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Relationship Between Payor Source,
Expectation of and
Satisfaction with Prenatal Care

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Mary Lorraine Zuker Blackmer

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Major professor

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RELATIONSHIP BETWEEN PAYOR SOURCE, EXPECTATION OF AND SATISFACTION WITH PRENATAL CARE

by

Mary Lorraine Zuker Blackmer

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ABSTRACT

RELATIONSHIP BETWEEN PAYOR SOURCE,
EXPECTATION OF AND
SATISFACTION WITH PRENATAL CARE

By

Mary Lorraine Zuker Blackmer

This study examined the relationship between payor source and expectation of, and satisfaction with prenatal care. The sample consisted of 307 Medicaid and 213 private insured women. Women had moderate levels of expectations and were generally satisfied. Significant differences were found in four expectation dimensions and seven satisfaction dimensions. Correlations between expectations and satisfaction were weak and generally negative. Similar correlations in both groups were found between expectation of information and multiple satisfaction dimensions. The groups differed in correlations between expectation of one provider and accessible quality care with multiple satisfaction dimensions. The Nurse in Advanced Practice can use these findings to clarify expectations of prenatal care and to improve information delivery to all women. In addition, advocacy to improve system factors may affect Medicaid women's satisfaction with prenatal care.

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LIST

LIST

INTRO

CONCE

CONCE

REVIE

METH

RESU

DISC

TABLE OF CONTENTS

Tabl

SUMM

REFE

APPE

Table of Contents (Cont.)

LIST OF TABLES

LIST OF FIGURES

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Introduction

The United States spends more money per person for prenatal care than any other industrialized nation (Machala & Miner, 1991). The rank of the United States in infant mortality rates, however, remains 19th among industrialized nations (Johnson, Primas, & Coe, 1994). Infant mortality has been viewed as a primary indicator of the health status of a nation as well as of the quality and the availability of the health services that are provided to the people (Schwartz, 1990). Low birth weight has been identified as one of the major indicators for increased infant mortality and morbidity, yet 7% of the total births in the United States are documented as low birth weight deliveries (Higgins, Murray, & Williams, 1994). Early and regular prenatal care is a major factor in reducing low birth weight babies (Piper, Ray, & Griffin, 1990; York, Williams, & Munro, 1993). The importance of early prenatal care was emphasized by the Public Health Service (Fingerhut, Makuc, & Kleinman, 1987).

Variables that contribute to differences in prenatal care include accessibility, availability and the perceived desirability (Johnson et al., 1994). How a woman perceives the care she expects to receive, may influence her use of

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that service. The perception and utilization of prenatal care services seem vital to favorable pregnancy outcomes. With increasing consumer awareness of preventative health care services, it is important to understand what factors influence patients to return for further services (Hinshaw & Atwood, 1981).

With competing dollars for health care, it is vital to retain patients to survive in the medical care services arena (Ross, Frommelt, Hazelwood, & Chang, 1987). Satisfaction with care from a medical provider has been seen as an indicator in the patient returning and continuing services with that provider (Bowling, 1992; Oberst, 1984; Rooks, Weatherby, & Ernst, 1992). Thus, increasing satisfaction and compliance with regular care (Weiss, 1988) would affect the outcome, and in turn, influence the level of satisfaction for future encounters with health care (Bowling, 1992). By increasing satisfaction with prenatal care services it would be hoped to improve regular prenatal care services and improve pregnancy outcomes.

Low income women were more likely to have a higher rate of poor infant outcomes (Hansell, 1991; Schwartz, 1990; Scupholme, Robertson, & Kamons, 1991). Many authors believe that a lack of insurance or finances was a major barrier in regards to delayed or no prenatal care (Braveman, Bennett, Lewis, Egerter, & Showstack, 1993; Hansell, 1991). In an effort to increase the accessibility of prenatal care, the

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United States Congress expanded the Medicaid guidelines to include a broader range of coverage to low socioeconomic pregnant women (Mawn & Bradley, 1993; Piper et al., 1990) for prenatal care expenses. But, many prenatal care providers found malpractice too costly or Medicaid reimbursement less than private insurance, so many providers limited their Medicaid clientele, refused Medicaid recipients or stopped obstetric care (Curry, 1990). This left private insured women more "desirable" to have in a private practice as patients (Inglis, 1991). Women, receiving Medicaid were often left to utilize health departments or regional clinics. Thus, the gold standard of receiving prenatal care at a private obstetricians office is not available to many Medicaid insured pregnant women.

Even with Medicaid coverage expansion, other risk factors must influence the lack of utilization of services (Haas, Udvarhelyi, & Epstein, 1993; Piper et al., 1990). A disparity must exist between some aspect of the prenatal care that low socioeconomic women, represented as Medicaid recipients, perceive differently than middle or high economic women.

Perhaps something in the expectations and satisfaction of the care these women receive is an important factor. Many people look unfavorably upon recipients of services from the Department of Social Services. Perhaps this is perceived by the women. Sociodemographic characteristics

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should not theoretically alter the quality of the medical care services provided to a patient (Hansell, 1991). Yet, our health care delivery system is a subsystem of our society and incorporates many unfavorable biases.

With the documentation that early and regular prenatal care saves infants' lives, it is imperative to understand those factors that influence women to delay or not obtain prenatal care (Lia-Hoagberg et al., 1990). Multiple factors have been speculated but as a nation with offensively high infant mortality, the importance of decreasing the rate is vital to our health care system.

Statement of the Problem

The purpose of this study was to see if a difference existed between women's payor source of prenatal care, and the expectation of prenatal care and the level of satisfaction with prenatal care.

The research questions were:

(1) Is there a difference in expectations of prenatal care between women who have Medicaid and women who have private insurance?

(2) Is there a difference in satisfaction with prenatal care between women who have Medicaid and women who have private insurance?

(3) What is the relationship between expectation of and satisfaction with prenatal care and payor source?

This information should be useful to the nurse in advanced practice in the delivery of prenatal care services. If a relationship exists between expectations and level of satisfaction, perhaps specific characteristics of clients' expectations could be evaluated and used in marketing or in education to improve expectations and then perhaps improve satisfaction. If expectations differ between Medicaid women and privately insured women, specific interventions could be implemented to meet both groups' needs. If expectations are not met during prenatal care it is likely that women will be less than satisfied. If women with a specific payor source are less satisfied with the care they receive, it would be appropriate and necessary to adapt services and interventions to increase the satisfaction and thus, hope to improve early and regular prenatal care. Improving prenatal care services could ultimately improve infant mortality and morbidity within the United States.

Conceptual Definitions of Variables

Prenatal Care Expectation

Expectation is a concept that is somewhat subjective. Expectation has been defined by Greeneich (1993) as responses which are situation specific, influenced by environmental factors, past experience and specific attributes of the situation. Expectations are unique for each individual.

Oberst (1984) explains expectations as a combination of a variety of characteristics, attitudes, prior experiences, and knowledge which influences what the patient perceives in a given situation. This impacts on the level of satisfaction. Ross and colleagues (1987) reviewed the literature and found that many of the definitions for expectations were given specifically in relationship to services or treatment outcomes. Expectation is referred to as a global concept, yet must be individualized to what the patient expects will happen within a given situation.

Expectation of prenatal care is that care which is anticipated to be received during periodic visits to an obstetric health care provider during a pregnancy, as recommended by the American College of Obstetricians and Gynecologists (Inglis, 1991). Omar and Schiffman (1992) noted these expectations include expectations about prenatal clinic/office staff and provider care and prenatal clinic/office services, which may include the number and type of providers, resource services, information given, availability of personalized care and the accessibility of quality care.

For this study, expectation of prenatal care was conceptually defined as adapted from Omar and Schiffman's (1992) definition, as the pregnant woman's expectations of the prenatal care and services she anticipates receiving throughout her pregnancy. These expectations include

expectations about prenatal clinic/office staff and provider care and prenatal clinic/office services, which include the number of providers, resource services, information given, availability of personalized care and the accessibility of quality care.

Prenatal Care Satisfaction

The literature refers to prenatal care satisfaction from a variety of perspectives. The literature presents satisfaction as not easily defined. Satisfaction is a multidimensional construct and cannot be validly assessed on a global basis (Oberst, 1984; Seguin, Therrien, Champagne, & Larouche, 1989). Different cultures attach different meanings to health care and the services that they receive. It was noted that cultural beliefs along with lifestyle and psychologic attributes can influence a women's attitude toward prenatal care (York et al., 1993). Further, since prenatal care is predominantly a women's issue, many cultures fail to justify that women have a valid opinion of the services that were received.

In the United States health care services for women have gained increased recognition and represent a large portion of the services that are delivered within hospitals. The patient's perception of the services received is repeatedly seen in the literature. Hinshaw and Atwood (1981) define patient satisfaction as the patient's opinion of the care received from nursing staff.

LaMonica, Oberst, Madea, and Wolf (1986) and Risser (1975) while developing patient satisfaction scales defined satisfaction as "the degree of congruence between patients' expectations of nursing care and their perceptions of care actually received". Satisfaction is seen as a subjective concept.

Satisfaction is identified by Higgins and colleagues (1994) as complex and multidimensional with psychosocial dimensions, a perception. Thus, the difference between perception of quality of care and the satisfaction with care are two different components.

Prenatal care satisfaction was defined by Omar and Schiffman (1992) as a positive or negative feeling or attitude that a pregnant woman formed about prenatal care. Factors these authors identified that influenced satisfaction were prenatal clinic/office providers, clinic/office staff, and clinic/office service, which included the caring relationship, information provided, time waiting, facilities, scheduling ease, and consistency of provider seen.

Satisfaction with prenatal care for this study was conceptualized as adapted from Omar and Schiffman (1992), as the pregnant woman's positive or negative attitude/feelings towards prenatal care and include positive or negative attitude/feelings about prenatal clinic/office providers, clinic/office staff, and clinic/office service, which

included the caring relationship, information provided, time, facilities, scheduling ease, and consistency of one provider.

Payor Source

Within the literature reviewed, only a loose conceptual definition of payor source was identified. The method of payment for medical bills was used to define what insurance status, or payor source, meant (Fingerhut et al., 1987). Further examples were given as to different types of payor source: private health insurance, public assistance, including Medicaid, state/local government assistance or no insurance. One study alluded to "health insurance unit", which is presented from the health insurance industry as the members that are receiving the insurance coverage under one policy (Long, 1987), and generally seen as a benefit of employment.

A complex collection of payor sources are available in the United States. Schwartz (1990) defined a variety of pay sources: private or commercial insurance, Health Maintenance Organization (HMO), or military government sponsored. There is also Medicaid which has state and federal funding and guidelines. The government, in addition, has special federal and/or state funded programs with a sliding fee program for those not eligible for that state's Medicaid program. Further, self-pay as a payor

source, includes individuals without any outside source of assistance to pay for health care services.

Private insurance are generally provided by an employer or purchased by an individual through an employer, group or as an individual. Private insurance are offered in a wide variety of packages which cover different services at different reimbursement rates (Long, 1987). Private insurance, commercial insurance, or HMO (health maintenances organizations) are generally insuring the working, middle to upper class populations. Since having insurance affords women the opportunity to access private obstetric care, this often segregates, by payor source, where prenatal care can be obtained. Those women without private insurance, and eligible for Medicaid generally must seek services for prenatal care in public clinics.

Medicaid programs are designed for those who are at, or below, an individual state's Department of Social Services (DSS) program guidelines, thus, individuals or families with lower income are the recipients. Low income is defined by the annually adjusted federal poverty income guidelines (Piper et al., 1990). Depending upon the state in which the recipient lives, specific program guidelines may vary. In 1990 the federal government required states to provide Medicaid coverage to women at or below 133% of the poverty level, and allowed for the extension of up to 185% of the poverty level (Haas, Udvarhelyi, Morris, & Epstein, 1993).

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In Michigan the expanded DSS program for women at or below 185% of poverty is referred to as MICH-Care. Thus, Medicaid is federal and state funded insurance for individuals and families at or below the income guideline for that state's program, generally a representation of the lower socioeconomic population.

For this study payor source was defined as the primary source of payment for prenatal care, direct or indirect, and specifically for this study, Medicaid or private insurance.

Conceptual Framework

The theoretical model used as the basis for this study was King's theory and the model of interacting systems. This nursing theory evolved out of general system theory combined with knowledge and emphasis on human interaction (Hanchett, 1990). The dynamic interacting human system is the main focus of King's theory. She identifies persons, objects as well as events as interrelated phenomena (Hanchett, 1990), all which may influence a pregnant woman's interactions towards increasing perceptions, expectations, communication and satisfaction with a prenatal care provider and herself.

King identifies three dynamic systems that are key to her theory. The three systems, personal or individuals, interpersonal or groups, social or society, interact constantly towards a level of health (King, 1989). Each

system is unique, yet in constant state of interaction and transaction with the other systems.

Some of the explicit assumptions within King's model are that the central focus of nursing is the interaction of human beings and environment, with the goal being health for human beings; the interaction process is influenced by perceptions/expectations, goals, needs, and values of both the client and the nurse (Meleis, 1991). The assumptions emphasize the complexity of the goal of health for the nurse and client as well as how these interactions play a vital role in the goal of health. The basic concept in the discipline of nursing, as a profession, is health (King, 1989). There are many factors that may and can influence an individual's goal for a state of health. One of the most salient concepts noted for all three systems is the concept of communication (Hanchett, 1990) within the King model. It is the nurse's intent to utilize skills in communication to assist the individual with any deficits that may exist towards reaching the goal.

Figure 1 depicts how the three open systems each have permeable boundaries which allow free interactions with one or both systems at any time. Each system maintains its own integrity, yet each system is in constant interaction and thus, change, never returning to an original state. The broken lines depict this influx. The arrows direct the easy availability of exchange from one system to another.

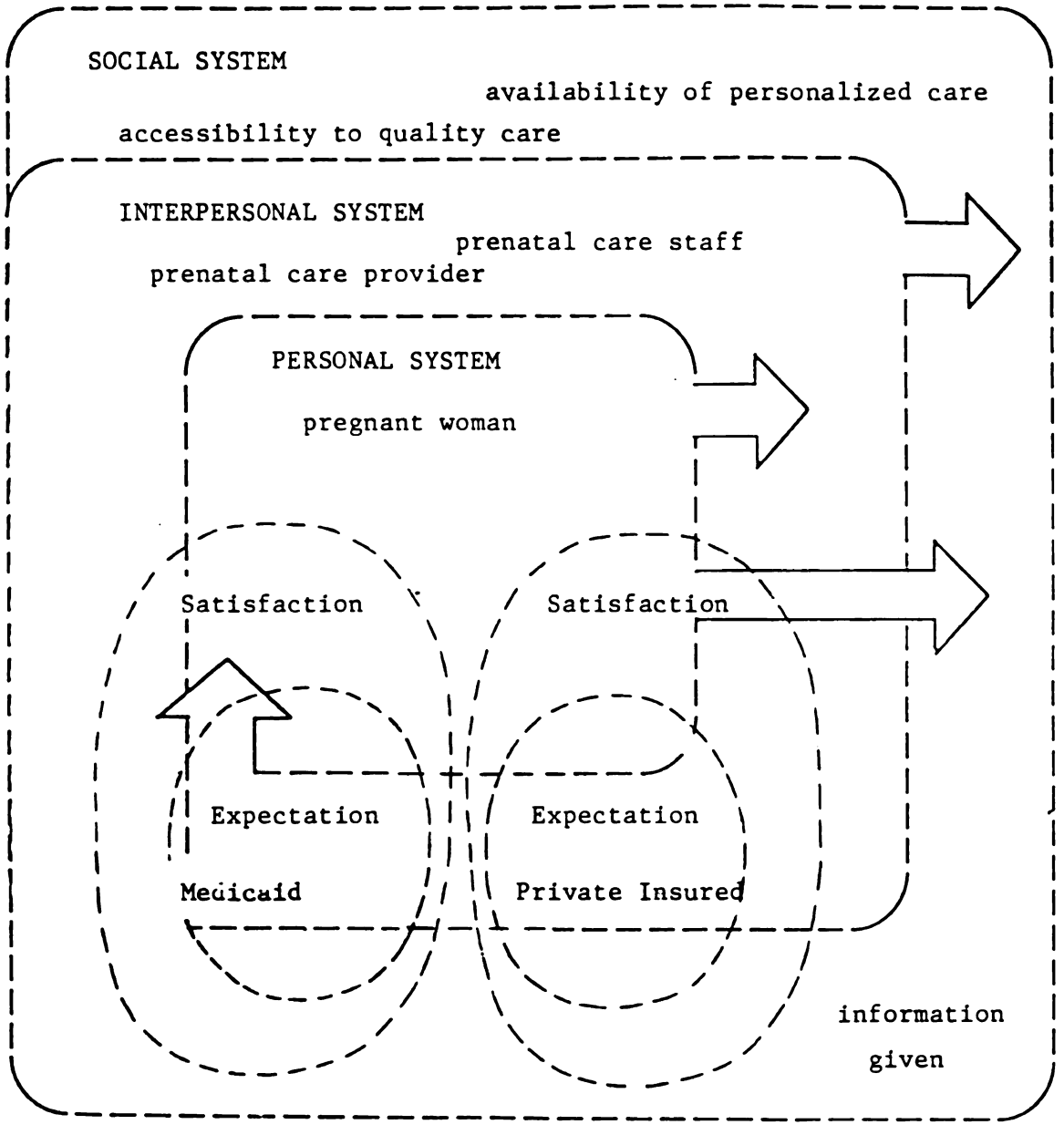

Figure 1. Conceptual framework adapted from King (King, 1971, p 6).

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The large segmented ovals (Figure 1) reflect the different payor sources, Medicaid and private insured, that a woman might have for her prenatal care. Because these two payor groups represent different socioeconomic groups, we cannot expect them to have identical components within the personal system. These populations of women typically have different experiences which influence their personal systems. The ovals have broken lines to depict the interactions that take place between the three systems.

Expectation of prenatal care is unique for each woman. Broken lines depict the many influences by the systems which impact on the pregnant woman forming these unique expectations (Figure 1). Although unique, differences in socioeconomic status or insurance source, affords women different interactions with their systems and impacts their perceptions of prenatal care differently. Thus, expectations are depicted as small circles within each of the larger satisfaction ovals depicting different payor sources.

Both payor sources interact with each of the three systems. Payor sources are rooted in the social system through eligibility criteria and legislation. Yet, the meaning of that payor source is influenced from other factors of the pregnant woman's unique background. The interpersonal system is included to show the interaction with accessibility, access and services received with

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prenatal care. The pregnant woman, the personal system, interprets what her payor source means to her, and how that influences her expectations and eventually may impact on her satisfaction with her prenatal care. She may perceive specific social stigma as a result of the payor source of which she participates. She may see that one payor source holds higher social status or has advantages that another payor source may not. And thus, depending on payor source, expectations and satisfaction may be different.

The ovals (Figure 1) also have a permeable membrane, maintaining dynamic interactions with all three systems. Satisfaction with prenatal care in influenced by the interactions she encounters within the different systems. Expectations of care begin with information and interactions with the social system subgroups. It is further impacted by the interpersonal system, relationships with family, friends, nurse in advanced practice (APN) as prenatal care provider and prenatal care staff. Expectations and satisfaction also intersect with the pregnant woman's personal system. For her attitudes and beliefs combined with her expectations are what will influence her satisfaction with her care.

Each system is separate and unique, yet influences the other. The social system encompasses the family systems, friends, neighbors, religious affiliation systems, work place systems, educational system, health care services, as

well as the cultural, socioeconomic and demographic influences. Any influence that is within her social network and that interacts to help her form ideas and feeling/attitudes towards an issue is included, including prenatal care services. This interactions between herself and her social system influences the expectations towards what prenatal care may or may not include.

The interpersonal system describes the ever changing interactions that an individual has within a dyad, triad or group (Husband, 1988). For the pregnant woman this would mean the father of the baby, if he was involved, or any other person that the pregnant women has a relationship with, both favorable or unfavorable. Members of her social system may or may not be included in her interpersonal system. The nurse in advanced practice, as prenatal care provider would hopefully transfer from the social system over to the interpersonal system as a relationship is established. Yet, how the provider and staff communicates may greatly influence the relationship as well at the satisfaction with the prenatal care services. The woman's payor source for prenatal care also interacts highly within this system. Depending upon her source of coverage, she needs to interact with different representatives of that system. Interactions may be positive or negative. The woman's perception may be influenced differently if enrollment is done through employment or through a public

agency. If enrollment is difficult and cumbersome, especially if she is poorly educated or in a rural area (McClanahan, 1992), interpersonal systems regarding payor source influence her expectation and satisfaction. Attitudes and beliefs of other members (neighbors, friends and family) within her interpersonal system regarding her source of payment for care can greatly influence the pregnant woman's expectations and satisfaction with her prenatal care experience and service.

The personal system is an individual system that is in constant interaction with the adjacent systems. Each system contributes, exchanges and influences the attitudes and feelings that a pregnant woman may form. The pregnant woman's perceptions, expectations, and satisfaction with her pregnancy are all characteristics of her personal system. Because of the constant state of influx both in and out of the personal system, the exchange with the members of the other systems have opportunity to greatly influence the pregnant woman's expectations and satisfaction with her prenatal care.

The nurse in advanced practice, as a human being, is a personal system as well as the pregnant woman. Thus, two personal systems, or a dyad are interacting. The nurse in advanced practice acts as the interpersonal system for the pregnant woman. The personal system as well as the

interpersonal system are both influenced by the social systems which maintain constant interaction.

Review of the Literature

Literature for studies related specifically to the expectation of and satisfaction with prenatal care by women receiving Medicaid or private insurance is very limited. Much of the literature surrounding prenatal care looked at adequate versus inadequate prenatal care (Leatherman, Blackburn, & Davidhizar, 1990; York et al., 1993), or barriers to receiving adequate prenatal care (Curry, 1989; Poland, Ager, & Olson, 1987) but not specifically expectation of and satisfaction with prenatal care. Another topic seen in the literature review was pregnancy outcome (Petitti, Hiatt, Chin, & Croughan-Minihane, 1991; Zlotnick & Gould, 1993). Studies were identified in the literature that dealt with the concepts of interest within this study individually.

Payor Source and Prenatal Care

Numerous articles in the literature address payor source within the context of a study. Unfortunately, none were found that specifically looked at payor sources and patient satisfaction with prenatal care.

Oberg, Lia-Hoagberg, Hodkinson, Skovholt, and Vanman (1990) looked at prenatal care comparisons between payor source. They found that privately insured women (82% of the 50 insured women in the study) were more likely to receive

adequate prenatal care than women with no insurance (59% of the 49 women without insurance), and women with Medicaid (50% of the 50 Medicaid recipients). Multiple factors were investigated as to why the disparity between groups. Ambivalence to being pregnant, unplanned pregnancy, consideration of termination of pregnancy, interruption of insurance coverage, and feelings of depression were some of their findings. A total of 19% of the women changed insurance coverage during the pregnancy, with most going from uninsured to Medicaid. If women with Medicaid continuously receive less than adequate prenatal care, more indepth research needs to be done to attempt to find these barriers and implement interventions for positive changes.

The expansion of Medicaid coverage was reported to have increased minority access to maternal health care but, women with private insurance are still reported more likely to receive adequate perinatal health care (Inglis, 1991). Satisfaction of prenatal care services was not evaluated by payor source. Again, support is presented for the importance of looking at differences between women receiving Medicaid and women with private insurance that influence prenatal care.

Higgins et al. (1994) found significantly more women without insurance had inadequate prenatal care than those with insurance or those with Medicaid. Lower socioeconomic status was associated with inadequate care and with women

starting care on the average, in the seventh month. Further, Higgins and colleagues (1994) found women with Medicaid, representing lower socioeconomic status, were poorly represented in the sample and collapsed into women with private insurance for analysis. Overall 53% of the women in the sample had no insurance, yet 42.5% had family incomes of less that $10,000 per year. The author of the present study wonders if these women were not eligible within that state, unaware of services, or if this was a true representation of low income population in that community.

Overall, these studies revealed that low income women, generally represented by Medicaid, were in the group that received the greatest amount of inadequate care. Studies suggest that there are a variety of variables that contribute to why low income women receive less care. Little is identified however, as to if expectations of their care and satisfaction with their prenatal care is influenced by payor source.

Expectations of Prenatal Care

Few studies dealing with the concept of expectation were found in the literature. Studies using the concept of perception, views and desired information were found, but few linked directly with patient satisfaction.

A broad study which looked at educational expectations was done between pregnant clients in a private clinic

(n=135) and a public clinic (n=250) to determine patient perception of health care topics compared with health care providers (Freda, Andersen, Damus, & Merkatz, 1993). The findings revealed that 25% of the time a significant difference existed in health care topics between what the prenatal clients wanted to know and what the providers were offering. In addition, there was multiple significant differences between the two groups' interests in prenatal care education. If a pregnant woman expects information and does not receive it, her satisfaction with the prenatal services may be altered negatively. Expectations are thus an important factor that providers of service assume, rather than evaluate.

Ross et al. (1987) in a review of 21 studies related to expectations in patient satisfaction with general medical care found a difference in definitions of expectation and satisfaction within the instruments that were used to evaluate satisfaction. However, 17 of the 21 studies "supported an expectation-satisfaction relationship" (Ross et al., 1987, p. 22). Even though the definitions were worded slightly different, it was found that expectations of medical service were linked to patient satisfaction levels.

Satisfaction with Prenatal Care

For many years nursing researchers have been interested in what characteristics are present that predict patient satisfaction (Greeneich, 1993). Much of the research done

has looked at quantitative and not qualitative data. Few studies were found looking specifically at satisfaction with prenatal care.

There are a multitude of factors that affect patient satisfaction with medical care in general in the literature. In a London study (n=100) (O'Brien & Smith, 1981), a variable found to influence a patient's satisfaction or dissatisfaction with prenatal care was continuity in care. Seeing only one or two professional providers was an important factor in satisfaction with care. The relationship that developed with the provider seems to have been an important factor of overall prenatal care satisfaction.

Hall and Dornan (1990) using meta-analysis examined socioeconomic characteristics and patient satisfaction with medical care. Satisfaction was found to be significant or near significant in association with "being older, having higher social status, being married" (Hall & Dornan, 1990, p. 811). If one correlates higher social status with having private insurance, this would reveal higher social status members are more satisfied with medical care. Specifics of what all services rendered under medical care was unclear as to if prenatal care was included.

A Montreal study (Seguin et al., 1989) was concerned with the "halo effect" of trying to evaluate satisfaction with perinatal care. Unfortunately, none of the subscales

looked at prenatal care satisfaction specifically. In general, satisfaction was found to be correlated with participation with decision making during vaginal delivery and even higher with cesarean deliveries. If this level of satisfaction could be retrospectively correlated, women who are more involved with prenatal care would be more satisfied.

Sullivan and Beeman (1982) also addressed the complexity of evaluating satisfaction of prenatal, labor and delivery care. They were cognizant that satisfaction is related to several factors: perception of caretakers, technical competence, emotional support and communication. The study found that satisfaction with prenatal care decreased for all women with decreasing amounts of time spent discussing problems and when less empathy was shown. In addition, Sullivan and Beeman (1982) found that the experience is the important component with maternity care, not the pregnancy outcome. Thus, the experience has great power on the level of satisfaction a woman might express regarding prenatal care.

Satisfaction was looked at in conjunction with self-esteem and social support regarding adequate or inadequate prenatal care (Higgins et al., 1994). They used multiple questionnaires to evaluate satisfaction. The authors found that women who did have adequate prenatal care, among other factors, were more satisfied with their prenatal care and

had higher self-esteem. The retrospective design limited some of the findings of the study. Interestingly the authors propose that "perhaps women receiving adequate prenatal care expected to be satisfied" (Higgins et al., 1994, p. 31) but that additional research is indicated to help explain what factors influence satisfaction with prenatal care.

Multiple variables have been demonstrated to influence prenatal care satisfaction. Adequacy of care is a common thread. The lack of adequacy of care by low income women, or Medicaid recipients (Affonso, Mayberry, Graham, Shibuya, & Kunimoto, 1992; Braveman et al., 1993; Buescher & Ward, 1992) has been reported. Further, it has been reported that higher social status women receive more adequate care (Fingerhut et al., 1987) and are more satisfied (Hall & Dornan, 1990).

An additional variable that is common is the relationship with the provider as an important factor in prenatal care satisfaction (Bowling, 1992; Oberst, 1984). Women expressed increased satisfaction with providers who spent more time with them and allowed them to be more involved, and less satisfaction with providers who were not empathic and did not listen to their concerns (Higgins et al., 1994; Robbins et al., 1993). Thus, the relationship with the provider of prenatal care seems to be an important aspect of many women's level of satisfaction with that care.

Summary of Literature

Expectations of and satisfaction with prenatal care as they relate to payor source are poorly represented in the literature. Expectation of prenatal care is so poorly represented, that it makes one consider that perhaps it is taken for granted that all pregnant women should know what to expect with prenatal care services or sorely neglected within our high tech society as to the need to know basic information.

Many factors were noted in the literature that influence satisfaction with prenatal care. No one factor was seen as a common thread throughout all of the literature. Even though women who received inadequate care were less satisfied, the literature lacked an explanation as to if women received less care because they were less satisfied or if other variables were present.

Lower socioeconomic women, represented by recipients of Medicaid, continue to have the greatest percent of poor pregnancy outcomes. Large gaps occur in the literature to clearly define specific details as to what low income women feel interfere with regular prenatal care services, and how this may contribute to poor outcomes. This gap in the literature only lends further to the importance of this study. The link between expectation of and satisfaction with prenatal care as it relates to payor source seems a logical and necessary nursing research component to explore,

with hope to improve early and regular prenatal care by lower socioeconomic women.

In summary of the literature, a multitude of research has been done to support what medical factors influence prenatal care. Yet, no studies were located specific to what women expect of their prenatal care, how satisfied they are with the care they receive, and how this is influenced by the payor source for their prenatal care

Methods

Research Design

This study was a retrospective descriptive correlational design using data previously collected by Omar and Schiffman (1994) using the Patient Satisfaction with Prenatal Care Instrument (Appendix A). The original study done by Omar and Schiffman (1994) looked at pregnant women's perception of expectations about prenatal care and satisfaction with prenatal care services, with surveys distributed to subjects at multiple sites between November, 1992, and February, 1994. Subjects were recruited from childbirth education classes, prenatal care provider offices, and from a public health department in southern Michigan, and from a public health department in Idaho. The instrument, the Patient Satisfaction with Prenatal Care (PSPC) was developed and revised by Omar and Schiffman (1992). The procedures for the primary study are provided in Appendix B.

Sample

For this study, the sample was comprised of 520 pregnant women in their third trimester who completed the Patient Satisfaction with Prenatal Care instrument in the original study (Omar & Schiffman, 1994). Only women who indicated they had Medicaid insurance or private insurance for payor source for their prenatal care were included. Sixty seven women were excluded from the sample of the original study because they had no insurance, were on MICH-Care, or their insurance source was omitted. The sample had 307 women receiving Medicaid and 213 women who were privately insured.

Operational Definitions of the Variables

The primary variables utilized within this study were prenatal care expectations, prenatal care satisfaction and payor source for prenatal care services.

Prenatal Care Expectations

Prenatal Care Expectations (PNCE) were defined as the total mean scores of the expectations subscales dimensions on the PSPC (Patient Satisfaction with Prenatal Care) instrument as noted in Appendix A (Omar & Schiffman, 1994). The PNCE scale in the original instrument assessed what the pregnant woman expected from her prenatal care. The scale was developed looking at five dimensions that were operationally defined as well. The first dimension, Expectations of One Provider, referred to the patient

expectation to receive consistent prenatal care and delivery from one provider (mean score for items 11 and 12). Second, Expectations of Other Service, referred to expected services offered by the nutritionist, social worker or public health nurse (mean score for items 19, 20, and 21). Third, Expectations of Information, referred to the amount of prenatal care the woman expected to receive (mean score for items 9 and 10). Fourth, Expectations of Personalized Care, referred to the expectations about individualized attention (mean score for items 13, 14 and 18). The fifth dimension, Expectations of Accessible Quality Care, referred to the perceived expectation of having difficulty obtaining prenatal care and the quality of that care, this item was reversed scored. This last dimension was reflected as a mean score for items 6, 8 and 16. In addition, the total of all items comprised the mean score that was utilized for the Prenatal Care Expectations total score (PNCE). The lower the score the more the pregnant women expected from that specific aspect of her prenatal care. The higher the score, the less the pregnant women expected from that aspect of her prenatal care.

Prenatal Care Satisfaction

Prenatal Care Satisfaction (PNCS) was defined by the scores of items 25 through 86 on the Patient Satisfaction with Prenatal Care (PSPC) instrument (Omar & Schiffman, 1992). There were three subscales in the original study:

Satisfaction with Provider, Satisfaction with Staff, and Satisfaction with Prenatal Care Services or System. Each subscale subsequently had concepts which were operationalized. In this study, these three subscales were used to analyze satisfaction with prenatal care.

Prenatal Care Satisfaction with Provider. Prenatal care satisfaction with provider was defined as satisfaction with the doctor, nurse midwife, or the nurse practitioner who did most of the care the women received, reflected as Prenatal Care Satisfaction/Provider (PNCS1). Dimensions included Provider Caring, which reflected how the women felt they were treated by the provider (mean of items 29, 30, 32, 33, 42, 43 and 44). Provider Information reflected the explanations that the women were given by the provider regarding different aspects about their pregnancy (mean score of items 25, 26, 27, 39 and 40). The total of the Provider Caring and Provider Information dimension scales comprised the mean score for the Prenatal Care Satisfaction/Provider (PNCS1). The lower the score the more the pregnant women were satisfied with prenatal care regarding their provider. The higher the score, the less the pregnant women were satisfied regarding the provider of prenatal care.

Prenatal Care Satisfaction with Staff. The second subscale, Satisfaction with Staff, was defined as satisfaction with the nurse, receptionist, aide,

nutritionist, social worker, lab technician and other people the pregnant women may come in contact with in the office or clinic, reflected as Prenatal Care Satisfaction/Staff (PNCS2). The dimension concepts defined were Staff Caring - the way that the women perceived they were treated by the staff at the office or clinic (mean score of items 50, 51, 52, 53, 54 and 60), and Staff Information - the explanations that the staff gave the women regarding aspects of the pregnancy (mean score of items 48, 49 and 58). The total of the Satisfaction with Staff dimension scales comprised the mean score for the Prenatal Care Satisfaction/Staff (PNCS2). The lower the score the more the pregnant women were satisfied with prenatal care regarding the staff. The higher the score, the less the pregnant women were satisfied regarding the staff with prenatal care.

Prenatal Care Satisfaction with System. The third satisfaction scale, Prenatal Care Satisfaction with System (PNCS3), contained four dimensions. Waiting time referred to the amount of time women waited to be seen and the total amount of time spent at the office or clinic (mean score of items 70 and 71). Access was reflected as the scheduling of prenatal care appointments (mean score of items 68 and 69). The Facilities referred to the waiting room, examination, rooms and facility parking (mean score of items 78, 79 and 80). Organization looked at aspects of consistency of provider and the choice the women had in picking a provider

(mean score of items 72, 73 and 74). The total of the mean scores of the dimensions of Satisfaction with System scales comprised the mean score for the Prenatal Care Satisfaction/System (PNCS3). The lower the score the more the pregnant women were satisfied with prenatal care regarding the services and system. The higher the score, the less the pregnant women were satisfied regarding the services and the system delivering her prenatal care.

Prenatal Care Payor Source. Payor source was obtained from the demographic information section, question number 97. Choices given to the women were Medicaid, Private Insurance, MICH-Care or None (self-pay). Those included in this study for payor source were Medicaid and Private Insurance. Those who did not have insurance, noted as none or self pay, those insured by MICH-Care, or those who omitted completion of item 97 were excluded.

Instrumentation

The Patient Satisfaction with Prenatal Care Instrument (PSPC) was developed and revised by Omar and Schiffman (1992) as an instrument to measure patient expectations of and satisfaction with prenatal care services. The instrument was developed after review of pertinent literature and through three phases. These included focus groups to obtain basic items, pilot testing of the instrument for validity and reliability, and revisions and distribution of the survey for the data set to be used for

this study. The instrument has a 108 items with five scales. The first scale has five items looking at motivation to seek prenatal care. The second scale is the expectations of prenatal care, has five dimensions and 19 items. The third scale containing 23 items, was the pregnant woman's satisfaction with the primary provider of her prenatal care with two dimensions. The fourth scale reflected satisfaction with the staff, had two dimensions and contained 17 items. The fifth scale was satisfaction with the prenatal care system, had four dimensions and contained 20 items. Additional questions were asked on the instrument to allow for subject's comments and collection of subject specific data.

A six point Likert scale was used for each scale on the PSPC instruments. Responses ranged from 1 (strongly agree) to 6 (strongly disagree). Thus, the lower the score on each item and thus for each scale the higher the motivation, higher expectations or higher satisfaction with prenatal care was reflected. The higher the score, the lower the motivation, lower expectations or lower satisfaction with prenatal care was seen.

For this study not all instrument items were used or operationalized. Only those items specifically evaluating patient level of expectation or satisfaction with prenatal care as determined by factor analysis (Omar & Schiffman,

1994) or questions regarding demographic information were included in this study.

For this study the scales used were prenatal care expectations (PNCE) and the dimensions, prenatal care satisfaction/provider (PNCS1) and dimensions, prenatal care satisfaction/staff (PNCS2) and dimensions, and prenatal care satisfaction/system (PNCS3) and dimensions. In addition, information regarding demographics including payor source were used to answer the research question and to obtain descriptive information regarding the sample.

Cronhach's alpha coefficient of internal consistency were reported for each dimension of each scale, as well as the subscale totals, as used in this study (see Table 1). Most values for dimensions and total scales were acceptable. The reliability for the expectation subscale was .72, however the Accessible Quality Care was only .48 for internal consistency, which may result in concern in interpreting results using this instrument. The alpha for the three satisfaction subscales ranged from .85 to .93 (Omar & Schiffman, 1994).

Data Analysis

The demographics of the subjects for this study were described using frequencies, means, ranges, and standard deviations as appropriate. The onset of prenatal care and number of prenatal care visits were also calculated. For Research Questions 1 and 2, looking at differences in

Table 1

Alpha Reliability of the PSPCII Instrument: Expectation and Satisfaction Dimensions

Dimension	Alpha
Expectations	
One Provider	.74
Other Services	.80
Provider Information	.71
Personalized Care	.62
Accessible Quality Care	.48
TOTAL EXPECTATION	.72
Satisfaction	
Provider Caring Relationship	.91
Provider Information	.90
TOTAL PROVIDER SATISFACTION	.93
Staff Caring Relationship	.94
Staff Information	.82
TOTAL STAFF SATISFACTION	.93
Time	.90
Access	.78
Facilities	.78
Organization	.78
TOTAL SYSTEM SATISFACTION	.85

expectations and differences in satisfaction with prenatal care, by women with Medicaid or private insurance, descriptive statistics, and ANOVA were used. Research Question 3 was evaluated using Pearson correlation coefficients to measure for the relationship between expectation and satisfaction of prenatal care by payor source. The level of significance was established at .05. The SPSS statistical software was used for analysis of data.

Protection of Human Subjects

The original study used volunteer subjects who had opportunity to have all questions regarding the study answered by a trained data collector. A survey was the only form of data collected. No potentially dangerous or adverse reaction to participation was known or could have been anticipated. The original study (Omar & Schiffman, 1994) was approved by Michigan State University's, University Committee on Research Involving Human Subjects (U.C.R.I.H.S.). The data utilized for this study has been maintained on a disk by the principal co-investigators (Omar & Schiffman, 1994). The survey did not request the name of the subject. The subjects were entered by identification numbers only and did not include any subject identifiers. Thus, no link with the name of any subjects could be made. Approval to conduct the secondary analysis was obtained from the Michigan State University Committee for Research

Involving Human Subjects (U.C.R.I.H.S.) prior to the initiation of data analysis (Appendix C).

Research Assumptions

It was assumed that the prenatal care, professional staff, support staff and the environment at each data collection site were comparable in quality of service and that data was collected accurately. It was assumed that data collectors maintained interrater reliability with their interactions with subjects, and that every potential subject was given opportunity to participate. It was further assumed that all subjects understood the written instructions, the survey questions or had sufficient explanation by the data collector so that each question was answered honestly by the participant. In addition, it was assumed that data were entered accurately.

Research Limitations

Some of the limitations of the study were that the convenience sampling did not allow for generalizability to all pregnant women, and the nonexperimental design does not allow for causality. The variability in the number of prenatal visits that subjects had could not be controlled for as to how this affected their expectations and satisfaction. In addition, considerable variability may exist within women's expectations and satisfaction with prenatal care that are linked to the length of time that the woman has been involved with a specific payor source.

The study did not allow for changes in insurance source that may have occurred though the pregnancy, looking instead at the insurance source at the time the survey was completed. Further, Medicaid insurance source is utilized within this study to represent those women of lower socioeconomic status, yet variability in eligibility requirements are known to exist in different states.

It is well supported in the literature that multiple factors also may influence prenatal care. This study did not take into account other such factors, such as barriers to care or pregnancy outcomes which also may influence prenatal care satisfaction or expectations. Women who may have been so dissatisfied with care potentially could have switched providers or stopped prenatal care services altogether, and thus, would not have been able to be included within the study. This may then bias the sample by not including those at the extreme of dissatisfaction with care. In addition, expectations were being evaluated retrospectively in this study. Thus, throughout the course of services and interactions received during prenatal care, the perception of expectations may have been influenced.

Results

Description of Sample

The sample consisted of 520 women. Of these, 307 (59%) women received Medicaid and 213 (41%) women received private insurance for their prenatal care services (Table 2).

Table 2

Frequencies of Sample Demographic Variables by Payor Source

Demographic Variable	Medicaid n (%)	Private n (%)
Race		
White	201 (66%)	184 (87%)
Black	57 (19%)	10 (5%)
Hispanic	29 (9%)	11 (5%)
Other	18 (6%)	7 (3%)
X^2 (3, N = 517) = 30.93, p ≤ .001		
Marital Status:		
Married	112 (37%)	182 (86%)
Single	155 (50%)	26 (12%)
Other	40 (13%)	5 (2%)
X^2 (2, N = 520) = 122.85, p ≤ .001		
Education:		
Less Than/Some High	100 (32%)	7 (3%)
High School Graduate	93 (31%)	30 (14%)
Some College/Technical	93 (31%)	66 (31%)
Graduate/Post College	18 (6%)	109 (52%)
X^2 (5, N = 516) = 172.67, p ≤ .001		
Number of Pregnancies:		
One	108 (36%)	132 (64%)
Two	80 (27%)	41 (20%)
Three/Four	80 (27%)	29 (14%)
Five or More	29 (10%)	5 (2%)
X^2 (8, N = 504) = 44.55, p ≤ .001		
Initiation of Prenatal Care:		
1-3 Months	221 (72%)	201 (95%)
4-6 Months	77 (25%)	9 (4%)
7-9 Months	8 (3%)	2 (1%)
X^2 (3, N = 519) = 44.07, p ≤ .001		
Number of Visits:		
1-5	51 (17%)	21 (10%)
6-10	131 (43%)	142 (67%)
11 or More	121 (40%)	49 (23%)
X^2 (2, N = 515) = 28.24, p ≤ .001		

women in the Medicaid group (M = 23.0, SD = 4.8) were significantly younger than the private insured group (M = 28.0, SD = 5.0), $F(1, 515) = 151.1$, $p < .05$. The Medicaid sample completed their surveys at a mean of 33.7 (SD = 4.0) weeks gestation, which was significantly different than the private insured sample who completed their surveys at a mean of 31.8 (SD = 2.7) weeks gestation.

Three quarters of the total sample was comprised of White/non-Hispanic women who had a high school education or greater. Further, the women were having their first or second child, had started their prenatal care within the first trimester of their pregnancy and had 6 or more visits to their prenatal care provider during the course of their pregnancy.

When comparing the two payor source groups, there were numerous significantly different demographic characteristics. The women in the Medicaid group (Table 2) had greater racial diversity, a high school education or less, and were not married. Women in the private insured group were predominately white, had at least some college or technical education, and were more likely to be married. Further, the privately insured group contained more women who were having a first pregnancy, who started care in the first trimester, and had a higher number of prenatal visits.

Answers to Research Questions

Expectation

1. *Is there a difference in expectations of prenatal care between women who have Medicaid and women who have private insurance?*

Both groups had only a moderate amount of expectation regarding overall prenatal care. The Medicaid group had significantly more expectations regarding their overall care than the private insured group (Table 3).

A significant difference in expectations was noted between the two groups in three of the dimensions (Table 3).

Table 3

Mean Prenatal Care Expectation Scores by Payor Source

	Medicaid		Private			
	M	SD	M	SD	F	(df)
One Provider	2.29	1.26	2.45	1.33	1.86	(1, 514)
Other Services	2.72	1.05	4.20	1.07	242.61	(1, 513)***
Information	3.13	1.39	2.91	1.28	3.13	(1, 513)
Personal Care	2.17	.91	1.99	.81	5.55	(1, 513)*
Acc Qual Care	3.08	.81	3.44	.55	59.32	(1, 513)***
TOTAL EXPECT	2.68	.62	3.05	.59	56.92	(1, 513)***

Note. The lower the score the greater the expectation.

[a]dimension reverse scored

* $p < .05$, ** $p < .01$, *** $p < .001$

Medicaid women were significantly more likely to expect to be referred for services from a nutritionist, social worker or public health nurse. The private insured group had higher expectations of personalized/individualized care. Both groups slightly agreed that they expected to have problems getting care, expected to have visits take a long time, and expected to receive poor care. So both groups had low expectations of accessible quality care. The private insured group agreed significantly more that they expected to have problems accessing quality care when compared to the Medicaid group.

Thus, each group had significantly different expectations in some dimension regarding their prenatal care. Between the groups, the Medicaid group had significantly higher overall expectations than the privately insured group with their prenatal care.

Satisfaction

2. *Is there a difference between satisfaction of prenatal care between women who have Medicaid and women who have private insurance?*

Total Prenatal Care Satisfaction was evaluated looking at three subscales, each containing different dimensions of prenatal care services.

Prenatal care satisfaction/provider. The total subscale for satisfaction with prenatal care for Provider was established from two dimensions. Both groups were

Table 4

Mean Satisfaction Scores by Payor Source

	Medicaid		Private			
	M	SD	M	SD	F	(df)
Caring Relat	1.81	.71	1.82	.68	.68	(1, 517)
Info Given	2.19	.90	2.65	.96	31.07	(1, 517)***
TOTAL PROVIDER	1.97	.73	2.17	.72	9.80	(1, 517)***
Caring Relat	1.88	.85	1.80	.76	1.06	(1, 515)
Info Given	2.25	1.00	2.47	.85	6.97	(1, 513)**
TOTAL STAFF	2.01	.84	2.03	.72	.91	(1, 514)
Time Apts	3.05	1.47	2.28	1.15	41.18	(1, 518)***
Access Apts	1.92	.94	1.92	.94	.00	(1, 518)
Facility	2.05	.82	1.59	.63	48.29	(1, 517)***
Organization	2.55	1.20	2.10	1.05	20.23	(1, 517)***
TOTAL SYSTEM	2.37	.80	1.94	.66	41.75	(1, 517)***

Note. The lower the score the greater the satisfaction.

* p < .05, ** p < .01, *** p < .001

satisfied with each dimension and with the total provider satisfaction with prenatal care (Table 4). The Medicaid group however, had significantly more satisfaction overall with the dimension of Information Given by the provider as well as Total Satisfaction with provider.

Prenatal care satisfaction/staff. The second aspect of prenatal care satisfaction looked at Staff. Two dimensions of staff satisfaction were included in the total staff scores: Staff Information and Staff Caring Relationship.

Overall, Medicaid and private insured women agreed they were satisfied with the staff (Table 4). The Medicaid group was significantly more satisfied with the dimension of Information Given by staff. However, no significant difference was seen between the two groups with respect to the dimension of Staff Caring Relationship and for Total Satisfaction with the staff.

Prenatal care satisfaction/system. The third component of satisfaction looked at the System or prenatal care facility where the women received their prenatal care. Four different dimensions were included in the Total System satisfaction score.

Both groups reported overall satisfaction with the systems of their prenatal care. Table 4 data demonstrates that privately insured women were significantly more satisfied than Medicaid women with three of the four dimension, as well as the Total System satisfaction subscale. Although satisfied, Medicaid women reported they were less satisfied with the time waiting (Time Apts) to be seen, the amount of time at the office for appointments and facility accommodations (Facility), and the organization's ability to offer consistency with, and a choice of prenatal care providers (Organization). No significant difference was noted between the two groups regarding accessibility to schedule appointments (Access Apts).

Women in both groups overall were satisfied with their prenatal care from provider, staff and system. Privately insured women reported significantly less satisfaction on the Total Provider subscale. There was no significant difference between the two groups on the Total staff subscale. Medicaid women reported significantly less satisfaction on the Total system subscale. Thus, differences in overall perceived satisfaction with prenatal care services do exist between women who receive Medicaid when compared to women who are privately insured.

Relationship Between Expectation and Satisfaction

3. *What is the relationship between expectation of and satisfaction with prenatal care and payor source?*

Correlations for the two groups between expectation and satisfaction were overall low (Table 5). The Medicaid group had correlations in the range of .00 to .27, and the private insured group's correlations had a range of .00 to .30. Even though low correlations were seen, some of the correlations were significant.

The vast majority of significant correlations were negative, indicating an inverse relationships between expectations of and satisfaction with prenatal care. Since total expectations scores generally were in the moderate range (Table 3) while total satisfaction subscales were generally in the high satisfaction range (Table 4), lower levels of expectations were related to higher levels of

Table 5

Correlations Between Subscales of Expectation and Satisfaction by Payor Source

	Prov Care	Prov Info	TOTAL PROVIDER	Staff Care	Staff Info	TOTAL STAFF	Sys Time	Sys Acc	Sys Facl	Sys Orga	TOTAL SYSTEM
					Medicaid						
Expect											
OneProv	-.12*	-.18**	-.16**	-.14*	-.21**	-.18**	-.16**	-.12*	.04	-.16**	-.14*
OtherServ	.04	.13*	.09	.14*	.19**	.17**	.07	.07	.06	-.04	.04
Inform	-.26**	-.23**	-.27**	-.15**	-.20**	-.18**	-.20**	-.19**	-.13*	-.20**	-.24
PersCare	.06	.06	.06	-.03	.00	-.02	.04	-.00	.13*	.10	.11
AccCare	.03	-.12*	-.05*	-.09	-.09	-.10	-.07	-.11	.07	-.05	-.05
TOTAL EXP	-.09*	-.10	-.10*	-.08	-.08	-.09	-.10	-.11*	.06	-.12*	-.10
					Private Insured						
Expect											
OneProv	-.05	-.17*	-.18	.05	.05	.02	.07	.07	.08	-.08	.03
OtherServ	.01	.14*	.09	-.06	.01	-.04	-.05	.05	-.07	-.01	-.03
Inform	-.25**	-.29**	-.30**	-.17*	-.27**	-.22**	-.10	-.05	-.09	-.23**	-.18**
PersCare	.18**	.07	.14*	.09	.10	.10	.20**	.10	.18**	.05	.17*
AccCare	-.15*	-.18**	-.19**	-.20**	-.23**	-.23**	-.08	-.07	-.14*	-.15*	-.16*
TOTAL EXP	-.07	-.11	-.10	-.08	-.12	-.10	.02	.05	-.00	-.11	-.03

* $p < .05$, ** $p < .01$

satisfaction. Correlations between the two groups revealed similar, moderate correlations and multiple weak correlations between dimensions of expectations with satisfaction (Table 5). Both groups had moderate, yet significant inverse relationships between expectations of information (Inform) and three provider scales: caring relationship (Prov Care), provider information (Prov Info) and total provider satisfaction (Total Provider). In addition, other satisfaction scales and subscales were also significantly negatively correlated with the expectation of information (Inform) subscales for both groups.

Correlational differences were also seen between the two groups in expectations and satisfactions. In the Medicaid group, expectations of one provider (OneProv) had significant weak, negative correlations with all staff and system satisfaction dimensions except system facility (Sys Facl). This pattern was not observed in the private insured group. This would indicate that for the Medicaid group, as expectations of one provider decreased, multiple dimensions of satisfaction increased.

Another difference found was in regards to expectations of accessible quality care: expectations of appointments taking a long time, problems getting care, and receiving poor care. Although weak, only the private insured group had expectations of accessible quality care (AccCare) that were significantly correlated with satisfaction with all

dimensions of provider, all dimensions of staff, plus system facility (Sys Facl), system organization (Sys Orga), and total system satisfaction (Total System). Thus, for privately insured women as expectation of having problems with accessible quality care decreased satisfaction with most dimensions of satisfaction increased.

Overall, most correlations were at best moderate and were generally negative. There were patterns of similarities between the two groups in expectations of information and satisfaction with provider dimensions and total. There were also patterns of contrast between the two payor source groups with Medicaid women more likely to have expectation of one provider (OneProv) and expectation of other services (OtherServ) correlate with staff satisfaction dimensions and staff total satisfaction, and private insured women more likely to have expectation of accessible quality care (AccCare) correlate with all aspects of satisfaction with care. Relationships for this study did exist between payor source groups for expectations of and satisfaction with prenatal care.

Discussion

Sample

In this retrospective descriptive correlational study, a total of 520 pregnant women were evaluated by payor source. Three hundred and seven women receiving Medicaid and 213 women receiving private insurance were used in the

sample. Although the overall sample consisted of mostly white/non-Hispanic women who had a high school education or greater, and had started their care in the first trimester, when the two groups were compared, there were significantly different demographic findings. The Medicaid group was significantly younger than the private insured group. Consistent with the literature, and within this study, pregnant Medicaid populations are frequently younger as well as have different characteristics than the general population (Machala & Miner, 1991; Oberg et al., 1990). Much of the literature regarding prenatal care looked at adequacy of care or outcome by payor source. Sociodemographic characteristics associated with inadequate care were: poverty, unmarried, age less than 20, education less than 12th grade, and higher parity (Curry, 1990). These characteristics, consistent with this study's Medicaid population, have been found to influence the woman's prenatal care.

Many of the characteristics of the sample for this study were consistent with the literature. This study, as with the literature (Fingerhut et al., 1987), found that as women's education decreased to under 12 grade in high school, an increase in Medicaid participation was seen. Conversely, the higher the educational level achieved the more likely women were to have private insurance to pay for prenatal care. In addition, this study, consistent with the

literature (Fingerhut et al., 1987), found that lower socioeconomic status women were more likely to have delayed their start of prenatal care.

Sixty four percent of the private insured women were having their first baby compared to 36% of Medicaid women. Many of the private insured women in the original collection of data, were participants in childbirth education classes. Although the sampling attempted to obtain parity diversity by including women who were attending "refresher" childbirth classes, this sample may not be representative of the private insured population. Thus, some of the differences seen in parity may be explained by the sampling itself. However, if someone has never experienced prenatal care services, one might suggest that expectations would be different than those of a woman with a repeat pregnancy. Perhaps, had the data been matched by age and parity, different or stronger relationships might have been noted.

Expectations of Prenatal Care by Payor Source

Both Medicaid and privately insured women overall had a moderate level of expectation of their prenatal care. However, higher mean scores were found for accessible quality care; both groups generally agreed they expected to have problems getting prenatal care and expected visits to take long. Consistent with the findings of this study, conceptually all women develop a certain expectation of prenatal care as consumers of other health care (Greeneich,

1993), even those who had not yet had a child. This unique conceptualization is integrated from multiple aspects of women's socialization (Greeneich, 1993). Many factors influence expectations of prenatal care but both groups were noted to have some expectation of that care.

This study found Medicaid women had higher expectation in receiving other services (nutritionist, social worker and public health nurse). In this Medicaid group however, over 63% were not having their first pregnancy. Perhaps previous pregnancy experiences had influenced their expectation of the present prenatal care. As well, with increasing public announcements of public services to low income women, these women may have felt receiving other services was an anticipated component of services normally expected in obtaining prenatal care. In addition, the Medicaid group was significantly younger when compared to the privately insured group, thus, more likely to expect and relate to ongoing education.

The private insured group did not have high expectations of being referred to other services. Perhaps this group anticipated that the information that they would need would be included and offered with regular prenatal care and a referral to public health was not necessary. In addition, they may have felt that services through the public health department were specific to low income women.

Although not of significant level, it is of interest that women receiving Medicaid had higher expectations of having one provider, even though low socioeconomic status women are more likely to receive prenatal care at a clinic setting (Fingerhut et al., 1987) where multiple providers are more likely to be offering care. This may be influenced by the lack of primary care providers for many low income individuals who have no routine health care insurance. The expectation that when an individual does have insurance, one provider will then deliver the care may be had by Medicaid women.

Women in the privately insured group had higher expectation of receiving personalized care. To receive individualized attention, to have the provider care both mentally and physically, and to have a referral for problems were not as significantly expected by Medicaid women. This goes along with the concept of developing a relationship with an individual obstetrician or private physician as a primary provider of prenatal care. Again, lower socioeconomic women receiving Medicaid are often not accepted at a private practice (Fingerhut, et al., 1987; Young, McMahon, Bowman, & Thompson, 1990) and thus seek care at public clinics where one provider may not be available. In addition, without prior health care insurance or irregular coverage, perhaps many low income women had never developed the same level of relationships as privately

insured women. Therefore, perhaps Medicaid recipients do not expect to have personalized care as often.

The Medicaid group had significantly higher total expectations of their prenatal care than the private group. In this study, the Medicaid group was more likely to be having a second pregnancy. Thus, many women may have been previously educated as to what to expect and to the services available. For the primiparas, word of mouth, community or state public service announcements may have increased the awareness of services available to low income women and the importance of prenatal care. Perhaps as a result, Medicaid women have come to expect more be offered during prenatal care, when compared to privately insured women. Another factor may be that low income are often uninsured and unable to participate in non-pregnant preventative health care services. Increased insurance (Medicaid) coverage of pregnant women has afforded low income women insurance coverage that they are perhaps not accustomed to receiving. Low income women may therefore have overall higher expectations of prenatal care services once insurance coverage is secured. Privately insured women are less apt to have disruption in coverage and perhaps, assume once pregnant, they will receive a certain level of prenatal care previously experienced, thus, no significant increase in expectations may exist. An additional point is that the survey was administered in the third trimester. The timing

of the survey administration by itself, may be a concern. Women retrospectively reported on their prenatal care expectations; thus, expectations may have been influenced by past experiences, by the present care and services received, or both.

As seen in this study, overall both groups had moderate levels of expectations of prenatal care. The privately insured women did not have expectation of overall services as high as Medicaid recipients. Little variability was found in the expectation dimensions of prenatal care with both groups. It is curious that women in both payor source groups expressed such little variance in expectations regarding a major life event of having a baby. But perhaps, the uniqueness of these women being asked and the retrospective nature of the study may offer an explanation. Further research is certainly indicated regarding expectations of prenatal care.

Satisfaction of Prenatal Care by Payor Source

Overall both groups were satisfied with their prenatal care. Neither group was dissatisfied with any dimension of satisfaction with their prenatal care. Perhaps the anticipated birth of a child, or what some studies refer to as the halo effect (Oberst, 1984; Seguin et al., 1989) was occurring. Women may have felt somehow obligated to express a certain level of satisfaction for fear of impact somehow on the remainder of their care, although informed consent

indicated otherwise. Personal interactions with the provider or staff, or the wording of the instrument itself may also have made it difficult to be strongly dissatisfied with many questions. All women were in the last trimester of their pregnancy. Many may have been uncomfortable and/or have been anxious regarding the impending labor and wished to complete the 108 item survey quickly and leave the office/clinic. Thus, many women may have answered in the middle range and perhaps not truly thought each and every question through thoroughly.

Women receiving Medicaid were significantly more satisfied with information from the provider and the total provider subscale, when compared to the private insured group. This finding is consistent with the report by Hall and Dornan (1990) that satisfaction was related to the manner and information given by the provider. Curry (1990) reports that when provider services are depersonalized, prenatal care can be negatively impacted, and thus satisfaction decreased.

Further, the Medicaid group was younger than the private insured group, therefore, perhaps more in need of this information, and more influenced by the authority of the health care professional. A portion of the sample for this study was from childbirth classes. Low socioeconomic women frequently do not attend outside childbirth education classes. Knowing this, perhaps the prenatal care providers

have established teaching standards for lower income women during their appointment times. Perhaps many prenatal care providers have also come to assume higher income women will participate in childbirth education classes and obtain information at that time rather than providers offering information during regular prenatal care visits. By targeting the younger or lower income client for educational information, it may not be realized that many higher income women as well, expect information and are dissatisfied with the provider if information is not offered. Further, private insured women may not have their concerns addressed. Even though the private insured group were more educated, they also were more likely to be having their first baby. These women may have felt they were in need of prenatal care information to assist with this new experience. Perhaps the providers felt that higher educated women would be more motivated to seek information on their own. However, the private insured women were not as satisfied when information was not offered. Dissatisfaction with provider has been contributed to inadequate teaching (Curry, 1990). As well, a decrease in time spent discussing the pregnant woman's concerns has been related to decrease in satisfaction (Sullivan et al., 1982). Private insured pregnant women may need to be addressed more directly as to their concerns and educational needs, and then have these integrated in their care.

Looking at the staff satisfaction dimensions, it was found that the Medicaid group was significantly more satisfied with the information given by staff when compared to the private insured group. Again, the Medicaid group was younger, had lower educational level and were low income. Assumptions may have been made by the staff, based on age, that increased information needed to be given. This may also be linked to the fact that with low socioeconomic women having poorer outcomes, increased education is marketed towards them. The private insured group was satisfied, but significantly less satisfied than the Medicaid group.

There was no significant difference in the caring relationship by staff or the total staff satisfaction subscale, overall interactions were felt as comparable in satisfaction by the two groups. However, it may be that prenatal care education in the office/clinic is offered by staff who interact with Medicaid women differently than staff in office/clinics of the private insured group. Perhaps, again, staff make the assumption that older, highly educated, married women do not need to be given information, and information is not offered to all women equally.

The women in the private insured group were significantly more satisfied with the amount of time they waited to be seen and time spent in the office, the facility's waiting room, exam rooms, and parking, the organization's consistency in providers and choice of

providers, as well as the total system satisfaction. Again, this increased satisfaction with the material aspects of the services may reflect the fact that these women were more likely to receive their care at a private provider versus a public clinic setting. These facilities may have had better staffing to maintain the office and grounds as well as located in more affluent areas of the community. Private insured women in this study were more likely to be married, having their first pregnancy and more likely did not have to deal with barriers associated with poverty.

In addition, as suggested within the literature (Inglis, 1991), Medicaid women have other factors, poorer health, substance abuse, and more irregular utilization of prenatal care, that make them high risk. In the process of delivering good medical care, these appointments are more likely to take longer. Evaluation, plan and implementation for high risk pregnancies take longer, yet with a lower level of education, perhaps many of the Medicaid women did not fully understand the reason and the importance of the longer office/clinic visit. Although the Medicaid group was satisfied with all of these system dimensions, they were significantly less satisfied when compared to the private insured group. The Medicaid group may have had more barriers trying to utilize prenatal care. Public transportation with set schedules, child care for other children who are not always welcome in the waiting room, and

available providers for Medicaid obstetric services (Curry, 1990) all can have a tremendous impact on satisfaction. Thus, women may need to wait longer because of lack of flexibility in transportation. As well, many agencies trying to address these barriers experienced by low income women, are attempting to do "one stop shopping" (Machala & Miner, 1991) where the woman has multiple appointments following each other (provider, staff educator, nutritionist) at one agency. This will then decrease the number of times transportation is needed, but increase the amount of time spent at the clinic and further, may confuse women as to the consistency of the provider of care. Further, the subjects in this study were all paid volunteers. Perhaps women were not truly interested in the research, and did not pay attention to the questions on the survey. In addition, perhaps those who were less satisfied with their care were also less likely to attend regular prenatal care services and did not participate in the original study at all, or just didn't bother to complete a questionnaire. An additional factor is that it is unknown how many women were not included in the study because of preterm delivery, because they left care altogether or switched providers because of dissatisfaction. Women, also, were not queried as to whether their primary source of insurance changed during the course of the pregnancy. Thus,

other factors may also have influenced satisfaction with prenatal care and were not evaluated in this study.

All women perceived a certain level of satisfaction with their prenatal care. However, satisfaction with prenatal care services was perceived differently by women who were receiving Medicaid when compared to women who received private insurance. Similarities existed between the payor source groups in satisfaction with three dimensions and one total subscale. However, differences in satisfaction were found in five dimensions and two total subscales.

Relationship between Expectation of and Satisfaction with Prenatal Care by Payor Source

Although this study did find significant differences in expectation in and satisfaction with prenatal care by payor source, no strong relationships were noted. However, one moderate and multiple weak correlations were found that were significant. In addition, a majority of the correlations were negative, indicating an inverse relationship.

There was little variability in the scores by payor source. With little overall variability, generally low correlation values are found. Perhaps the convenience sample was too homogenous. A more likely contributing factor is that expectations were evaluated retrospectively. Pregnant women experience many changes during a pregnancy. From confirmation of a pregnancy to late in the third

trimester, a myriad of experiences occur. Expectations of prenatal care may lack significance for the women as they approach the end of the pregnancy, or they may have forgotten what was really expected with prenatal care months before. When asked to remember back, perhaps many of the women took a more non committal response, resulting in only moderate levels of expectations reported by their responses. In addition, satisfaction scores also lacked variability. Women were generally satisfied with prenatal care in both groups. Again, without a broad range of values, scores were clustered. These scores again, may be influenced by the timing of the survey. Women who are regularly attending prenatal care generally are more likely to be satisfied with the service they are receiving. Although high risk pregnancy status was not known, many of the sample were obtained at pregnancy support programs, which may be loosely inferred with the pregnancy progressing without severe complications. If the pregnancy was felt to be developing favorably, women may be more likely to feel satisfied with other aspects of their care. Since both groups had similar levels of expectations, and levels of satisfaction, a lack of variability is most likely contributory to no strong significant correlations.

An additional point may be that other significant factor correlations were not included in this study. If the questions regarding expectation did not significantly

correlate to levels of satisfaction by pregnant women, this too, would result in low variability in scores, and thus potentially in low correlations.

Significant correlations that were found, were generally negative. With moderate levels of expectations it does not take much positive intervention to raise satisfaction scores. Perhaps with only a moderate level of expectation expressed by both groups of women, many dimensions of satisfaction were inversely related and increased, as a result. Low levels of expectations correlated with higher levels of satisfaction. Very little was found in the literature regarding correlations between expectation of and satisfaction with prenatal care by payor source. Perhaps no specific factors have peaked interest regarding expectation elements that specifically correlate with prenatal care satisfaction elements.

One finding of this study was that Medicaid women's expectation of one provider (Prov) negatively correlated with generally all dimensions of satisfaction. These were mostly significant correlations. As these women decreased their expectation of having one provider, satisfaction with overall prenatal care was increased. Even though Medicaid women had a higher expectation of one provider, if perhaps they had been informed that one provider was not available for their prenatal care, this explanation, and information clarification then resulted in this group of women being

more satisfied with their overall care. Perhaps this was further carried over into other aspects of their prenatal care with increased information giving, thus contributing to increased satisfaction of care.

A second finding was with the private insured women. This study found that expectation of accessible quality care (AccCare) negatively correlated with generally all aspects of satisfaction with prenatal care. As expectations of having problems with accessible quality care decreased, a significant increase in prenatal care satisfaction was expressed. Private insured women overall were more satisfied if they did not expect to have problems obtaining care or problems receiving quality care.

Interestingly, a similarity was found in one area for both groups. Expectation of information (Inform) was negatively correlated with all dimensions of satisfaction for both groups. As expectations of receiving information decreased, an increase in satisfaction was expressed with all provider, all staff, and all systems dimensions. Interesting, women did not have high expectations of receiving information at a time when multiple changes were occurring with their body and significantly impacting on their life. Women in both groups had moderate levels of expectations of receiving information, yet not only were both groups satisfied with the information offered but the information also carried over to satisfaction with all

aspects of their prenatal care. With only moderate levels of expectations regarding information, perhaps it generally did not take much information offered to increase levels of satisfaction. Information giving, thus, perhaps is an important factor in improving satisfaction with overall prenatal care for all women.

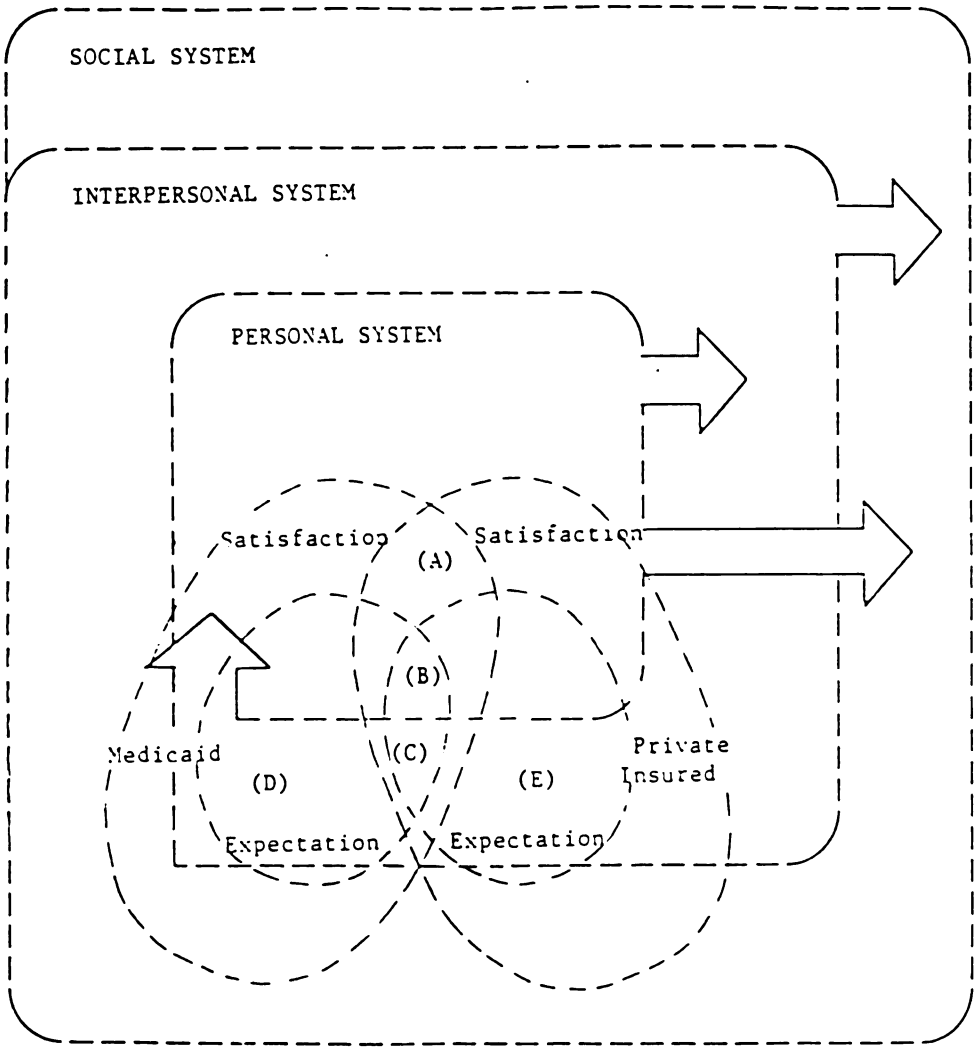
The study found that overall all women had expectations and were satisfied with their prenatal care. However, the findings had only moderate to low correlations between the two groups. The groups had similar correlations with some dimension, showing that women in general are all influenced in a certain fashion towards their prenatal care. The differences in correlations by group, may be attributable in part, to differences in payor source. However, this study explored only five different dimensions of prenatal care expectation. Many other factors impact on the person as a whole to create overall expectations (King, 1989). Accuracy of perception is fundamental to King's operationally definition of communication (Hanchett, 1989), an important part of prenatal care. Perhaps, the low overall correlations found are a result of other significant factors influencing satisfaction with prenatal care not included in this study. Further, perhaps the overall lack of variability in this study was a factor as well.

Discussion of Results as Related to the Conceptual Model

This study generally supported components of the adapted model from King as depicted in Figure 1. The model as originally proposed was modified to be consistent with the findings in this study. A pregnant woman, as a personal system, is in constant interactions with interpersonal and social systems. The three systems exchange a constant influx of information from all directions and from all systems.

Common expectations were identified by women in both groups. Overlapping expectations are depicted by the small ovals, which now intersect (Figure 2 (B)). Again, broken lines are used to depict the constant interactions that occur within the three systems. The small ovals also intersect with all three systems to depict the influence by the interpersonal system (one provider, information, and personalized care), as well as the social system (other services, accessible quality care). Common expectations found in this study were having one provider, and expectations of information. Both of these expectation dimensions are aspects of the interpersonal system of the pregnant women. All other expectation dimensions had significant differences between payor source groups.

Common levels of satisfaction were found in provider caring relationship, staff caring relationship, and accessible appointment times. These common satisfaction



(A) Common Satisfaction Dimensions: provider caring relationship, staff caring relationship, access. (B) Common Expectations: one provider, information. (C) Significant Similar Correlations: expectation of information with all satisfaction dimensions. (D) Select Significant Correlations for Medicaid: expectation of one provider with all satisfaction dimensions. (E) Select Significant Correlations with Private Insured: expectation of accessible care with all satisfaction dimensions.

Figure 2. Conceptual Framework for Expectation of and Satisfaction with Prenatal Care by Payor Source, adapted from King (King, 1971, p 6).

dimensions are depicted by the large ovals, which also now intersect (Figure 2 (A)). The large ovals continue to have broken lines to depict the influx and exchange of interactions that occur within the pregnant women's lives. Interactions occur between all three systems, as evidenced by overall levels of satisfaction with both interpersonal systems (provider and staff dimensions) and the social system (systems dimensions), and thus the large oval intersects with all three systems within the adapted and modified conceptual frameworks. As found in this study, provider and staff caring relationship dimensions were aspects of the interpersonal system, with accessible appointment times being a component of the social system. Again, some findings regarding satisfaction with prenatal care contained significant differences between the two groups. Thus, payor source does contribute to some unique characteristics of expectation and satisfaction with prenatal care.

Looking further at the dimensions of significant differences between the two groups, it was noted that the Medicaid women had significantly more expectations of being referred to other services, a component of their social system. The private insured group however, had significantly more expectation of having personalized care and having accessible quality care, components of the interpersonal system. Interestingly, expectations by payor

source are in contrast and, thus, a portion of the small ovals representing expectation for the two groups, do not intersect.

Significant differences between groups were also noted in the satisfaction dimensions. The Medicaid group was significantly more satisfied with information given by provider, total provider satisfaction and information given by staff. All of the dimensions by the Medicaid group were components of the interpersonal system. The private insured group was significantly more satisfied with time waiting for appointments, system facility, system organization and total system satisfaction. The large ovals, also, have an area that do not intersect, to represent differences by payor source. Interestingly, in contrast to the Medicaid group, all of these components fall with in the social system. Again, very unique characteristics were seen by payor source with satisfaction within systems.

Figure 2 demonstrates the overlapping of both the large satisfaction ovals and the smaller expectation ovals. Thus, an adaptation of Figure 1 was made to be consistent with the findings and to demonstrate that there were common findings between the two groups, and significant differences between the two groups, in both expectation of and satisfaction with prenatal care.

The study failed to show any strong correlations between expectation of and satisfaction with prenatal care

as it related to payor source. However, multiple significant correlations were found, which were generally negative or inverse relationships. Again similarities were found by payor source. This correlational finding was in looking at expectation of information and satisfaction with most all other dimensions (Figure 2 (C)). As expectation to receive information decreased, an increase in satisfaction within all dimensions of satisfaction, with both groups, was correlated. The expectation of information, within the interpersonal system, thus, had significant impact on the satisfaction of factors within the other systems. With the King model, this again demonstrates the continuous influx, but also the impact of the exchange within systems.

Significant, negative correlational differences were also found within this study. The Medicaid group had a significant correlation of expectation of one provider and all dimensions of satisfaction (Figure 2 (D)). The private insured group had a significant correlation of expectation of accessible quality care with all dimensions of satisfaction (Figure 2 (E)). As expectations decreased, an increase in satisfaction occurred. As each payor source group interacts within their interpersonal systems, satisfaction within all other dimensions of prenatal care were correlated. Again, the constant exchange and impact between the systems is easily demonstrated using King's model.

A pregnant woman's life is unique yet dynamic. Fetal growth, increased interactions with providers, staff, other agencies, and community resources, easily allows this study to be adapted to the King model. The three systems are in constant interaction, influencing each other, specifically influencing the pregnant woman. However, the payor source for prenatal care does have influence on expectation and satisfaction with prenatal care as demonstrated by the similarities and differences. Each personal system is unique and interacts differently with all systems but maintains its own integrity.

Implications for Advanced Nursing Practice in Primary Care

Prenatal care has been well linked with improved pregnancy outcome (Affonso et al., 1993; Inglis, 1991; Klerman, 1994). Further, satisfaction with care has been linked with early and regular prenatal care (Greeneich, 1993; Ross et al., 1987). As demonstrated by this study and within the literature (Greeneich, 1993; Ross et al., 1987; Weiss, 1988) prenatal care patients enter prenatal care with certain expectations regarding that care and this can be linked, although weakly, to their level of satisfaction with that care. This study demonstrates that overall all women were somewhat satisfied with their prenatal care but, different levels of satisfaction and different expectations of care were seen between Medicaid women and private insured women. As demonstrated in this study, each system

interacts, yet sometimes different levels of interactions occur between the personal system of the women with the interpersonal and social systems.

As a result of the findings in this study, perhaps the greatest impact can be made by the APN by advocating for accessible quality prenatal care within our nation for all women. Expanded Medicaid coverage for pregnant women has unfortunately not made a drastic impact on our nations infant mortality. It is questionable to continue to allocate millions of dollars into medical coverage that makes little difference in overall pregnancy outcomes. By having universal prenatal insurance coverage this could allow care to begin as soon as the pregnancy was confirmed. Additionally, if reimbursement rates were increased by the federal and state governments for pregnant Medicaid recipients, the two tiered delivery service could be abolished and alleviate this study's findings of dissatisfaction with the systems by Medicaid women as well as differences by payor source. Within the profession, APN's must join together, continue to validate interventions that improve satisfaction with prenatal care, and pregnancy outcomes, and lobby as a united front. Local, state and national participation in professional organizations help to coordinate and consolidate goals. Political activism may be difficult for many APN's, yet numbers give strength towards

a common goal of helping many who are less advantaged and may not advocate on their own behalf.

This study found both groups had only moderate levels of expectation of prenatal care. Notable conclusions from this study that are important for the Nurse in Advanced Practice (APN) are knowing that significant shared expectations, as well as significant differences in expectation, by payor source, do exist.

Because expectations of prenatal care are had by all women, these expectations could be addressed at a first prenatal visit with the APN. A personal interview would be completed to explore medical history, psychosocial concerns, and expectations the women had developed. Clarifications of what the office/clinic can provide regarding routines, length, and frequency of visits, and numbers and types of providers. Additional sources of information available in the office/clinic in the form of written or video, and community pregnancy resource information with phone numbers would also be offered. A pregnancy calendar would be available to all women that would include the weeks gestation, when tests are recommended and why, basic common concerns for fetus and mom, and names of staff she may need to contact during her pregnancy. An additional aspect would include introductions to staff. By incorporating this procedure into a first prenatal visit for all pregnant women it would further support the findings within this study that

expectations of prenatal care are had by all, even though significant differences exist between women with different payor sources. With all women being evaluated with the same first prenatal visit routine, an attempt at providing a non biased service at the same time evaluate for the individual differences that exist for implementation at further prenatal appointments.

Because all women had expectation of one provider, when possible, pregnant women should have consistency of provider. When this is not available, women should be given information ahead of time as to whom they will see and why the change is indicated. If the agency has multiple providers of care, the pregnant women must be informed of the names of the providers and the policy of rotating visits with providers during the first visit, to decrease the expectation of one provider. As noted in the findings of this study, a decrease in expectations of having one provider, is correlated with an increase in satisfaction in all aspects for Medicaid women. In addition, community education, as to what prenatal care providers are available, would be important. Solo practices as well as group practices could advertise such, so women could be informed early as to the availability of prenatal care practices.

An additional shared expectation was to receive information. Women from both groups expected to receive information without asking regarding their prenatal care.

Interestingly, expectation of receiving information was correlated with an increase in satisfaction with all aspects of prenatal care by both groups. The importance of accurate information during a pregnancy potentially could be vital factor to a positive outcome. Therefore, all women should be offered, at every prenatal appointment, information to promote maternal and fetal well being throughout the pregnancy. By the APN interviewing women at a first prenatal visit, learning style and informational needs can be assessed. Women should be encouraged throughout the pregnancy to request information that will fulfill their expectations, needs and desires, thus increasing satisfaction. An additional method of information delivery would be for the APN to offer on site prenatal care classes to all women at convenient times. In addition to childbirth education classes that are established in the community, classes could be offered at health clubs, church groups, or school pregnant teen programs. Set classes could be established and offered according to trimester needs and changes, and topics, such as breastfeeding, postpartum care and baby care could be offered. The APN could further implement a community newspaper column and a radio station release which could offer short overall healthy tips on pregnancy care.

Differences in expectation were identified between groups as well. Medicaid women had significantly more

expectations to be referred to a public health nurse, nutritionist, or social worker. The APN must therefore implement this knowledge by keeping current with services available to pregnant Medicaid women within the community, and offer referral information to these women. In addition, the provider could also collaborate with agencies to have staff members available during prenatal visits to assist with referrals or enrollment into services. Private insured women slightly disagreed regarding expectation of being referred, however, bulletin boards or brochures in the office could promote available services to private insured women who were interested.

Significant similarities and differences in satisfaction with prenatal care were also found by payor source. Both groups had high levels of satisfaction with provider and staff caring relationships. This is an important component for the APN to incorporate in staff development. A consistent attitude of caring for the pregnant woman and what her needs are as a pregnant woman are somewhat fundamental in service delivery, yet staff members need to be educated on the impact this relationship with clients has on satisfaction for both payor source groups. Staff meetings could be held to share staff concerns, but to also promote the staff as an important part of the prenatal care delivery team. Name tags to promote a helpful caring atmosphere could be worn by staff as well as

providers. In addition, staff could be encouraged to remember clients' names and any pertinent information regarding the client's history, recent tests, or planned procedures. Careful review of the chart by the provider prior to appointments could also assist in promoting a caring relationship by the provider.

In addition, it was found that private insured women were not as satisfied with information given by the provider and the staff. The private insured group were slightly older, more educated and had higher incomes than the Medicaid group. The APN must therefore educate the staff that private pay women also have informational needs. As previously discussed, an initial interview with explanation regarding information as well as routine prenatal care information packets would be available. Higher levels of education were found in private insured women, but having a baby is still a new experience requiring new knowledge. Private insured women should be assumed to need all prenatal information unless refused. Private insured women must be encouraged to also request specific topics beyond the routine information given out throughout the pregnancy. Outside information should be available to all women, and it is the responsibility of the APN to remain current with this information and pass it on to all pregnant women. In addition, the APN could offer prenatal classes at the office/clinic. As previously discussed, these could be

specifically related to pregnancy trimesters and postpartum needs. In addition, working within the community to offer classes at a variety of settings, perhaps even at worksites, could enhance information to private insured women. Further, this information could be shared with medical schools and other practicing prenatal care providers so that private insured women's expectations of information could be improved.

Satisfaction with prenatal care by private insured women was also found to be influenced by other factors. One correlation that was identified in this study was as a decrease in expectation of having problems with accessible quality care occurred, an increase in satisfaction with all dimensions occurred. This is an important finding for the APN. Private insured women that expect to have problems are potentially less likely to be satisfied. Increased community knowledge on availability, accessibility and easy entry into prenatal care can be accomplished by the APN. Speaking to women's groups, school parent/teacher organization's, media presentations, and posters in local areas that cater to young women could help to promote ease of entry into prenatal care services.

This study also found that Medicaid women were significantly more dissatisfied with all components of the system subscale, except access to appointments. Thus, Medicaid women felt they had to wait longer to see the

provider, were at the clinic longer, were less satisfied with the waiting room, exam room and parking. As well, they were significantly less satisfied with the frequency of seeing the same provider, a choice of provider and not having to repeat their story. Satisfaction with a health care service is associated with return business (Greeneich, 1993).

To improve satisfaction with the system for Medicaid women, appointments must be scheduled so that lengthy waits can be avoided when possible. If waits are necessary, educational information should be available as well as honest explanations as to why the delay is occurring, and the option to reschedule if needed. Time management is important to both provider and client. Waiting rooms and exam rooms can be adapted to be more pleasant for the women, and any small children that may accompany them to their visit. Bright, cheerful pictures which promote healthy lifestyles, parenting or fun activities, can brighten a room as well as be used to stimulate conversations regarding information to promote a positive pregnancy. Input from the clients for any cultural influence could be included as well. Seasonal decorations or client's pictures, help to promote a more family oriented atmosphere and hopefully improve satisfaction for Medicaid women. Agency scheduling must also be adapted to accommodate for adequate time needed to see women, so that long waits are the exception. Clients

should be given the option to schedule longer than normal visits if needed. The agencies that work with high Medicaid populations must also evaluate the adequacy of parking for clients. Parking spaces must be kept free for those recipients of services at the clinic, not neighboring businesses. Thorough evaluation of the adequacy of the number of spaces available and the accessibility of those spaces during office/clinic hours must be done.

In addition, with the advancement of Medicaid towards managed care, encouragement for private prenatal care providers to accept more women receiving Medicaid, this discrepancy between the two groups should diminish. The APN can promote the importance of this change through professional state organizations and support of laws to promote universal prenatal health care. By moving towards increased reimbursement and fee for service, comparable to private insured, more providers are likely to accept Medicaid clients. The importance of abolishing a two tiered health care system is an important factor in overall satisfaction.

Correlational findings have been discussed regarding expectation of one provider by Medicaid women correlated with increased satisfaction with all dimensions, expectations of information by both payor source groups correlated with increased satisfaction with all dimensions, and as a decrease in expectation of having problems with

accessible quality care occurred by private insured women, an increase in satisfaction with all dimensions occurred.

Because, as this study revealed, all women have a certain level of expectation of care, overall are satisfied with care, and the implementability of King's model, the Nurse in Advanced Practice is positioned in a very influential spot. As an important part of the interpersonal and social system, she/he has an opportunity to be current with those variables that influence different sociodemographic groups' level of expectation and satisfaction and adapt to influence positively the personal system or pregnant woman.

Recommendations for Further Research

As previously stated, little research exists regarding payor source in regard to expectations and satisfaction with prenatal care, and how these variables affect pregnancy outcomes. This study does suggest that Medicaid women and privately insured women have significant differences in expectations and significant differences in satisfaction with different aspects of prenatal care. Further research could be suggested as follows:

(a) Longitudinally, study pregnant women from the initiation of prenatal care through delivery, inquiring as to their level of expectation at the beginning of the pregnancy and satisfaction at different points in the pregnancy. This could further be broadened to be

done with subgroups of primiparous and multiparous women.

(b) Explore how different prenatal care providers (private practice, clinic practice, nurse midwife clinic) offering prenatal care, influence expectation of and satisfaction with prenatal care as related to payor source.

(c) Reanalyze the current data to evaluate if different age groups and/or parity of prenatal patients, perceive satisfaction of prenatal care differently.

The early and regular participation in prenatal care is a very important component to prenatal outcome. If research can support different variations in expectations and satisfaction that women have regarding their prenatal care, providers of these services can appropriately adapt their services and interventions to encourage and entice patients into improved participation.

With such a myriad of variables influencing prenatal care participation, any factor that is thought to influence an improvement, must be validated and implemented.

Summary

This study looked at expectations of and satisfaction with prenatal care as it pertained to a woman's payor source for that care. The findings of this study suggest that differences do exist between Medicaid women and privately insured women as to expectations of care and satisfaction

with prenatal care. Though only weak to moderate correlations were seen between expectation of and satisfaction with prenatal care by payor source, the findings do suggest that Medicaid women and privately insured women perceive some aspects of prenatal care services somewhat differently. The number of inverse relationships was a surprising finding within the study.

The findings can be readily implemented into the delivery of prenatal care services by the Nurse in Advanced Practice. Early clarification with pregnant women by the APN regarding what prenatal services offer, and what prenatal care information is available, will improve expectations that pregnant women have. Further, an increase in community awareness of pregnancy support services, and with the availability of accessible prenatal care, levels of satisfaction with prenatal care could be improved for both Medicaid women and private insured women. In addition, these findings encourage the Nurse in Advanced Practice to do further research as to additional methods to improve satisfaction with prenatal care in hopes to improve regular participation with prenatal care and ultimately improved outcomes with low economic women.

Greenberg (1983) concluded in his study that the greatest reduction in unfavorable pregnancy outcomes could be realized by improving prenatal care to socially disadvantaged women; that if prenatal care services were

consistent between low socioeconomic and middle income women, an increase in improved pregnancy outcome would occur. Through continued nursing research the Nurse in Advanced Practice is in a position to make an impact in prenatal care services for all women.

LIST OF REFERENCES

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Affonso, D., Mayberry, L., Graham, K., Shibuya, J., & Kunimoto, J. (1992). Prenatal and postpartum care in Hawaii: A community-based approach. Journal of Obstetric, Gynecologic, and Neonatal Nursing, 22(4), 320-325.

Braveman, P., Bennett, T., Lewis, C., Egerter, S., & Showstack, J. (1993). Access to prenatal care following major medicaid eligibility expansions. Journal of the American Medical Association, 269(10), 1285-1289.

Bowling, A. (1992). Assessing health needs and measuring satisfaction. Nursing Times, 88(31), 31-34.

Buescher, P., & Ward, N. (1992). A comparison of low birth weight among Medicaid patients of public health departments and other providers of prenatal care in North Carolina and Kentucky. Public Health Reports, 107(1), 54-59.

Curry, M. (1989). Nonfinancial barriers to prenatal care. Women & Health, 15(3), 85-99.

Curry, M. (1990). Factors associated with inadequate prenatal care. Journal of Community Health Nursing, 7(4), 245-252.

Fingerhut, L., Makuc, D., & Kleinman, J. (1987). Delayed prenatal care and place of first visit: Differences by health insurance and education. Family Planning Perspectives, 19(5), 212-214, 234.

Freda, M., Andersen, H., Damus, K., & Merkatz, I. (1993). What pregnant women want to know: A comparison of client and provider perceptions. Journal of Obstetrics, Gynecologic, and Neonatal Nursing, 22(3), 237-244.

Greenberg, R. (1983). The impact of prenatal care in different social groups. American Journal of Obstetrics and Gynecology, 145(7), 797-801.

Greeneich, D. (1993). The link between new and return business and quality of care: Patient satisfaction. Advanced Nursing Science, 16(1), 62-72.

Haas, J., Udvarhelyi, S., & Epstein, A. (1993). The effect of health coverage for uninsured pregnant women on maternal health and the use of cesarean section. Journal of the American Medical Association, 270(1), 61-64.

Haas, J., Udvarhelyi, S., Morris, C., & Epstein, A. (1993). The effect of providing health coverage to poor uninsured pregnant women in Massachusetts. Journal of the American Medical Association, 269(1), 87-91.

Hall, J., & Dornan, M. (1990). Patient sociodemographic characteristics as predictors of satisfaction with medical care a meta-analysis. Social Science Medicine, 30(7), 811-818.

Hanchett, E. (1990). Nursing models and community as client. Nursing Science Quarterly, 3(2), 67-72.

Hansell, M. (1991). Sociodemographic factors and the quality of prenatal care. American Journal of Public Health, 81(8), 1023-1027.

Higgins, P., Murray, M., & Williams, E. (1994). Self-esteem, social support, and satisfaction differences in women with adequate and inadequate prenatal care. Birth, 21(1), 26-33.

Hinshaw, A., & Atwood, J. (1981). A patient satisfaction instrument: Precision by replication. Nursing Research, 31(3), 170-175.

Husband, A. (1988). Application of King's theory of nursing to the care of the adult with diabetes. Journal of Advanced Nursing, 13, 484-488.

Inglis, A. (1991). United States maternal and child health services, Part I: Right or privilege? Neonatal Network, 9(8), 35-43.

Johnson, J., Primas, P., & Coe, M. (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.

King, I. (1971). Toward a theory for nursing: General concepts of human behavior. New York: John Wiley.

King, I. (1989). Health as the goal for nursing. Nursing Science Quarterly, 2(3), 123-128.

Klerman, L. (1994). Perinatal health care policy: How it will affect the family in the 21st century. Journal of Obstetrics, Gynecologic, and Neonatal Nursing, 23(2), 124-128.

LaMonica, E., Oberst, M., Madea, A., & Wolf, R. (1986). Development of a patient satisfaction scale. Research in Nursing & Health, 9, 43-50.

Leatherman, J., Blackburn, D., & Davidhizar, R. (1990). How postpartum women explain their lack of obtaining adequate prenatal care. Journal of Advanced Nursing, 15, 256-267.

Lia-Hoagberg, B., Rode, P., Skovholt, C., Oberg, C., Berg, C., Mullett, S., & Choi, T. (1990). Barriers and motivators to prenatal care among low-income women. Social Science Medicine, 30(4), 487-495.

Long, S. (1987). Public versus employment-related health insurance: Experience and implications for black and nonblack americans. The Milbank Quarterly, 65, Supol.1, 200-212.

Machala, M., & Miner, M. (1991). Piecing together the crazy quilt of prenatal care. Public Health Reports, 106(4), 353-360.

Mawn, B., & Bradley, J. (1993). Standards of care for high-risk prenatal clients: The community nurse case management approach. Public Health Nursing, 10(2), 78-88.

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

Meleis, A. (1991). Theoretical nursing: development & progress (2nd ed.). Philadelphia, PA: Lippincott.

Oberg, C., 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.

Oberst, M. (1984). Patient's perception of care: Measurement of quality and satisfaction. Cancer, 53(10), 2366-2373.

O'Brien, M., & Smith, C. (1981). Women's views and experiences of ante-natal care. The Practitioner, 225, 123-125.

Omar, M., & Schiffman, R. (1992). Impact of pregnant women's expectations and satisfaction with prenatal care on practice, service, and policy. East Lansing, Michigan: Michigan State University, College of Nursing.

Omar, M., & Schiffman, R. (1994). Patient satisfaction with prenatal care: Instrument development final report. East Lansing, Michigan: Michigan State University, College of Nursing.

Piper, J., Ray, W., & Griffin, M. (1990). Effects of medicaid eligibility expansion of prenatal care and pregnancy outcome in Tennessee. Journal of the American Medical Association, 264(17), 2219-2223.

Petitti, D., Hiatt, R., Chin, V., & Croughan-Minihane, M. (1991). An outcome evaluation of the content and quality of prenatal care. Birth, 18(1), 21-25.

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

Risser, N. (1975). Development of an instrument to measure patient satisfaction with nurses and nursing care in primary care settings. Nursing Research, 24(1), 45-52.

Robbins, J., Bertakis, K., Jelms, L., Azari, R., Callahan, E., & Creten, D. (1993). The influence of physician practice behaviors of patient satisfaction. Clinical Research and Methods, 25(1), 17-20.

Rooks, J., Weatherby, N., & Ernst, E. (1992). The national birth center study part III: Intrapartum and immediate postpartum and neonatal complications and transfers, postpartum and neonatal care, outcomes, and client satisfaction. Journal of Nurse-Midwifery, 37(6), 361-397.

Ross, C., Frommelt, G., Hazelwood, L., & Chang, R. (1987). The role of expectations in patient satisfaction with medical care. Journal of Health Care Marketing, 7(4), 16-26.

Schwartz, I. (1990). Low-birth-weight effects of demographic and socioeconomic variables and prenatal care in Pima County, Arizona. Western Journal of Medicine, 152(6), 725-728.

Scupholme, A., Robertson, E., & Kamons, S. (1991). Barriers to prenatal care in a multiethnic, urban sample. Journal of Nurse-Midwifery, 36(2), 111-116.

Seguin, L., Therrien, R., Champagne, F., & Larouche, D. (1989). The components of women's satisfaction with maternity care. Birth, 16(3), 109-113.

Sullivan, D., & Beeman, R. (1982). Satisfaction with maternity care. Medical Care, 20(3), 321-330.

Weiss, G. (1988). Patient satisfaction with primary medical care: Evaluation of socioeconomic and predispositional factors. Medical Care, 26(4), 383-391.

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

York, R., Williams, P., & Munro, B. (1993). Maternal factors that influence inadequate prenatal care. Public Health Nursing, 10(4), 241-244.

Zlotnick, C., & Gould, P. (1993). Prenatal quality of life outcomes for a public health quality assurance system. Journal of Nursing Care Quality, 7(3), 35-45.

APPENDICES

APPENDIX A
PATIENT SATISFACTION WITH PRENATAL CARE SURVEY

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 <u>you</u> feel about the statement. Some statements, however, may not apply to everyone. If the statement does <u>not</u> 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 <u>you</u> feel about the statement. Some statements, however, may not apply to everyone. If the statement does <u>not</u> 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	Slighdy 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 <u>you</u> feel about the statement. If the statement does <u>not</u> 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 <u>FIRST</u> 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
_____ Michcare
_____ 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 <u>any</u> 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 <u>one</u> 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 <u>first</u> 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 <u>closest</u> to the <u>total</u> 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!

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APPENDIX B
PROCEDURES FOR SURVEY ADMINISTRATION AND DATA COLLECTION

APPENDIX B

PROCEDURES FOR SURVEY ADMINISTRATION AND DATA COLLECTION

Primary Study by Omar and Schiffman

A total of 587 subjects were included in the original study (Omar & Schiffman, 1994). The population in the original study, was by convenience sampling of subjects in their third trimester of pregnancy. Pregnant women were recruited in the waiting room at the Women, Infants, and Children's (WIC) clinic lobby at a district health department, at childbirth education classes or at other prenatal care providers offices. The women that were recruited from the childbirth education classes or some from the prenatal care providers offices were classified as urban middle income women. Those recruits were mostly Caucasian, married, had more than a high school education, private insurance, had a prior pregnancy, and averaged 27 years of age. Those women recruited from the health department WIC program and other providers were classified as urban or rural poor. These women were predominately Caucasian (83%), Hispanics represented 13%. Participants generally were married, averaged 23 years of age, had at least one prior pregnancy and had a high school education.

The investigators, Omar and Schiffman (1994), selected and trained data collectors for each of the three primary data collection sites within the third phase of their study. Consistent established criteria was used by each data collector. Data collectors solicited women for participation, and verified data by the established criteria. Data collectors were available to clarify or answer questions that the subjects had. As included within the survey, return of the completed survey to the data collector was considered consent for her participation in the study. Women did receive a cash incentive for their participation upon completion of the survey. The data was collected according to the investigators pre-established criteria in the following manner:

(1) prospective subjects deemed eligible according to criteria, were identified in the waiting rooms of the district health departments, prenatal clinics, or before childbirth classes;

(2) participation of the subjects was elicited;

(3) a cover letter with the survey was provided to the prospective subjects;

(4) confidentiality was assured to all prospective subjects;

(5) completed instruments served as the subject' consent to voluntarily participate in the study;

(6) data collectors remained available while prospective subjects completed the survey to answer any questions, provide direction, and collect the completed surveys;

(7) each subject completing a survey received a cash incentive;

(8) the completed surveys were returned to the primary investigators.

APPENDIX C

UNIVERSITY COMMITTEE ON RESEARCH INVOLVING HUMAN SUBJECTS

MICHIGAN STATE
UNIVERSITY

March 14, 1995

TO: Mary L. Blackmer
1316 Forest Lane
Cadillac, Mi 49601

RE: IRB#: 95-117
TITLE: RELATIONSHIP BETWEEN EXPECTATION OF AND SATISFACTION WITH PRENATAL CARE AS IT RELATES TO PAY OR SOURCE
REVISION REQUESTED: N/A
CATEGORY: 1-E
APPROVAL DATE: 03/13/95

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

cc: Rachel F. Schiffman

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