



Womens awareness of their partners concerns during pregnancy
by Jill Ann Real

A thesis submitted in partial fulfillment of the requirements for the degree of MASTER OF NURSING
Montana State University
© Copyright by Jill Ann Real (1981)

Abstract:

The purpose of this study was to determine a) the awareness women have of their partners' concerns during the prenatal period, and b) the relationship of this awareness to the following sociocultural characteristics of the participants: age, income, education, length of time married (or living together), whether the pregnancy was planned or unplanned, presence or absence of extended family, and agricultural background.

The concept of awareness was measured by using a questionnaire designed to identify men's prenatal concerns. Each man was asked to rate his concerns about the pregnancy on a 57 item questionnaire, and his partner was asked to rate the same concerns as she believed them to pertain to her mate.

The sample consisted of 40 primiparous couples attending their first session of Childbirth Education Association classes. All couples spoke English as their primary language, had completed six years of school, were Caucasian Americans, and were in their third trimester of pregnancy.

Analysis of the data showed that awareness did exist to varying degrees among the sample population studied. Further study is needed to determine what constitutes acceptable and non-acceptable levels of awareness, in reference to the degree of crisis couples' experience during pregnancy.

The only sociocultural variable that was significantly related to the level of awareness women had of their partners' prenatal concerns was education. It was found that as the educational levels of the men or women increased, the degree of awareness also increased.

A two part analysis was done on the individual questionnaire items. Results of the first part of the individual item analysis identified differences that existed between spouses. It was found that certain items were accurately perceived by their partners, while others were poorly perceived. All of the items defined as accurately perceived were of low concern to the men, whereas all of the poorly perceived items were of high concern to the men. The second analysis done on the individual questionnaire items suggested that some misperceptions were due to general differences between men and women.

The data analysis also uncovered some serendipitous findings that raised certain questions: Why didn't Childbirth Education Association class participants attend early prenatal classes? Why were there no unmarried couples in the classes?

STATEMENT OF PERMISSION TO COPY

In presenting this thesis in partial fulfillment of the requirements for an advanced degree at Montana State University, I agree that the Library shall make it freely available for inspection. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by my major professor, or, in her absence, by the Director of Libraries. It is understood that any copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Signature

Jill Ann Real

Date

February 27, 1981

WOMEN'S AWARENESS OF THEIR PARTNERS'
CONCERNS DURING PREGNANCY

by

JILL ANN REAL

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF NURSING

Approved:

Anna M. Shannon
Chairperson, Graduate Committee

Anna M. Shannon
Head, Major Department

Michael Maloe
Graduate Dean

MONTANA STATE UNIVERSITY
Bozeman, Montana

March, 1981

ACKNOWLEDGEMENT

I would like to take this opportunity to thank my advisor, Anna M. Shannon, R.N., D.N.S., F.A.A.N., Dean, School of Nursing, whose perceptive questions and editorial contributions were greatly appreciated. I would also like to extend my thanks and appreciation to Kathleen Chafey, R.N., M.S., Assistant Dean, School of Nursing, and Barbara Derwinski-Robinson, R.N., M.S.N., who were contributing members of my thesis committee; to Twila Krum who helped in the data collection for this project; and the Childbirth Education Association for their support. Finally, deepest appreciation is extended to my husband, Paul Janke for his sense of humor, understanding, and loyalty.

TABLE OF CONTENTS

	<u>Page</u>
VITA	ii
ACKNOWLEDGEMENT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vii
ABSTRACT	ix
Chapter	
1. INTRODUCTION	1
The Problem	1
Statement of Purpose	3
Definition of Terms	4
2. REVIEW OF THE LITERATURE AND CONCEPTUAL FRAMEWORK	5
Crisis Theory	6
Crisis Defined	6
Coping with Crisis	7
Intervention	8
Pregnancy as a Family Developmental Crisis	9
Definition	9
Coping during the Developmental Crisis of Pregnancy	19
Intervention during the Developmental Crisis of Pregnancy	26
3. METHODOLOGY	29
Sample	29

Chapter	Page
Sample Size	30
Protection of Human Rights	31
Measurement	32
Instrument	32
Data Collection	35
Data Analysis	37
Summary	39
4. RESULTS	41
Introduction	41
Scale Authenticity: Reliability and Validity	42
Description of Sample	44
Calculation of the Women's Awareness Score	50
Correlations and Tests of Significance Between W.A.S. and Selected Variables	51
Analysis of Individual Items	53
Mean Difference Score Analysis	55
Item Mean Response Analysis	58
Conclusions	59
5. DISCUSSION OF RESEARCH FINDINGS, IMPLICATIONS, LIMITATIONS, AND SUGGESTIONS FOR FUTURE RESEARCH	62
Introduction	62
Discussion of the Findings	62
Women's Awareness Score	63

Chapter	Page
W.A.S. and Sociocultural Characteristics of the Sample	64
Individual Item Analysis	68
Serendipitous Findings	76
Implications	77
Limitations	78
Recommendations	79
Summary	80
APPENDICES	83
A. Letter to Childbirth Education Association Requesting Permission to do Study	84
B. Information Letter to Study Participants	86
C. Part I of Measurement Tool: Sociocultural Information about Sample (given to both men and women)	88
D. Definitions of Categories for Completion of Part II of the Men's Questionnaire	90
E. Definitions of Categories for Completion of Part II of the Women's Questionnaire	91
F. Part II of Measurement Tool - Given to Male Participants	92
G. Part II of Measurement Tool - Given to Female Participants	95
H. Letter from Dulin Granting Permission to use her Tool	98
I. W.A.S. Distribution and Frequencies	99
J. Mean Difference Scores for Questionnaire Items	100

Chapter	<u>Page</u>
K. Item Mean Responses for Men Ranked from Highest to Lowest	103
LIST OF REFERENCES	106

LIST OF TABLES

Table	Page
1. Reliability Analysis for Total Scale and Subscales of Measurement Tool	43
2. Age Distribution of Sample	45
3. Number of Years Couples had been Married	46
4. Educational Level of Sample	47
5. Family Income Level of Sample	47
6. Frequency of Contact with Family in Montana	49
7. Range, Mean, and Standard Deviation of W.A.S.	51
8. Correlations between the W.A.S. and Selected Variables . . .	52
9. Test of Significance on W.A.S. when Grouped by Sociocultural Characteristics of the Study Participants .	54
10. Mean Difference Scores for Poorly Perceived Concerns	57
11. Mean Difference Scores for Accurately Perceived Concerns . .	57
12. Item Mean Responses of Men and Women that were Significantly Different	60

ABSTRACT

The purpose of this study was to determine a) the awareness women have of their partners' concerns during the prenatal period, and b) the relationship of this awareness to the following sociocultural characteristics of the participants: age, income, education, length of time married (or living together), whether the pregnancy was planned or unplanned, presence or absence of extended family, and agricultural background.

The concept of awareness was measured by using a questionnaire designed to identify men's prenatal concerns. Each man was asked to rate his concerns about the pregnancy on a 57 item questionnaire, and his partner was asked to rate the same concerns as she believed them to pertain to her mate.

The sample consisted of 40 primiparous couples attending their first session of Childbirth Education Association classes. All couples spoke English as their primary language, had completed six years of school, were Caucasian Americans, and were in their third trimester of pregnancy.

Analysis of the data showed that awareness did exist to varying degrees among the sample population studied. Further study is needed to determine what constitutes acceptable and non-acceptable levels of awareness, in reference to the degree of crisis couples' experience during pregnancy.

The only sociocultural variable that was significantly related to the level of awareness women had of their partners' prenatal concerns was education. It was found that as the educational levels of the men or women increased, the degree of awareness also increased.

A two part analysis was done on the individual questionnaire items. Results of the first part of the individual item analysis identified differences that existed between spouses. It was found that certain items were accurately perceived by their partners, while others were poorly perceived. All of the items defined as accurately perceived were of low concern to the men, whereas all of the poorly perceived items were of high concern to the men. The second analysis done on the individual questionnaire items suggested that some misperceptions were due to general differences between men and women.

The data analysis also uncovered some serendipitous findings that raised certain questions: Why didn't Childbirth Education Association class participants attend early prenatal classes? Why were there no unmarried couples in the classes?

CHAPTER 1

INTRODUCTION

The Problem

Theorists have identified pregnancy as a crisis period that affects men, women, and ultimately their relationships as couples (Bibring, Dwyer, Huntington, & Valenstein, 1961; Caplan & Parad, 1965; Duvall, 1971; LeMasters, 1965). The changes and adjustments that occur during pregnancy contribute to the crisis by creating anxiety producing concerns.

The pregnancy induced concerns of women have been well researched. Helping women to cope with their concerns has become a major goal of nursing care (Antle, 1975, Hines, 1971). With the fathers' increased participation during pregnancy in the mid-1960's, their therapeutic value began to be recognized as helpful and supportive to their partners (Miller, 1966). As a result, nursing intervention began to focus on facilitating the men's abilities to support their wives. This was done by helping men develop an awareness of their partners' concerns and the women's need for understanding (Anzalone & Phillips, 1978).

More recently it has been recognized and documented that men have many concerns during pregnancy. Current literature now suggests that men also need support and understanding and that this support and understanding should come from their partners!

The ability for mutual support becomes a reality when couples

are able to recognize and communicate their concerns to one another (Antle, 1975; Caplan, 1961, Cox, 1972; Duvall, 1971, 1977; Lipkin, 1974; Stichler, Bowden, & Reimer, 1978; Sumner, 1976). This becomes the first step in coping with the anxiety produced by these concerns and in lessening the crisis experienced by couples during pregnancy.

Although much has been done to develop awareness in men of their partners' concerns, the reverse does not appear to be true. This researcher's literature search did not reveal any evidence suggesting that women were aware of their partners' concerns, nor were there data indicating that women were being helped to develop this awareness.

Therefore, the first step in researching this area was to determine to what degree women are aware of their partners' concerns during pregnancy. This awareness was determined by using a questionnaire designed to measure the men's prenatal concerns about their partners, babies, and themselves. The men were asked to rate their concerns about the pregnancy on the questionnaire, and their partners were asked to rate the same concerns as they believed them to pertain to their mates. The congruency between their responses was then used as a measure of awareness.

Another important aspect of this problem were the factors that influence the presence or absence of awareness. The literature suggested that the sociocultural characteristics of a given couple may influence the degree to which they experience pregnancy as a

crisis, as well as their ability to cope. These characteristics included such attributes as age, education, income, length of time married (or living together), and whether the pregnancy was planned or unplanned. Duvall (1977) maintained that all of the aforementioned variables can affect the completion of the developmental tasks of pregnancy. The inability to complete these tasks would increase the crisis experienced by the couple.

Some authorities feel the presence of extended families has a beneficial influence; they may be a source of support for pregnant couples and hence, increase their coping abilities (Murray, 1972). Cultural differences can further influence the nature of the crisis and coping abilities (Murray, 1972). Since Montana is primarily a rural state with a large agricultural base, one aspect of cultural diversity was explored by determining whether an agricultural versus non-agricultural background had any influence on the extent of awareness women have of their partners' prenatal concerns.

Statement of Purpose

It was, therefore, the purpose of this study to determine a) the awareness women have of their partners' concerns during the prenatal period, and b) the relationship of this awareness to the following sociocultural characteristics of the participants: age, income, education, length of time married (or living together), whether the pregnancy was planned or unplanned, presence or absence of extended

family, and agricultural background.

Definition of Terms

Concerns: Those aspects of pregnancy that cause fear, stress, anxiety, or some disturbing thought (Dulin, 1972).

Planned pregnancy: A conscious decision to become parents, prior to becoming pregnant.

Agricultural: People who are living, or have lived, on a ranch or farm for a period of six months or more.

Extended family: Presence of relatives within the state of Montana.

Prospective parents: Those couples, married or not, expecting their first child, in the third trimester of pregnancy, and attending the first session of Childbirth Education Association classes.

Family: Refers to the evolving family that consists of a man and woman expecting their first child.

Awareness: Refers to the ability of women to accurately perceive their partners' prenatal concerns. Awareness was measured by calculating the differences between the responses of men and their partners when each were given the same questionnaire, and the men were asked to note their own prenatal concerns, while the women were asked to note the same concerns as they believed them to pertain to their partners.

CHAPTER 2

REVIEW OF THE LITERATURE AND CONCEPTUAL FRAMEWORK

The framework for this study is based on crisis theory, whereby pregnancy is viewed as a family developmental crisis. The literature review will be divided into two major sections. The first section will provide a general overview of crisis theory. The second section will specifically discuss pregnancy as a developmental crisis, affecting men, women, and their relationships as couples. The early work (1959-1965) of Gerald Caplan contributed a great deal to the development of crisis theory, and as such, will be cited frequently in this paper.

Crisis Theory

This section will discuss general crisis theory. It is divided into three parts in which the concept of crisis will be defined and explained, coping strategies will be reviewed, and methods of intervention discussed.

Crisis Defined

Crisis has been defined as a turning point (Rapoport, R., 1965); an upset in a steady state (Caplan, 1961); a call to new action (Rapoport, L., 1965); "...a period of disequilibrium overpowering the individual's homeostatic mechanisms" (Caplan & Parad, 1965, p.56); any situation for which present coping skills are inadequate (Duvall,

1977). A crisis develops "...when a person faces an obstacle to important life goals that is, for a time, insurmountable through the utilization of customary methods of problem solving" (Caplan, 1961, p.18).

There are basic features common to all crisis events. These include the following: "...an acute time factor, behavior changes, subjective feelings of helplessness and ineffectiveness, tension and the perception of a threat which is realistic and unique to the individual" (Schulberg & Sheldon, 1968, p.556). Caplan and Parad (1965) have identified three sets of interrelated factors that can produce a state of crisis: a hazardous event which poses some threat, a threat to instinctual need which is symbolically linked to earlier threats that resulted in vulnerability or conflict, and an inability to respond with adequate coping mechanisms.

Typically a crisis occurs not as an isolated event but within the context of an existing system and is managed according to resources available. Murray (1972) identified various factors that will affect the nature of a crisis: age, physiological status, aspects of treatment, previous experience, ability to deal with stress, response of significant others, cultural values, ability to talk about feelings, role in the family, and effects of the crisis event on life style with family, occupation, and social group. "The impact of the crisis will depend on the nature of the crisis, the state of organization in the

family, the resources of the family, and its previous experience with crisis" (LeMasters, 1965, p.111).

Coping with Crisis

Coping mechanisms are used by individuals to reduce tension and anxiety when problems arise. According to Aguilera and Messick (1974) coping mechanisms

...can be overt or covert and can be consciously or unconsciously activated. They have generally been classified into such behavioral responses as aggression, regression, withdrawal, and repression. The selection of a response is based upon tension reducing actions that successfully relieved anxiety and reduced tension in similar situations in the past. (p.64)

Crises occur when individuals have problems that cannot readily be solved by using coping methods that have worked in the past.

Successful coping with crises results in the individuals maturation or development (Rapoport, R., 1965), and growth (Smith, 1978). Ineffective coping, on the other hand, leads to maladaptive behavior, increased stress (Smith, 1978), and possible revival of old psychological conflicts (Caplan, 1960; Rapoport, R., 1965). During a crisis there is the possibility of development of new solutions to these old problems and conflicts. These solutions may be healthy and lead to positive growth or unhealthy and lead to a state of poor mental health (Caplan, 1960; Rapoport, R., 1965). It is generally believed that persons undergoing crises are amenable to influence when skilled intervention techniques are applied (Rapoport, R., 1965).

Intervention

During a crisis it is believed that minimal intervention "...tends to achieve maximum and optimal effects..." (Aguilera & Messick, 1974, p.6). There are a variety of crisis intervention techniques in the literature reviewed. The use of one method over another is dependent on the type of crisis and the individual experiencing the crisis.

Schulberg and Sheldon (1968, p.556) described three general approaches to handling a crisis: "... (1) eliminating or modifying the hazardous situation; (2) reducing the individual's exposure to the hazardous situation; (3) reducing the individual's vulnerability by increasing coping capacity." Aguilera and Messick (1974) identified four methods of intervention during a crisis as follows:

- a. Helping the individual to gain an intellectual understanding of his crisis....
- b. Helping the individual bring into the open his present feelings to which he may not have access....
- c. Exploration of coping mechanisms....
- d. Reopening the social world....[This refers to a situation when the crisis has been precipitated by the loss of someone significant to the individual's life.] (p.20).

In deciding what method of crisis intervention to use it is important to assess the individual. Caplan (1961) suggested looking at the following three areas: the capacity of the person to withstand stress and anxiety; the degree of reality recognized and faced in solving problems; and the ability to adjust to the demands of reality.

Pregnancy as a Family Developmental Crisis

This three-part section will elaborate upon the concept of pregnancy as a developmental crisis. In part one the concept of pregnancy as a crisis will be discussed in general terms, followed by a review of how the crisis affects women, men, and families (family referring to the evolving family). Part two will review coping mechanisms and the impact of sociocultural factors on the families' ability to cope. Part three will conclude with a discussion on the need for intervention.

Definition

Pregnancy has been studied as a crisis event by a number of researchers and is widely referred to as being developmental or maturational in nature (Bibring et al., 1961; Caplan, 1961; Dyer, 1965; Erikson, 1953; Parad, 1965; Rapoport, R., 1965; Schulberg & Sheldon, 1968). Developmental crises are induced by the special tasks required by each new developmental phase in the sequence of psychosocial maturation (Erikson, 1953). These crises are considered normal occurrences and an essential part of growth and development (Bibring et al., 1961; Deutcher, 1972) because most humans experience them in the process of growing up (Caplan & Parad, 1965). It is the time of passage from one developmental state to the next that provides fertile ground for anxiety and tension within families (Phipps, 1980).

During a developmental crisis

....a complex of biopsychosocial stimuli poses certain tasks that must be faced and mastered with a reasonable degree of effectiveness if the next maturational stage is to yield its full potential for further growth and development. (Parad, 1965, p.73)

Specific developmental steps have been identified by Duvall (1971) as necessary during pregnancy:

1. arranging for the physical care of the expected baby
 2. developing new patterns for getting and spending income
 3. reevaluating [sic] procedures for determining who does what and where authority rests
 4. adapting patterns of sexual relationships to pregnancy
 5. expanding communication systems for present and anticipated emotional needs
 6. reorienting relationships with relatives
 7. adapting relationships with friends, associates, and community activities to the realities of pregnancy
 8. acquiring knowledge about and planning for the specifics of pregnancy, childbirth, and parenthood
 9. maintaining morale and a workable philosophy of life.
- (p.199)

In meeting the developmental tasks of pregnancy "...the family is forced to reorganize, roles have to be reassigned, status positions shifted, values reoriented, and needs met through new channels" (LeMasters, 1965, p.111). There results a period of family disequilibrium (Caplan, 1961) that calls for the establishment of a new repertoire of responses and coping behaviors (Stichler et al., 1978). Bibring et al. (1961) believed that the developmental tasks of pregnancy can lead to the revival and simultaneous emergence of conflicts that may have had partial or inadequate solutions in earlier developmental phases.

It is important to realize that the crisis of pregnancy offers the chance to affect, by minimal intervention, the future mental health of pregnant families (Caplan, 1961). Caplan based this belief on two aspects of crisis theory:

- (1) In a crisis, old problems are brought to surface and new problems are faced, and there is a possibility at this time of novel solutions which may be in a healthy direction, or in an unhealthy direction.
- (2) A person in crisis, because of the disequilibrium, because the situation is in a state of flux, is more susceptible to influence than when he is not in crisis. (Caplan, 1961, p.72)

Pregnancy as a crisis for women. Literature on maternity care has long emphasized pregnancy as a time of crisis for expectant mothers. During this period women have to cope with physical, psychological, and developmental changes (Arnstein, 1972; Bibring et al., 1961; Caplan, 1960; Dyer, 1965; Schulberg & Sheldon, 1968). Caplan (1960, p.72) stated that pregnancy should be viewed as "...a biologically determined period of psychological stress." The emotional manifestations of pregnancy are due to general metabolic changes (hormonal) as well as psychogenic factors that are linked "...to the sexual aspects of the reproductive process..., and to the process whereby during the course of pregnancy she develops psychologically into the role of the mother..." (Caplan, 1960, p.73). It is felt that pregnancy is a crisis "...that affects all expectant mothers, no matter what the state of their psychic health" (Bibring et al., 1961,

p.25).

A variety of behavioral and emotional manifestations have been described in the literature. Mood swings or emotional lability are frequently seen in pregnant women (Caplan, 1961; Colman & Colman, 1972; DeGarmo & Davidson, 1978) and are generally felt to be due to hormonal changes (Caplan, 1960). This lability can result in a variety of behaviors: irritability and sensitivity, crying (Colman & Colman, 1972), changes in sexual desire (Caplan, 1960; Colman & Colman, 1972), and emotional highs and lows (Colman & Colman, 1972; DeGarmo & Davidson, 1978).

Other psychological manifestations of pregnancy which are frequently discussed in the literature include introversion, passivity, and dependence (Caplan, 1960; Jessner, 1964). These changes generally begin sometime between the first and second trimester. Caplan (1957, p.29) theorized that "...in the same way the woman needs to take in extra nutriment to build the tissues of her fetus, she has to take in extra emotional supplies of love and affection which she will later pass on to her baby."

Other manifestations mentioned with less frequency in the literature were as follows: increased feelings of vulnerability, anxiety, insomnia (Colman & Colman, 1972), fatigue, and a decrease in outside interests, especially in the third trimester (Jessner, 1964). Loesch and Greenburg (1962) mentioned most women also feel uncertain and lack

confidence, particularly during their first pregnancy.

In the middle of the second trimester there is a shift in intrapsychic equilibrium whereby unconscious conflicts from the past surface and there is a possibility of more mature solutions to these old problems (Caplan, 1960). The resolution of these old conflicts represents a major task for most pregnant women. "It would be an understatement to say that the way in which a woman copes...is critical to her future feelings about herself as a woman and mother, and has far reaching effects on her subsequent adjustments to pregnancy and motherhood" (Colman & Colman, 1972, p.141).

The literature indicated that pregnancy is experienced in stages. DeGarmo and Davidson (1978) identified the following stages found in each pregnancy: women must adjust to the reality of the pregnancy, then to the separateness of the fetus, and finally the women must be prepared to relinquish their babies from their bodies. It was further stated that previous emotional or physical deprivation can so exhaust some women's resources that they are unable to cope with these tasks of pregnancy. Bibring et al. (1961) referred to these stages as the developmental process of pregnancy and motherhood. Colman and Colman (1972) discussed the psychologic tasks of pregnancy by trimester. During the first trimester women need to accept the pregnancy as a reality; in the second trimester they need to change from dependency on their mothers to dependency on their husbands; and ultimately in the

third trimester they must come to rely on their own strengths.

Anxiety during pregnancy has been observed by a number of researchers (Caplan, 1961; Jessner, 1964; Light & Fenster, 1974). Light and Fenster (1974, p.46) defined anxiety as "...an uneasiness of mind resulting from an emotionally stressful situation." Some common concerns and fears discussed in the literature have been found to contribute to anxiety during pregnancy. These can be grouped into three major categories: concerns for self, infant, and marriage.

A variety of concerns women had about themselves during pregnancy were mentioned in the literature. Fawcett (1978) and Loesch and Greenburg (1962) found women were preoccupied over their body changes. Some women feared they were unattractive and "too fat" (Newton, 1963). Others were concerned about possible body damage resulting from the birth, including death (Loesch & Greenburg, 1962). Many women expressed concerns about labor and delivery and their ability to handle the pain (Loesch & Greenburg, 1962; Light & Fenster, 1974). Over half of the women studied by Light and Fenster (1974) were also concerned about subsequent pregnancies.

The main concern expressed by women regarding the infant was centered around whether or not the baby would be normal (Light & Fenster, 1974; Loesch & Greenburg, 1962). Occasionally there was a preoccupation with the infant's sex.

Some fears were centered around the marital relationship.

Jessner (1964) stated some women expressed concern that the pregnancy would destroy their marriage. Loesch and Greenburg (1962) discussed the fact that pregnant women were often upset about their attitude changes toward their husbands.

Certain factors can influence the type and intensity of concerns women have during their pregnancy. Klaus and Kennel (1976) listed several factors: whether the pregnancy was planned, whether the women were married, whether they were living with the fathers, and whether they had other children. Klaus and Kennel further suggested that the ages of any other children, the women's occupations or desires for an occupation, memories of their childhood, and feelings for their parents, would also be of influence.

Pregnancy as a crisis for men. Current literature supports the theory that pregnancy is a crisis time for men as well as women (Anzalone & Phillips, 1978; Hott, 1976). Men's experience during pregnancy differs from that of women. Research has identified specific emotions and concerns of prospective fathers, as well as various behavior changes that occur during the prenatal period.

Upon confirmation of the pregnancy, men feel surprised and ambivalent (Antle, 1975). They may be proud of their virility and at the same time feel guilty for impregnating their wives (Antle, 1975; Duvall, 1971). The guilt may be compounded when they observe their partners struggling with morning sickness or fatigue. Later on during

the first or second trimester the men may feel anxiety over the widening distance between themselves and their partners caused by the women's introversion (Antle, 1975).

During the second trimester expectant fathers begin to identify with the physical actuality of the pregnancy when they feel fetal movements. They may feel ambivalent about their partners' rapidly changing body. If the men are unable to express and deal with these emotions they may seek outside masculine company and spend less time with their wives (Antle, 1975).

The third trimester finds men concerned about impending labor and delivery (Antle, 1975; Dulin, 1972) and they may doubt their ability to "take it" (referring to the birth) (Antle, 1975). Some men are afraid of approaching their partners sexually (Antle, 1975; Duvall, 1971; Marquart, 1976). However, in studies by Dulin (1972) and Bailey (1979) prospective fathers indicated less concern over the change in their sexual relationships than in other areas, such as their ability to "father". The guilt of impregnating their wives may worsen as the men observe their spouses in the final, uncomfortable stage of pregnancy. Jessner, Weigert, and Foy (1970) found that some husbands, during the last trimester, have feelings of estrangement and exclusion.

Throughout pregnancy men may worry about their ability to provide for their families (Antle, 1975; Dulin, 1972; Marquart, 1976; Wapner, 1976). At any time during this period men may feel anxious, depressed,

inadequate, hemmed in, and trapped (Duvall, 1971), as well as insecure (Antle, 1975). Many men become jealous of the baby and/or physician. They wonder about their ability to care for the baby and be good fathers (Dulin, 1972). Biller and Meredith (1974) found some men felt that the pregnancy was aging them.

Behavior changes have been noted in men during pregnancy. Marquart (1976) discovered that many prospective fathers socialized with other fathers more during pregnancy than previously, and that the topic of fatherhood was prominent in their conversations. Men reported changes in their behavior to set a good example. They also noted a tendency to be more protective of their partner (Marquart, 1976).

Not all fathers adjust positively to pregnancy. Duvall (1971, p.206) stated that the expectant father is "...faced with a new situation for which he may have no experience. If he cannot adjust to the pregnancy the consequences may be psychosomatic disorders, mood swings, anxiety, and difficulties with relationships." The strain of pregnancy can surface in the form of emotional problems that manifest themselves in the form of "...frenetic physical activity, minor psychosomatic ailments, and deviant social behavior..." (Biller & Meredith, 1974, p.40). Several studies have been done supporting the latter statements. Liebenberg (1969) did a study in which 65% of 61 first time fathers reported pregnancy symptoms. Arnstein (1972) discussed the fact that arrest rates for sex offenses were higher for expectant

fathers, than for other married men. It was felt that psychologically healthy males could handle changes in their sex lives, but with emotionally disturbed fathers the same changes could lead to sex offenses, especially during the last four months of pregnancy. Other behavioral changes in men discussed by Rice (1966) were attempts to escape the responsibility of impending fatherhood by turning to alcoholism, to temporary desertion, or to other women. Wainwright (1966) studied the case histories of ten men who were hospitalized with a psychopathological reaction to fatherhood. He identified some of the relevant factors that may precipitate mental illness in men during pregnancy: increased sense of responsibility, latent homosexuality, seeing the infant as a binding force in an unsatisfactory marriage, envy of their wives' childbearing functions.

Pregnancy as a crisis for evolving families. Pregnancy is usually a shared family experience (Stichler et al., 1978) during which time both parents experience separate emotional and behavioral changes that can lead to stress and anxiety (Antle, 1975). It is a period of disequilibrium for families compared to their normal state (Caplan, 1961) and as such can be considered a family crisis. Certain variables will determine whether the crisis will strengthen or weaken families: socioeconomic level, marital and familial relationships, and previously completed developmental tasks (Duvall, 1977). Caplan (1960) believed it is more accurate to speak of pregnant families rather than pregnant

women, since entire families are affected by the pregnancy.

Porter and Demeuth (1979) explained the rationale for considering pregnancy as a family crisis:

The newly pregnant couple must necessarily deal with internal conflicts in the course of family development. The relationship between husband and wife is in a state of constant flux. Pregnancy demands a repatterning of their relationship. This repatterning is an emotionally charged process which can play a crucial role in the couple's reactions to the pregnancy itself. As tensions between husband and wife are created or heightened, the pregnancy becomes a crisis. (p.103)

Duvall (1971) has identified certain developmental tasks of pregnancy. A major task included "...expanding communication systems for present and anticipated emotional needs" (p.199). Central to this concept is the ability to reward each other for achievement and satisfy critical needs for acceptance, encouragement, and affection. Failure of this task can lead to disequilibrium and tension in the couples' relationships (Arnstein, 1972; Caplan, 1961; Duvall, 1971, 1977; Griffith, 1976; Jessner, 1964).

Coping during the Developmental Crisis of Pregnancy

It is generally felt that an open system of communication is an essential coping skill during the crisis of pregnancy (Antle, 1975; Biller & Meredith, 1974; Caplan, 1961; Cox, 1972; Duvall, 1971, 1977; Lipkin, 1974; McKinley, 1963; Stichler et al., 1978; Sumner, 1976). The following assumptions regarding the merits of open communication

were found in this literature:

1. Open communication of fears and fantasies assist couples in consolidating their personal strengths and more fully meeting each others' needs (Antle, 1975).
2. Accurate information about others' attitudes and beliefs is more facilitative and productive than are misperceptions (Cox, 1972).
3. An open communication system is a means of reaching each other for comfort, love, understanding, and sympathy (Duvall, 1977).
4. Feelings and concerns that couples express and share result in mutual understanding (Sumner, 1976) and a decrease in anxiety (Schaefer, 1966). This is based on the belief that open, honest dialogue adds to the understanding of those involved (Sumner, 1976).

Cultural differences may affect individuals' or families' abilities to cope with crises. On a broad scale, certain aspects of Western culture, such as the Western concept of masculinity and the current trend toward nuclear families can influence coping ability. There are many subcultures in Western society also exerting influence on how families cope during crises. One such sub-culture available for study in Montana are people with an agricultural background.

Stichler et al. (1978) maintained that lack of mutual support is due to communication breakdown. Certain aspects of Western culture and society can promote such a breakdown. It has been theorized that the traditional Western concept of masculinity does not permit

expression of feelings (Antle, 1975; Anzalone & Phillips, 1978; Smith, 1978). "Culturally men are ingrained with the idea that at all costs they must maintain control and a sense of being strong. As a result even though they may be feeling a sense of discomfort, they are often unable to discuss it..." (Stichler et al., 1978, p.155). The contemporary role of fathers is slowly changing. It is becoming more acceptable for men to be affectionate and express their feelings (Hines, 1971). They are becoming actively involved with their wives' pregnancies. This active involvement begins with acknowledgement and acceptance of the emotions pregnancy may elicit (Antle, 1975). Western culture also promotes the positive aspects of pregnancy. This may result in guilt feelings for couples who experience the common negative emotions (Stichler et al., 1978).

Extended families can be a source of support for expectant couples (Hines, 1971). Hrobsky (1977) identified various functions of a support system: offering validation of the parents' perception and allaying their fears; releasing parents from some of their responsibilities; functioning as emotional sounding boards, listening to concerns and self doubts; providing concrete information; and enhancing parents' enjoyment by simply sharing new experiences with them. Due to the high rate of mobility in our present society it is not always possible for extended families to be a realistic support system. Even if relatives are not physically separated, they may be a poor source of support due

to interpersonal conflicts (Hrobsky, 1977).

The current trend toward nuclear families has caused increased isolation of pregnant couples (Cronenwett & Newmark, 1974). Brazelton (1973) and Hines (1971) maintained that nuclear family structures leave husbands to make their own adjustments to the pregnancy. Sumner (1976) observed that without the traditional support of extended families couples must go through pregnancy alone. However, Klaus and Kennel (1976) stated that organizations have helped replace extended families. Such groups as childbirth classes let expectant couples share their hopes, expectations, and fears with others.

Culture, as defined by Spradley (1979, p.5) "...refers to the acquired knowledge that people use to interpret experience and generate social behavior." The cultural base of an individual will thus influence how he will cope in a crisis situation. The agricultural population is a sub-culture of Western society. In Montana 13% of the population live on farms (U.S. Bureau of Census, 1979). People from agricultural backgrounds have a unique body of knowledge pertinent to that culture that will affect how they react in a given situation. It is possible, therefore, that prospective parents with an agricultural background may perceive the crisis of pregnancy differently and have different coping mechanisms than will prospective parents from a non-agricultural background.

The literature review indicated there were other variables

that may influence the degree of crisis experienced during pregnancy, and possibly the coping abilities of couples. These included: age, income, education, length of time married, whether the pregnancy was planned or unplanned, previous pregnancies, and trimester of pregnancy.

According to Duvall (1977) the developmental tasks of marriage precede those of pregnancy. She indicated that successful achievement of the marital tasks enhances satisfaction, approval, and success with the later tasks of pregnancy, "...whereas failure leads to unhappiness in the family, disapproval by society, and difficulty with later family developmental tasks" (Duvall, 1977, p.177). This indicated that successful achievement of the marital tasks would decrease the amount of difficulty encountered when dealing with the developmental tasks of pregnancy. The developmental tasks of married couples are as follows:

1. finding, furnishing, and maintaining their first home
2. establishing mutually satisfactory ways of supporting themselves
3. allocating responsibilities that each partner is willing to assume
4. establishing mutually acceptable personal, emotional, and sexual roles
5. interacting with in-laws, relatives, and the community
6. planning for possible children
7. maintaining couple motivation and morale (Duvall, 1977, p.195).

Certain variables could reasonably be assumed to affect the completion of these tasks. Age, education, and income may reflect ability to provide a home and a way of supporting the family. Smoyak (1977)

stated that teenage marriages have a divorce rate four times higher than other groups. Furthermore, the developmental tasks of adolescence frequently conflict with those of pregnancy (Duvall, 1977).

It would seem logical that couples married for a longer period of time prior to pregnancy would have a greater possibility of successfully completing the developmental tasks of marriage. Hrobsky (1977, p.460) stated that couples who delay their first pregnancy can use that time "...to find ways each partner can develop his or her own interests, learn to be comfortable with being different from each other, yet enjoy that differentness, and learn to be close to one another without being identical." However, it was also stated that although prolonging this period increased the potential for growth, it does not guarantee the couples will use it effectively (Hrobsky, 1977).

Whether or not a pregnancy was planned can be an indication of the successful completion of the marital tasks and readiness to move on to the tasks of pregnancy. However, some couples use pregnancy as the means of becoming closer, hoping the child will cement their unstable relationship (Hrobsky, 1977). Smith (1978, p.48) maintained that unplanned pregnancies can be a source of conflict "...because partners may feel a lack of control over their own bodies, a lack of communication with their spouses, and/or stress around the decision making process itself." Klaus and Kennel (1976) stated that the way women respond to the changes of pregnancy can depend on whether the

pregnancy was planned or not. Frequently the decision to have children is culturally based.

Dyer's 1965 study lent support to the idea that the preceding variables may influence the depth of crisis experienced during pregnancy. She studied the degree to which couples experienced the impact of their first child as a crisis and found that couples married three years or more experienced less crisis, as did those couples who had planned their pregnancy and followed that plan. Couples who experienced a greater degree of crisis were those who had not planned their pregnancy, or failed to follow their plan, and where the husband was not a college graduate. It was also found that the wives' educations were not related to the amount of crisis experienced. Dyer (1965, p.314) defined crisis using Reuben Hill's definition: "...any sharp or decisive change for which old patterns are inadequate....A crisis is a situation in which the usual behavior patterns are found to be unrewarding and new ones are called for immediately."

One of the key aspects of learning is the way knowledge is sought and built upon by experience (Troll, 1975). Therefore, those couples who have experienced multiple pregnancies and previously attended prenatal classes will have different perspectives of pregnancy than will primiparous couples. This concept is supported by Bailey's (1979) study. She discovered that although all prospective fathers did have concerns during pregnancy, the concerns varied in type and degree

between multiparous and primiparous fathers. Light and Fenster (1974) found there was a significant difference between concerns of primiparous and multiparous mothers as well.

Other studies have indicated that concerns will vary during each trimester. It has been well established that the fathers have needs and concerns that are trimester specific (Antle, 1975; Biller & Meredith, 1974; Colman, 1969; Jessner, 1964). The same is true for prospective mothers (Colman & Colman, 1972; DeGarmo & Davidson, 1978; Roberts, 1976). These concerns were discussed in detail earlier in the paper.

In summary, as a result of the literature review, the following sociocultural variables may affect the degree of crisis experienced by the pregnant couple: age, income, education, length of time married, whether the pregnancy was planned or unplanned, presence or absence of extended family, agricultural background, previous pregnancies, and trimester of pregnancy. The following variables will be controlled for in the sample selection: previous pregnancies, and trimester of pregnancy. Data related to other variables will be gathered for post hoc analysis.

Intervention during the Developmental Crisis of Pregnancy

Assisting couples in mastering the crisis of pregnancy should be a concern of health professionals. Recent studies suggested that the type of childbirth experienced by the couples will influence future family relationships (Cronewett & Newmark, 1974). Loesch and Greenburg

(1962) found that when husbands were supportive, the pregnancy progressed more smoothly. Aguilera and Messick (1974) suggested that when expectant fathers mastered the crisis of pregnancy they were better able to adapt to the next maturational crisis, that of fatherhood. Hott (1976) found that the way in which mothers accepted or rejected the fathers during pregnancy may be a factor in how the men accepted or rejected the child. Caplan (1959) discussed the importance of fathers giving their partners extra attention during pregnancy in order for good mothering to take place. Support for husbands may be equally important from the point of view of future father-child relationships and marital relationships (Hines, 1971). R. Rapoport (1965) maintained that the way a crisis is handled or coped with will affect the outcome in terms of individual mental health and in terms of ensuing family relationships.

Lipkin (1974) and Smith (1978) felt that husband-wife relationships were an important foundation for effective parenthood. In agreement, Jessner et al. (1970) stated:

...the optimal condition for parenthood is a marriage based on compatible partnership, which can reduce the frustration, anxiety, and anger of everyday life to a tolerable minimum and which at the same time can provide a creative reciprocity, and spontaneous solidarity. (p.239)

From the literature it would appear that nursing intervention should be based on strengthening the couples' relationships. In order to do so, however, there is a need to know more about that relationship

during pregnancy. It has been established that pregnancy is a time of crisis for men and women, and that the crisis can affect their relationships. Both men and women experience concerns that can produce anxiety. The literature suggested that recognition and communication of these concerns to each other is an effective coping mechanism and provides for mutual support during the crisis. Traditional nursing intervention has long focused on helping men develop an awareness of their partners' needs for understanding and support. Current literature suggests men also need support and understanding and that this should come from the women. However, in order for women to be a source of support they need to first become aware of their partners' concerns. There does not appear to be any research reported on whether women are aware of their partners' concerns during pregnancy. Finding out the degree to which awareness exists and what factors affect the presence or absence of awareness is necessary if nursing intervention is to be based on scientific knowledge and not on supposition. It is the purpose of this study to address this issue.

CHAPTER 3

METHODOLOGY

The research method appropriate to this study was the descriptive survey. According to Brink and Wood (1978) the descriptive survey looks at the relationship between or among variables and comparisons are made. This study examined the awareness women have of their partners' concerns during the prenatal period. It also addressed the relationship of this awareness to certain sociocultural characteristics of the participants, including age, income, education, length of time married (or living together), whether the pregnancy was planned or unplanned, presence or absence of extended family, and agricultural background.

This chapter is divided into four major sections. The first section will describe the sample used in this study. A description of the measurement tool will next be discussed, followed by a section describing the methods used in collecting the data. The chapter concludes with an explanation of how the data will be analyzed.

Sample

The sample was selected from the population of couples attending Childbirth Education Association classes. The Childbirth Education Association classes were chosen due to their accessibility, convenience, and because attendance indicated an involvement and concern of both parents.

The criteria for sample selection were designed to assure the couples' ability to accurately understand and fill out the questionnaires; to avoid culturally skewed results; and to control for possible intervening variables such as previous experience with childbirth, and trimester related differences in concerns expressed. The following criteria were used for sample selection of couples:

1. Speak English as their first language
2. Have completed a minimum of six years of school
3. Be Caucasian American
4. Be in the third trimester of their pregnancy
5. Be expecting the birth of their first child
6. Be attending the first session of the Childbirth Education Association classes.

A letter was sent to the local Childbirth Education Association (see Appendix A) requesting permission to approach their classes and seek their participation in the study. The local Childbirth Education Association instructors reviewed the proposal and permission was granted.

Sample Size

A sample size of 40 couples was selected for this study. Brink and Wood (1978, p.100) stated "If you plan to look at the relationship between variables, a handy rule of thumb is to plan for at least five observations for each category of each variable." Since this study

looked at the awareness women have of their partners' concerns during the prenatal period in relation to seven variables, a sample size of 35 was considered adequate. However, the larger the sample the less chance there is of statistical error. Due to the large number of couples currently attending Childbirth Education Association classes a proposed sample size of 40 was considered a reasonable projection.

Protection of Human Rights

According to Polit and Hungler (1978) there are three factors involved in the protection of human rights: informed consent of participants, confidentiality of data collected, and protection of participants from physical or mental harm or discomfort.

In order to obtain informed consent, potential participants were given an introductory letter (see Appendix B). This letter explained the purpose and nature of the study, described the questionnaire, and assured them of individual anonymity. It further stated that participation was strictly voluntary. Subjects were told they were free to refuse to answer any or all questions, without any jeopardy to their continued training in Childbirth Education Association classes. The subjects' consent were assumed to be granted by the completion and return of the questionnaires.

The data collection system was designed to provide for individual anonymity. Data were grouped for analysis so that no individual datum was reported. Minimal physical or psychological stress was anticipated

for those participating in the study. Furthermore, the proposal for this study was approved by the Montana State University Human Subjects Review Committee.

Measurement

Instrument

Tool selection. A questionnaire was used to collect the data for this study. There are several advantages to using a questionnaire: (a) it is less costly and time consuming than other data collection methods, such as interviews, (b) it allows for anonymity of participants, and (c) written questions are standard from one subject to the next and are not susceptible to changes in emphasis, as can be the case in verbal questioning (Brink & Wood, 1978; Polit & Hungler, 1978).

The questionnaire consisted of two sections. The first section included a variety of open and close ended questions designed to collect the sociocultural data needed to describe the sample. A questionnaire with a Likert-type scale, developed by Dulin (1972) to identify men's prenatal concerns, and later modified by Bailey (1979), comprised the second part of the data collection tool. Likert-type scales are used to measure attitudes. "They consist of declarative statements expressing a viewpoint on a topic. Respondents are asked to indicate the degree to which they agree or disagree with the opinion expressed in the statement" (Polit & Hungler, 1978, p.361).

Tool description. The literature review identified certain socio-cultural characteristics that might affect the awareness women had of their partners' prenatal concerns. The first section of the questionnaire contained a variety of questions designed to obtain this information from the study participants (see Appendix C). Some of the questions were taken from a tool devised by Bailey (1979) to identify the demographic characteristics of her sample population of primiparous and multiparous fathers. These included questions about age, education, number of years married (or living together), and income. The other questions in this section of the data collection tool were devised by this investigator as a result of her literature review.

The second section of the data collection tool was designed to identify concerns of primiparous fathers. The original questionnaire, developed by Dulin in 1972, was comprised of 43 items determined to be potential concerns of prospective fathers during the prenatal period. The items were initially selected from Dulin's review of the literature, discussion with graduate students in maternal-child nursing, and interviewing three new fathers.

The Likert-type scale utilized by Dulin gave participants the opportunity to describe their frequency of concern for each item. There were five possible responses: "Always", "Frequently", "Sometimes", "Seldom", and "Never". Definitions of these categories were included with each questionnaire (see Appendix D & E). "Always" meant that the

prospective father had been concerned about the item more than 10 times since learning of his wife's pregnancy. "Frequently" meant that he had been concerned about the item between 6-9 times since learning of his wife's pregnancy. "Sometimes" meant that he had been concerned about the item 3-5 times since learning of his wife's pregnancy, while "Seldom" meant once or twice. "Never" meant that the expectant father had never been concerned about the item.

Dulin's questionnaire included three major content areas: concerns of the expectant father in regard to (a) his partner, (b) the baby, and (c) himself. Bailey (1979) slightly modified the tool for use in her study to identify concerns of primiparous and multiparous prospective fathers. She included questions pertaining to multiparous fathers, and expanded each content area to reflect new knowledge in the area.

For this study, Bailey's modified version of Dulin's tool was further modified by deleting the questions pertinent to multiparous fathers. There were 57 items in the questionnaire. The questionnaires were the same for men and women, with the exception of a few pronoun changes (see Appendix F & G). Permission was obtained from Dulin to use her tool (see Appendix H).

Tool reliability and validity. This tool had been used to identify prospective father's concerns in two separate studies (Bailey, 1979; Dulin, 1972). Both authors did pilot studies. Bailey (1979, p.70) tested the "...inter-item reliability of the tool by means

of Cronbach's Alpha. The total tool alpha, .900, was much higher than any of the subscales individually. This suggests that the tool is reliable as a whole, and there is little reason to use separate subscales." The reported correlation of .900 indicated a strong inter-item relationship.

Dulin (1972) used a group of graduate students in maternal-child nursing to establish content validity of the tool. Bailey (1979, p.27) stated that her pilot study "...assisted in determining the validity and clarity of the revised tool."

Data Collection

Data collection was done by a senior nursing student. The researcher instructed her in the procedure to be used, and was an observer at two of the classes, to assure consistency. It was necessary to collect data at six different Childbirth Education Association classes in order to obtain a sample size of 40 couples.

The researcher prepared the manila envelopes that were distributed to the Childbirth Education Association class couples. Each envelope contained two questionnaires. In order to avoid confusion, the men's questionnaires were color-coded blue and the women's pink. In the initial preparations of the manila envelopes each of the enclosed questionnaires were assigned unique corresponding numbers. In the event the couples' questionnaires were somehow separated or mixed up these numbers would allow the researcher to rematch them. Stapled to

the outside of each envelope was an introductory letter (see Appendix B) explaining the nature of the study and questionnaires, assuring voluntary participation and subject anonymity, and giving instructions for filling out the questionnaires.

The following procedure was used each time data were collected:

1. To avoid introducing any additional variables, data were collected at the first session of the Childbirth Education Association class series, before any content was presented.

2. Upon entering the classroom each couple was given a manila envelope containing the two questionnaires.

3. Each couple was asked to read the introductory letter, and if they chose to participate to fill out the enclosed questionnaires, according to the instructions. Pencils and magazines (to write on) were also distributed with the envelopes.

4. Participants were allowed as much time as they needed to complete the tool. Those not participating were excused for a break.

5. Completed questionnaires were replaced in the manila envelope and returned to the researcher.

6. Couples were asked to refrain from asking questions until after the questionnaires were completed.

7. In order to avoid embarrassing women attending the classes alone, or with a female coach, they were also given the envelopes and asked to fill out only the pink questionnaire. These questionnaires

were excluded from the study.

Data Analysis

The data analysis consisted of several steps. They were as follows:

Step 1: Each pair of questionnaires was checked for matching numbers in the upper left hand corner. The paired questionnaires were then stapled together.

Step 2: Each questionnaire was checked to determine if the background information corresponded with the criteria for sample selection. Those couples not meeting the criteria were excluded from the study.

Step 3: Descriptive statistics were used to describe the sample.

Step 4: In scoring the data, Dulin's (1972) method of assigning a predetermined number to each value was used: "Always" = 5;

"Frequently" = 4; "Sometimes" = 3; "Seldom" = 2; and "Never" = 1.

Tabulating the Women's Awareness Score (W.A.S.) for each couple was accomplished by subtracting the man's score from this partner's, on an item by item basis, converting the difference into its absolute value, and adding the differences for the total number of items. The formula used in this calculation is as follows:

$$W.A.S. = \sum_{n=1}^{57} \left| W_i - M_i \right|$$

Where n = item number on questionnaire

i = couple number

W = woman

M = man

A low W.A.S. indicated a greater degree of awareness of the man's concerns on the part of his partner, whereas a high score indicated less awareness on the part of the woman.

Step 5: The W.A.S.'s were correlated, using Kendall's Tau, with certain sociocultural variables, to determine if there were significant relationships. A statistical test of difference, the Mann Whitney U, was calculated on the W.A.S. when the sample was defined by other variables.

Step 6: A two-part individual item analysis was done. The first analysis was designed to determine if there were items where women were consistently aware or unaware of their partner's concerns. The analysis consisted of tabulating a Mean Difference Score (M.D.S.) for each item. The formula used to calculate the M.D.S. is as follows:

$$\text{M.D.S. for } 1 \leq n \leq 57 = \frac{1}{40} \sum_{i=1}^{40} (|W_i - M_i|)$$

Where n = item number on questionnaire

i = couple number

W = woman

M = man

The Grand Mean and its standard deviation were then computed from the

57 mean differences:

$$\text{Grand Mean} = \left[\frac{1}{57} \sum_{n=1}^{57} (\text{M.D.S.})_n \right]$$

Where n = item number on questionnaire

All items with a minimum Mean Difference Score one standard deviation above the Grand Mean were defined as concerns that women poorly perceived. The items with a M.D.S. one standard deviation below the Grand Mean were those concerns of their partners that women were able to perceive accurately.

The second part of the individual item analysis compared the men's mean responses with the women's mean responses on an item by item basis. This was done in an attempt to identify the direction of any differences between the way the men responded to the questionnaire items and the way the women perceived they would respond. A paired t-test was done to determine if the differences were significant.

Summary

The sample population used in this study consisted of 40 primiparous couples attending the first session of Childbirth Education Association classes. All participants spoke English as their first language, had completed a minimum of six years of school, were Caucasian Americans, and in the third trimester of their pregnancy.

The study was designed to protect the human rights of the

participants. Informed consent was obtained from all subjects, and individual anonymity was assured through the method of data collection. Furthermore, the proposal for this study was approved by the Human Subjects Review Committee.

The data collection tool was described in detail. It consisted of two parts, the first of which requested sociocultural information from the subjects. The second part consisted of a Likert-type scale designed to identify the frequency of concerns men have during the prenatal period.

Bailey (1979) tested the tool's reliability by means of Cronbach's Alpha. The results confirmed that the tool is reliable as a whole. Both Dulin (1972) and Bailey (1979) used methods to assure the content validity of the tool.

The final two sections of this chapter described the procedure used for collecting data and the plan for analysis of the data. Sufficient detail was given to allow for replication of the study.

CHAPTER 4

RESULTS

Introduction

The purpose of this study was to determine whether women were aware of their partners' concerns during pregnancy. Concerns were defined as "those aspects of pregnancy that cause fear, stress, anxiety, or some disturbing thought" (Dulin, 1972). The concept of awareness was measured by using a questionnaire designed to identify men's prenatal concerns. The men were asked to rate their concerns about the pregnancy on individual questionnaires, and their partners were asked to rate the same concerns as they believed them to pertain to their mates. A Women's Awareness Score (W.A.S.) was then calculated by measuring the difference between their responses.

The relationships between the W.A.S. and sociocultural characteristics of the study participants were also explored. These characteristics included such variables as age, family income, education, length of time married (or living together), whether the pregnancy was planned or unplanned, the presence or absence of extended family, and a history of an agricultural background.

The sample selected for the study were prospective parents (40 couples) currently involved in Childbirth Education Association classes. Each of the men received a questionnaire (see Appendix F) eliciting their individual responses to 57 stated concerns. Each of the women

(see Appendix G) were asked to respond to the same 57 items as they individually believed them to pertain to their partners.

The Likert-type questionnaire allowed the men to express their concern about a particular item with five possible responses: "Always", "Frequently", "Sometimes", "Seldom", and "Never". Definitions of these categories were included with each questionnaire (see Appendix D & E). The women expressed their perception of their partners' concerns using the same five possible responses. The 57 items included concerns in three content areas: concerns for partner (the mother); concerns for the baby; and concerns for self (the father).

The SPSS Computer Package was used in the data analysis. All descriptive and inferential statistics were obtained with this method.

Analysis of the data will be presented in the following order: scale authenticity, description of the sample, calculation of the W.A.S., correlations and tests of significance between the W.A.S. and selected sociocultural variables, and finally a two part analysis of the individual questionnaire items. The first item by item analysis was designed to determine which of the men's concerns were poorly perceived by their partners and which of their concerns were accurately perceived. The second individual item analysis compared the men's mean response with that of the women's on an item by item basis.

Scale Authenticity: Reliability and Validity

"Reliability concerns the extent to which an experiment, test,

or any measuring procedure yields the same results on repeated trials" (Carmines & Zeller, 1979, p.11). The inter-item reliability of the tool used in this study was tested by means of the Cronbach's Alpha. Table 1 indicates the alpha scores for each of the three content areas (sub-scales) and for the total scale; all were above 0.80. An Alpha value above 0.80 indicates a positive relationship exists among the items on the scale. One can therefore conclude that the reliability test indicated homogeneity among the items in the scale and allowed for the use of the data for making interpretations about the scale.

Table 1
Reliability Analysis for Total Scale and Subscales
of Measurement Tool

Scale	Cronbach's Alpha
1. Concerns about my partner	.83
2. Concerns about the baby	.89
3. Concerns about myself	.86
Total Scale	.94

The original tool had its content validity evaluated by a group of graduate students in maternal-child nursing. After modifying the tool to reflect new knowledge in each content area and including

questions pertaining to multiparous fathers, Bailey (1979) did a pilot study that helped to determine the validity and clarity of the revised tool. Since this study only dealt with primiparous fathers the two questions on Bailey's modified tool pertaining to multiparous fathers were deleted. The investigator, in the literature review, did not find any new area of knowledge that necessitated further modification of the tool.

Description of the Sample

There were 63 couples who filled out questionnaires. Twenty-three of these couples did not meet the criteria for inclusion in the study for the following reasons: there were nine cases where one or both of the prospective parents were not expecting the birth of a first child; two women indicated they had six years or less of education; ten individuals were not Caucasians - there was one "Polynesian", two "Mexicans", one "Black", and six "Native Americans"; one individual did not respond to the question of race, and furthermore, along with one other individual, failed to complete one or more pages of the questionnaire.

The remaining 40 couples met the criteria for inclusion in the study: all were Caucasian Americans, spoke English as their first language, had completed more than six years of school, were in their third trimester of pregnancy, and were expecting the birth of their first child.

In the following discussion of the sociocultural characteristics of these couples, all responses were taken from the men's questionnaires unless otherwise specified. This was done because of discrepancies between some of the answers given by certain husband-wife dyads. There were, for example, two couples who disagreed on their annual family income, and one case where the man stated the pregnancy wasn't planned and his wife stated it was. Another couple responded differently regarding the number of years they had been married.

Of the 80 individuals studied, the mean age for the men was 26.4 years with a range of 18-36 years. The women's mean age was 24.5 years with a range of 17-34 years. The distribution of ages is illustrated in Table 2.

Table 2
Age Distribution of Sample

Age	Respondents (n=80)	
	M	F
17-20	2	6
21-24	10	15
25-28	19	16
29-32	5	2
over 32	4	1

Although not a criterion for inclusion in the sample, all couples indicated they were married. Four couples had been married less than one year, 12 had been together between 1-2 years, and 14 had been married between 3-5 years. Only nine had been married between 6-10 years, and one had a marriage lasting between 11-15 years. One of the couples had been together over 15 years (see Table 3).

Table 3

Number of Years Couples Had Been Married

Number of years married	Frequency (n=40)
Less than 1	4
1-2	12
3-5	14
6-10	9
11-15	1

The education levels were similar for both men and women (see Table 4). It was found that 14 men and an equal number of women had completed between 9-12 years of school. Eighteen men and 19 women had completed 13-16 years of school. Only eight men and seven women had completed over 16 years of school.

Table 4
Education Level of Sample

Years of Education	Respondents (n=80)	
	M.	F
9-12	14	14
13-16	18	19
over 16	8	7

The annual income of these couples varied from \$5,000 or less to over \$20,000 (see Table 5). Only two couples indicated an annual income of \$5,000 or less, and both of these stated they were students. One couple earned between \$5,001 and \$10,000, while five declared an income between \$10,001 and \$15,000. Eleven couples earned between \$15,001 and \$20,000, while 20 of the couples earned an annual income in excess of \$20,000. One couple elected not to answer this question.

Table 5
Family Income Level of Sample

Annual Income	Frequency (n=39)
\$5,000 or less	2
\$5,001 - \$10,000	1
\$10,001 - \$15,000	5
\$15,001 - \$20,000	11
over \$20,000	20

Of the 80 participants in this study, only 12 individuals indicated unemployment status. Ten of those who did were women and two were men. Seven women stated they were "housewives", one woman was "unemployed", and two were "students". Both of the men who indicated they were unemployed were also "students".

The majority of couples ($n=23$) indicated they had planned their pregnancies. Sixteen responded that the pregnancy had not been planned. One couple did not respond to the question.

Only seven individuals (four men and three women) indicated they had previously attended some type of prenatal class during or prior to this pregnancy. Six of these persons went to classes given by local hospitals and clinics. The other person indicated her "prenatal class" had consisted of several college level child development classes.

Less than half of the participants (16 men and 12 women) responded that they had lived on a ranch or farm at some point in their lives. The remaining 51 individuals indicated they had not had that experience, while one person chose not to respond to the question. The length of time spent on a ranch or farm ranged from 2-28 years for the men and 1-23 years for the women. The mean number of years was 11.4 for the men and 12.4 for the women.

The majority of couples ($n=35$) indicated they had family members living in Montana, while only five did not. The amount of contact that individuals had with their Montana families varied (see Table 6).

Seventeen persons revealed they had daily contact, 34 had weekly contact, while 15 were in touch with their families on a monthly basis. One individual answered "yearly", one wrote in "occasionally", and one wrote "bimonthly" when asked how often they were in contact. Two individuals chose not to respond.

Table 6

Frequency of Contact with Family in Montana

Contact with family	M (n=35)	F (n=36)
Daily	6	11
Weekly	16	18
Monthly	10	5
Yearly	0	1
Other ^a	2	0
No answer	1	1

^a One person wrote in "Occasionally" and another wrote in "Bimonthly"

In summary, the study population was consistent with the characteristic prenatal class participants described by Watson (1977): Caucasian and well educated (with 26 men and 26 women - 65% of the sample - having some type of post high school education), and middle

economic status (family income was above \$15,001 for 31 of the 40 couples, with 20 of those indicating an income greater than \$20,000).

Calculation of the Women's Awareness Score

In scoring the results of the questionnaire, each answer was converted to a numerical value: "Always" = 5; "Frequently" = 4; "Sometimes" = 3; "Seldom" = 2; and "Never" = 1. For each item, the man's response was subtracted from his partner's. These differences were then converted to their absolute value and added together, arriving at a total score for each couple. The formula used to calculate the W.A.S. is as follows:

$$W.A.S. = \sum_{n=1}^{57} |W_i - M_i|$$

Where n = item number on questionnaire

i = couple number

W = woman

M = man

Using this method of scoring, the minimum score possible was zero and would occur if a couple answered all questions exactly the same. The maximum possible score was 228, and would occur if one member of the dyad answered with an "Always" and the other with a "Never" on all 57 items. Therefore, the possible range of the score was 0-228, with a low score indicating a greater degree of awareness of the man's concerns, and a high score indicating less awareness.

The resultant scores of the 40 couples participating in this study ranged from 30-100 (See Appendix I). It should be kept in mind that a low score indicated greater awareness on the part of the woman for her partner's concerns, whereas a high score indicated less awareness. The mean W.A.S. was 59.1 with a standard deviation of 15.36 (see Table 7). The researcher therefore concluded that awareness did exist to varying degrees among the sample population studied.

Table 7

Range, Mean, and Standard Deviation of W.A.S.

Scores (n=40)	
Range	30-100
Mean	59.1
Standard Deviation	15.36
Note: Minimum score possible was 0, maximum 228	

Correlations and Tests of Significance
Between the W.A.S. and Selected Variables

It was established that different levels of awareness existed among the 40 couples in this study. A correlation coefficient (Kendall's Tau) was utilized to determine the relationship between the W.A.S. and the following variables: age (for men and women), years of

education (for men and women), and number of years married (see Table 8). No significant correlations were found between the W.A.S. and women's age, men's age, or the number of years married ($p > .05$).

The correlation coefficient for the W.A.S. and the men's education showed a negative correlation (Tau = $-.2723$) that was statistically significant ($p \leq .01$). This indicated that the lower the W.A.S. (denoting greater awareness) the higher the men's education, while the higher the W.A.S. (denoting less awareness) the lower the men's education. The women's educational level and W.A.S. also showed a negative correlation (Tau = $-.2256$) that was statistically significant ($p \leq .05$), indicating that there was a tendency for the W.A.S. to decrease (denoting greater awareness) as the women's level of education increased, the reverse also being true.

Table 8
Correlations between the W.A.S. and Selected Variables

Variables	Kendalls's Tau	Significance
Men's age	-.1779	.107
Women's age	-.1004	.362
Men's education	-.2723	.014*
Women's education	-.2256	.041**
Years married	-.1441	.191
* $p \leq .01$		
** $p \leq .05$		

The Mann-Whitney U was used to test for a difference on W.A.S. between groups when defined by agricultural background (as indicated by time spent on a ranch or farm) for men and women, whether the pregnancy was planned or not, whether the annual income was above or below \$20,000, and whether or not the couple had family in Montana. All results were statistically non-significant ($p > .05$) as shown in Table 9.

In summary, education was the only variable affecting the degree of awareness women had of their partners' concerns. It was found that as the educational levels of both men and women increased the degree of awareness also increased.

Analysis of Individual Items

Two separate analyses were done on the individual questionnaire items. In the first analysis the data were studied to determine which of the men's concerns were accurately perceived by their partners and which of their concerns were poorly perceived. This was accomplished by calculating a Mean Difference Score (M.D.S.). In an attempt to gain a broader understanding of the relationships between the men's concerns and the women's perceptions of their concerns, a second analysis was done. This consisted of comparing the Item Mean Responses (I.M.R.) for men and women in an attempt to identify the direction of any differences between the way the men responded to the questionnaire

Table 9

Test of Significance on W.A.S. when Grouped by
Sociocultural Characteristics of the Study Participants

Sociocultural Characteristics	n	Mann Whitney U	z value	Corrected for Ties Two-tailed p
Agricultural background (men)		170.5	-.3856	.6997
Yes	16			
No	23			
Agricultural background (women)		154	-.4135	.6972
Yes	12			
No	28			
Planned Pregnancy		224	1.1429	.2431
Yes	23			
No	16			
Family in Montana		85.5	-.0818	.9348
Yes	35			
No	5			
Annual Income above \$20,000		239	1.3778	.1683
Yes	20			
No	19			

items and the way the women responded. A paired t-test was done to determine if the differences were significant. The first analysis was designed to look at differences between partners on an item by item basis, whereas the second analysis was designed to look for differences between men, as a group, and women, as a group.

Mean Difference Score Analysis

In determining which of the men's concerns were accurately perceived by their partners and which were poorly perceived, a Mean Difference Score (M.D.S.) was calculated for each of the 57 items on the questionnaire (see Appendix J). This score was obtained by subtracting each man's response from his partner's on an item by item basis, converting the differences to their absolute values, adding the results, and dividing by 40. The formula used to calculate the M.D.S is as follows:

$$\text{M.D.S. for } 1 \leq n \leq 57 = \frac{1}{40} \sum_{i=1}^{40} (|W_i - M_i|)$$

Where n = item number on questionnaire

i = couple number

W = woman

M = man

The Grand Mean and its standard deviation were then computed from the 57 mean differences. The formula used to calculate the Grand Mean

is as follows:

$$\text{Grand Mean} = \left[\frac{1}{57} \sum_{n=1}^{57} (\text{M.D.S.})_n \right]$$

Where n = item number on questionnaire.

The calculated Grand Mean was 1.04 and its standard deviation was 0.25. All items with a minimum M.D.S. one standard deviation above the Grand Mean (>1.29) were defined as men's concerns that were poorly perceived by their partners. The items with a M.D.S. one standard deviation below the Grand Mean ($<.79$) were those concerns of men that their partners were able to perceive accurately.

There were a total of five items that fell into the category of poorly perceived concerns (see Table 10). Two of those items ("Might have an extremely painful labor" and "Will be happy with my role in childbirth") were more than two standard deviations above the Grand Mean (>1.54). The M.D.S. indicated that the men's answers for the five items in Table 10 were poorly perceived by their partners, when compared with other items on the questionnaire.

There were eight items that fell one standard deviation below the Grand Mean ($<.79$) (see Table 11). One of these items ("That my boss may not understand my role as a new father") was two standard deviations below the Grand Mean ($<.54$). These were the items for which the women were able to accurately perceive their partners' responses.

Table 10

Mean Difference Scores for Poorly Perceived Concerns

Questionnaire Item	Mean Difference Score
2. "Doing enough exercise"	1.325
13. "Might have a long labor"	1.425
14. "Might have an extremely painful labor"	1.550 ^a
22. "Will be happy with my role in childbirth"	1.675 ^a
32. "How to handle a newborn infant"	1.350

Note: Grand Mean = 1.04 with a standard deviation of 0.25

^a Two standard deviations above the Grand Mean (>1.54)

Table 11

Mean Difference Scores for Accurately Perceived Concerns

Questionnaire Item	Mean Difference Score
11. "Becoming less attractive to me due to breastfeeding"	.650
17. "Could die while having the baby"	.725
19. "May never want another child"	.750
21. "May not be large enough to deliver"	.600
25. "The baby being breech"	.675
29. "The baby being injured during delivery"	.775
41. "Our house/apartment being too small for another person"	.600
49. "That my boss may not understand my role as a new father"	.400 ^a

Note: Grand Mean = 1.04 with a standard deviation of 0.25

^a Two standard deviations below the Grand Mean ($<.54$)

Item Mean Response Analysis

The Item Mean Response (I.M.R.) analysis was originally undertaken in an attempt to clarify why certain items were poorly perceived and others were accurately perceived. It should be recalled that data obtained through the Likert-type scale were not equal interval data and as such it was necessary to assign a predetermined number to each value in order to identify central tendencies. "Always" was assigned five, "Frequently", four, "Sometimes", three, "Seldom", two, and "Never", one. Therefore the I.M.R.'s had a possible range of one to five, the higher scores indicating items of greatest concern.

The first step in the I.M.R. analysis was to calculate the men's I.M.R. (M.I.M.R.). It was found that the poorly perceived concerns all had moderate to high M.I.M.R.'s. When all 57 of the M.I.M.R.'s were ranked from high to low the five poorly perceived concerns were found to be among the top ten concerns of men (see Appendix K). The accurately perceived concerns all had low M.I.M.R.'s and were among the lowest ranked concerns of men (see Appendix K).

The next step in the I.M.R. analysis was to compare the mean responses of the men and women on an item by item basis. The previous analyses (W.A.S. and M.D.S.) explored differences existing between partners, whereas the I.M.R. analysis looked at differences between the men, as a group, and the women, as a group. This was done in an attempt to identify the direction of any differences between the way

the women responded to the questionnaire items and the way the men responded. A paired t-test was done to determine if the differences were significant. It was found that for 19 questionnaire items the M.I.M.R. was significantly greater ($p \leq .05$) than was the women's I.M.R. (W.I.M.R.). For two items the W.I.M.R. was significantly greater ($p \leq .05$) than was the M.I.M.R. (see Table 12). It should be noted that several of the items that had a M.I.M.R. significantly greater than the W.I.M.R. had previously been identified as accurately and poorly perceived concerns in the M.D.S. analysis. These items are identified in Table 12.

Conclusions

The results of the data analysis indicated that some women were more aware of their partners' concerns than were others. Statistically significant relationships were found to exist between the W.A.S. and the educational levels of the men and women. It was discovered that the higher the educational level (men's or women's) the greater the awareness women had of their partners' concerns, the reverse also being true.

The individual questionnaire items had a two part analysis. The first analysis consisted of calculating the M.D.S. in an attempt to identify which of the men's concerns were poorly perceived by their partners and which of their concerns were accurately perceived. Five

Table 12

Item Mean Responses of Men and Women
that were Significantly Different

Questionnaire Item	Item Mean Response		Paired t-test
	Men	Women	Two-tailed p
1. "Eating a balanced diet"	4.25	3.775	.02
2. "Doing enough exercise"	3.65	2.975	.01 ^a
5. "Being moody and crying often"	2.5	3.15	.02 ^b
13. "Might have a long labor"	2.825	2.05	.00 ^a
14. "Might have an extremely painful labor"	3.25	2.15	.00 ^a
15. "Might have to have a Cesarean section"	2.375	1.725	.00
17. "Could die while having the baby"	1.75	1.175	.00 ^c
18. "Might have serious complications as a result of the pregnancy"	2.05	1.575	.04
19. "May never want another child"	1.825	1.325	.05 ^c
21. "May not be large enough to deliver"	1.775	1.475	.04 ^c
25. "The baby being breech"	1.925	1.4	.00 ^c
26. "The baby being premature"	2.3	1.825	.01
27. "The baby being deformed"	3.025	2.225	.00
28. "The baby being stillborn"	2.025	1.45	.01
30. "Different medications given during labor and delivery may have an effect on the baby"	2.65	2.0	.00
31. "The baby being healthy"	4.05	2.0	.02
37. "Taking the baby home and leaving my partner in the hospital due to a complication"	1.8	1.4	.05
46. "Being able to financially afford the baby now"	2.575	3.0	.02 ^b
51. "I may not know if my partner is in labor"	2.3	1.85	.04
52. "I may not get her to the hospital soon enough"	2.375	1.9	.01
57. "I may not be helpful during labor"	2.375	1.8	.01

a. Previously identified in the M.D.S. analysis as a poorly perceived concern.

b. One of two items where the women's I.M.R. was significantly greater than the men's I.M.R.

c. Previously identified in the M.D.S. analysis as an accurately perceived concern.

poorly perceived concerns were identified, while eight accurately perceived concerns were discovered.

The second part of the analysis consisted of analyzing the Item Mean Responses. When the M.I.M.R.'s for all 57 questionnaire items were ranked from highest to lowest, the five poorly perceived concerns, identified in the M.D.S. analysis, were found to be among the top ten concerns of men, as a group. The accurately perceived concerns all had low M.I.M.R.'s and were among the lowest ranked concerns of men.

The mean responses of the men and the mean responses of the women were analyzed on an item by item basis. A paired t-test was done to determine if the differences between the M.I.M.R. and W.I.M.R. were significant. A significant difference was found between the I.M.R.'s of men and women for 21 of the questionnaire items. For 19 of those items the M.I.M.R. was significantly greater than the W.I.M.R. The remaining two items had the W.I.M.R. significantly greater than the M.I.M.R. Several of the items identified in the M.D.S. analysis as accurately and poorly perceived concerns were among the 21 items with significant differences between the M.I.M.R.'s and the W.I.M.R.'s.

CHAPTER 5

DISCUSSION OF RESEARCH FINDINGS, IMPLICATIONS, LIMITATIONS, AND SUGGESTIONS FOR FUTURE RESEARCH

Introduction

The first part of this chapter presents a discussion of the research findings. Implications of the findings are discussed next, as they apply to nursing, followed by a discussion about the limitations of this study, and suggestions for future research. The chapter concludes with a summary of the research presented in this paper.

Discussion of the Findings

This study is based on the concept that pregnancy is a crisis that can affect the relationship of prospective parents. Contributing to the crisis of pregnancy are anxiety producing concerns that both men and women experience. The literature review suggested that recognition and communication of these concerns is an effective coping mechanism and provided for mutual support during the crisis. The concept of mutual support during pregnancy is relatively new in the literature. Traditionally nursing has focused on helping men develop an awareness of their partners' needs for understanding and support. Recent literature suggested men also need support and understanding and that this should come from the women. To be an effective source of support women need to be aware of their partners' concerns. However, no research was found addressing the issue of whether women

were aware of their partners' concerns. It was, therefore, the purpose of this study to determine a) the awareness women have of their partners' concerns during the prenatal period, and b) the relationship of this awareness to the following sociocultural characteristics of the participants: age, income, education, length of time married (or living together), whether the pregnancy was planned or unplanned, presence or absence of extended family, and agricultural background.

The sample, consisting of 40 primiparous couples attending their first session of Childbirth Education Association classes, was a sample of convenience. All couples spoke English as their primary language, had completed more than six years of school, were Caucasian Americans, and were in their third trimester of pregnancy. The relative homogeneity of the sample population was designed to allow for a more in-depth study of a specific population.

Women's Awareness Score

The first part of the data analysis consisted of calculating the Women's Awareness Score (W.A.S.). This was achieved by measuring the differences between the responses of each couple when each partner was given the same questionnaire designed to measure men's prenatal concerns. All men were asked to rate their concerns about the pregnancy, while their partners were asked to rate the same concerns as they believed them to pertain to their mates. The minimum possible score on this questionnaire was zero, with a maximum of 228. The

actual scores ranged from 30 to 100 with a standard deviation of 15.36 and a mean of 59.1. The results indicated that awareness did exist in varying degrees among the sample population studied. It was not within the scope of this study to assign dividing lines between scores to indicate acceptable and non-acceptable levels of awareness.

W.A.S. and Sociocultural Characteristics of the Sample

The second part of this study was designed to discover factors that might influence the presence or absence of the awareness. The literature review identified various sociocultural factors that may influence the degree of crisis experienced by the pregnant couple and their ability to cope. These same factors were analyzed in terms of their relationship with the W.A.S.

Correlations between W.A.S. and age, education, and number of years married. A correlation coefficient (Kendall's Tau) was utilized to determine if a relationship existed between the W.A.S. and the following variables: age (for men and women), years of education (for men and women), and number of years married. All findings were statistically non-significant with the exception of education. There was a statistically significant ($p \leq .01$) correlation ($\text{Tau} = -.2723$) between the W.A.S. and men's education. A similar, statistically significant ($p \leq .05$), correlation ($\text{Tau} = -.2256$) was found between the W.A.S. and women's education. In both cases the W.A.S. tended to decrease, indicating an increased awareness, as the level of education

increased. The reverse was also true.

Perhaps one reason why age did not correlate significantly with the W.A.S. was the inadequate representation of younger couples in the sample. The majority of the sample (29 men and 31 women) were between the ages of 21-28. Only two men and six women (10% of the sample) were under the age of 20. The literature review suggested that pregnancy was more of a crisis for teenagers since the developmental tasks of pregnancy often conflict with those of adolescence (Duvall, 1977).

The lack of a significant correlation between the W.A.S. and the number of years a couple had been married may have been because "years married" was not a measure of the couples' relationship. In other words, the years spent together may not reflect the quality of that time together, merely the quantity, and may have little bearing on the ability of women to develop an awareness of their partners' concerns. It could also be that couples who attend Childbirth Education Association classes, no matter the length of their marriage, have a stronger relationship than do couples not attending. A close relationship is important for success in these classes, as the method taught requires the participation and cooperation of both parents.

The statistically significant correlations between W.A.S. and men's and women's education revealed there was a tendency for the W.A.S. to decrease, indicating a greater awareness on the part of the

women for their partners' concerns, as educational levels for men and women increased. These correlations were consistent with findings reported in the literature review, suggesting that the crisis of pregnancy may be affected by the educational background of the individuals involved. It was interesting to note that both the men's and women's educational level correlated with the W.A.S., since 72.5% (n=29) of the women indicated the same level of education as did their partners. For 15% of the couples the women had a higher level of education than did their partners, while for the remaining 12.5% the reverse was true.

Test of significance of W.A.S. when defined by sample characteristics. The Mann Whitney U was used to determine if a significant difference existed between the W.A.S. and each of the following variables: agricultural background (as indicated by time spent on ranch or farm) for men and women, whether the pregnancy was planned or unplanned, whether the annual income was above or below \$20,000, and whether the couple had family in Montana. None of the tests were significant ($p > .05$).

The lack of a significant difference between the group with families in Montana and the group without may have been partially affected by the unequal size distribution between the two groups. There were 35 couples who had extended families in Montana, while only five did not. The very fact that such a large percentage (87.5%) of

the sample population had extended families in Montana was interesting, especially when the literature maintained there was a current trend in the United States toward nuclear families. According to Klaus and Kennel (1976) there was also the possibility that nuclear families have developed a support network to replace that of extended families.

There was no significant difference found between the group who had planned their pregnancy and the group who had not. Perhaps by the third trimester (when the questionnaire was administered) any conflicts between spouses, due to the pregnancy being unplanned, had been resolved. It was also a possibility that an unplanned pregnancy was not necessarily an unwanted pregnancy.

The group with an annual income above \$20,000 and the group below \$20,000 similarly showed no significant difference in the W.A.S. This result may have been affected by a design problem that allowed for a nonprecise measurement of income. With 50% of the sample indicating an income greater than \$20,000 it was obvious that the income categories used in this study were not reflecting current wages, or the fact that both partners may have been working. This problem could be corrected in future studies by including additional categories: \$20,001-\$25,000, \$25,001-\$30,000, and over \$30,000. In higher income areas it may be necessary to include categories up to \$50,000.

Non-significant differences also resulted when comparing men and

women with agricultural backgrounds to men and women with no agricultural backgrounds. The cultural diversity between agricultural and non-agricultural backgrounds, as defined in this study, did not appear to be a factor in determining women's ability to perceive their partners' prenatal concerns.

Individual Item Analysis

A two-part analysis of the individual questionnaire items was done. The first analysis consisted of calculating the Mean Difference Scores (M.D.S.) for all 57 questionnaire items. This analysis was designed to determine which of the men's concerns were poorly perceived by their partners and which of their concerns were accurately perceived. The second individual item analysis looked at the Item Mean Responses (I.M.R.) of the men and those of the women. Comparing the men's I.M.R. (M.I.M.R.) with the women's I.M.R. (W.I.M.R.) was done in an attempt to identify the direction of any differences between the way the women, as a group, responded to the questionnaire items and the way the men, as a group, responded. A paired t-test was done to determine if the differences were significant.

The discussion of the individual item analysis will be divided into two sections. The first section will identify and discuss the poorly and accurately perceived concerns. Parts of the I.M.R. analysis pertinent to these items will be included when appropriate. The second section will discuss the I.M.R. analysis of all 57 items.

M.D.S. analysis. There were five questionnaire items that fell into the category of poorly perceived concerns: "Doing enough exercise", "Might have a long labor", "Might have an extremely painful labor", "Will be happy with my role in childbirth", and "How to handle a newborn infant". All of these items had a high M.I.M.R., indicating these items were of some concern to the men. When all 57 of the M.I.M.R.'s were ranked from high to low the five poorly perceived concerns were found to be among the top ten concerns that men had (see Appendix K).

The amount of concern expressed by men about their partner's "Doing enough exercise" may have been due to current societal awareness of exercise and the role it plays in pregnancy and post-partal recovery. It may have also reflected men's feelings toward the women's figure changes and a desire for the women to regain their pre-pregnancy shapes. The fact that the sample was starting Childbirth Education Association classes, which focus on exercise, may also help to explain the degree of concern expressed by men. The poor perception women had of their partners' concern for this item may suggest a reluctance on the part of men to communicate their feelings. Typically men who attend Childbirth Education Association classes see themselves in a supportive role. Therefore, as men become cognizant of their partners' own struggles with their body images, the men may not wish to upset their wives further by vocalizing their own concerns.

Concerns about the approaching labor being long and painful are

typical in the last trimester of pregnancy. The high frequency of concerns expressed by the men in this sample may have reflected the men's own anxiety about their role in childbirth. The women may not have been aware of these concerns due to a reluctance on the part of their partners to express such feelings. The traditional masculine stereotype, forbidding expressions of tenderness, may have been a prevalent influence. It could also be that the men were afraid of frightening their partners by discussing their fears, especially if they saw themselves as being strong and supportive.

The literature suggested that men have a great deal of anxiety concerning the baby. Obrzut (1976) noted that 80% of his sample of expectant fathers were concerned with infant care skills. The fact that the women were unaware of the men's concerns regarding "How to handle a newborn infant" may again have been a reflection of the traditional male stereotype that doesn't allow men to freely express their feelings.

The item, "Will be happy with my role in childbirth", was the item for which most women misperceived their husbands actual level of concern. It appeared that the men's concerns toward their roles in childbirth may have been a topic that couples communicate about poorly. Certainly the tremendous emphasis American society is currently placing on father participation and support may have affected these couples (Marquart, 1976; Hines, 1977).

There were eight items that fell in the category of accurately

perceived concerns: "Becoming less attractive to me due to breastfeeding", "Could die while having the baby", "May never want another child", "May not be large enough to deliver", "The baby being breech", "The baby being injured during delivery", "Our house/apartment being too small for another person", "That my boss may not understand my role as a new father". All of these items had a low M.I.M.R. and, when compared with other questionnaire items, were among the lowest ranked concerns of men (See Appendix K).

The lack of concern about the item "Becoming less attractive to me due to breastfeeding" may have indicated that this was an issue the couples discussed and mutually decided whether or not the infant was to be breastfed. It may also have been an indication of society's current acceptance of breastfeeding. Breastfeeding is a topic that health care providers typically discuss with expectant mothers during the third trimester, so they can prepare their breasts if they decide to breastfeed.

The item "May never want another child" was accurately perceived as being of low concern to the men. Perhaps this was due to couples' current involvement with the existing fetus and its imminent arrival. This concern may also be more prevalent postnatally, especially after a difficult birth.

The items about complications during delivery such as the woman dying, not being large enough to deliver, and the child being born breech or being injured were all accurately perceived as being of low concern to the men. The low concern for complications may have

represented the current philosophy that childbearing is primarily a normal, uncomplicated function of women's bodies. It may also have indicated a lack of knowledge about these conditions.

The low concern expressed for the item "Our house/apartment being too small for another person" may have been a reflection of the relatively middle economic status of the sample population. Also, by the third trimester, this problem may have been resolved by moving to larger accommodations.

The final item, "That my boss may not understand my role as a new father" fell two standard deviations below the Grand Mean, denoting almost total congruency between the responses of the men and their partners. Again, the M.I.M.R. indicated this was an item of low concern. The higher income and educational levels of this sample may have been an indication that these men were their own bosses, or in positions with more flexibility and as such need not be concerned with this item. The possibility also exists that this item should be deleted from the questionnaire. There was no evidence in the literature review that this was a typical concern men had during pregnancy. It was originally added to Dulin's (1972) tool as a result of her interview with three expectant fathers. The lack of concern expressed by the men in this sample made the item's validity suspect.

In summary it was interesting to note that those items of low concern to the men, as a group, were accurately perceived as being of

low concern by their partners, whereas all of the items inaccurately perceived by the women were of high concern to the men. It was possible that the men had certain concerns they were unable or unwilling to communicate about to their partners.

I.M.R. analysis. Previous analyses in this paper have looked at differences between the men and their partners. The I.M.R. analysis was designed to look for differences between men and women, in general. This was accomplished by comparing the men's mean response with the women's mean response on an item by item basis. A paired t-test was done to determine if the differences between their responses were significant. A paired t-test was used because data were collected as paired data. Since the women responded in terms of their partners' concerns the results cannot be seen as typical of men and women, however they might provide direction for future research.

A total of 21 significant differences were found between the M.I.M.R.'s and the W.I.M.R.'s. For 19 of the questionnaire items the M.I.M.R. was significantly greater ($p \leq .05$) than was the W.I.M.R. On only two items the W.I.M.R. was significantly greater ($p \leq .05$) than was the M.I.M.R.

Of particular interest was the fact that three of the items previously defined as poorly perceived concerns ("Doing enough exercise", "Might have a long labor", and "Might have an extremely painful labor") and four of the items defined as accurately perceived

concerns ("Could die while having the baby", "May never want another child", "May not be large enough to deliver", and "The baby being breech") were among the 19 items identified as having a M.I.M.R. significantly greater than the W.I.M.R. It should be pointed out, that the M.D.S. analysis was looking at the differences between a man and his partner, whereas the I.M.R. analysis was looking for general differences between men and women. The two analyses suggested that differences existed on an individual level, between spouses, as well as on a larger scale, between the sexes.

When the 21 items that had significant difference between the M.I.M.R. and W.I.M.R. were further analyzed it was found that 43% of these items were "concerns about my partner (mother)"; 29% were "concerns about the baby"; and 19% were "concerns about myself (father)".

Eighty-one percent (n=17) of the items dealt with labor and its outcome. These included: "Might have a long labor", "Might have an extremely painful labor", "Might have to have a Cesarean section", "Could die while having the baby", "Might have a serious complication as a result of the pregnancy", "May never want another child", "May not be large enough to deliver", "The baby being breech", "The baby being premature", "The baby being deformed", "The baby being stillborn", "Different medications given during labor and delivery may have an effect on the baby", "The baby being healthy", "Taking the baby home

and leaving my partner in the hospital due to a complication", "I may not know if my partner is in labor", "I may not get her to the hospital soon enough", "I may not be helpful during labor". For all of these items the M.I.M.R. was significantly greater than was the W.I.M.R., indicating that women, as a group, may underestimate the concern men have about labor and its outcome. The literature review stated that concerns about labor were prevalent in the third trimester, affecting both men and women. Since the Childbirth Education Association classes are designed to deal with these concerns it would be interesting to see if the differences between the men's responses and the women's perception of the men's responses altered significantly by the end of the class series.

The remaining 19% (n=4) of the items dealt with a variety of topics: finances, diet, exercise, and the women's emotional lability. The fact that the women perceived the men were more concerned about this item than was actually the case may have been a reflection of their own concern. The women also perceived the men were more concerned about the item "Being able to financially afford the baby" than was indicated by the men. This may have been due to the women's acceptance of the men's typical role of provider.

In conclusion, the results of the I.M.R. analysis suggested that differences may exist between the sexes regarding men's concerns during pregnancy and women's perceptions of their concerns. The topic

of labor and its outcome appeared to be the area of concern for which the greatest misperceptions existed. In general the women tended to underestimate the men's frequency of concerns for those items. Certainly this is an area that needs further research.

Serendipitous Findings

A few serendipitous findings also deserve comment. These include: the low percentage of individuals attending early prenatal education classes; the fact that all couples in the sample were married; and the fact that 87.5% of the sample had family in Montana.

Childbirth Education Association classes are traditionally taught in the third trimester of pregnancy and the curriculum is devoted to specific breathing and relaxation techniques designed to help men and women cope with labor and delivery. It has been well documented that there is a need for prenatal education throughout pregnancy. Some education is done on an individual basis in the doctor's office. However, this may be neglected. Other organizations such as hospitals, health departments, and clinics, offer group classes to pregnant couples, and encourage attendance during the first trimester. The Childbirth Education Association, recognizing a need for early prenatal education, also offers an "early bird" class designed to meet the educational needs during the first and second trimester. With the variety of early prenatal classes available, it was surprising that

only 7.5% (n=7) of the sample indicated they had attended one. It would be interesting to find out if the couples knew about these classes, and if so, why they chose not to attend. The literature stated that the primary developmental task of the first trimester of pregnancy was the acceptance of its reality. Perhaps the poor attendance was an indication that couples have not yet accepted the pregnancy as a reality.

Although not a criterion for sample selection, all of the couples indicated they were married, including the 23 couples who were excluded for failure to meet the criteria for sample selection. There were five single women who attended the Childbirth Education Association classes where the data for this study were collected, but they all came with female coaches, not with the father of the child.

Finally, it was interesting to note that 87.5% of the sample had family living in Montana and most were in contact with them on a daily, weekly, or monthly basis. The literature discussed the increasing prevalence of nuclear families, yet among this particular sample that does not appear to be the case.

Implications

The results of this study support the fact that the women were aware, to varying degrees of their partners' prenatal concerns. The presence of this awareness was a general indication that men were able to communicate most of their concerns to their partners. This

becomes the first step in coping with the anxiety produced by these concerns, and lessening the crisis experienced by the couple during pregnancy.

There were statistically significant correlations between the levels of education for men and women, and the W.A.S. The higher the level of education (for men or women) the greater the awareness exhibited by the women. The nurse cognizant of this relationship would be able to focus on couples with lower levels of education and help facilitate communication of the men's concerns.

In analyzing the individual questionnaire items it became apparent that certain concerns of men were poorly perceived by women. These included: "Doing enough exercise", "Might have a long labor", "Might have an extremely painful labor", "Will be happy with my role in childbirth", and "How to handle a newborn infant". The knowledge that these particular concerns were poorly communicated could be put to use by prenatal educators. Again, the nurse could promote a discussion about these items, helping the men to identify and communicate these concerns to their partners, in an attempt to lessen the anxiety they may have caused. There is also an implication for classes on newborn care to be offered to expectant fathers.

Limitations

The following were considered to be limitations of the study:

1. The small sample size and the lack of random selection limited the ability to generalize the results to a larger population.
2. Couples self-selected themselves into the Childbirth Education Association program and it may be this selection criterion itself which resulted in the findings of this study.
3. Using a scale that sought information in frequency of concerns allowed for more individual interpretation, decreasing the reliability of scores between people.
4. Construct validity of the tool was not established.
5. It was not possible to assign dividing lines between scores to indicate acceptable and non-acceptable levels of awareness.

Recommendations

Based on the findings and limitations noted in this study the following recommendations are presented:

1. Utilize a larger sample size, including couples of different ages, ethnic backgrounds, and not involved in prenatal classes.
2. Do a correlational study to determine if a relationship exists between the W.A.S. and how couples rate their marriages.
3. Do a correlational study to determine if a relationship exists between the W.A.S. and the degree of crisis experienced during pregnancy (as measured, for example, by Hobbs 1965 Degree of Crisis Scale).

4. Do a descriptive study to identify with whom men discuss their concerns and who they use as a support system.
5. Determine if W.A.S., M.D.S., and I.M.R. change after attendance in Childbirth Education Association classes.
6. Design a study to determine why couples do not attend early prenatal classes.
7. Compare unrelated women's perception of men's concerns during pregnancy, with men's concerns, when the men are involved in a pregnancy.

Summary

The purpose of this study was to determine a) the awareness women have of their partners' concerns during the prenatal period, and b) the relationship of this awareness to such sociocultural characteristics of the participants as age, income, education, length of time married (or living together), whether the pregnancy was planned or unplanned, presence or absence of extended family, and agricultural background.

Analysis of the data showed that awareness did exist to varying degrees among the sample population studied. Further study is needed to determine what constitutes acceptable and non-acceptable levels of awareness, in reference to its effect on the couples' relationship during the crisis of pregnancy.

The only sociocultural variable that was significantly related to the level of awareness women had of their partners' prenatal concerns was education. It was found that as the educational levels of the men or women increased, the degree of awareness also increased. This result was consistent with findings in the literature suggesting that couples with higher educational levels experience less of a crisis during pregnancy.

In the M.D.S. analysis of individual questionnaire items, it was found that certain concerns of the men were accurately perceived by their partners, while others were poorly perceived. It was interesting to note that all of the accurately perceived items were of low concern to the men, whereas all of the poorly perceived items were of high concern.

Several possible reasons were put forth as to why certain items were poorly perceived. Most of these reasons dealt with the reluctance of the men to communicate their concerns. It was theorized that this reluctance may be related to the traditional male stereotype of being strong, silent, and fearless.

According to the conceptual framework of this study, couples who are able to recognize and communicate their concerns to one another are coping with the anxiety these concerns produce. The poorly perceived concerns, identified in this study, were not being communicated by the men to their partners, and as such may be a source of anxiety.

This anxiety can contribute to the crisis of pregnancy and may ultimately have a detrimental effect on the couples' relationship.

Facilitating the communication of these concerns is a possible nursing intervention that may help to decrease the anxiety they produce.

Whereas the M.D.S. analysis identified differences that existed between spouses, the I.M.R. analysis suggested that misperceptions also existed on a wider scale between the sexes. Most of the differences between the sexes dealt with concerns about labor and its outcome, where the women tended to underestimate the men's frequency of concern. It was suggested that further research is needed in this area.

The data analysis uncovered some serendipitous findings that raised certain questions: Why didn't these Childbirth Education Association class participants attend early prenatal classes? Why were there no unmarried couples attending these Childbirth Education Association classes? Finally, further research will be needed, using a larger, more diverse sample, before any conclusions can be made for the general population.

APPENDICES

APPENDIX A

LETTER TO CHILDBIRTH EDUCATION ASSOCIATION
REQUESTING PERMISSION TO DO STUDY

April 23, 1980

TO: The Childbirth Education Association

I am a graduate student in Nursing at Montana State University. At this point in my studies I am preparing a proposal to do my research thesis for my masters program. I am requesting permission to conduct a study using the C.E.A. prenatal classes.

The purpose of my study is to determine whether women are aware of their partners' concerns during the prenatal period, and what characteristics of the couple influence this awareness.

I would like to ask couples attending the first session of the C.E.A. class series to participate in my study. Each couple will receive two questionnaires, one marked for the man, and the other for the woman. The questionnaires are divided into two sections. The first section asks participants for information on their background. In the second section the man will be asked to rate his concerns about the pregnancy in relation to himself, his partner, and baby. The woman will be asked to rate these same concerns as she believes them to pertain to her partner. The questionnaires are the same for men and women, with the exception of a few pronoun changes.

Example of items on the questionnaires:

Man: I am concerned that my partner
may not know when labor begins

Woman: My partner is concerned that
I may not know when labor
begins

Always	Frequently	Sometimes	Seldom	Never
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

It is estimated that the introduction to the study, the instructions, and time needed for filling out the questionnaire will take approximately 20 minutes. If at all possible, I would like to start gathering data in May. I will need a sample size of 40 couples.

Please contact me if you have further questions. I have also left a more complete description of the study (including copies of the questionnaire) with (name of person in charge of the State association).

Thank you,

Jill Real

Jill Real, R.N.

APPENDIX B

INFORMATION LETTER TO STUDY PARTICIPANTS

PLEASE READ THIS BEFORE OPENING THE ENVELOPE

Hello,

I am a graduate student at Montana State University working towards a Master's Degree in Nursing. For my thesis I would like to learn whether women are aware of their partners' concerns during pregnancy and what characteristics of the couple influence this awareness.

Inside the envelope are two questionnaires. The blue one, marked "Father", is for the man to fill out and the pink one, marked "Mother", is for the woman. The first section of each questionnaire asks for general background information about yourselves. In the second section of the father's questionnaire, he will be asked to rate his concerns about the pregnancy in relation to himself, his partner, and the baby. The mother, in the second section of her questionnaire, will be asked to rate the same concerns as she believes them to pertain to her partner. For the purpose of this study I am defining concerns as those aspects of pregnancy that cause stress, fears, anxiety, or some disturbing thought.

You will, in no way, be identified in this study. There is a small number in the upper left hand corner of each questionnaire. This is not to identify you, but is used to match your questionnaire with your partner's after you have returned them. The results of this study will be shared with other health professionals and will be available to you, when the study is completed, at the M.S.U. Library.

Participation in this study is strictly voluntary. If you are willing to participate please fill out the enclosed questionnaire before class begins. In filling out the questionnaires, you are free to refuse to answer any or all questions. Please do not confer with your partner while completing the questionnaire, as I am interested in your individual responses. There are no right or wrong answers. Do not sign your name to the questionnaire.

REMEMBER: The man is rate his own concerns, on the BLUE form.
The woman is to rate the concerns as she believed

them to pertain to her partner, on the PINK form.

Again I ask you NOT to confer with your partner while answering the questionnaire.

When you have completed the questionnaire, replace it in the same envelope with your partner's and hand it in.

Thank you for your cooperation,

Jill Real

Jill Real, R.N.

APPENDIX C

PART I OF MEASUREMENT TOOL:
SOCIOCULTURAL INFORMATION ABOUT SAMPLE (GIVEN TO BOTH MEN AND WOMEN)

PLEASE CIRCLE OR FILL IN THE BLANKS

Today's date _____ Due date of Delivery _____

Your age _____

Ethnic Origin: Black American

Hispanic American

Asian American

Native American

Caucasian American

Other _____

Language spoken in your house _____

Present Marital Status _____

Years married or living together: less than 1 1-2 3-5
6-10 11-15 more than 15

Your occupation: _____

Years of education: 6 or less 7-9 10-12 13-16 more than 16

Annual Family Income \$5,000 or less \$5,001-\$10,000 \$10,001-\$15,000
\$15,001-\$20,000 more than \$20,000

This pregnancy was: Planned Unplanned

Have you attended previous prenatal classes? Yes No

If yes, when did you attend them, and who gave them? _____

Are you expecting the birth of your first child? Yes No

Have you ever lived on a farm or ranch? Yes No

If yes, for how many years? _____

Do you have any family living in Montana? Yes No

If yes, how often are you in contact with them: daily weekly

monthly yearly

other _____

APPENDIX D

DEFINITIONS OF CATEGORIES FOR COMPLETION OF
PART II OF THE MEN'S QUESTIONNAIRE

THE FOLLOWING ARE THE DEFINITIONS OF THE CATEGORIES TO USE IN
COMPLETING THIS QUESTIONNAIRE:

- ALWAYS: Means that you have been concerned about the item more than 10 times since learning of your partner's pregnancy.
- FREQUENTLY: Means that you have been concerned about the item between 6-9 times since learning of your partner's pregnancy.
- SOMETIMES: Means that you have been concerned about the item between 3-5 times since learning of your partner's pregnancy.
- SELDOM: Means that you have been concerned about the item once or twice since learning of your partner's pregnancy.
- NEVER: Means that you are not presently concerned about the item and have not been concerned about the item since learning of your partner's pregnancy.

APPENDIX E

DEFINITIONS OF CATEGORIES FOR COMPLETION OF
PART II OF THE WOMEN'S QUESTIONNAIRE

THE FOLLOWING ARE THE DEFINITIONS OF THE CATEGORIES TO USE IN
COMPLETING THIS QUESTIONNAIRE:

- ALWAYS: Means that your partner has been concerned about the item more than 10 times since learning of your pregnancy.
- FREQUENTLY: Means that your partner has been concerned about the item between 6-9 times since learning of your pregnancy.
- SOMETIMES: Means that your partner has been concerned about the item between 3-5 times since learning of your pregnancy.
- SELDOM: Means that your partner has been concerned about the item once or twice since learning of your pregnancy.
- NEVER: Means that your partner is not presently concerned about the item and has not been concerned about the item since learning of your pregnancy.

APPENDIX F

PART II OF MEASUREMENT TOOL - GIVEN TO MALE PARTICIPANTS

PLEASE CHECK THE APPROPRIATE CATEGORY DESCRIBING YOUR REACTION

PART ONE: CONCERNS ABOUT MY PARTNER

	ALWAYS	FREQUENTLY	SOMETIMES	SELDOM	NEVER
<u>I AM CONCERNED ABOUT MY PARTNER:</u>					
1. <u>EATING A BALANCED DIET</u>					
2. <u>DOING ENOUGH EXERCISES</u>					
3. <u>LOSING HER FIGURE</u>					
4. <u>BECOMING LESS AFFECTIONATE TOWARD ME</u>					
5. <u>BEING MOODY AND CRYING SO OFTEN</u>					
6. <u>WANTING SEXUAL INTERCOURSE LESS OFTEN</u>					
7. <u>BEING A GOOD MOTHER</u>					
8. <u>BECOMING PREGNANT SOON AFTER DELIVERY</u>					
9. <u>BEING ABLE TO BREASTFEED/BOTTLEFEED</u>					
10. <u>GETTING ENOUGH REST AFTER BIRTH</u>					
11. <u>BECOMING LESS ATTRACTIVE TO ME DUE TO BREASTFEEDING</u>					
<u>I AM CONCERNED THAT MY PARTNER:</u>					
12. <u>MAY NOT KNOW WHEN LABOR BEGINS</u>					
13. <u>MIGHT HAVE A LONG LABOR</u>					
14. <u>MIGHT HAVE AN EXTREMELY PAINFUL LABOR</u>					
15. <u>MIGHT HAVE TO HAVE A CESAREAN SECTION</u>					
16. <u>MAY NOT BE ABLE TO TOLERATE LABOR EMOTIONALLY</u>					
17. <u>COULD DIE WHILE HAVING THE BABY</u>					
18. <u>MIGHT HAVE SERIOUS COMPLICATIONS AS A RESULT OF THE PREGNANCY</u>					
19. <u>MAY NEVER WANT ANOTHER CHILD</u>					
20. <u>WILL HAVE THE BABY WHEN THE DOCTOR AND NURSE ARE NOT AROUND</u>					
21. <u>MAY NOT BE LARGE ENOUGH TO DELIVER</u>					
22. <u>WILL BE HAPPY WITH MY ROLE IN CHILDBIRTH</u>					

PART TWO: CONCERNS ABOUT OUR BABY

I AM CONCERNED ABOUT:	ALWAYS	FREQUENTLY	SOMETIMES	SELDOM	NEVER
23. <u>HOW THE BABY GROWS IN THE UTERUS DURING PREGNANCY</u>					
24. <u>HURTING THE BABY NOW DURING SEXUAL INTERCOURSE</u>					
25. <u>THE BABY BEING BREECH (BOTTOM FIRST)</u>					
26. <u>THE BABY BEING PREMATURE (BORN EARLY)</u>					
27. <u>THE BABY BEING DEFORMED</u>					
28. <u>THE BABY BEING STILLBORN (BORN DEAD)</u>					
29. <u>THE BABY BEING INJURED DURING DELIVERY</u>					
30. <u>DIFFERENT MEDICATIONS GIVEN DURING LABOR AND DELIVERY THAT MAY HAVE AN EFFECT ON THE BABY</u>					
31. <u>THE BABY BEING HEALTHY</u>					
32. <u>HOW TO HANDLE A NEWBORN INFANT</u>					
33. <u>THE BABY LIKING ME</u>					
34. <u>HOW TO RELATE TO THE BABY</u>					
35. <u>KNOWING WHAT TO DO WHEN THE BABY CRIES</u>					
36. <u>BEING LEFT ALONE WITH THE BABY WHEN MY PARTNER IS AWAY FOR A FEW HOURS</u>					
37. <u>TAKING THE BABY HOME AND LEAVING MY PARTNER IN THE HOSPITAL DUE TO A COMPLICATION</u>					
38. <u>THE BABY CHANGING OUR LIFE STYLE</u>					
PART THREE: CONCERNS ABOUT MYSELF					
I AM CONCERNED ABOUT:					
39. <u>FEELING LESS AFFECTIONATE TOWARD MY PARTNER</u>					
40. <u>NOT FEELING READY FOR THIS BABY NOW</u>					
41. <u>OUR HOUSE/APARTMENT BEING TOO SMALL FOR ANOTHER PERSON</u>					
42. <u>BEING A GOOD FATHER</u>					
43. <u>BEING ABLE TO DISCUSS MY FEARS WITH MY PARTNER</u>					
44. <u>HAVING TIME TO SPEND WITH A NEW FAMILY MEMBER</u>					

	ALWAYS	FREQUENTLY	SOMETIMES	SELDOM	NEVER
I AM CONCERNED ABOUT:					
45. MEETING MY SEXUAL NEEDS					
46. BEING ABLE TO FINANCIALLY AFFORD THE BABY NOW					
47. THE POSSIBLE NECESSITY OF GETTING A SECOND JOB					
48. LOSING MY FREEDOM					
49. THAT MY BOSS MAY NOT UNDERSTAND MY ROLE AS A NEW FATHER					
50. FEELING INADEQUATE TO HELP MY PARTNER IN LABOR AND DELIVERY					
I AM CONCERNED THAT:					
51. I MAY NOT KNOW IF MY PARTNER IS IN LABOR					
52. I MAY NOT GET HER TO THE HOSPITAL SOON ENOUGH					
53. I MAY NOT GET TO BE WITH MY PARTNER IN DELIVERY					
54. I WILL BE AWAY WHEN SHE GOES INTO LABOR					
55. MY PARTNER WILL EXPECT ME TO BE IN THE DELIVERY ROOM WITH HER					
56. I MAY WANT TO LEAVE THE DELIVERY ROOM AFTER I AM THERE					
57. I MAY NOT BE HELPFUL DURING LABOR					

APPENDIX G

PART II OF MEASUREMENT TOOL - GIVEN TO FEMALE PARTICIPANTS

PLEASE CHECK THE APPROPRIATE CATEGORY DESCRIBING YOUR REACTION

PART ONE: CONCERNS MY PARTNER HAS ABOUT ME

	ALWAYS	FREQUENTLY	SOMETIMES	SELDOM	NEVER
MY PARTNER IS CONCERNED ABOUT MY:					
1. EATING A BALANCED DIET					
2. DOING ENOUGH EXERCISES					
3. LOSING MY FIGURE					
4. BECOMING LESS AFFECTIONATE TOWARD HIM					
5. BEING MOODY AND CRYING SO OFTEN					
6. WANTING SEXUAL INTERCOURSE LESS OFTEN					
7. BEING A GOOD MOTHER					
8. BECOMING PREGNANT SOON AFTER DELIVERY					
9. BEING ABLE TO BREASTFEED/BOTTLEFEED					
10. GETTING ENOUGH REST AFTER BIRTH					
11. BECOMING LESS ATTRACTIVE TO HIM DUE TO BREASTFEEDING					
MY PARTNER IS CONCERNED THAT I:					
12. MAY NOT KNOW WHEN LABOR BEGINS					
13. MIGHT HAVE A LONG LABOR					
14. MIGHT HAVE AN EXTREMELY PAINFUL LABOR					
15. MIGHT HAVE TO HAVE A CESAREAN SECTION					
16. MAY NOT BE ABLE TO TOLERATE LABOR EMOTIONALLY					
17. COULD DIE WHILE HAVING THE BABY					
18. MIGHT HAVE SERIOUS COMPLICATIONS AS A RESULT OF THE PREGNANCY					
19. MAY NEVER WANT ANOTHER CHILD					
20. WILL HAVE THE BABY WHEN THE DOCTOR AND NURSE ARE NOT AROUND					
21. MAY NOT BE LARGE ENOUGH TO DELIVER					
22. WILL BE HAPPY WITH HIS ROLE IN CHILDBIRTH					

PART TWO: CONCERNS ABOUT OUR BABY

MY PARTNER IS CONCERNED ABOUT:	ALWAYS	FREQUENTLY	SOMETIMES	SELDOM	NEVER
23. <u>HOW THE BABY GROWS IN THE UTERUS DURING PREGNANCY</u>					
24. <u>HURTING THE BABY NOW DURING SEXUAL INTERCOURSE</u>					
25. <u>THE BABY BEING BREECH (BOTTOM FIRST)</u>					
26. <u>THE BABY BEING PREMATURE (BORN EARLY)</u>					
27. <u>THE BABY BEING DEFORMED</u>					
28. <u>THE BABY BEING STILLBORN (BORN DEAD)</u>					
29. <u>THE BABY BEING INJURED DURING DELIVERY</u>					
30. <u>DIFFERENT MEDICATIONS GIVEN DURING LABOR AND DELIVERY THAT MAY HAVE AN EFFECT ON THE BABY</u>					
31. <u>THE BABY BEING HEALTHY</u>					
32. <u>HOW TO HANDLE A NEWBORN INFANT</u>					
33. <u>THE BABY LIKING HIM</u>					
34. <u>HOW TO RELATE TO THE BABY</u>					
35. <u>KNOWING WHAT TO DO WHEN THE BABY CRIES</u>					
36. <u>BEING LEFT ALONE WITH THE BABY WHEN I AM AWAY FOR A FEW HOURS</u>					
37. <u>TAKING THE BABY HOME AND LEAVING ME IN THE HOSPITAL DUE TO A COMPLICATION</u>					
38. <u>THE BABY CHANGING OUR LIFE STYLE</u>					

PART THREE: CONCERNS ABOUT HIMSELF

MY PARTNER IS CONCERNED ABOUT:	ALWAYS	FREQUENTLY	SOMETIMES	SELDOM	NEVER
39. <u>FEELING LESS AFFECTIONATE TOWARD ME</u>					
40. <u>NOT FEELING READY FOR THIS BABY NOW</u>					
41. <u>OUR HOUSE/APARTMENT BEING TOO SMALL FOR ANOTHER PERSON</u>					
42. <u>BEING A GOOD FATHER</u>					
43. <u>BEING ABLE TO DISCUSS HIS FEARS WITH ME</u>					
44. <u>HAVING TIME TO SPEND WITH A NEW FAMILY MEMBER</u>					

	ALWAYS	FREQUENTLY	SOMETIMES	SELDOM	NEVER
<u>MY PARTNER IS CONCERNED ABOUT:</u>					
45. MEETING HIS SEXUAL NEEDS					
46. BEING ABLE TO FINANCIALLY AFFORD THE BABY NOW					
47. THE POSSIBLE NECESSITY OF GETTING A SECOND JOB					
48. LOSING HIS FREEDOM					
49. THAT HIS BOSS MAY NOT UNDERSTAND HIS ROLE AS A NEW FATHER					
50. FEELING INADEQUATE TO HELP ME IN LABOR AND DELIVERY					
<u>MY PARTNER IS CONCERNED THAT:</u>					
51. HE MAY NOT KNOW IF I AM IN LABOR					
52. HE MAY NOT GET ME TO THE HOSPITAL SOON ENOUGH					
53. HE MAY NOT GET TO BE WITH ME IN DELIVERY					
54. HE WILL BE AWAY WHEN I GO INTO LABOR					
55. I WILL EXPECT HIM TO BE IN THE DELIVERY ROOM WITH ME					
56. HE MAY WANT TO LEAVE THE DELIVERY ROOM AFTER HE IS THERE					
57. HE MAY NOT BE HELPFUL DURING LABOR					

APPENDIX H

LETTER FROM DULIN GRANTING PERMISSION TO USE HER TOOL

March 3, 1980

Judy Dawson Dulin
c/o Major S.L. Dulin
Headquarters Second Region
USA CIDC
APO New York 09102

Dear Ms. Dulin:

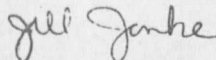
I am writing to request permission to use the tool you developed for your thesis entitled "Identification of Concerns of First-Time Prospective Fathers," at the University of Washington (1972). Currently I am studying for a master's degree in nursing at Montana State University. For my thesis I intend to look at the female's awareness of her partner's concerns during the prenatal period.

In using your tool I will be asking the woman to answer the questions the way she thinks her partner will, and then compare her responses with his answers. The degree of congruence between their answers will be studied in terms of the following intervening variables: socio-economic status, planned parenthood, presence of extended family, rural/urban background, and age. I may need to slightly modify the tool in order to include items on current research findings.

If you have further questions on my proposal please feel free to contact me. I've enclosed a copy of this letter for your files. I'd appreciate it if you would sign the permission below and return this letter to me in the envelope provided.

Thank you for your assistance in this matter.

Sincerely,

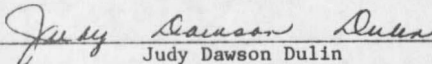


Jill Janke
MSU Graduate Student



Anna M. Shannon, R.N., D.N.S., F.A.A.N.
Dean of Nursing
Chairman of Jill Janke's Graduate Committee

CONSENT GRANTED


Judy Dawson Dulin

DATED:

11 March 1980

APPENDIX I

W.A.S. DISTRIBUTION AND FREQUENCIES

<u>W.A.S.</u>	<u>Frequency</u>
30	1
39	1
40	2
43	3
45	1
46	1
48	3
50	1
51	2
52	1
53	1
54	2
56	1
57	1
58	1
63	2
64	1
65	1
68	2
69	2
70	1
71	1
74	1
79	1
81	1
87	1
90	1
100	1

n = 40

APPENDIX J

MEAN DIFFERENCE SCORES FOR QUESTIONNAIRE ITEMS

Item Number	M.D.S.
1.	.975
2.	1.325 ^a
3.	.850
4.	1.100
5.	1.250
6.	.850
7.	1.050
8.	.900
9.	1.200
10.	1.075
11.	.650 ^b
12.	1.100
13.	1.425 ^a
14.	1.550 ^a
15.	1.200
16.	.900
17.	.725 ^b
18.	1.075
19.	.750 ^b
20.	1.000
21.	.600 ^b
22.	1.675 ^a
23.	1.175
24.	.925
25.	.675 ^b

26.	.825
27.	1.250
28.	1.025
29.	.775 ^b
30.	1.000
31.	1.150
32.	1.350 ^a
33.	1.275
34.	1.225
35.	1.275
36.	1.100
37.	.850
38.	1.275
39.	1.474
40.	.825
41.	.600 ^b
42.	1.225
43.	1.000
44.	.950
45.	1.250
46.	.925
47.	.875
48.	.800
49.	.400 ^b
50.	1.000
51.	1.050
52.	.925
53.	1.000
54.	1.225
55.	1.400

102

56.	.950
57.	1.225

-
- a. Accurately perceived concerns.
 - b. Poorly perceived concerns.
-

APPENDIX K

ITEM MEAN RESPONSES FOR MEN RANKED FROM HIGHEST TO LOWEST

Item Number	Item Mean Response
1. Eating a balanced diet	4.25
31. The baby being healthy	4.05
2. Doing enough exercises	3.65 ^a
14. Might have an extremely painful labor	3.25 ^a
32. How to handle a newborn infant	3.20 ^a
23. How the baby grows in the uterus during pregnancy	3.075
27. The baby being deformed	3.025
22. Will be happy with my role in childbirth	2.900 ^a
13. Might have a long labor	2.825 ^a
35. Knowing what to do when the baby cries	2.8
24. Hurting the baby now during sexual intercourse	2.725
30. Different medications given during labor and delivery that may have an effect on the baby	2.65
38. The baby changing our lifestyle	2.65
34. How to relate to the baby	2.6
46. Being able to financially afford the baby now	2.575
10. Getting enough rest after birth	2.55
5. Being moody and crying so often	2.5
6. Wanting sexual intercourse less often	2.475
55. My partner will expect me to be in the delivery room with her	2.45
42. Being a good father	2.45
15. Might have to have a cesarean section	2.375
52. I may not get her to the hospital soon enough	2.375
54. I will be away when she goes into labor	2.375
57. I may not be helpful during labor	2.375

26. The baby being premature	2.3
50. Feeling inadequate to help my partner in labor and delivery	2.3
51. I may not know if my partner is in labor	2.3
44. Having to spend time with a new family member	2.25
3. Losing her figure	2.225
33. The baby liking me	2.225
45. Meeting my sexual needs	2.2
43. Being able to discuss my fears with my partner	2.125
7. Being a good mother	2.1
36. Being left alone with the baby when my partner is away for a few hours	2.1
9. Being able to breastfeed/bottlefeed	2.075
18. Might have a serious complication as a result of the pregnancy	2.05
28. The baby being stillborn	2.025
40. Not feeling ready for this baby now	2.025
56. I may want to leave the delivery room after I am there	1.975
12. My partner may not know when labor begins	1.95
25. The baby being breech	1.925 ^b
29. The baby being injured during delivery	1.9 ^b
19. Partner may never want another child	1.82 ^b
53. I may not get to be with my partner in delivery	1.8
37. Taking the baby home and leaving my partner in the hospital due to a complication	1.8
21. May not be large enough to deliver	1.775 ^b
48. Losing my freedom	1.775
17. Could die while having the baby	1.75 ^b
16. May not be able to tolerate labor emotionally	1.725
20. Will have the baby when the doctor and nurse are not around	1.725

8. Becoming pregnant soon after delivery	1.7
4. Becoming less affectionate toward me	1.675
39. Feeling less affectionate toward my partner	1.675
47. The possibility of getting a second job	1.6
41. Our house/apartment being too small for another person	1.45 ^b
49. That my boss may not understand my role as a new father	1.3 ^b
11. Becoming less attractive to me due to breastfeeding	1.3 ^b

-
- a. Poorly perceived concerns.
b. Accurately perceived concerns.
-

LIST OF REFERENCES

LIST OF REFERENCES

- Aguilera, D.C., & Messick, J.M. Crisis Intervention: Theory and Methodology. St. Louis: C.V. Mosby Co., 1974.
- Antle, K. Psychological Involvement in Pregnancy by Expectant Fathers. Journal of Obstetrical, Gynecological, and Neonatal Nursing, July-August 1975, 4, 40-42.
- Anzalone, J.T., & Phillips, C.R. Fathering Participation in Labor and Birth. St. Louis: C.V. Mosby Co., 1978.
- Arnstein, H. The Crisis of Becoming a Father. Sexual Behavior, April 1972, pp. 42-47.
- Bailey, D.A. Identification of Concerns of Primiparous and Multiparous Prospective Fathers. Unpublished Masters Thesis, University of Washington, 1979.
- Bibring, G., Dwyer, T.F., Huntington, D.S., & Valenstein, A.F. A Study of the Psychological Process in Pregnancy and of the Earliest Mother-Child Relationships: I. Some Propositions and Comments. In The Psychoanalytic Study of the Child (Vol. XVI). New York: International Universities Press, 1961.
- Biller, H., & Meredith D. Father Power. New York: David McKay Co., 1974.
- Brazelton, T.B. Effect of Maternal Expectations of Early Infant Behavior. Early Child Developmental Care, 1973, 2, 259-273.
- Brink, P., & Wood, M. Basic Steps in Planning Nursing Research from Question to Proposal. Massachuset: Duxbury Press, 1978.
- Caplan, G. Psychological Aspects of Maternity Care. American Journal of Public Health, January 1957, 47, 25-31.
- Caplan, G. Concepts of Mental Health and Consultation. Washington: U.S. Department of Health, Education, and Welfare, 1959.
- Caplan, G. Emotional Implications of Pregnancy and Influences on Family Relationships. In H.C. Stuart & D. Prugh (Eds.), The Healthy Child: His Physical, Psychological, and Social Development

Cambridge: Harvard University Press, 1960.

Caplan, G. An Approach to Community Mental Health. New York: Grune & Stratton Inc., 1961.

Caplan, G. Principles of Preventive Psychiatry. New York: Basic Books, Inc., 1964.

Caplan, G., & Parad, H. A Framework for Studying Families in Crisis. In H. Parad (Ed.), Crisis Intervention: Selected Readings. New York: Family Service Association of America, 1965.

Carmines, E.G., & Zeller, R.A. Reliability and Validity Assessment. Beverly Hills, California: SAGE Publications, Inc., 1979.

Colman, A.D. Psychological State During Pregnancy. American Journal Of Orthopsychiatry, July 1969, 39, 788-797.

Colman, A.D., & Colman, L. Pregnancy: The Psychological Experience. New York: Herder & Herder, 1972.

Copp, J.H. Diversity of Rural Society and Health Needs. In Rural Health Services: Organization, Delivery, and Use. North Central Regional Center for Rural Development. Ames, Iowa: Iowa State University Press, 1976.

Cox, F.D. American Marriage: A Changing Scene. Dubuque, Iowa: William C. Brown, 1972.

Cronewett, L., & Newmark, L. Fathers' Responses to Childbirth. Nursing Research, May-June 1974, 23, 210-217.

DeGarmo, E., & Davidson, K. Psychosocial Effects of Pregnancy on the Mother, Father, Marriage, and Family. In L.K. McNall & J. Galeener (Eds.), Current Practice in Obstetric and Gynecologic Nursing (Vol. 2). St. Louis: C.V. Mosby Co., 1978.

Deutcher, M. A Learning Period for Man and Woman. Sexual Behavior, April 1972, p. 46.

Dulin, J.D. Identification of Concerns of First Time Prospective Fathers. Unpublished Masters Thesis, University of Washington, 1972.

Duvall, E.M. Family Development (4th ed.). Philadelphia: J.B. Lippincott Co., 1971.

- Duvall, E.M. Marriage and Family Development. Philadelphia: J.B. Lippincott Co., 1977.
- Dyer, E. Parenthood as Crisis: A Re-Study. In H. Parad (Ed.), Crisis Intervention: Selected Readings. New York: Family Service Association of America, 1965.
- Erikson, E. Growth and Crisis of the Healthy Personality. In C. Kluckhohn, H. Murray, & D. Schneider (Eds.), Personality in Nature, Society, and Culture (2nd ed.). New York: Alfred A. Knopf, 1953.
- Fawcett, J. Body Image and the Pregnant Couple. American Journal of Maternal-Child Nursing, July-August 1978, 3 (4), 227-233.
- Griffith, S. Pregnancy as an Event with Crisis Potential for Marital Partners: A Study of Interpersonal Needs. Journal of Obstetrical, Gynecological, and Neonatal Nursing, November-December 1976, 5 (6), 35-38.
- Hines, J. Father-The Forgotten Man. Nursing Forum, 1971, 10 (2), pp. 176-200.
- Hott, J.R. The Crisis of Expectant Fatherhood. American Journal of Nursing, September 1976, 76 (9), 1436-1440.
- Hrobsky, D.M. Transition to Parenthood-A Balancing of Needs. In S. Smoyak (Ed.), Nursing Clinics of North America (Vol. 12, #3). Philadelphia: W.B. Saunder Co., September, 1977.
- Jessner, L. Pregnancy as a Stress in Marriage. In E. Nash, L. Jessner, & D.W. Abse (Eds.), Marriage Counselling in Medical Practice. Chapel Hill: The University of Carolina Press, 1964.
- Jessner, L., Weigert, E., & Foy, J.L. The Development of Parental Attitudes During Pregnancy. In E.J. Anthony & T. Benedek (Eds.), Parenthood: Its Psychology and Psychopathology. Boston: Little & Brown & Co., 1970.
- Klaus, M., & Kennel, J. Human Maternal and Paternal Behavior. In M. Klaus & J. Kennel (Eds.), Maternal-Infant Bonding. St. Louis: C.V. Mosby Co., 1976.

- LeMasters, E.E. Parenthood as Crisis. In H. Parad (Ed.), Crisis Intervention: Selected Readings. New York: Family Service Association of America, 1965.
- Liebenberg, B. Expectant Fathers. Child and Family, Summer 1969, 8, 264-267.
- Light, H., & Fenster, C. Maternal Concerns During Pregnancy. American Journal of Obstetrics and Gynecology, January 1974, 118 (1), 46-50.
- Lipkin, G.B. Psychosocial Aspects of Maternal-Child Nursing. St. Louis: C.V. Mosby Co., 1974.
- Loesch, J.G., & Greenburg, N.H. Some Specific Areas of Conflicts Observed During Pregnancy: A Comparative Study of Married and Unmarried Pregnant Women. American Journal of Orthopsychiatry, June 1962, 32, 624-636.
- Marquart, R.K. Expectant Fathers: What are Their Needs? American Journal of Maternal-Child Nursing, January-February 1976, 1, 32-36.
- McKinley, E. Social Implications of Pregnancy. Clinical Obstetrics and Gynecology, September 1963, 6 (3), 685-693.
- Murray, R. Principles of Nursing Intervention for the Adult Patient with Body Image Changes. Nursing Clinics of North America, December 1972, 7 (4), 697-707.
- Newton, N. Emotions of Pregnancy. Clinical Obstetrics and Gynecology, September 1963, 6 (3), 639-668.
- Parad, H.J. (Ed.). Crisis Intervention: Selected Readings. New York: Family Service Association of America, 1965.
- Phipps, L.B. Theoretical Frameworks Applicable to Family Care. In J.R. Miller & E.H. Janosik (Eds.), Family Focused Care. New York: McGraw Hill Book Co., 1980.
- Polit, D., & Hungler, B. Nursing Research Principles and Methods. Philadelphia: J.B. Lippincott Co., 1978.
- Porter, L.S., & Demeuth, B.R. The Impact of Marital Adjustment on Pregnancy Acceptance. Maternal-Child Nursing Journal, Summer 1979, 8, 103-112.

- Rapoport, L. The State of Crisis: Some Theoretical Considerations. In H. Parad (Ed.), Crisis Intervention: Selected Readings. New York: Family Service Association of America, 1965.
- Rapoport, R. Normal Crisis, Family Structure, and Mental Health. In H. Parad (Ed.), Crisis Intervention: Selected Readings. New York: Family Service Association of America, 1965.
- Rice, P. The Social Implications of Pregnancy. In H.C. Stuart & D.G. Prugh (Eds.), The Healthy Child his Physical, Psychological, and Social Development. Cambridge: Harvard University Press, 1966.
- Roberts, J. Priorities in Prenatal Education. Journal of Obstetric, Gynecologic, and Neonatal Nursing, May-June 1976, 5 (3), 17-20.
- Schaefer, G. The Expectant Father. Nursing Outlook, September 1966, 14 (9), 46-48.
- Schulberg, H., & Sheldon, A. The Probability of Crisis and Strategies for Preventive Intervention. Archives of General Psychiatry, May 1968, 18 (5), 553-558.
- Smith, E.D. Pregnancy and Marital Stress. In L.K. McNall & J. Galeener (Eds.), Current Practice in Obstetric and Gynecologic Nursing (Vol. 2). St. Louis: C.V. Mosby Co., 1978.
- Smoyak, S. (Ed.). Parenting: Symposium of Parenting. In Nursing Clinics of North America (Vol. 12, #3). Philadelphia: W.B. Saunders Co., 1977.
- Spradley, J. The Ethnographic Interview. New York: Holt, Rinehart, and Winston, 1979.
- Stichler, J.F., Bowden, M.S., & Reimer, E.D. Pregnancy: A Shared Emotional Experience. American Journal of Maternal-Child Nursing, May-June 1978, 3 (3), 153-157.
- Sumner, G. Giving Expectant Parents the Help they Need: The ABC's of Prenatal Education. American Journal of Maternal-Child Nursing, July-August 1976, 76 (4), 220-225.
- Troll, L. Early and Middle Adulthood. Monterey: Brooks & Cole, 1975.

U.S. Bureau of the Census. Statistical Abstract of the U.S.
(100th ed.). Washington, D.C., 1979.

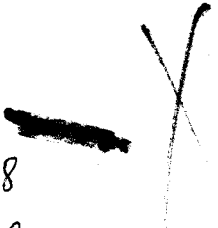
Wainwright, W.H. Fatherhood as a Precipitant of Mental Illness.
American Journal of Psychiatry, 1966, 123, 44.

Wapner, J. The Attitudes, Feelings, and Behaviors of Expectant Fathers
Attending LaMaze Classes. Birth and the Family Journal, Spring
1976, 3, 5-13.

Watson, J. Who Attends Prepared Childbirth Classes? A Demographic
Study of C.E.A. Classes in Rhode Island. Journal of Obstetrical,
Gynecological, and Neonatal Nursing, March-April 1977, 6 (2),
36-39.

MONTANA STATE UNIVERSITY LIBRARIES
stks N378.R229@Theses RL
Women's awareness of their partners' con

3 1762 00168704 3


N378
R229
cop. 2