2	3	4	

(please specify _____)

91. There are a variety of sources of information available to you during your pregnancy. We want to know how helpful these sources of information are to you. Please read each statement. Decide how helpful that source of information is to you. For each statement, please circle the number under the response which best describes how you feel about the source of information. Circle the "9" in the column marked "not applicable" only if you did not use the source of information.

	Very Helpful	Helpful	Somewhat Helpful	Not At All Helpful	Not Applicable
____pamphlets/books	1	2	3	4	9
____videotapes	1	2	3	4	9
____childbirth education classes	1	2	3	4	9
____family	1	2	3	4	9
____friends	1	2	3	4	9
____OTHER	1	2	3	4	

(please specify _____)

PLEASE CONTINUE ON NEXT PAGE

Now, we would like to know a little more about you. Please remember that all responses are confidential at no time will the researchers release any information linking you to the survey. For each statement, please check the response that best describes you. Please answer all the questions. Thank you for your help with this project.

---

92. Age _____ (in years)

93. Race (check only one)

_____ Asian
_____ Black
_____ Hispanic
_____ Native American
_____ White (Non-Hispanic)
_____ Other (Please Specify)_____

94. Mark the highest level of education you have completed (check only one):

_____ Less than high school
_____ Some high school
_____ High School Graduate/GED
_____ Some College/Technical School
_____ College Graduate
_____ Post College

95. Mark the response which currently describes your marital status (check only one):

_____ Single
_____ Divorced
_____ Married
_____ Separated
_____ Widowed
_____ Other (please specify)_____

96. Are you working outside the home?

_____ No
_____ Yes If yes, _____ Fulltime
_____ Parttime

97. What kind of insurance do you have? (Check all that apply)

_____ Medicaid
_____ Private Insurance
_____ Medicare
_____ None (Self Pay)

PLEASE CONTINUE ON NEXT PAGE

98. Counting this pregnancy, how many times have you been pregnant?_____

IF YOU ANSWERED "1", SKIP TO QUESTION #99; IF YOU ANSWERED 2 OR MORE, ANSWER QUESTIONS 98A AND 98B.

98a. If you have been pregnant more than once, did you seek prenatal care at this office/clinic for any of these pregnancies?
_____No _____Yes

98b. How many living children do you have? _____

99. How did you make your first prenatal appointment?

_____ by telephone
_____ in person
_____ other (please specify)_____

100. From the time you called or went to the office/clinic, how long did you wait for your first appointment? Identify the amount of time closest to the time you waited. Please check only one category.

_____ less than one week _____ two weeks _____ four weeks
_____ one week _____ three weeks _____ more than 4 weeks. How many___?

101. How far along in your pregnancy were you when you came for your first prenatal visit (Check only one)

_____ 1-3 months
_____ 4-6 months
_____ 7-9 months

102. How many weeks pregnant are you now?_____

103. Identify the amount of time closest to the total amount of time you usually spend at your clinic or office visit.

_____ less than 15 minutes _____ 31 minutes to 45 minutes _____ 61 minutes to 2 hours
_____ 15 minutes to 30 minutes _____ 46 minutes to 60 minutes _____ more than 2 hours

104. Check the one that best describes how many times have you been to the office/clinic for prenatal care.

_____ 1-5 times
_____ 6-10 times
_____ 11 or more times

PLEASE CONTINUE ON THE NEXT PAGE

105. Do you take prenatal (childbirth education) classes?

_____ No _____ Yes →If yes, where?
- ____ at office/clinic
- ____ from outside agency, i.e., childbirth classes given in the community
- ____ in school

106. Do you use tobacco?

_____ No _____ Yes →If yes, how many packs/day? _____

107. Do you use alcohol?

_____ No _____ Yes →If yes, what do you usually drink?
(Check all that apply)
- _____ Beer
- _____ Wine
- _____ Spirits (hard liquor)

If yes, how many alcoholic beverages do you drink per week? _____

108. Which of the following do you take regularly during your pregnancy?
(Check all that apply).

- _____ Prenatal vitamins
- _____ Iron
- _____ Indigestion medicine (i.e., Tums, Rolaids, Mylanta)
- _____ Anti-nausea medicine
- _____ Tranquilizers
- _____ Sleeping pills
- _____ Laxatives
- _____ Aspirin or other pain killers
- _____ Cold Medicine
- _____ Street/recreational drugs
- _____ Other (Please specify) _____
- _____ I have not taken any drugs or medication of any kind during this pregnancy.

YOU ARE FINISHED

PLEASE RETURN THE COMPLETED SURVEY

TO THE PERSON WHO GAVE IT TO YOU.

THANK YOU FOR YOUR PARTICIPATION!

[illegible]

The number of people in our family is:_____

Our gross family income is :

_____10,000-13,616 per year
_____13,617-18,204
_____18,205-22,792
_____22,793-27,380
_____27,381-31,968
_____31,969-36,556
_____36,557-41,144
_____41,145-45,732
_____45,733-49,999
_____50,000-59,999
_____60,000-69,999
_____70,000-79,999
_____80,000 and above

I saw a Benzie County provider for my pregnancy test and transferred to a Grand Traverse physician right away.

yes_____
no_____

I saw a Benzie County provider for my pregnancy test and transferred to a nurse midwife right away

yes_____
no_____

I will be seeing one provider for the first part of my pregnancy in Benzie County, and transfer to another provider in Grand Traverse County for my last trimester and delivery of the baby.

yes_____
no_____

I went directly to an out of county provider for my initial prenatal visit and continued with that provider, in....

Traverse City_____ Manistee_____..

Appendix D

BENZIE COUNTY WOMEN
WE WANT YOU

1. If you are pregnant and have had at least two prenatal care visits.

2. If you do not qualify for "WIC" or "MIC"

WHAT: To complete a survey about your experiences with prenatal care and participate in a focus group.

WHEN: **WEDNESDAY January 4, 1995**

TIME: 20-30 minutes to complete the Survey and 1 to 1 1/2 hours for the Focus Group.

PLACE: Manistee-Benzie Community Mental Health Counseling Center in Benzonia.

WHY: To provide information about what you feel is important, and what you expect from your prenatal care.

Investigators: Millie Omar, Ph.D., R.N.
Michigan State University
College of Nursing

Ellen Herring BSN., R.N.
Graduate Student

Bonnie Hahn Neitzke BSN.,R.N.
Graduate Student

A GIFT FOR YOU!
($25.00 for completed survey and participation in Focus Group)

IF INTERESTED CALL: Bonnie Neitzke at (616) 352-7716

Ellen Herring at (616) 352-7354

All information received is

CONFIDENTIAL

Transportation and **Child Care** will be provided if needed.

Appendix E

INFORMED CONSENT FORM

I agree to be a participate in the study "Barriers and Motivations, Expectations, and Satisfaction of Middle Income Pregnant Women in Benzie County, Michigan," with Mildred A. Omar, Ph.D., R.N., Rachel F. Schiffman, Ph.D., R.N., Ellen Herring, B.S.N., R.N., and Bonnie Neitzke, B.S.N., R.N. from the College of Nursing, Michigan State University.

I understand that I will be participating in a study about prenatal care and that I will be completing two questionnaires and a focus group discussion about my perception of prenatal care services I have received.

I understand that I will receive $25.00 for completing the questionnaires and participating in the study.

The main purpose of this study is to gain a better understanding about prenatal care. I understand that if I agree to participate I will:

1. Agree to complete the questionnaires now. The time required will take appropriately 30 minutes.

2. Agree to participate in a focus group discussion and this discussion will be tape-recorded. The time will not exceed one to one and one half hours.

3. I understand no beneficial results can be guaranteed as a result of participating in this study. I know that I am free not to participate at all or to withdraw from participation at any time, and that the decision to withdraw will have no effect on the prenatal care I receive. Should I have concerns as result of the questionnaires or discussion, I know I can talk to Mildred Omar, Bonnie Neitzke and Ellen Herring by phone at 1-800-654-8219, 352-7716 or 352-7354 respectively. I know that my responses and comments during the discussion are confidential. There will be no identification of me on the questionnaires. My responses to the questionnaires will not be part of my prenatal record. There will be no identification of me on the tape and the tape will be destroyed after being reviewed. My name will not be used in any written materials or in any presentation which may result from this study.

I certify that I have read the above consent and I understand the contents. My signature below means that I have freely agreed to participate in this project and that I consent to the focus group discussion being tape-recorded.

_____

(Date) (Signature of Participant)

_____

(Date) (Signature of Witness)

Appendix F

MICHIGAN STATE
UNIVERSITY

December 7, 1994

TO: Rachel F. Schiffman
A230 Life Sciences

RE: IRB#: 94-566
TITLE: MOTIVATION AND BARRIERS TO PRENATAL CARE FOR MIDDLE INCOME LEVEL WOMEN OF BENZIE COUNTY
REVISION REQUESTED: N/A
CATEGORY: 1-C
APPROVAL DATE: 12/07/94

The University Committee on Research Involving Human Subjects (UCRIHS) review of this project is complete. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and methods to obtain informed consent are appropriate. Therefore, the UCRIHS approved this project including any revision listed above.

RENEWAL: UCRIHS approval is valid for one calendar year, beginning with the approval date shown above. Investigators planning to continue a project beyond one year must use the green renewal form (enclosed with the original approval letter or when a project is renewed) to seek updated certification. There is a maximum of four such expedited renewals possible. Investigators wishing to continue a project beyond that time need to submit it again for complete review.

REVISIONS: UCRIHS must review any changes in procedures involving human subjects, prior to initiation of the change. If this is done at the time of renewal, please use the green renewal form. To revise an approved protocol at any other time during the year, send your written request to the UCRIHS Chair, requesting revised approval and referencing the project's IRB # and title. Include in your request a description of the change and any revised instruments, consent forms or advertisements that are applicable.

PROBLEMS/ CHANGES: Should either of the following arise during the course of the work, investigators must notify UCRIHS promptly: (1) problems (unexpected side effects, complaints, etc.) involving human subjects or (2) changes in the research environment or new information indicating greater risk to the human subjects than existed when the protocol was previously reviewed and approved.

If we can be of any future help, please do not hesitate to contact us at (517)355-2180 or FAX (517)336-1171.

Sincerely,

David E. Wright, Ph.D.
UCRIHS Chair

DEW:pjm

OFFICE OF
RESEARCH
AND
GRADUATE
STUDIES

University Committee on
Research Involving
Human Subjects
(UCRIHS)

Michigan State University
225 Administration Building
East Lansing, Michigan
48824-1046

517/355-2180
FAX 517/432-1171

MICHIGAN STATE
UNIVERSITY

July 1, 1994

TO: Mildred A. Omar
A-230 Life Sciences

RE: IRB#: 94-269
TITLE: BARRIERS, EXPECTATIONS AND SATISFACTION OF MIDDLE INCOME, PREGNANT WOMEN IN BENZIE COUNTY, MICHIGAN
REVISION REQUESTED: N/A
CATEGORY: 2-I
APPROVAL DATE: 07/01/94

The University Committee on Research Involving Human Subjects'(UCRIHS) review of this project is complete. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and methods to obtain informed consent are appropriate. Therefore, the UCRIHS approved this project including any revision listed above.

RENEWAL: UCRIHS approval is valid for one calendar year, beginning with the approval date shown above. Investigators planning to continue a project beyond one year must use the green renewal form (enclosed with the original approval letter or when a project is renewed) to seek updated certification. There is a maximum of four such expedited renewals possible. Investigators wishing to continue a project beyond that time need to submit it again for complete review.

REVISIONS: UCRIHS must review any changes in procedures involving human subjects, prior to initiation of the change. If this is done at the time of renewal, please use the green renewal form. To revise an approved protocol at any other time during the year, send your written request to the UCRIHS Chair, requesting revised approval and referencing the project's IRB # and title. Include in your request a description of the change and any revised instruments, consent forms or advertisements that are applicable.

PROBLEMS/ CHANGES: Should either of the following arise during the course of the work, investigators must notify UCRIHS promptly: (1) problems (unexpected side effects, complaints, etc.) involving human subjects or (2) changes in the research environment or new information indicating greater risk to the human subjects than existed when the protocol was previously reviewed and approved.

If we can be of any future help, please do not hesitate to contact us at (517)355-2180 or FAX (517)336-1171.

Sincerely

David E. Wright, Ph.D.
UCRIHS Chair

DEW:pjm

OFFICE OF
RESEARCH
AND
GRADUATE
STUDIES

University Committee on Research Involving Human Subjects (UCRIHS)
Michigan State University
225 Administration Building
East Lansing, Michigan
48824-1046
517/355-2180
FAX 517/336-1171