

HEALTH BELIEFS ABOUT PREGNANCY AND PARTICIPATION IN PRENATAL
CARE AMONG URBAN CANADIAN INDIAN WOMEN

by

Elizabeth Helen Sokoloski

A thesis
presented to the University of Manitoba
in partial fulfillment of the
requirements for the degree of
Masters of Nursing
in Nursing

Winnipeg, Manitoba

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ISBN 0-315-54954-8

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This thesis is lovingly
dedicated to the
memory of my
mother.

ACKNOWLEDGEMENTS

My deep gratitude is extended to my thesis committee members who guided, inspired, and encouraged me throughout this research project: Dr. Janet Beaton, Dr. Helen Glass, and Dr. John O'Neil. Their scholarly contributions were admirable and sincerely appreciated.

Dr. Janet Beaton, my advisor, guided me throughout this research process. Her skill as a nurse researcher and teacher kept me focused and directed throughout this endeavor. I am truly grateful to her for the patience, care, and understanding she consistently conveyed.

Dr. Glass's contributions as an experienced nurse researcher were challenging and inspiring. Her persistent support and gentle nudgings motivated me to achieve completion of this project.

Dr. John O'Neil whose background is in anthropology and research provided me with invaluable guidance. His unfaltering support and encouragement stimulated me to continue in my research efforts.

I am deeply grateful to the informants who participated in this study. It was a privilege for me to share so personally in their lives. They have truly been "teachers"

while sharing their culture and personal experiences with me. While I would like to acknowledge each of the informants as participants in the study, for reasons of confidentiality I am unable to do so. I further wish to acknowledge that any errors in interpretation are my own.

I am especially thankful to my family, friends, colleagues, and co-workers who "were there" and urged me onward. Their encouragement and support enabled me to forge ahead. Barbara Paterson's continued interest in my research was especially affirming to me.

Lastly, but by no means least, I would like to thank Judy Cook, Laurie Thompson, Marie Sveistrup, and Sam Wong who not only capably typed for this project but offered moral support.

ABSTRACT

Previous research indicates that the health of Canadian Indian women and their infants is less than that of other Canadian women and their infants. Indian women do not participate regularly in conventional prenatal care. The purpose of this ethnographic study was to explore the health beliefs of Canadian Indian women about pregnancy and their participation in prenatal care. In-depth, tape-recorded interviews, totalling 45 hours, were conducted with seven Indian women informants in a large urban setting. Content analysis was used to identify themes emerging from the data.

Canadian Indian women in this study conceptualized pregnancy in a spiritual context and believed pregnancy was a healthy natural process requiring no intervention. Consequently, some women do not believe that they are susceptible to serious, asymptomatic, or symptomatic illness during pregnancy. Women believe they are responsible for "taking care of themselves" during pregnancy. Therefore, they follow cultural practices believed to promote a healthy pregnancy: avoiding harmful substances and technological interventions, maintaining positive emotions, adequate nutrition and activity.

Indian women are often dissatisfied with the interactions that occur with health-care providers in prenatal clinics. Indian women's expectations are often not realized and their beliefs about pregnancy may be in conflict with those of health-care providers.

For many Indian women barriers to attending for prenatal care outweigh the benefits. Barriers to prenatal care could be reduced by improving communication and providing culture-specific care in a holistic fashion. The study highlights implications for nursing practice, education, and research.

CONTENTS

| | |
|----------------------------|-----|
| ACKNOWLEDGEMENTS | v |
| ABSTRACT | vii |

| <u>Chapter</u> | <u>page</u> |
|--|-------------|
| I. INTRODUCTION | 1 |
| Purpose | 1 |
| Background and Significance | 1 |
| The Prenatal-Care System | 6 |
| Rationale for the Study | 7 |
| Problem Statement | 9 |
| Definitions | 9 |
| Assumptions | 10 |
| Limitations | 11 |
| II. LITERATURE REVIEW | 12 |
| Historical and Current Background of Canadian Indians | 13 |
| Culture and Beliefs | 20 |
| Summary | 25 |
| Culture and Pregnancy | 25 |
| Health Beliefs and Preventive Health Behavior | 37 |
| Theoretical Focus | 43 |
| Summary | 51 |
| III. METHOD | 53 |
| Design | 55 |
| Selection of Informants | 56 |
| Development of the Interview Guide | 59 |
| Rights of Human Subjects | 62 |
| Procedure for Data Collection | 66 |
| Data Analysis | 69 |
| Summary | 70 |
| IV. RESULTS | 72 |
| The Nature Of Pregnancy | 72 |
| Summary | 86 |
| Birth Control | 89 |
| Being A Woman | 93 |
| Summary | 95 |

| | |
|---|-----|
| Helpful Prenatal Practices | 96 |
| Harmful Prenatal Practices | 101 |
| Summary | 104 |
| Indian Women's Views of the Prenatal-Care System | 105 |
| Participation in Prenatal Care | 106 |
| Technological Interventions | 110 |
| Summary | 112 |
| Interactions With Health-Care Providers | 113 |
| Summary | 118 |

V. INTERPRETATION OF RESULTS, DISCUSSION, AND CONCLUSIONS 120

| | |
|---|-----|
| Interpretation of Results in Relation to the Theoretical Focus | 121 |
| The Health Belief Model | 125 |
| Susceptibility | 126 |
| Seriousness | 126 |
| Benefits and Barriers | 128 |
| Cue To Action | 131 |
| Modifying Factors | 131 |
| Enabling Factors | 132 |
| Summary | 133 |
| Implications for Nursing Practice | 133 |
| Assessment and Planning | 133 |
| Assessment of the Meaning of Pregnancy | 134 |
| Assessment of Pregnancy Beliefs and Practices | 134 |
| Assessment of Financial/Social Status | 135 |
| Assessment of Indian Women's Perspective for Missing Appointments | 135 |
| Assessment of Level of Knowledge | 136 |
| Assessment of Past Pregnancy Loss | 136 |
| Implementation | 137 |
| Improving Communication/Interaction with Indian Women | 137 |
| Meeting Indian Women's Expectations of Prenatal Care | 138 |
| Negotiating | 138 |
| Integrating Traditional Indian Practices in Prenatal Care | 139 |
| Evaluation | 142 |
| Implications for Nursing Education | 143 |
| Implications for Nursing Research | 143 |
| Recommendations | 145 |
| Conclusions | 150 |

REFERENCES 152

| <u>Appendices</u> | <u>page</u> |
|--|-------------|
| A. INTERVIEW GUIDE | 165 |
| B. LETTER OF APPROVAL FROM THE ETHICAL REVIEW COMMITTEE | 167 |
| C. INVITATION TO PARTICIPATE IN THE STUDY | 168 |
| D. CONSENT FORM TO PARTICIPATE IN STUDY | 169 |

LIST OF TABLES

| <u>Table</u> | <u>page</u> |
|---|-------------|
| 1. Enabling and Limiting Factors to Prenatal Care Attendance | 108 |

Chapter I
INTRODUCTION

1.1 PURPOSE

The purpose of this study was to explore the health beliefs of Canadian Indian women about pregnancy and their participation in prenatal care.

1.2 BACKGROUND AND SIGNIFICANCE

Morbidity and mortality statistics reveal the health status of Canadian Indian women and their children is less than that of other Canadian women and children. Infant mortality rates (death of children one year of age and under per 1,000) for Indians declined from 82.0 in 1960 to 16.5 in 1986 (Indian and Northern Affairs Canada, 1988). The rate for Canadians as a whole was 7.9 in 1986 (Statistics Canada, 1988).

The provincial statistics are no brighter. The College of Physicians and Surgeons of Manitoba has collected data which suggests that Indian perinatal deaths (500 grams to 28 days) are overrepresented in provincial mortality statistics. These figures are probably somewhat underestimated since accurate information about ethnic

origin cannot always be obtained. Over a 6 year period from 1977 to 1982 there were 257 Indian perinatal deaths. These deaths represent 16.5 percent of the provincial total perinatal deaths in a group comprising approximately 8 percent of the Manitoba population (College of Physicians and Surgeons of Manitoba, 1982).

Statistics from a report by the College of Physicians and Surgeons of Manitoba indicate that high Indian perinatal death rates are associated with inadequate prenatal care. In 1980 the perinatal deaths for registered Indians accounted for 18 percent of the total perinatal deaths. Forty-six percent of these Indian deaths were associated with inadequate prenatal care visits. Inadequate care was defined as less than 4 prenatal clinic visits. The corresponding figure for the general population in 1980 showed that 20 percent of the total perinatal deaths were associated with inadequate prenatal visits (College of Physicians & Surgeons of Manitoba, 1982). Subsequent reports did not differentiate between the Indian and non-Indian population so more current statistics are not available.

Although Manitoba statistics indicate a steady decline in Indian infant death rates over the past few years, the Indian rate still remains higher than that of other Manitobans. The infant death rate (deaths during the first year of life excluding stillbirths per 1,000 live births)

for registered Indians in 1987 was 10.15 compared to 8.54 for other Manitobans (Health and Welfare Canada, 1987).

Because of the multiple factors involved, it cannot be implied that perinatal deaths result solely from poor prenatal clinic attendance. However, it is evident that if a woman does not attend for prenatal care it is difficult to identify actual or potential problems and to offer any corrective measures (College of Physicians and Surgeons of Manitoba, 1977).

An association has been found between participation in prenatal care and pregnancy outcome among Canadian Indian women. Findings from a survey indicated that Indian mothers who received no prenatal care had an infant mortality rate of over 10 percent (based on live births). Infant mortality was defined as the number of children dying during the first year of life. Mothers who received prenatal care for the full duration of their pregnancy had an infant mortality rate of 3.8 percent. Women who participated regularly in prenatal care for the greater part of their pregnancy had a 5 percent infant mortality rate, but mothers who had attended late or irregularly had a 7 percent rate. Mothers who had reported early, but failed to continue to attend experienced a 9 percent mortality. Unfortunately, adequate or regular prenatal care was not defined specifically in the report (Graham-Cumming, 1967a).

The survey also indicated that mortality among the children of mothers who had continuous supervision from the first trimester was virtually half that experienced among children whose mothers reported only in the third trimester. Even in that group of late comers, the infant mortality rate was significantly less than among the children of mothers who did not have any supervision (Graham-Cumming, 1967a).

The original report of the same study indicated that there was a relationship between prenatal supervision and infant birthweight and stillbirths. The incidence of birthweights of under 5 pounds fell from 6 percent in the unsupervised group to 3 percent in the supervised group. Moreover, the stillbirth rate for women who did not have adequate supervision was 9 per 1,000 births. This is in contrast with a stillbirth rate of just over 6 per 1,000 births for mothers who attended prenatal clinics for at least the latter two trimesters of their pregnancies (Department of National Health and Welfare, Medical Services, 1962).

For Indian women prenatal care is especially important since they constitute a high risk group of childbearing women. Indian women have a higher incidence of adolescent pregnancy, complications in pregnancy and childbirth, multiparity and grandmultiparity, low birthweight and high birthweight babies, and greater infant mortality following premature birth (Baskett, 1977; Community Task Force on Maternal and Child Health, 1981).

Wotton and Macdonald's (1981) study of pregnant Cree Indian women in Norway House, Manitoba (an Indian reserve) verified the high risk nature of this group of pregnant women. Data collected between 1977 and 1981 indicated that at 36 weeks gestation, 39 percent of the women were high risk. This rate was more than double the provincial rate of 19.3 percent. Almost one third of the women received minimal antenatal care and a few received none. Anemia occurred in 12 percent of the mothers. Other significant risk factors included previous neonatal deaths or stillbirths (7 percent), high blood pressure (16 percent), gestational diabetes (10 percent), urinary infection (14 percent), antepartum bleeding (10 percent), significant medical illness (7 percent), and previous Cesarean Section (7 percent). The perinatal mortality rate was 29.0 per 1,000 live births. This exceeded the Canadian rate for 1978 which was 13.5 and exceeded the overall Indian rate of 26.5 per 1,000 live births. A more recent study of pregnant Indian women could not be found in the literature.

A factor contributing to the high risk status of pregnant Indian women is their decreased nutritional state. The Department of National Health and Welfare (1975) nutrition survey indicated that the nutrition of pregnant Indian women in Manitoba, as in other parts of Canada, was inadequate. Energy intakes were lower than that of the non-Indian population as were intakes of vitamin A and C.

Calcium, vitamin D, and iron intakes were found to be marginal. Serum folate values were in the high risk category. The association between nutritional deficiency and poor pregnancy outcome is well documented. If a woman does not attend for prenatal care, an opportunity for nutritional counseling by health care professionals is lacking or reduced.

1.2.1 The Prenatal-Care System

"All cultures have evolved some system of explanation regarding conception, pregnancy, and childbirth and all have developed sets of beliefs and techniques for dealing with these mammalian and human processes" (Landy, 1977, p. 287). The impact of culture on such an important aspect of life as pregnancy and the birth of a new baby has been recognized and emphasized by numerous researchers (Brownlee, 1978; Jordan, 1980; Kitzinger, 1977; McLain, 1975; Romalis, 1981; Snow, Johnson, & Mayhew, 1978). These authors have highlighted the need for health-care workers to be aware of the beliefs about childbearing of various cultural groups if effective culture-specific care is to be implemented.

The Canadian prenatal-care system is structured in a specific way, based on the assumptions, expectations, and needs of middle-class culture (Clausen, Flook, Ford, Green & Popiel, 1973; Horn, 1978). These assumptions, expectations, and needs include the need for regular visits to a medical

doctor throughout pregnancy with the expectation that these visits will ensure a healthy pregnancy outcome. It is assumed that if a woman attends regularly for prenatal care the health status of the woman and her child will be improved. These beliefs and the behaviors associated with the Canadian prenatal system may be incongruent with those of other minority social and ethnic groups.

1.3 RATIONALE FOR THE STUDY

Nurses have traditionally concerned themselves with the health needs and problems of childbearing women and their newborn infants. They have focused their practice and research efforts on specific periods of time and on specific individuals, pairs, or groups during childbearing and the early childrearing cycle. Nursing has emphasized the promotion of health and the prevention of illness in childbearing women and infants as well as provided care when illness occurred (Sandelowski, 1983).

A large part of prenatal service is health educational rather than medical and is concerned with emotional aspects of pregnancy and childbirth (Ford, Seacat & Silver, 1966). The responsibility for providing health education and emotional support largely rests with the nurse in community settings, clinics, or hospital wards. In some isolated regions without a physician, nurses provide prenatal care throughout normal pregnancy.

The role of the nurse as a client advocate is widely recognized. Nurses have the privilege of being the health-care workers who have the most intimate and prolonged contact with clients. Nurses, because of this privilege, have numerous opportunities to serve as client advocates in helping the clients to meet their needs and to support protection of their rights.

In considering the current status of childbearing Indian women, it is evident that there is a need for the nurse to assume a client advocate role. Becoming more aware of Indian women's health beliefs about pregnancy and their participation in prenatal care would assist the nurse in her advocate role.

Leininger (1978), who introduced the concept of transcultural nursing, has articulated the importance of studying health beliefs, practices, customs, and values in cross-cultural perspective. These studies facilitate "the gathering of fresh data from local cultures which is then carefully studied, classified, and used to guide professional practices" (p. 17).

This study was an attempt to gain some insight into Indian women's health beliefs about pregnancy and their participation in prenatal care. It is hoped that this investigation enhances cross-cultural communication, provides a basis for understanding health needs, and assists

in providing health services which meet the culture-specific needs of Canadian Indian women.

1.4 PROBLEM STATEMENT

The basic question which generated this research study was: Why do many Canadian Indian women not participate regularly in prenatal care? More specifically this study proposed to answer the following questions:

1. What are the health beliefs of Canadian Indian women about pregnancy?
2. How do health beliefs about pregnancy influence Indian women's participation in prenatal care?

1.5 DEFINITIONS

For the purposes of this study the following definitions were used:

Health: is defined as a relative, dynamic, culturally determined, and valued process concerned with all of life's processes including the biological, psychosocial, and spiritual.

Beliefs: are defined as statements which Indian women hold as true, but which may or may not be based on empirical evidence (Horn, 1979).

Health beliefs: are defined as statements which Indian women hold as true, which may or may not be based on

empirical evidence, related to health during pregnancy (modified from Horn, 1979).

Health behavior: is defined as any activity undertaken by a person who believes her/himself to be healthy, for the purpose of preventing disease or detecting disease in an asymptomatic stage (Kasl & Cobb cited in Rosenstock, 1974).

Antenatal or prenatal care: is defined as the medical and nursing supervision and care given to the pregnant woman during the period between conception and the onset of labor. Ideally, adequate antenatal care is that care which considers the physical, emotional, and social needs of the woman, her unborn baby, her mate, and their other children (Reeder, Mastroianni, & Marten, 1980). Prenatal care for uncomplicated pregnancies includes clinic visits every four weeks throughout the first seven months, every two weeks until the last month, and every week until delivery (Pritchard & Macdonald, 1980).

Canadian Indian woman: is defined as a woman who identifies herself as a Canadian Indian.

1.6 ASSUMPTIONS

1. Indian women all have beliefs about pregnancy which are culturally based.
2. Participation in prenatal care is a result of conscious decision-making which in turn is influenced by cultural and situational circumstances.

1.7 LIMITATIONS

The exploratory nature of the study enhanced the discovery of valuable cultural data which can be utilized by nurses to provide more culture-specific care to Indian women. However, the study does have several limitations. The limitations include the following:

1. Only English speaking Indian women informants were selected, therefore, the group was biased as non-English speaking women were excluded.
2. Three different tribes of Indians were represented by seven informants in the study. Intergroup differences were not identified because of the few informants representing each tribe.

Chapter II

LITERATURE REVIEW

The literature review considers three major areas: (a) historical and current background of Canadian Indians, (b) culture and pregnancy, and (c) health beliefs and preventive health behavior. A subsection to the historical and current background of Canadian Indians focuses on culture and beliefs. The major emphasis of the studies reviewed is preventive health behavior since prenatal care is considered preventive health care. It has been suggested that preventive health behavior and illness behavior are different and generalizing from one type of behavior to the other is inappropriate (Hoppe & Heller, 1975). In choosing preventive health services the consumers usually have considerable discretion in the extent to which they use them. When manifest disease is not a complicating factor, health-care workers are generally not as integrally involved in the decision process as they are when disease is present and being treated (Lairson & Swint, 1978).

2.1 HISTORICAL AND CURRENT BACKGROUND OF CANADIAN INDIANS

This section of the literature review provides the context which must be considered for a better understanding of pregnant Indian women within the middle-class prenatal-care system. The past and current health status of Indian people and factors influencing their health is outlined. Consideration is also given to the socioeconomic and political disadvantage Indian people experience, especially Indian women who encounter a disproportionate number of obstacles, yet are childbearers responsible for many self-care activities associated with the critical prenatal period. The role of culture in shaping beliefs and behavior concludes this section.

At the time of the first white settlements in North America about four centuries ago, Canada's indigenous peoples were considered particularly healthy and of strong physique (Graham-Cumming, 1967b). Andrew Graham (cited in Young, 1979) wrote in 1767 that:

The Indians in general exceed the middling stature of Europeans; are straight well made people, large boned, but not corpulent Their constitution is strong and healthy; their disorders few, the chief of which are the flux, consumption, and pain in the breast The venereal disease is also common among them but the symptoms are much milder than in Europe .

. . . They seldom live to a great age, but retain all of their faculties to the last (p. 194).

Although the past general good health of Indians is gleaned from anecdotal notes which are questionable statistically, it can be inferred that fairly good health was enjoyed since the life-style of Indians included healthy practices. The traditional nutrition of Indians provided a diet high in protein but low in fat and carbohydrate. Protein came primarily from fish and game meat. Vitamins and minerals were obtained from bush plants and berries (Schaefer, 1978). The Indian nomadic life-style and physical exertion from hunting, fishing, trapping, and gathering provided exercise with activities of daily living.

Shortly after contact with the white man the Indian population began to decline rapidly, mainly from communicable diseases (most notably tuberculosis) to which they had no immunity (Graham-Cumming, 1967b). Numerous factors, including loss of traditional life-styles as a result of acculturation, have contributed to the present increased incidence of many diseases. Anthropologists have stated that acculturation results "when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original pattern of either or both groups" (Redfield, Linton, & Herskovitz, 1936, cited in Young, 1988, p. 4). Young (1988) reports that the term acculturation is not currently favored

by some scholars because it emphasizes how indigenous cultures eventually become assimilated by more dominant ones. Young contends that many scholars now argue that contact with Europeans did not result in a drastic erosion of Indian culture. Terms which do not suggest domination of one culture by another are more favored. These include terms such as social change and culture change.

As a more static and sedentary life-style developed for Indian people, and as carbohydrate-rich foods and domesticated animal meats were increasingly consumed, diseases such as obesity, hypertension, circulatory disorders, gallstones, and diabetes mellitus have become prevalent (Johnston, William & Weldon, 1977; Schaefer, 1978). Paradoxically, today many Indian groups suffer from a higher prevalence of such "diseases of affluence" than do Canadians in general (Young, 1979). The high incidence of alcohol and drug abuse, family breakdown, suicides, accidents, and violent deaths among Indians are, moreover, evidence of mental stress and demoralization associated with acculturation and life-style change (National Commission Inquiry on Indian Health, 1979).

Examination of data on acculturation, which compares former and present standards of living, reveals that the standard of living of indigenous peoples worldwide is lowered, not raised by economic progress. In spite of the best intentions of those who have promoted change and

improvement, all too often the real results have been poverty, poor health, social disorder, discontent, discrimination, overpopulation, and environmental deterioration. All this is combined with the destruction of the traditional culture (Bodley, 1982).

Historical, legal, social, economic, and political forces make Indian women particularly disadvantaged. Historically, the birth rate for Canadian Indians has been high and is significantly higher than among Canadians in general. Between 1968 and 1981, when the total fertility rate of Canada declined by 32 percent, from 2.5 to 1.7 (births per woman), that of registered Indians declined by 48 percent, from 6.1 to 3.2. In spite of the rapid reduction Indians still have a fertility rate almost twice as high as Canada as a whole (Ram & Romaniuc, 1985). Indian women in addition to having a higher fertility rate often bear the burden of being a single parent as well.

Employment opportunities for Indian women are less than favorable. In 1970 Indian women accounted for 26 percent of the Indian labor force which worked fulltime compared with 43 percent for Canadian women generally. Indian women reported lower incomes than both Canadian women and Indian men. A greater proportion of Indian women, in comparison to women generally, were heads of households, particularly those households occupied by more than one person (Research Branch, PRE, Indian & Inuit Affairs Program, 1979). In 1981

statistics indicated that Indian women were less likely to be employed than Indian men even when they had a higher level of education. Women were also much less likely than Indian men to have an income over \$5,000, even when they were better educated (Hull, 1987).

Legislation enacted in the past has handicapped Indian women legally, socially, and economically. The Indian Act discriminated on the basis of sex and marital status. Indian women lost their Indian status upon marriage to non-Indian men. This was in contrast to the situation for Indian men who did not lose their status upon marriage to non-Indian women. In fact non-Indian women gained status upon marriage to Indian men. Loss of Indian status for a woman meant loss of the right to use and benefit from reserve lands and Indian monies (Indian & Northern Affairs Canada, 1982). Amendments to the Indian Act were made in 1985 which allowed Indian women the right to reclaim their Indian status (Indian and Northern Affairs Canada, 1987).

Clatworthy (1980) found unemployment rates among Indian females in one urban Canadian center to be about 3.9 times higher than that of all other females. Moreover, Indian women had higher unemployment rates than Indian men. As household heads men outnumbered the women in vocational and university achievement. Unemployment rates were about three times higher for Indians than non-Indians and household incomes were about one half as large as those of the total population.

Harding (1971) argues that erroneous explanations of the problems of Indian people are common. The fact that these problems are often referred to as the "Indian Problem" indicates the superficiality of thinking. Somehow the problems are viewed as arising from the Indian's inherent inability to adjust to mainstream life. Such thinking lacks an appreciation of the interdependence of aspirations and motivations on the one hand with socialization and opportunity on the other.

The source of many problems faced by Canadian Indians stems from the historical interdependence of the dominant society and this minority, according to Harding. Indian people may be viewed as a colonial people who have been treated and in effect controlled by outside authorities over which they had no direct control. The fact that all Canadian Indians are under direct control of a centralized branch of government is one of the indications of this colonial treatment. Indians in the context of Canadian society are a powerless minority lacking the opportunity for participation in decision making in matters affecting them politically, socially, and economically.

Indian reserves (with their inherent isolation) were established in the late 1800s as European settlements were being established in Canada with the aid of the railway. The decision to have reserves was imposed on the Indians with the hope that reserves would enable them to trap, fish,

hunt, and develop an agricultural economy of their own (Harding, 1971).

Farming as an alternative to fishing, hunting, and trapping met with little success. Land was frequently rock, water, and muskeg (Hildebrandt, 1970) which hampered successful growth. Over the years, the reserve system did not provide the expanding Indian population with a stable source of income and welfare payments became a major source of their income (Harding, 1971). Harder (1981) summarized the effect of development on the Indians of Northern Manitoba very well: "The social and economic advantage--based on their ability to exploit and trade their fur resources, and on their intimate knowledge of the environment--was gradually eroded by encroaching commercialism, and they became increasingly marginalized and impoverished" (p. 40).

In the hope of finding employment, people of Indian ancestry have migrated to the urban areas. Frideres (1974) identified two different groups of Indians who migrated into the city during the 1960s. The "white oriented" groups made a deliberate decision to move and consciously attempted to assimilate into the larger community. The "transient group" went to the city to work, but as soon as the job was finished, left and returned to the reserve or joined the unemployed and moved in and out of the city depending on scarcity of labor. Of those who went to the city, 80 percent returned to the reserve within five years.

McCaskill (1980) suggests that the migratory pattern of Indians on and off reserves results in the preservation of ethnic identity. He found the majority of Indian migrants were not participating in organizations of the larger society and concluded that assimilation was not occurring. Indians still looked to the reserve in terms of ideology, cultural identity, and social ties.

It is likely that the migratory pattern of Indians on and off reserves results in various degrees of social change which influences beliefs about pregnancy and participation in health care. Traditional beliefs may persist after migration because of ethnic group loyalties. On the other hand culture contact may engender changes in beliefs.

2.1.1 Culture and Beliefs

In order to understand more fully the context of the pregnant Indian woman in the middle-class prenatal system the concepts and dynamics of culture and beliefs must be appreciated. A classical anthropological definition of culture by Tylor (cited in Valentine, 1972) is "that complex whole which includes knowledge, belief, art, morals, laws, customs, and any other capabilities and habits acquired by man as a member of society" (p. 3). Valentine (1972) states that culture is most simply, the entire way of life followed by a people. Culture according to Goodenough (cited in

Valentine, 1972) refers to the "organization of experience shared by members of a community, including their standards for perceiving, predicting, judging, and acting" (p. 3). This means that culture includes all socially standardized ways of seeing and thinking about the world; of understanding relationships among people, things and events; of establishing preferences and purposes; of carrying out actions and pursuing goals. In a general sense, then, culture consists of the rules which generate and guide behavior. More specifically, the culture of a particular people or other social body is everything that one must learn to behave in ways that are recognizable, predictable, and understandable to those people.

Valentine (1972) points out that through culture, groups collectively adapt themselves to environmental conditions and historical circumstances. The environmental resources available to any people and the human events stemming from other groups of people profoundly condition, stimulate, and limit the development of cultures. For example, contemporary Indian and Inuit cultures include many adaptations both to northern habitat and to the developing European domination of the northern regions. Neither one of these sets of conditions was created by Indians or Inuit, and neither one is part of the rules and standards which make up the Indian and Inuit culture. Yet both these aspects of external reality have been dealt with through

changing and developing indigenous lifeways, and thus have importantly conditioned the growth of modern Indian and Inuit culture. At the same time, Europeans living in the arctic have recognized the effectiveness of some Indian and Inuit adaptations--rules for making and using appropriate types of clothing, shelter, and transportation--and have adopted them.

A clarification is made by Valentine (1972) between enactment of cultural values and situational or circumstantial adaptations. Valentine contends that what is prized and endorsed according to the standards of a cultural system are not always manifest or practically available in the exigencies of ongoing existence. A current misconception, according to Valentine, is that people everywhere live as they do because they prefer their actual mode of existence and its consequences. In fact there are few human situations that allow full enactment of cultural values in the practical world so adaptations must be made depending on the resources and circumstances available.

Beliefs are basic to culture. An argument has even been made to support the notion of culture as a set of beliefs (Loflin & Winogron, 1976). The concept of belief and its relationship to behavior will, therefore, be elaborated at this point.

Fishbein and Ajzen (1975) contend that beliefs represent the information that a person has about an object. Specifically, a belief links an object to some attribute. The term "object" and "attribute" refer to any discriminable aspect of an individual's world. For example, a belief may link "using birth control pills" (the object) to "preventing pregnancy" (the attribute). Thus, the object of a belief may be a person, a group of people, an institution, a behavior, or an event and the associated attribute may be any object, trait, property, quality, characteristic, outcome, or event. Fishbein and Ajzen define a belief as "the subjective probability of a relationship between the object of the belief and some other object, value, concept or attribute" (p. 131). This definition implies that belief formation involves the establishment of a link between any two aspects of an individual's world.

Beliefs may be considered in a much broader perspective. Medical belief systems, from an anthropological aspect, are viewed as sets of premises and ideas which enable people to organize their perceptions and experiences of medical events and to organize their interventions for affecting and controlling these events. Briefly, they are ways of defining problems and generating solutions to these problems (Young, 1983).

Medical belief systems fall along a continuum between two extremes, externalizing and internalizing systems.

Externalizing systems concentrate on etiologies, that is, identifying the agents, events, motives, and extrasomatic circumstances which lead to the onset of symptoms. Internalizing systems concentrate on intrasomatic events, that is, explaining sickness and curing through ideas about physiological and pathophysiological processes. Most belief systems fall somewhere between the extremes. What we are accustomed to call "modern medicine" is an exception since it falls at the extreme internalizing end (Young, 1983).

Particular beliefs about sickness and health persist because beliefs enable people to decide on courses of action for reversing, arresting, moderating, and preventing undesirable states. The beliefs are consistent with each other and with related sets of beliefs, and phenomenologically, with the real events they are intended to explain. While the content and organization of medical beliefs is the product of both cultural and biophysical realities, it is culture--by determining which biophysical signs are selected and which are ignored, which objects and events are implicated in disease episodes and which are dismissed as irrelevant--which dominates in traditional medicine (Young, 1976).

2.1.2 Summary

This outline of the general health and circumstances of Canada's Indian people has provided the context for understanding the position of pregnant Indian women in the middle-class prenatal system. At a critical stage in their life Indian women must cope not only with less than desirable socioeconomic circumstances, but heightened stress and powerlessness. Migration from a reserve to an urban area generates additional stress because of diminished kin and friendship networks as well as loss of a familiar environment and way of life. Moreover, migration engenders challenges to their cultural heritage and customs.

The discussion on culture and beliefs related the two concepts. It is apparent that the beliefs which Indian women hold have been shaped by dynamic cultural factors as well as situational circumstances over which they had little control. Their culture in turn has evolved as an adaptation in response to complex environmental, historical, economic, social, and political forces.

2.2 CULTURE AND PREGNANCY

Cultural diversity in beliefs and practices in pregnancy is well illustrated in the literature. Also evident is that differences in maternity care and obstetrical practices are not only seen between

technologically unsophisticated cultures, but also between technologically advanced cultures (Chalmers, 1982).

Different cultures stylize birth and childbearing in different ways, so that birth and childbearing are always a cultural phenomenon, and the rituals that surround and accompany it cannot be understood without reference to each society's system of beliefs about reproduction. The reason why a particular culture manages childbirth and childbearing in a particular way are bound up with the ideology predominating in that culture about reproduction, about medicine, and the role of women (Oakley, 1977, p. 18).

In order to deal with the inherent danger and existential uncertainty associated with birth, people tend to produce a set of internally consistent and mutually dependent beliefs and practices which are designed to manage the physiologically and socially problematic aspects of birth in a way that makes sense in that particular cultural context (Jordan, 1980). In modern industrial societies much reliance is placed on the effectiveness of regular prenatal care visits, the ingestion of iron and vitamin supplements, the avoidance of medication in the first trimester of pregnancy, attendance at relaxation classes, and so forth (Oakley, 1977).

A society's way of conceptualizing birth constitutes the single most powerful indicator of the general shape of its birthing system. For example, in the United States the culture-specific definition of the event, is that it is a medical procedure. In Yucatan, Mexico it is a stressful but normal part of family life, in Holland it is a natural process, and in Sweden it is conceptualized as an intensely personal, fulfilling achievement. These shared views have ideological status, in that they serve as a guide for conducting the routine business at hand (Jordan, 1980).

The literature related to beliefs and practices of Indian women during pregnancy is sparse. The few existing studies were primarily conducted in the United States (Evaneshko, 1978; Horn, 1978 & 1983; Loughlin, 1965). Hildebrand (1970) explored the beliefs of the Chippewa of the Great Lakes and is specifically related to Canadian Indian women.

Loughlin's (1965) study of Navajo women explored the attitudes of women toward scientific medicine, reasons for seeking care, and the kinds of care which were most acceptable.

The results of Loughlin's study indicated that childbearing is considered a natural life experience. It is the ultimate goal of the woman to bear children and pregnancy is never considered an illness to be endured for

nine months. The new arrival is truly anticipated and much desired whether the child is the first or the fifteenth. There is almost complete lack of any obvious censure for unmarried pregnant women. Very little preparation for the baby can be made because of a taboo that this might cause illness, injury, or even death to the unborn baby. The mother continues with her usual activities and makes no changes in her dietary habits.

Loughlin found that Navajo women are slow to accept medical supervision during pregnancy. The reason for this, according to Loughlin, may be the resistance to adjustments or changes which are often suggested by the health-care personnel. Also since the Navajo women never consider themselves to be ill because of a pregnancy and since health is a state of balance between the individual and the supernatural, there is no felt need for a medical examination.

Loughlin concluded that any program of action designed to change attitudes must take into consideration the values and pressures involved in old attitudes and resistance to change, especially those attitudes laid down by cultures which have prospered over centuries of time.

Hildebrand (1970) described the past and present beliefs and practices of the Chippewa of the Great Lakes Region. In the past families were not large, the average

being two or three children. Artificial limitation of family size was not known, although abstinence was practiced. It was considered a disgrace to have children like "steps and stairs".

The study revealed that food and activity taboos were practiced. For example, the expectant mother was warned not to eat much food at any time, since it would make the baby large and labor difficult. She was cautioned not to turn over in bed lying down; she was to rise on her knees and turn over, as rolling over in bed caused the umbilical cord to wind around the child's head, neck, and shoulders. Women who refrained from hard work while pregnant might anticipate adherence of the placenta following birth. It was believed lying around during pregnancy prevented the child from being loosened and made birth more difficult. Men were never permitted to be near a woman in labor. Modesty was highly valued and not even the women attendants looked at a woman more than necessary during birth.

The present day customs, according to Hildebrand, indicate that the majority of women in the childbearing cycle present themselves for examination for the first time during the fifth month of pregnancy. Reasons for this include a dislike for vaginal examinations, lack of opportunity to establish a close and continuing relationship with their doctors, and transportation and communication difficulties.

Evaneshko (1978) explored the childbearing and childrearing practices among the Iroquoian. Data were gathered by participant observation and interviewing 30 reservation women.

The findings of this study indicated that there used to be many taboos surrounding the pregnant woman, some of which still persist. Most of the taboos were of the homeopathic type where a person's behavior was believed to produce similar effects on the unborn child. Thus, eating strawberries produced birthmarks; sewing would "tie up the insides" or would wrap the cord around the baby's neck; emotional distress in the mother would produce a nervous baby. Pregnant women used to be, and still are, encouraged to exercise, take walks, maintain a normal work schedule, and eat for two.

Evaneshko found that, currently, women believe the ideal time to start having children is the midtwenties. Women believe the age of thirty-five is a good time to stop having children because childrearing requires the energy and patience of youth and because there is time for the couple to have a "life of their own" after the responsibilities of childrearing is lessened.

Horn's (1978) descriptive-exploratory study of Northwest Coastal Indians in the state of Washington focused on the perceptions and cognitions of Indian women about

pregnancy and health care during pregnancy. Informants were twelve women living on a reserve.

The study found that women perceived pregnancy as a regular (as opposed to irregular) life experience and they did not consider it a disease. The importance of kinship groups was stressed, and persons in kinship groups were perceived as primarily providers of health services. The health-care system provided by health-care persons was generally bypassed and used only in crisis. Entry into the health-care system occurred when no perceived alternative was available. Generally, efforts to obtain health-care services during pregnancy followed what was culturally relevant. The cultural components of illness and health relating to pregnancy included religion and empirical knowledge and provided assumptions upon which informants made decisions about health practices such as walking, eating, avoiding certain foods, and pacifying ancestral spirits.

Horn found that although some of the informants' beliefs regarding pregnancy and health care during pregnancy were consonant with the currently offered prenatal-care system, some were highly dissonant. Problems associated with obtaining care, such as fragmentation of services, lack of transportation, and perceived attitudes of prejudice on the part of health-care workers were strong reinforcers of the belief system that active participation in prenatal care

and preparation as identified in the prenatal-care system were more problematic than helpful, and in most instances probably made little difference. In the minds of the informants, the purposes and value of prenatal care were questionable.

The beliefs about pregnancy of Northwest Coast American Indian women were explored by Bushnell (1981) in an ethnographic study. The results indicated that pregnancy is believed to be a normal and natural event. Seeing a health-care provider during pregnancy is, therefore, not considered necessary. Women in the study identified nutrition, fetal development, knowledge about pregnancy and childbirth as important. They thought a sensitive nurse who made the effort to get to know each woman personally was the best source of this information. Older traditional Indian women thought female relatives should pass on information about pregnancy; younger women thought classes should be offered exclusively for Indian women because they felt uncomfortable around white people.

Bushnell found that traditional women believe no extra support during pregnancy is required since pregnancy is viewed as a normal and natural event. No preparation is made for the coming baby, but no explanation for this practice was offered.

The study also revealed that practices related to the prenatal period included eating less near term and walking a lot in order to have a small baby and an easier delivery. Women believe they give care to their baby through their own good health and nutrition. Eating something good is believed to make a good baby.

Horn (1983) also examined the influence of cultural beliefs on teenage pregnancy among Caucasian, Black, and American Indian women. In-depth interviews were conducted with 20 American Indian, 18 Caucasian, and 17 Black pregnant teenagers. Findings revealed beliefs to be different in relation to prevention of pregnancy, significance of becoming a mother at an early age, and kinds of support systems available to them within their social network.

Horn discovered that American Indian women did not believe contraception should be used until after the first baby was born. The Black teenage women believed that contraception was appropriate, however, birth control pills and intrauterine devices were not acceptable because they were believed to alter the menstrual cycle and thus cause illness. The beliefs of the Caucasian teenage women stemmed from their religious backgrounds. Depending on their beliefs some were strongly opposed to prevention of pregnancy but some were supportive. There were no consistent statements reflecting similar beliefs among the Caucasian adolescents except along religious lines.

The findings of the study also indicated that Indian women believed that within their culture, high value was placed on early pregnancy and that becoming pregnant validated one's feminine role. Black women stated the ideal norm to be an education, followed by employment, and then marriage and children. Nevertheless, they did not perceive negative sanctions within their culture if one did not meet the norm. Early motherhood for Caucasian women was not valued and a sense of having failed was evident in their comments.

The Indian women in Horn's study expressed a strong belief that support was available for them either in their own family, or from other persons they referred to as "my people". The lives of the young Black women seemed to be the least disrupted of all, as they all stayed in their own families of orientation during their entire pregnancies. The Caucasian women did not believe they had very much support. None of them remained in their families during the pregnancy.

The beliefs and practices surrounding childbearing in other cultures have been investigated by several researchers. A few studies have been selected as examples to illustrate some culture-specific beliefs and practices.

McClain (1975) found that Mexican women believe that a male embryo migrates to the mother's right and a female to

the left. Therefore, in practice the sex of the child is thought to be determined by the position of the fetus. A male fetus is believed completely formed at forty days; the female is not believed completely formed until five months.

The study also revealed that abortions, stillbirths, and all other abnormal births are attributed to some external factor. Eclipses of the sun and moon and excessive drinking by the father is believed to cause deformities in the fetus. An excess of foods considered to be "cold" or prolonged contact with cold substances, fright or anger in the mother, and sibling jealousy of the unborn child are believed to cause illness in the neonate. The author did not provide a definition of "hot" or "cold" but simply stated that these terms did not necessarily refer to temperature. Logan (1977) explains that hot and cold refer to symbolic qualities of natural objects, foods, and illnesses which are believed to alter the health of a person. For example, excessive consumption of foods considered to be hot results in hot illnesses. Treatment for the ailment consists of consuming cold foods and medicines to equalize the body's temperature.

Snow et al. (1978) found that low-income Mexican-American, Latin-American, and Black women, held beliefs which differed from that of health-care providers. A discrepancy was evident between what women stated was desirable prenatal behavior and what they actually did. All

women, for example, said that prenatal care should be sought in the first trimester, but in reality only 24 percent came in at that time.

The results further indicated that childbearing even in the menopausal years and venereal disease were not perceived as risks to pregnancy. Women feared smoking and drinking during pregnancy because of possibly "marking the child". A badly malformed child was believed to be a punishment for premarital sex.

Good's (1980) ethnographic study explored the popular beliefs about female physiology and fertility of Iranian women. The results revealed that women believe each person has a characteristic temperament believed to be related to a balance between "hot" and "cold". Susceptibility to various disorders and responsiveness to different therapies is believed to depend on temperament. Females are considered to be relatively colder than males (and, therefore, less perfect).

Good found that women in Iran are expected to conceive within the first year of marriage. If they fail to do so, their fertility is questioned and consequently their status as a wife. All married women are expected to have at least one child. The uterus is believed to become dry and less strong as a woman gets older and less able to carry a child to full term.

The study also revealed that many women believe the "pill" causes drying of the uterus and makes conception at a later time unlikely. Rather than take the pill, some women will opt for abortion as a birth control method instead of risking the loss of fertility.

The previous studies have highlighted the similarity and diversity in beliefs and practices surrounding pregnancy in various Indian groups as well as other cultures. Indian women in these studies conceptualize pregnancy as a valued, normal life process, rather than a medical event. Beliefs about conception, childbearing, and the role of women contribute to this conceptualization.

2.3 HEALTH BELIEFS AND PREVENTIVE HEALTH BEHAVIOR

The relationship between health beliefs and preventive health behavior has been investigated by several researchers. Only one rare study by Watkins (1968) focused on the relationship of health beliefs to prenatal care attendance. Since prenatal care is primarily preventive health, studies concerned with preventive health behavior have been selected for review. The studies in this section have been reviewed chronologically parallel to the development of research in this area.

An early study by Kegeles (1963) examined the relationship of health beliefs to preventive dental health

behavior in two groups of subjects randomly selected from a company payroll list. Results revealed that preventive dental visits were more likely to be made by subjects who believed they were susceptible to serious dental problems and believed there were actions that they could take to prevent or alleviate serious effects of problems.

The unique study by Watkins (1968) investigated the relationship between health beliefs and initiation of prenatal care in low-income Black women systematically selected from a total clinic population and interviewed in their homes using an open-ended questionnaire. The results indicated that a short interval between pregnancies and dissatisfaction with nursing care was associated with delay in seeking care.

The study also found that women who sought care early had a higher rate of past fetal loss, prematurity, and infant deaths. More of the early initiators than the late initiators believed they were susceptible to illness during pregnancy.

The most significant difference between the two groups, according to Watkins, was related to feeling sick and seeking care. More of the early initiators than the late initiators stated they felt sick early in pregnancy and sought care for diagnosis and treatment of these symptoms. Early initiators were more likely to come because they

perceived prenatal care to be valuable; late initiators came in response to the encouragement of others.

Watkins concluded that health-care workers concerned with motivating women from the lower socioeconomic group to seek early prenatal care must improve techniques of helping these mothers to understand the possibility of health hazards to them during pregnancy. In addition health-care providers need to help these women believe in the value of medical care in preventing or lessening the effect of such hazards.

In one of the few experimental studies, Kegeles (1969) investigated the relationship between communication intervention, belief change, and obtaining a Papanicolaou test in Black women. Indigenous workers communicated information (experimental or control) in an attempt to induce the women to make clinic visits for cervical cytology. The women's beliefs about vulnerability to cervical cancer and effectiveness of preventive action were determined prior to and after the communication.

The findings of the study indicated that subjects who received the more extensive experimental communication and had their beliefs strengthened or who started with strong beliefs and retained them, took action much more frequently than comparable women who received the less comprehensive control communication.

Another of the few experimental studies which parallels Kegeles' was that of Haefner and Kirscht (1970), which examined the relationship between initial beliefs, experimental treatments (viewing disease related films), subsequent beliefs, intentions to act, and subsequent behavior.

The results of the study indicated that health films, significantly modified beliefs about perceived susceptibility to disease and benefits of preventive action. Persons who had viewed the films significantly more often reported intentions to take preventive actions such as obtain X-rays and make visits to a physician for a checkup. Persons in the experimental groups, when questioned eight months later, reported having had a checkup in the interim significantly more often than those in the control group.

Stillman (1977) examined the relationship between beliefs about breast cancer and the practicing of breast self examination (BSE). A questionnaire was administered to a convenient sample of 122 women. Findings indicated that the majority of women who held high beliefs in perceived benefits of BSE and/or perceived susceptibility to breast cancer tended to practice BSE to some degree.

Leavitt (1979) investigated the relationship between health beliefs and utilization of ambulatory care services for illness related and general visits (including prenatal

care). Utilization data were collected for two 12-month periods on 256 randomly selected subjects.

The results of the study showed that the most salient of the health beliefs for predicting use of services was perceived vulnerability to illness followed by belief of benefits associated with preventive health behavior. Subjects who scored high on vulnerability and benefits of prevention were likely to use health services twice as often as subjects who scored low.

Most studies relating health beliefs to preventive health behavior are flawed by sampling bias, methodological weaknesses, small sample size, single settings, and lack of differentiation in health status of subjects. Comparisons are difficult to make because of inconsistency in methodology and the variables investigated. However, the findings of these studies generally support the use of health beliefs in explaining preventive health behavior. The one rare study by Watkins (1968) supports the use of health beliefs in explaining prenatal clinic attendance. More of the early attenders than the late attenders for prenatal care indicated a psychological readiness to act (because of previous complications during pregnancy), a belief in susceptibility to illness, and a belief in the benefits of prenatal care. Dissatisfaction with nursing care was found to be associated with delay in attending.

The two unique experimental studies offered the strongest support for the role of beliefs in explaining preventive health behavior. Kegeles' (1969) investigation demonstrated that experimental subjects who received communication to increase their beliefs about vulnerability to disease and benefits of preventive care and who subsequently increased their beliefs, were more likely to keep appointments for cytological examination than those with low beliefs.

The Haefner and Kirscht (1970) study found that medical checkups could be increased when subjects' beliefs in susceptibility to disease and benefits of taking preventive action were strengthened by intervention. Since so few experimental studies have been conducted a causal relationship between health beliefs and preventive health behavior cannot be inferred.

The literature revealed a paucity of research relating health beliefs to prenatal care participation. Few studies were done with subjects of various ethnic backgrounds. This study was conducted to explore the health beliefs about pregnancy and participation in prenatal care among Canadian Indian women.

2.4 THEORETICAL FOCUS

The Explanatory Model (EM) and the Health Belief Model (HBM) provided a theoretical focus for this study. Kleinman (1980) defines EMs as the notions held by patients, family members, and health-care providers about particular sickness episodes and their treatment. EMs consist of explanations about etiology, onset of symptoms, pathophysiology, cause of sickness (severity and type of sick role), and treatment.

An important distinction is made by Kleinman between disease and illness aspects of sickness. Disease is defined as a "malfunctioning in or maladaptation of biological and/or psychological processes" (Kleinman, 1978, p.88), whereas, illness denotes the "experience of disease (or perceived disease) and the societal reaction to disease" (Kleinman, 1978, p.88). Disease is most commonly linked to the EMs of professional practitioners and is explained in abstract, highly technical, and usually impersonal language. Illness, on the other hand, is explained by the patient in highly personal, nontechnical, concrete language and focuses on life problems that result from sickness. Patients' explanations are in the language of experience (Kleinman, 1978) and reflect social class, cultural beliefs, education, religious affiliation, and past experience with illness and health care. Cultural beliefs shape EMs which in turn influence perceptions of clinical reality and behavior evoked by those perceptions (Kleinman, Eisenberg, & Good, 1978).

Patient-provider interactions are considered transactions between EMS and these transactions often involve discrepancies between cognitive content as well as treatment expectations, goals, and values (Kleinman et al., 1978). Patients seek not only relief of their symptoms, but personally and socially meaningful explanations and psychosocial treatment for their illness. Health-care providers, who view sickness as a disease, offer explanations and treatments that are technical. Health-care relationships are frequently transactions between illness and disease models of sickness (Kleinman, 1978).

Kleinman et al. (1978) contend that identifying discrepancies between patient and health-care provider EMS and subsequently negotiating toward more shared EMS, can result in more satisfying and meaningful experiences for patients and staff. Conflict and health care problems can thus be avoided.

Research studies investigating EMS have focused primarily on illness episodes rather than preventive health behavior. Nonetheless, two studies do highlight how differences between patient and health-care provider EMS can result in problems with health-care delivery.

A study by Robinson (1985) was the only one which focused on exploring the EM of persons who were not ill. The experiences of parents were elicited during the

hospitalization of their chronically ill children. The study indicated that parents expected that they would be able to participate in the care of their hospitalized child. In reality, the parents felt undervalued because their perspective was not considered and their attempts to provide care were disregarded by staff. The parents reacted by becoming defensive and extremely vigilant in their role as advocate. Consequently, parents felt staff perceived them as "interfering." Both the parents and the staff experienced dissatisfaction as a result.

Friedl's (1982) study illustrated how discrepancies between patient and health-care provider EMS could result in closure of a Coal Miners' Program for the treatment of black lung disease. Appalachian coal miners with black lung disease viewed the role of a doctor to be a curative one, but believed their own disease incurable and irreversible. Because they did not understand the basis of physical therapy they thought the treatment program was a money making scheme. Consequently, they dropped out of the program and it was eventually forced to close.

Although the literature on EMS focused primarily on explanations related to illness episodes, for the purposes of this study the framework was used in a very general sense to explore Indian women's explanations about pregnancy and prenatal care.

The Health Belief Model (HBM) also provided a theoretical focus for this study. Hochbaum, Kegeles, Leventhal, and Rosenstock originally formulated the HBM to explain preventive health behavior (Maiman & Becker, 1974). However, more recently it has been modified to explain the health behavior of patients with illness (Given, Given, Gallin, & Condon, 1983).

The HBM analyzes a person's motivation to act as a function of the expectancy of goal attainment in the area of health behavior and can be categorized as an "expectancy x value" theory, attempting to describe behavior or decision making under conditions of uncertainty (Maiman & Becker, 1974). A basic premise of the HBM is that a person's relevant health beliefs influence the decision process to take health-related action (Rosenstock, 1974).

A description and explanation of the Model by Rosenstock (1966) follows. Three basic elements or concepts included in the Model are (a) the readiness to take action, (b) perceived benefits and barriers involved in taking action, and (c) a cue to action. The individual's subjective state of "readiness to take action" is determined by both the person's perceived likelihood of "susceptibility" to a particular illness, and by the individual's perceptions of the probable "severity" of the consequences of contracting the disease. Both perceived susceptibility and severity have a strong cognitive

component and are partly dependent on knowledge. The benefits and barriers involve the individual's evaluation of the advocated health behavior in terms of its effectiveness and costs. The individual will weigh the action's potential "benefits" in reducing susceptibility and/or severity, against perceptions of physical, psychological, financial, and other costs or "barriers" involved in the proposed action. The person's beliefs about the availability and effectiveness of taking action determine what course of action will be taken, not objective facts about the effectiveness of action. The beliefs held by the individual regarding taking action are undoubtedly influenced by the norms and pressures of social groups.

A "cue to action" must occur to trigger the appropriate health behavior. This stimulus to action can be either "internal" (e.g., perception of bodily states) or "external" (e.g., interpersonal interactions, mass media communications). With relatively little belief of susceptibility to, or severity of a disease, rather intense stimuli would be needed to initiate action. On the other hand, with relatively high levels of perceived susceptibility and severity, even slight stimuli may be adequate.

Researchers have demonstrated a positive relationship between beliefs about susceptibility, severity, benefits, and preventive health behaviors such as seeking tuberculosis

X-ray (Hochbaum, 1956), and preventive health examinations (Haefner & Kirscht, 1970). Other researchers have included the variable of perceived barriers and have found a positive relationship with preventive health behaviors related to receiving polio vaccination (Rosenstock, Derryberry, & Carriger, 1959) and making dental visits (Kegeles, 1963). Flack (cited in Becker, 1976) and Kegeles (1969) also found a positive relationship between women's beliefs about susceptibility to cancer and benefits of a pap test, with having a pap smear done. Becker, Kaback, Rosenstock, & Ruth (1975) found perceived susceptibility to Tay-Sachs disease and benefits in screening for the disease associated with participation in screening for the disease.

In summary the HBM proposes that the probability of taking health action is a function of the level of perceived threat determined by beliefs concerning susceptibility and severity, beliefs about the potential for benefits from proposed action taken to counter the threat, and the estimated level of cost or inconvenience involved in pursuing the proposed action (Leavitt, 1979). A cue to action sets the process in motion.

The HBM has been expanded and reformulated by Becker (1976) to include "modifying and enabling" categories to explain patient compliance behavior. These modifying and enabling factors include: (a) demographic variables; (b) structural factors such as cost, duration and complexity of

treatment, accessibility of regimen, and the need for new patterns of behavior; (c) attitudes including satisfaction with visits, staff, clinic procedures, and facilities; (d) interaction patterns including length and duration of interaction, continuity of care, quality and type of client-provider relationship, provider agreement with client (with diagnosis for example), and feedback to client; and (e) enabling factors such as previous experience with a particular health action, illness, or regimen, and source of advice and referral.

Several researchers have investigated the influence of modifying factors on participation in prenatal care. The studies generally indicate that age, education, parity, marital status, available support systems, planning pregnancy, legal status of first pregnancy, complications during pregnancy, and nurse continuity influence participation in prenatal care.

Kaliszer and Kidd (1981) found that women who were older, of lower parity, or had employed husbands attended earlier for prenatal care than younger women, those of higher parity, or those with unemployed husbands. Frightened teenagers, women with many social problems, and competent childbearers (women who had not experienced problems during their pregnancies) were found by Parsons and Perkins (1982) to be poor attenders for prenatal care. Good attenders for prenatal care were shown by Collver, Have, and

Speare (1967) to be primigravidas, married women, and those with higher education. McKinlay (1973), and McKinlay and McKinlay (1972) found good utilizers of prenatal care services to be women of low parity who planned their pregnancy, had employed husbands, and had a support system of friends whom they consulted prior to seeking care. McKinlay and McKinlay (1979) also found that postnuptial conception was associated with early attendance for care, whereas, prenuptial conception was associated with late attendance. Women who experienced complications of pregnancy also attended earlier. Parken's (1978) findings concur with those of other researchers. Women who were older, had a higher education, a low modesty pattern, and husband's with a low male dominance were found to be better attenders for prenatal care than those who were younger, had less education, a high modesty pattern, and husbands with a high male dominance. Poland (1976) found that nurse continuity in a prenatal clinic was associated with a decrease in missed appointments.

Becker et al. (1977) in an excellent review of selected research studies utilizing the HBM concluded that:

While no one would claim that the Health Belief Model is complete in accounting for all variations in how people behave with respect to their health, sufficient evidence has now been amassed to conclude that the Model provides a workable theoretical and practical foundation (p. 40).

Redeker (1988) in a critique of the HBM concluded that, "The HBM has already been useful and has continuing potential as a meaningful theory for nursing practice and research" (p. 34). The HBM was an appropriate theoretical framework for this study because the focus of the study was to explore Indian women's health beliefs about pregnancy and their participation in prenatal care. Since the HBM was initially formulated to explain preventive health behavior, the concepts included in the Model could appropriately serve as a framework to explore Indian women's beliefs about pregnancy and prenatal care. Women's beliefs about susceptibility to and the seriousness of illness during pregnancy could be elicited. In addition, perceived benefits and perceived barriers to obtaining prenatal care could be determined. A further advantage to using the Model was that the patient's perceptions would be elicited. This is a significant point if nurses wish to understand the patient's viewpoint.

2.4.1 Summary

A review of the literature revealed that historical, environmental, economic, social, cultural, and political forces have shaped the beliefs which Indian women hold. Only five studies have investigated the beliefs and practices of Indian women related to pregnancy. One study by Hildebrand focused on Canadian Indian women.

Several studies have proposed that a relationship exists between health beliefs and preventive health behaviour. One unique study by Watkins suggested that health beliefs influence prenatal care attendance.

Chapter III

METHOD

This study was ethnographic-descriptive in design and relied on key informants to obtain data. In-depth interviews, using an interview guide, were conducted to elicit health beliefs about pregnancy and prenatal care from seven Indian women informants. A group of English speaking Indian women, who were leaders in Indian women's health and experts of their culture, were selected as key informants.

Spradley (1979) states that ethnography is the work of describing a culture. The essential core of this activity aims to understand another way of life from the native point of view. It is concerned with the meaning of actions and events to the people who an ethnographer is seeking to understand. Rather than studying people, ethnography means learning from people. Malinowski (cited in Spradley, 1979) states, "The goal of ethnography is to grasp the native's point of view, his relation to life, to realize his vision of his world" (p. 3). According to Spradley (1979), ethnography offers an excellent strategy for discovering grounded theory (theories grounded in empirical data of cultural description). Ethnographic inquiry is different from open-ended interviews in that the latter are structured

to stay within pre-established general guidelines, while the former is more free-roaming and pursues promising avenues of cultural knowledge suggested by the informant's remarks (Evaneshko & Kay, 1982).

The most fundamental assumptions and philosophic presuppositions of an ethnographic approach described by Magoon (cited in Smith, 1984) is a model of person as actively participating in the construction of known reality as a "complex knowing agent". The significance of ethnographic methodologies for nursing research is based on the assumption that any methodology that allows for the discovery of variables in health-related situations can contribute greatly to uncovering the complexities of nursing practice scenes, and developing nursing knowledge and theory (Aamodt, 1982).

Ethnography and nursing has been blended into the concept of ethnonursing by Leininger. Leininger (1978) defines ethnonursing as "the systematic study and classification of nursing care beliefs, values, and practices as cognitively perceived by a designated culture through their local language, experience, beliefs, and value system" (p. 15).

In ethnography, the informant assists the researcher in the development of questions by helping the researcher find the appropriate questions to ask (Evaneshko & Kay, 1982).

Many cultural rules that underlie behavior are implicit and not readily put into words, thus it becomes a combined task of the researcher and the informant to discover the underlying organizing principles of cultural data (Evaneshko & Kay, 1982). In this situation informants are colleagues rather than subjects since the discovery of cultural knowledge is a mutual enterprise (Mead, cited in Evaneshko & Kay, 1982).

3.1 DESIGN

This qualitative design was chosen as a result of the literature review, knowledge of the characteristics of the target population, and the nature of the research topic. Although beliefs about pregnancy have been studied in a variety of cultures, very little is known about Canadian Indian women. The few studies that have examined the beliefs about pregnancy of Indian women in the United States used informants to obtain data. For example Horn (1978) used 12 women informants on an Indian reserve. Evaneshko and Bauwens (cited in Evaneshko & Kay, 1982) used 6 informants (without medical background) to obtain data on cultural categories of medical emergencies. The paucity of studies related to pregnancy in Canadian Indian women made an ethnographic-descriptive design appropriate.

3.2 SELECTION OF INFORMANTS

The use of key informants was deemed appropriate based on a review of the literature and the nature of the research questions. Informants were selected on the basis of three criteria suggested by Spradley (1979). These criteria include: (a) a thorough enculturation into the Indian culture, (b) current involvement with the Indian culture, and (c) having adequate time. Based on these criteria informants selected were women who knew their culture well and who had years of informal experience with other Indian women. Additionally, informants were currently involved in the Indian culture because their jobs entailed working with Indian women or they were involved with Indian organizations. Only informants who had time for about 6 one-hour interviews were selected as this was the suggested amount of time required for ethnographic interviewing by Spradley (1979).

Having met the initial criteria, informants were selected on the basis of eight other criteria. Based on these criteria, informants were women who (a) were either Cree, Saulteaux, or Ojibway, (b) spoke English, (c) currently resided in an urban area, (d) were 18 years of age or older, (e) had one or more children, (f) had attended for prenatal care, (g) were involved with and knowledgeable about Indian women's health, and (h) were leaders in women's health in the Indian community.

The Cree and Saulteaux are the Indian groups most highly represented in the urban center where the study was conducted. This estimate is based on an assessment of Indian reserve communities (Indian & Northern Affairs Canada, 1983) and personal communication with numerous Indians living in the urban center. Since the environmental and historical conditions have been similar for the three tribes represented in the group of informants and since intermarriage has occurred, traditions, customs, and beliefs have had an opportunity for blending. Living in close proximity to each other in the urban area has also provided for blending of beliefs. However, these tribes are distinct Indian groups and it cannot be assumed that their cultural practices and beliefs will be the same.

Selection of women considered leaders in the Indian community and involved in and /or concerned with Indian women's health (including pregnancy) provided informants who were knowledgeable about health-related issues including pregnancy. Names of potential informants were obtained from acquaintances of the researcher as well as informants who participated in the study. Only 7 Indian women were found willing to participate in the study. One informant withdrew from the study before completion because she had moved to another province.

Informants ranged in age from 30-47 years. The mean age was 38 years. The number of children each informant had

ranged from 1 to 5, with a mean of 2.8 children. Two informants (D and F) had experienced a pregnancy loss. The educational background of informants ranged from a Grade 8 level to a University Degree. Three informants had completed a University degree. One informant had two years of post-secondary education at a community college. Two informants had completed grade 10 and one had completed grade 8. Three informants were Cree, two were Ojibway, and two were Saulteaux. Each of the informants spoke their traditional language. The number of years that informants had lived on a reserve ranged from 8 to 15 years, with a mean of 13.2 years. Informant D did not state how long she had lived on a reserve. Informants had lived in the urban area from 6 to 28 years, with a mean of 16.8 years. Informant B and D did not indicate how long they had lived in the urban area.

Each of the informants fulfilled responsible positions in the community either through work or various organizations and had contact with other Indian women in this way. One informant had been one of the founders of an Indian professional health care organization and was the author of a book for Indian women. Another informant was the director of a department in a health care institution. Her job required teaching Indian women about pregnancy. Two informants were teachers in health related disciplines where they had contact with other Indian women. Two informants

served as board members to institutions concerned with women's health. One informant had been learning the traditional Indian ways from an elder and had been employed in a center where she was able to pass on these teachings to other Indian women.

3.3 DEVELOPMENT OF THE INTERVIEW GUIDE

Treece and Treece (1982) suggest that an interview guide is an effective tool for studying areas that are to be explored in-depth. Since an interview guide only suggests ideas, it allows the interviewer more freedom. This flexibility makes it possible to revise questions in context for clearer understanding. Since the topic of pregnancy had rarely been investigated among Canadian Indian women, in-depth interviews were deemed appropriate. The flexibility which this approach permitted enhanced in-depth exploration of an unexplored topic.

The interview guide was developed by the investigator and was based on a review of the literature. The ethnographic interview according to Spradley (1979) consists of three important elements: a) its explicit purpose, b) ethnographic explanations, and c) ethnographic questions. The explicit purpose of each interview is made known to the informant so both ethnographer and informant know there is a purpose to the interview. Ethnographic explanations are made about the project, recording of information, the

interview, and the native language (i.e., the need for informants to speak the same way they would talk to others in their cultural scene). Ethnographic questions may be descriptive, structural, or contrast questions. Descriptive questions elicit an ongoing sample of the informant's language. Structural questions enable the researcher to find out how the informants have organized their knowledge so categories can be identified. Contrast questions enable discovery of the dimensions of meaning which informants employ to distinguish the objects and events in their world (Spradley, 1979). The interview guide was developed based on these principles.

The interview guide was reviewed by an Indian Registered Nurse and 2 nurses with Masters of Nursing degrees. The Indian nurse provided feedback about the appropriateness of the topics for discussion with Indian women and the usefulness to nurses of the data which would be obtained. The Indian nurse was consulted during the development of the interview guide because of the suggestion by Cohen (cited in Pelto & Pelto, 1978) that, "No foreigner should ever construct a questionnaire without help of a group of Native speakers" (p. 80). Feedback provided by the Indian nurse was very positive in that she thought the information which would be gathered would be beneficial to nurses. The graduate nurses provided feedback as to whether the topics would help to elicit the concepts under

investigation. They also reinforced the researcher's belief that discussion of the topics would provide data that would be useful to nurses in their practice. Feedback provided by the nurses resulted in the modification of the interview guide. For example, some topics which did not relate to the research questions were omitted (e.g., questions related to breastfeeding and marital status). The nurses also suggested that the informant's age be discussed last under demographic data because it may be a sensitive topic for some women. This suggestion was followed.

The interview guide consisted of topics related to: a) demographic data, b) beliefs about spacing of children, conception, growth and development, prenatal practices, and c) prenatal and pregnancy experiences. Appendix A is an example of the interview guide.

The researcher practiced interviewing with two personal friends using the interview guide. One friend was from a culture different from that of the researcher. Interviewing personal friends enhanced open communication and feedback. Based on the practice interviews, interviewing techniques were refined (e.g., the interviewer became aware of how conscious of weight gain a woman can be and this prepared the researcher to handle discussion about weight gain during pregnancy more sensitively). The following are examples of questions asked by the investigator during interviews:

1. What do Indian women generally think about having children?
2. Can you tell me about the behavior of staff at the prenatal clinic?
3. Do Indian women think that they can get sick during pregnancy?
4. What do Indian women think are things that are good for them and their babies during pregnancy?
5. Do you think there is a difference between accepting and supporting single mothers?

Because of the difficulty anticipated in obtaining Indian informants, a practice interview with informants meeting the study criteria was not done. This allowed more informants for the study itself.

3.4 RIGHTS OF HUMAN SUBJECTS

The research proposal was submitted to the Ethical Review Committee at the University of Manitoba School of Nursing for approval prior to seeking informant participation. Appendix B is the letter of approval from the Ethical Review Committee. Once approval was granted, potential informants from the Indian community were selected.

Individuals who could provide the researcher with names of potential informants were asked to contact the women

initially to determine if they were willing to have their names submitted to the researcher. When a potential informant's name was offered to the researcher, the informant was telephoned or personally approached. An invitation to take part in the study was extended to the potential informant. Appendix C is an example of the Invitation to Participate in the Study. Informant participation in the study was voluntary. If a prospective informant indicated a willingness to be in the study, an interview was arranged at the informant's convenience and at a site preferred by her.

The purpose of the initial interview was to establish a comfortable relationship and explain the study more fully. When the researcher felt the informant was at ease, a detailed explanation of the study's purpose, its relevance to Indian women and the nursing profession was given. Expectations of the informant as a participant in the study were explained as indicated in the consent. Informants were told that their names and answers to the questions would be kept confidential. They were also informed that if the study were published, the data would be presented so that individual responses would not be recognized and the urban center where the study took place would not be identified. Informants were told of their right to withdraw from the study at any time and their right to refuse to answer any of the questions. They were told that they would not be

pressured to remain in the study or to answer any questions. They were informed that a summary of study results would be provided to them as requested. Full names and addresses of those wishing copies were recorded. Informants were told that they would be acknowledged in the study only if they gave written consent to have their names made known. None of the informants gave such consent. If the potential informant was willing to take part in the study, a time for a tape-recorded interview was arranged.

Prior to commencing the first tape-recorded interview the consent form was given to the informant to read and time was provided for answering any questions about the consent or any other aspects of the study. When the informant's questions had been satisfactorily answered, a written consent was obtained. Appendix D is an example of the Consent Form to Participate in Study. A copy of the consent form was offered to each informant. The name, address, and telephone number of the investigator was provided to each informant who consented to participate in case the informant had questions at a future time.

A nonjudgmental approach was maintained throughout the interviews to enhance sincere responses. The interviewer strived to be courteous, considerate, and sensitive to the needs of the informants as recommended by Babbie (1979) in order to set them at ease and enhance open communication with the investigator. To help make the informant more

comfortable during the first interview, questions about the informant's children, hobbies, and work were initially introduced unless the informant preferred to discuss other topics first.

Following completion of each interview, the researcher expressed her sincere appreciation for the informant's cooperation and participation. Upon completion of each interview period a time for talking about the interview was provided. Unless time constraints for the informant did not allow for it, discussion ensued. Any questions about the interview or study were answered and comments from informants were noted and later recorded.

At no time were informants' names associated with the interview guide or tape recordings, and only the researcher and her advising committee had access to the raw data which was kept under lock and key. Code letters from A to G were assigned to each informant as she entered the study in order to maintain informant and data confidentiality. Upon completion of the study, an informal meeting will be held at the researcher's home to discuss the results of the study.

One informant who requested the tapes from her interviews was given the tape recordings. The remainder of the tape recordings will be erased upon completion of the study. Transcripts will be kept under lock and key in case a secondary analysis is desired. Transcripts will be

destroyed when the researcher is sure there is no further need for them.

3.5 PROCEDURE FOR DATA COLLECTION

Once approval from the Ethical Review Committee was granted, informants were telephoned or approached personally (if no telephone). Informants were told how their names were obtained and why they were suitable participants for the study. Informants were then invited to participate in the study. Appendix C is an example of the Invitation to Participate in the Study that was extended to each of the potential informants. When willingness to take part in the study was indicated, a meeting at the informant's convenience and comfort was arranged. At this meeting, when the researcher thought the informant felt at ease with the researcher, a detailed explanation of the study (as outlined on the consent form) was given. When the potential informant indicated a willingness to participate, arrangements were made for a tape-recorded interview at a time and place chosen by the informant. Since some of the informants were willing to be interviewed during the first meeting, this was done.

All interviews were conducted by the investigator. This provided a relatively consistent approach to interviewing. Interviews were conducted at the informant's home, the researcher's home, or the informant's workplace,

depending on the informant's preference. This had the advantage of putting the informant at ease.

Prior to commencing tape-recorded interviews, a written consent was obtained. Four to 5 tape-recorded interviews of about 1 to 3 hours each were conducted with each informant at the informant's convenience. Interviews were conducted between November 1985 to January 1987. A total of 45 hours of interviewing was done. One or 2 topics from the interview guide were generally discussed during each interview. Focusing on 1 or 2 topics avoided fatiguing the informant. Although one hour interviews were initially planned, informants sometimes preferred to spend longer than an hour when discussion was flowing.

Two principles suggested by Spradley (1979) were used to facilitate the rapport-building process so vital to ethnographic interviewing. These included making repeated explanations and restating what informants said. Implementing these principles enhanced the informant's clarity about the direction of the interview and provided an opportunity for the informant to correct any misunderstanding.

Topics were discussed with the least sensitive introduced first so that the informant's cooperation was not hampered in any way (Babbie, 1979). Initial interviews were guided by the interview guide, but as interviews progressed,

concepts and themes for further exploration emerged and were the focus of subsequent interviewing. For example, when some informants began discussing support for single mothers, the effects of ultrasound during pregnancy, and traditional roles, these were explored with the other informants as well.

The tape recordings provided a reliable method of retrieving the information from interviews. According to Diers and Schmidt (1977), tape recording interviews is likely to be more complete and "accurate" than any other method of collecting verbal data. Demographic data was also tape recorded to provide an opportunity for fuller explanations than a questionnaire would have permitted. Field notes were kept on each interview. These were a record of observations, conversations, interpretations, and suggestions for future information to be gathered (Agar, 1980). Field notes allowed the investigator a means of synthesizing and understanding the data that might not otherwise be achieved with only recorded verbal information (Polit & Hungler, 1978). Each interview was transcribed word-for-word onto a computer. Printed copies were used for analyzing the data.

3.6 DATA ANALYSIS

The researcher used content analysis to code and analyze the data. This provided a relatively consistent approach to coding and analysis. Analysis of data was done as soon as possible after each interview to identify themes.

Holsti (1969) defines content analysis as "any technique for making inferences by objectively and systematically identifying specified characteristics of messages" (p. 14). Coding, according to Holsti (1969), "is the process whereby raw data are systematically transformed and aggregated into units which permit precise description of relevant content characteristics" (p. 94). Decisions about the coding were guided by the study's theoretical focus. The concepts of the Health Belief Model which include susceptibility to and seriousness of illness and benefits and barriers of preventive action served as a guide. The beliefs and explanations about pregnancy and prenatal care which Indian women have also guided the coding.

As the data was analyzed, themes emerged which were the focus of subsequent interviews. This permitted enrichment and verification of themes. As themes were identified and verified, these were noted in the margins of the transcripts. Themes from the transcripts were recorded on sheets of paper and recurring themes were identified and aggregated.

Ethnographic research requires constant feedback from one stage to another. Thus selecting a problem, collecting cultural data, analyzing cultural data, formulating ethnographic hypotheses, and writing the ethnography occur simultaneously (Spradley, 1979). In qualitative work, just as there is no clear-cut line between data collection and analysis (except during periods of systematic reflection), there is no sharp division between implicit coding and either data collection or data analysis. There tends to be a continual blurring and intertwining of all three operations from the beginning of the investigation until its near end (Glaser & Strauss, 1966).

Unlike quantitative analysis, analysts of qualitative data may not achieve the same results with the same data. The purpose of ethnography is to describe accurately and comprehensively the range and depth of data obtained. Each analyst, therefore, sets forth the theoretical framework in a way that makes logical sense to her/him (Quint, 1967).

3.7 SUMMARY

The design of the study was ethnographic-descriptive, relying on key informants to obtain data. In-depth tape-recorded interviews totalling 45 hours were conducted with 7 English speaking Indian women informants residing in a large urban setting. The informants who were selected for the study knew their culture well and were leaders in Indian

women's health. Participation in the study was voluntary and an informed consent was obtained from each informant. Confidentiality of informants was maintained. Interviews were conducted by the researcher using an interview guide to elicit demographic data, Indian women's beliefs about pregnancy, and their views about prenatal care. Interviews were transcribed word-for-word onto a computer and printed copies were used for analyzing the data using content analysis. Themes were identified from the data.

Chapter IV

RESULTS

The qualitative analysis of the data generated themes which highlighted Indian women's beliefs about pregnancy and the prenatal-care system. The beliefs tended to fall into six major areas. In this section Indian women's beliefs will be discussed under the following headings: a) The Nature Of Pregnancy, b) Birth Control, c) Being A Woman, d) Helpful Prenatal Practices, e) Harmful Prenatal Practices, and f) Indian Women's Views Of The Prenatal-Care System.

4.1 THE NATURE OF PREGNANCY

A variety of beliefs were identified which revealed how pregnancy is conceptualized by Indian women. In this section the prevailing beliefs about pregnancy and the explanations which Indian women have about pregnancy will be highlighted.

Informants consistently stated that pregnancy is believed to be a blessing from the Creator. A pregnant woman is considered blessed with life. As informant E stated: "And if you were pregnant . . . that was a blessing for you You were being blessed and you were chosen to carry this new baby."

Several other beliefs were linked to the basic belief that pregnancy is a blessing. It is commonly thought that women "just know" when they are pregnant and blessed with life. Informant G expressed this belief in the following way: "The woman will know when she has been blessed with life. Like they say you are not alone now, you are with life. That feeling of that sacredness in the woman that she has received life, then she will know."

Because pregnant women are believed to be carrying extra life for the Creator and because of the changes and risks associated with childbearing pregnant women are respected and hold special status in society. Informant G explained: "That woman that's pregnant is treated very, very sacredly and the women accept that as a special treatment. Not only her but her baby too."

Since pregnancy is viewed as a blessing from the Creator sharing news of a pregnancy has special significance to Indian women. The informants concurred that traditionally it is believed to be appropriate to disclose the presence of pregnancy only when it is certain. This avoids building false hopes about the privilege of being blessed.

I think this is down from the teaching that we have. You don't discuss anything unless you are sure because why have false expectations if you are really not sure. . . . Indian people are proud so when you say something you want it to be real

and be proud that you are pregnant, that you announce that you are pregnant (Informant D).

When a pregnancy loss occurs the event is explained in a spiritual sense by Indian women. Informants stated that a pregnancy loss means "that maybe it just wasn't meant for you right now to have the child," or "that life was not ready to come," or "that the mother was not ready to be a mother."

The sacredness of pregnancy was further illustrated by the beliefs which Indian women hold about children. Children are considered a gift from the Creator and each one is welcomed and treasured. It is believed that the role of parents is only temporary and that parents have the responsibility to care for a child for the Creator until the child becomes independent and can leave the parents.

A child is not really yours. . . . But you're the nourisher and provider on this earth, in this time, right now. And the child is just a gift and it's only yours temporarily. The child will be taken from you at. . . probably some time. . . . So we were told it was on a loan. That means the child is not ours. It's just for us for a little while, for teaching and then we're supposed to give this child back. And that's when you have to let go (Informant E).

Because children are considered a gift from the Creator Indian women believe that childbearing should continue until menopause. Informant D expressed this belief in the following way: "No, as many as you can have and I have seen some women pregnant in their forties and fifties. Kids are considered a gift."

Informants agreed that having children is important to Indian women and that Indian women are proud of children. Children are believed to strengthen the family unit. Because children are considered gifts, it is thought that economics is not a valid reason for not having children. Informant E stated: "Not having any money is not a good reason not to have a child I think many of us that have children are very poor, but we still manage. Or you think you do anyways."

The sacred nature of pregnancy was also illustrated in the beliefs which Indian women hold about unwed mothers. A belief that is upheld is that marriage should precede childbearing. However, when childbirth out of wedlock occurs it is thought that the mother should keep the baby. Informants stated that generally unwed mothers are accepted and supported. One informant made a definite distinction between acceptance and support of single mothers. She stressed that single motherhood would be accepted but not supported. According to this informant, it is believed that withholding support (child care or financial) is a means of

teaching a woman the lesson that childbearing should occur after marriage.

A lot of times when a young girl or a single girl gets pregnant and has a baby, the community and the family will accept it as this is what has happened. It has happened and there is nothing that we can do about it, but we accept it. They are really not supported in regards to supporting them and caring for the child whether it be financially or caring for the child, providing a home, a safe environment for them in order for the mother or the young girl to be able to grow and learn how to care for the baby, they are not supported. . . . A lot of times that is the way that the young girl will be taught, that she may, hopefully, will think about going out and getting pregnant again. . . . You're supposed to encourage family unity, extended family, but a lot of the culture and tradition is that you do not support because that is, if you supported, then it could be misunderstood as condoning it, that this pregnancy occurred. . . . I think it is quite common in most of the Indian traditions that this is the way that it is. You accept it, but you really have difficulty supporting a young girl having become pregnant (Informant D).

Because children are considered gifts from the Creator Indian people believe that the responsibility for child care should be shared by the entire community and not only the parents. It is, therefore, expected that children will be disciplined and guided by other members of the community. This concept of shared responsibility for child care extends to another situation - the childless couple. It is believed to be appropriate for a family member or friend to offer, for adoption, their own child to a childless couple. Moreover, in the Indian community it is appropriate for grandparents to be given a child that a mother cannot look after. This practice is believed to have a sacred meaning.

Same thing as, say a mother can't look after a child. . . and it automatically goes to the grandparents. . . . And you know it's only natural, this is the natural teachings of the Indian people. . . they have done this for centuries. . . . Once they've been given the child, you know, that's a sacred meaning to them. You never finish working with children as long as you live (Informant G).

Beliefs about the role of parents and the extended family in teaching children also illustrated the sacred connotation attached to pregnancy and children. A very strongly held belief is that grandparents have a very significant and special teaching role in the education of

their grandchildren. The wisdom and knowledge to teach grandchildren is believed to come from the Creator. One informant who was to become a grandmother had some fears about her future teaching role because of the great responsibility it entailed.

It's a very new role, me becoming a grandmother and the role that is out there for me to teach my grandchildren. . . . I am afraid of it because I feel I don't have enough wisdom and knowledge to be able to teach my grandchild like my grandmother taught me. And yet, I understand it comes, it is given to you from the Creator. It comes naturally when you have reached that stage of becoming a grandparent (Informant D).

When grandparents are not available to fulfill their teaching role it is believed that aunts and uncles should take the responsibility.

Traditionally, "sacred teachings" were transmitted through special ceremonies. At puberty young boys and girls received "teachings" that prepared them for the physical and social changes which would ensue. Prior to marriage, young couples were prepared for marriage and during pregnancy a woman was taught how to maintain a healthy pregnancy. Informants acknowledged that there was a resurgence of these special ceremonies and Indian women were participating in them.

Another prevailing belief which Indian women uphold about pregnancy is that it is a natural process. Informants were unanimous in stating that pregnancy is believed to be a natural normal process in which there should be no interference. It is a commonly held belief that pregnancy is maintained by Nature.

It's seen as a very natural process. It's Nature. It's like the spring - the grass is coming up and there is growth of flowers or that kind of a natural - Nature. The nurturing is done by Mother Nature. And of course the baby is taken care of by Nature in a similar way. And you don't want to interfere too much with the growth. Like say if you over water a plant, where you should have just left it out. To have enough faith that the clouds are going to come and rain and that things will grow in spite of you, rather than because of you (Informant B).

Indian women believe that the baby grows and develops like a plant. The care that a baby needs is, therefore, believed to be similar to the nurturing a plant requires.

If you don't feed that plant and if you don't look after it, the leaves are small, the leaves begin to turn yellow, and the plant doesn't grow and it looks sick. And that is the same with the baby inside if you don't eat properly (Informant D).

The belief that pregnancy is a natural process was illustrated in the way Indian women explain conception. It is believed that conception is analogous to phenomenon in Nature. Informant C explained: "I think I've heard how it was referred to conception - there was seeds. Yes, having to do with men and women." Informant G explained it in the following manner: "It's not explained like an egg. It is explained, part of you and part of him, they make it together where life begins. And so it's these circles of life, get together."

Pregnancy is believed to be part of the life cycle and a "way of life." As informant D stated: "When a girl becomes of age to have a baby, it seems that it just happens because it is part of life It is just a way of life. It is just the way it is in our community." All Indian people are thought to pass through a circle of life. For Indian women pregnancy is believed to be part of this circle of life.

Because there is a circle of life, apparently, that as Indian people, that we go through the circle of life. First you are born, then you become a child and then you become an adult and then you become a parent. And then there is a certain stage that you reach that you become a grandparent. . . . And I feel that I have waited many years and now I am a grandparent. I reached

that part of my life of becoming a grandparent and then I have to become a teacher. You see I have to become the educator of the grandchildren. . . . Yes, then you become a teacher and the way you are taught in the circle of life, then you become an elder (Informant D).

The naturalness of pregnancy was further demonstrated by Indian women's beliefs about the indicators of pregnancy. Naturally occurring signs and symptoms indicate to women that they are pregnant. Informants concurred that a missed period, morning sickness, and weight gain are believed to be indications of pregnancy. The informants also stated that some women "just know" that they are pregnant before any signs appear. Women "know" they are pregnant because of a "feeling" they have.

It is a commonly held belief that pregnant women have a certain look in their eyes. When describing the eye changes which indicate pregnancy informant D recalled, "My mother was saying that there is that certain spark or twinkle in the eyes. That is because of this new life that is beginning inside you." The same informant continued to explain: "This is the way that Nature takes over the body of a woman because it is Nature that creates, when a person becomes pregnant." It is believed that older Indian women "know" when a woman is pregnant by the way she looks.

The beliefs which Indian women hold about spacing of children further demonstrate that pregnancy is considered a natural process. Several informants stated that there is no ideal age to begin having children and that once a woman was married, regardless of her age, childbearing was appropriate and expected. It is generally believed that childbearing should take place when a woman is young.

I know from my own experience it is just expected of you to have a family. And what you are told though in our Indian way of life is you should have children when you are young because it is better to have children while you are young. While you are healthy the baby is also healthy. But there is no such age [ideal age to start having children] (Informant D).

Several informants noted that today more emphasis was being placed on getting an education first and then raising a family. It was suggested that some Indian women want to establish a career or acquire a home before commencing childbearing.

Traditional Indian women believe that man should not specify the number of children to have. The majority of informants agreed that there is not an ideal number of children to have. It is believed that children should be accepted naturally as they come.

It's not important, it's a natural thing. If you have two kids that's fine, not to worry there is no problem there. If you have one kid that's fine. If you have ten that's fine. But in terms of numbers, again, it's that natural thing you know. Man is not to sit down and specify rules to say that this is the amount of ideal number of children that you should have (Informant B).

Informants also concurred that traditionally there is not an ideal number of years to wait between children. However, according to one informant elders recommend waiting two years.

Although traditionally children are accepted as they naturally come informants indicated that beliefs about the number of children to have and the number of years to wait between children has changed. Currently in the urban area a range of two to four children is believed to be an ideal number with a period of one to five years between children. Informants acknowledged that family size on a reserve would be larger than in the urban area because of greater social pressure to have children.

The conceptualization of pregnancy as a healthy natural process was apparent in Indian women's beliefs about susceptibility to and seriousness of illness during pregnancy. Informants were unanimous in stating that

pregnancy is generally not believed to be an illness. Informant G expressed this belief in the following way: "A long time ago Grandma will teach that it's [pregnancy] not a sickness. It's a normal process."

The majority of informants thought Indian women believed they were not susceptible to illness during pregnancy. Informant B explained: "No, it [pregnancy] is considered such a normal process that you would not anticipate problems or difficulties unless there is some previous experiences." Some informants thought otherwise: "Yes, they think they can get sick, but they don't think it is serious because pregnancy is a natural normal process" (Informant D).

One half of the informants thought Indian women believed sickness during pregnancy was not serious. Informant D expressed the belief in this manner: "No, not at all serious because pregnancy is a natural normal process. They would think any problems like nausea and vomiting or frequency are normal during pregnancy."

One half of the informants thought Indian women believed sickness during pregnancy would be somewhat or very serious. Informant E explained: "I would say very serious because many of the women that I know want their pregnancies so much. It is very important to them and so that anything out of the ordinary, they would deal with it right away."

The conceptualization of pregnancy as a normal natural process was also evident from Indian women's beliefs about who should attend them during childbearing. Informants concurred that traditionally it is believed that attendants during pregnancy and childbirth should be older experienced women not medical doctors who are believed to be appropriate consultants for medical problems.

I think even Indian women would like to have another older woman present. . . . I think it is very important that it is an older woman. An older woman would have a lot more knowledge, a lot more wisdom, more understanding, more caring, more compassion. She would be better as a teacher, an educator and this is why the older woman type, the grandmother type (Informant D).

It is traditionally thought that men should not participate during pregnancy and childbirth because these processes are believed to be too powerful for them. It is thought that men can be harmed by participating in pregnancy related affairs.

I was told it's a woman's role and it's not for a man to be there when a child is being born because that can affect the man as well. It can hurt the man because he is not supposed to be there. . . . The reason it could be harmful to the man is because of the power behind it. The power of

birth, the power of life, of giving life. It's too overwhelming (Informant C).

An additional belief supports the notion that it is not appropriate for men to participate in affairs related to pregnancy and childbirth. It is believed that pregnancy and childbirth are events between the Creator and the woman.

In fact it is very much against the culture for a man to be present at the time of labor and delivery. It is between the Creator and the woman, that childbirth or your pregnancy. It's up to the woman, it's not up to the man (Informant D).

Even though traditional beliefs regarding who should attend women during childbearing influence current preferences of Indian women, informants indicated that men are now beginning to be involved in pregnancy and childbirth and some women want to have their partners participating.

4.1.1 Summary

Pregnancy is believed to be a blessing from the Creator and it is thought that women "just know" when they have been blessed. In order to avoid building false hope about the privilege of pregnancy, it is thought that news of pregnancy should be shared only when it is certain. Since pregnancy is viewed in a sacred context, pregnant women are respected and hold special status in society.

A belief about children is that they are a gift from the Creator. It is believed that children are not owned by their parents and that parents have a temporary role in their care. Because children are considered a gift, it is traditionally believed that childbearing should continue as long as a woman is fertile.

Children are important to Indian women and they are proud of their children. Children are believed to strengthen the family unit. Economics is not considered a valid reason for restricting family size.

It is thought that unwed mothers should keep their babies and that single mothers should be accepted and supported. However, some Indian women believe that withholding support (financial or child care) is an effective means of teaching a young woman that marriage should precede childbearing.

A traditional belief is that child care is the responsibility of the entire community. The members of the extended family (especially grandparents) are thought to have a prominent role in teaching children. Wisdom and knowledge to teach is believed to come from the Creator.

Pregnancy is believed to be a natural normal process in which there should be no interference. A pregnancy is thought to be nurtured by Nature and the care a baby needs is believed to be similar to the nurturing a plant requires. Conception is thought to be analogous to planting seeds or

two "circles of life" uniting. Indian women think pregnancy is a "way of life" and part of the life cycle.

A missed period, morning sickness, weight gain, "just knowing," and eye changes are believed to be indicators of pregnancy. Older Indian women are thought to "know" when a woman is pregnant from the way she looks.

Traditional Indian women uphold the belief that man should not specify the number of children to have. Consequently, Indian women do not think there is an ideal age to begin having children nor an ideal number of years to wait between children. It is thought that ideally childbearing should occur when a woman is young.

Indian women generally do not believe pregnancy is an illness. Some women also do not believe they are susceptible to serious illness during pregnancy.

Traditionally it is believed that an older experienced woman should attend women during childbearing. Pregnancy and childbirth are believed to be events too powerful for men and harmful to them. Many Indian women believe that it is not necessary to see a medical doctor during pregnancy because it is a normal natural process.

4.2 BIRTH CONTROL

Indian women's beliefs about birth control are linked to their beliefs that pregnancy is a natural process and a blessing from the Creator. It was evident that a natural approach to birth control is traditionally advocated.

A commonly held belief is that breastfeeding is an effective natural method of birth control. Informant D stated: "They fully believe that as long as they are nursing they will not have another child. That is a means of birth control."

One informant explained that breastfeeding is believed to be a cleansing or purification. According to this informant, it is believed that pregnancy can be avoided if a woman communicates with her womb and asks not to get pregnant while she is breastfeeding another child.

And so the longer they breastfeed the baby, the longer the cleansing is there, so that mother doesn't get pregnant right away. . . . See that's what we talk about when we say - in harmony with yourself. . . . You have to ask not to have life given to you while you are breastfeeding, because you are already looking after that life You have to be able to communicate to your womb that you don't want any children while you are feeding this one (Informant G).

Traditionally, natural herbs were used to prevent pregnancy and were prescribed by medicine men/women.

With the Indian people what happened was. . . when the woman decided that she had enough children, she went to the medicine man and the medicine man gave her the appropriate medication. . . to stop her from having any more pregnancies. . . . My mom took that. Anyways, she went to a medicine man and he gave her something and that's it, she didn't have anymore (Informant B).

Herbal preparations are currently being used by some Indian women to prevent pregnancy. Traditional herbally based preparations are utilized because they are considered natural.

Taking birth control is believed by some women to be tampering with that "way of life." As informant C explained: "In terms of my mom's generation . . . yes, there was [birth control] but my dad didn't believe in it so she didn't take any birth control. In a way it was like tampering with that way of life."

Some Indian women object to taking birth control pills because they believe they are unnatural and a foreign substance. They also believe that the chemicals have harmful effects. One informant explained that if a woman takes birth control pills she may not be blessed with a child in the future. Chemicals are believed to destroy the eggs.

My grandfather said, "If you take birth control pills, it's like taking that pill, when you swallow it, it's like a bunch of worms eating those eggs." . . . And he said, "Maybe later you won't be blessed with a child." So that was a warning to their granddaughter not to have anything to do with those pills (Informant G).

A tubal ligation is unacceptable to traditional Indian women because a woman would not be considered a woman if she could not bear future children. Another objection to a tubal ligation is related to the surgical procedure. It is traditionally believed that skin should not be cut. Informant E explained: "I guess, traditionally, anything cutting the skin is, you shouldn't really cut it If you do go to a surgeon and once you've had the surgery then the traditional people can't help you, to be supportive, you know."

Vasectomy as a method of birth control is unacceptable. There is a belief that having a vasectomy is wrong because it is tampering with your body. It is also believed to be akin to being your own God.

And they may feel a sense of wrong in terms of the spiritual, tampering with the body. Like if it's meant for you not to have any more children then you won't have anymore children. . . . It's as if you're your own God, sort of (Informant C).

Men oppose a vasectomy because a vasectomy is believed to be a threat to their male ego.

I don't know if they could tolerate that just yet. The man has gone through so many changes already. You know with technology coming in. So he's taking a little longer getting on his feet and then to have these vasectomies on top of everything. I think that's a little too much. . . . Well, if they did [have a vasectomy] they certainly don't tell anybody. . . . They might be teased by other men (Informant E).

Indian women believe that life begins at conception. Abortion is, therefore, traditionally not accepted. Informant G asserted: "It's almost like saying you got rid of that life you were blessed with." According to one informant it is believed that an abortion causes anger in the baby because the mother got rid of it. An inability to bear future children and guilt are thought to be additional consequences of having an abortion.

Because if you do, and some women really believe this, that if you do, you may not have children. That privilege will be taken away from you. So you take care of those things because the chance may never come again (Informant E).

Because some women do not believe in taking birth control they risk danger to their health and life by ignoring warnings from doctors to avoid further pregnancies.

This one woman I was listening to saying, " I have eight children and the doctor told me I shouldn't have any more children. The doctor told me I'm going to die if I have another one after having eight." And she wasn't going to take any birth control because they don't believe in it. And then she said, "I went and had eleven of them" (Informant G).

Informants generally agreed that it is believed to be a woman's responsibility for the choice in having children and for taking measures to prevent pregnancy. In very traditional families, it would be the responsibility of the man.

Although traditionally birth control is not accepted by some Indian women, informants concurred that beliefs about birth control have changed and some women are choosing various available methods to limit family size. According to informants, women in the urban areas are more likely than reserve women to utilize birth control.

4.3 BEING A WOMAN

Informants expressed several beliefs which indicated how womanhood is conceptualized in Indian society. It was evident that being a woman was strongly connected to childbearing. As informant B stated: "It's a fact of life one of a woman's functions is babies."

To be fully a woman it is believed that a woman should bear children. This belief was expressed by informant D in the following manner: "You are a woman and a woman is made to have children, to have babies, and if you don't have babies, then you are looked at as being not really a woman." If a woman does not have children she is considered unfulfilled and incomplete. As a result, childlessness is uncommon among Indian women and most informants stated that they did not know anyone who did not have children. Childlessness by choice may occur, but it is rare.

When a woman's potential for childbearing is terminated her womanhood is threatened. A traditional belief is that a woman is not a woman if she has had a tubal ligation, hysterectomy, or is using birth control.

However, if you look at the ones from the remote areas, from the north, the real cultural women will not go for a tubal ligation. . . because they feel that their husband would feel that they're not women by having a tubal ligation done. . . . And you have a hard time explaining to the man that it does not affect a woman being a woman, by having a tubal. . . . It is the same way as a hysterectomy is viewed. A lot of people have this myth that once a woman has a hysterectomy that's it, they are finished. It's the same way as a tubal or being on birth control (Informant D).

Having children is thought to heighten a woman's self worth and provide a challenge to her.

To have that self worth. When you can have children it makes you feel good and I think it is also a challenge for women. A challenge to see the more children that you have the better your [family] unit is. . . . It is something that they are proud of (Informant D).

4.3.1 Summary

Traditional Indian women take a natural approach to birth control. Breastfeeding is believed to be an effective method of family planning and is accepted because it is natural. Special natural herbs are also believed to be effective birth control measures. Artificial birth control is considered unnatural. Birth control pills are thought to be unnatural foreign substances with side effects. It is believed that a woman taking birth control pills is rejecting blessings. Birth control pills are thought to destroy the eggs and prevent future childbearing.

Some Indian women object to a tubal ligation because of a traditional belief that skin should not be cut. It is believed that once skin has been cut, traditional healers will not be able to provide effective support to the woman. A vasectomy is believed to be a threat to the male ego and tampering with the body. It is considered being your own God.

Life is believed to begin at conception so abortion is traditionally not accepted. A belief is that having an abortion may result in an inability to bear future children. It is generally believed to be the woman's responsibility for the choice in having children as well as taking measures to prevent pregnancy.

Being a woman in the Indian society is closely linked to childbearing. It is believed that a woman should bear children to be fully a woman. Once a woman is married it is thought that she should have children. A woman who has a tubal ligation, a hysterectomy, or is on birth control is not believed to be a woman. Having children is thought to challenge a woman and heighten her self worth.

4.4 HELPFUL PRENATAL PRACTICES

Indian women believe that a variety of practices, if implemented by the expectant woman, will promote a healthy pregnancy. These beliefs focused primarily on practices related to: a) women "taking care of themselves" during pregnancy, b) dietary practices, c) activity, d) rest and sleep, and e) emotions of the mother.

It is commonly believed that women are responsible for "taking care of themselves" during pregnancy so that the outcome of pregnancy will be a healthy baby.

I don't think an elder would tell a woman that they should attend the prenatal class because what the elder would tell them is to take care of yourself as the way that the Creator would want you in order for your child to be healthy. . . . You don't drink, you don't smoke, you eat properly and that type of thing (Informant D).

Women believe that miscarriages and preterm births result when they do not "take care of themselves" during pregnancy. It was evident that women suffer from guilt and anxiety when they transgress any of the practices believed to be healthy for mother and baby during pregnancy.

Maintaining a well balanced diet in moderate quantities is believed to help maintain a healthy pregnancy. Informants believed that Indian women who attended regularly for prenatal care would be familiar with the four food groups recommended by Canada's Food Guide. The four food groups which constitute Canada's Food Guide are: a) milk and milk products, b) meat, fish, poultry, and alternatives, c) breads and cereals, and d) fruit and vegetables.

A traditional belief is that corn, rice, meat, and berries are sacred foods which nourish the child spiritually. During pregnancy mothers are encouraged to occasionally eat the four sacred foods.

They believe in the four foods, that they call the sacred foods. It is the corn, and the rice, and the meat, and the berries. . . . And you don't eat them separate, you eat them together. . . . And the berries, you can eat again, four different kinds of berries all in one plate. And that's supposed to be the cleansing part of your body. But it's to feed the baby spiritually (Informant G).

It is believed that foods from the land are particularly helpful in maintaining a healthy pregnancy. These are foods such as wild meat or fish, vegetables (such as white carrots or potatoes), rice, and berries.

Exercise in moderation, and related to work, is believed to be a healthy practice during pregnancy. Walking is thought to be a particularly suitable form of exercise because it had been commonly done in the past.

A long time ago, women, they travelled from camp to camp and when it was time for them to have their baby, they just stop there for a day, a couple of hours and then just continued. . . . That was the healthy part of, the exercise (Informant G).

Adequate rest, sleep, and quiet times are thought to contribute to a healthy pregnancy. Inadequate sleep is believed to cause some deprivation in the baby as well as

cause the mother to get irritable. It is thought that rest periods provide time for the mother to focus on herself and the baby. Traditionally it is believed that the extended family should assist with chores and children to help a new mother obtain adequate rest and sleep. Today with the extended family less readily available, women do not have the same opportunity for rest.

I was told that years ago, that a woman who had a child, there was someone there always to help with the children, with the house because she needed time to heal her body. But as it is now it's not like years ago. . . . So you are forced into getting back into the house and looking after the children (Informant C).

It is believed that emotions of the mother can be transmitted to her baby during pregnancy and can affect the personality of the child. As a consequence of this belief, mothers are encouraged to have positive, pleasant thoughts during pregnancy.

I have been told to have good thoughts while I am carrying the child so that the child will enter the world in a good way. I will use Y [name of her child] as an example. During my pregnancy with her, our marriage was very stressful. It was very difficult for me to think positive as a result. I find that her personality is very, she is a very

aggressive little girl and speaks up since the day she was born. . . . Whereas, with X [name of another child] it was a blissful pregnancy in terms of we were both excited about the pregnancy and I was positive about the whole pregnancy. I was happy that I was pregnant. I wanted this baby that I was carrying. With X, he was more laid back, more at ease, he relaxes, he can also calm down, sit back, whereas, with Y, she is on the go, go all the time. It's hard for her (Informant C).

Communicating with the baby during and after pregnancy is believed to develop a baby that is more alert and interacts better with people and the environment. As a result of this belief, communicating with the baby during pregnancy is considered extremely important. Throughout pregnancy, women as well as other family members are encouraged to communicate with the baby through meditation, singing, talking, and chanting. Another belief held by Indian women is that communicating desires to a baby can lead to actualization of the desires.

Like she [a pregnant woman] didn't want to go to the hospital because they were going to induce her. And she sat there and talked to her baby and we were looking at her and we listened to her and she said, "Look baby, we don't want to go through that inducing. You can do it on your own." . . .

So we sort of helped her, anyway, in communicating to her baby. You know, "You do it on your own." So she went into labor [spontaneously] on Sunday and had her baby on Monday (Informant G).

4.5 HARMFUL PRENATAL PRACTICES

Indian women believe that a number of prenatal practices can endanger the health of a mother or baby. Practices believed to be harmful were related to a) strenuous activity, b) consumption of chemical substances such as alcohol and drugs, and c) smoking.

Informants were unanimous in stating that strenuous activity of the mother is thought to result in miscarriages or preterm births. Activities such as heavy lifting (especially other children), scrubbing floors, heavy housework, chopping wood, and carrying water or firewood are believed to be too strenuous for pregnant women and women are cautioned to avoid them.

She [informant's grandmother] was telling me when she was carrying my dad, who was the youngest of the three children that she had. . . . She was told not to lift anything that was at home. . . . And especially in those days because you had to carry your own water. . . . But she said she went ahead and did these things anyway. And when you washed the floors, like the floors were wooden, so

you had to get on your hands and knees with a scrub brush which is a no, no. You're not supposed to do that. . . . And I think she carried some water as well, and of course she went into labor [3 weeks early]. And so she said the reason why she went into labor probably was because she did all these things which her dad and her mom said don't even consider doing (Informant E).

Dancing during pregnancy is believed to be harmful. Vigorous dancing is believed to hamper the baby's breathing and cause the baby to turn to a different position in utero. Controlled breathing and physical exercises (such as those taught in prenatal classes) are believed to affect the baby adversely. No further explanation of consequences was offered by informants.

And because of the way that the prenatal classes sometimes are structured it's against the Indian culture teaching. One of the areas that it really shows is exercising and breathing. And yet we are, as Indian people, we are discouraged that you do not do these exercises or a certain way of breathing because the baby is going to be affected (Informant D).

Consumption of alcohol during pregnancy is believed to be a detrimental intervention that can cause a miscarriage.

It is believed that a miscarriage results because a baby can sense the mother's drinking behavior and does not want to be born to her. Informant G explained: "And they'll say, 'the baby didn't want you as a mother.' . . . Maybe the mother is drinking, or like today, the drugs. The baby knows that. He doesn't want to grow up because the woman is abusing herself." In the past women were also cautioned about other harmful effects of alcohol such as silly or violent behavior.

Traditional Indian women believe taking medications during pregnancy is unnatural. As a result, they may not take medication as prescribed unless a thorough explanation centered on the benefits to mother and baby has been given. Some women believe that taking drugs during pregnancy leads to the development of yellow jaundice in the baby.

And then once the clinics started coming on the reserves, they started sending the women out. When they had, like when the women had their kids at home, you didn't see jaundice and stuff like that. It's only when they started going to the clinics and all that. And the ladies used to sit around and talk, you know wondering why. All these drugs like iron pills and all that, that these women had to take, they had to take them. That's what's causing these babies to be sick with yellow jaundice (Informant F).

Smoking during pregnancy is considered harmful by Indian people. Generally, no explanation was given in the past about the harmful effects, women were just cautioned not to smoke because it was not good.

4.5.1 Summary

Indian women uphold a variety of beliefs related to practices thought to be helpful or harmful to mothers and babies during pregnancy. Indian women believe they are responsible for "taking care of themselves" during pregnancy so that they have a healthy baby. The consequences of not "taking care of yourself" during pregnancy are believed to be miscarriages and preterm births.

It is thought that a pregnant woman should eat a well balanced diet in moderate quantities. Foods from the land are believed to be particularly healthy for the expectant mother. A traditional belief is that a woman nourishes her child spiritually when she occasionally eats four sacred foods (corn, rice, meat, and berries). Exercise in moderation (especially walking) is considered to be a healthy practice but strenuous activity of the mother is believed to result in miscarriages or preterm births. Vigorous dancing is thought to affect the baby's breathing and cause the baby to change position in utero. Inadequate rest and sleep is believed to result in some deprivation to the baby and make the mother irritable. To help mothers

obtain adequate rest and sleep, it is believed that the extended family should assist with household chores and child care.

Emotions of the mother are believed to be transmitted to the baby during pregnancy and to affect the child's personality. Pregnant women are, therefore, encouraged to maintain positive thoughts throughout their pregnancy. Communicating with the baby during pregnancy is believed to help the development of an alert baby that interacts better with people and their environment.

Chemical substances such as cigarettes, alcohol, and drugs are believed to be unnatural harmful interventions during pregnancy. Miscarriages are thought to result from excessive consumption of alcohol. Drugs such as iron pills are believed to cause jaundice in babies.

4.6 INDIAN WOMEN'S VIEWS OF THE PRENATAL-CARE SYSTEM

Indian women's view's of the prenatal care system includes their beliefs and explanations about the prenatal-care system itself as well as the care they receive. This section describes women's beliefs and explanations about their participation in prenatal care and interactions with health-care providers in prenatal care clinics.

4.6.1 Participation in Prenatal Care

The beliefs and explanations which Indian women have about prenatal care utilization by Indian women tended to focus on what they believe constitutes regular and irregular prenatal care attendance and factors which they believe are enabling or limiting to prenatal care attendance.

Prenatal care is believed to be beneficial by some Indian women but many others see no benefits at all. Informants who thought Indian women see no benefits to prenatal care also thought that if the importance of prenatal care was stressed to Indian women they would attend more regularly.

Indian women believe that prenatal visits are currently too frequent for normal pregnancy. They think that visits could be less frequent during normal pregnancy but escalated during complicated pregnancies. Informant D expressed the following: "I think a lot of times I agree with the Native women. I think a lot of times we put our patients through some unnecessary probing, undressing, and checking."

Because Indian women think the scheduling of prenatal care visits is too frequent, informants believed that women may develop their own pattern of regular attendance based on their own perceived needs.

Regular could be anything, right? It could be they come every second scheduled appointment.

Maybe they go their first month, maybe they go their third. Or else maybe they miss two in between. . . . Just go the last month. . . . Like it's a pattern, right? (Informant C).

The informants thought that missing one or a few prenatal care appointments would be considered irregular attendance. It was believed that experienced childbearers would be more likely to challenge the established prenatal care system (i.e., scheduled appointments) than novices.

Like when I say young, I mean it's their first child or their second child. So don't feel as comfortable, I suppose, challenging that, you know challenging or making it different or asking for maybe decreased time. . . . But there might be some women out there who would feel comfortable with going less . . . but I'm just assuming that they might be older though, that have had more children and take care of themselves better (Informant E).

Informants identified various reasons why Indian women attend or do not attend for prenatal care. Table 1 highlights factors which informants thought were enabling and limiting to prenatal care attendance.

The primary enabling factor to prenatal care attendance was the belief that problems would be identified and treated

TABLE 1

Enabling and Limiting Factors to Prenatal Care Attendance

| | Enabling Factors | Limiting Factors |
|-----------------------|--|---|
| Psychological | belief that problems will be identified and treated; desire to confirm pregnancy; desire for feedback; positive interactions with staff; "taking care of yourself" (i.e., attending for prenatal care was believed to be a way of enhancing a positive pregnancy outcome); fear of "breaking the rules". | "taking care of yourself" (i.e., believing that maintaining good self-care practices rather than seeing a doctor would promote a healthy pregnancy); dislike of pelvic examinations and blood work; forgetting; denial of pregnancy; disappointing interactions with staff; procrastination; long waits in the clinic; believing staff might pressure them into having an abortion. |
| Social/ Economical | encouragement by a support person | baby-sitting problems; lack of time; transportation costs. |
| Cognitive | understanding the importance of attending. | lack of knowledge regarding the importance of medical supervision; believing there is no need for medical supervision because pregnancy is believed to be a healthy, natural process and no past or current pregnancy problems have arisen. |

so the outcome would be a healthy baby. Informant C explained: "I think they believe that they have to go just in case there is something wrong." Informants thought that problems during a previous pregnancy would be a common reason for women attending prenatal visits regularly in subsequent pregnancies.

The foremost limiting factors to prenatal care attendance were baby-sitting problems and believing there is no need to attend because of no past or current problems. Informants consistently identified pelvic examinations as problematic, especially if performed by a young, male doctor. Indian women believe that pelvic examinations are an interference. As informant E stated: "It's almost like an interference. It's almost too, well, it's too close to the baby." They also believe that an older female attendant should perform pelvic examinations because elderly people are respected in their culture. The pelvic exam was described as more troublesome in teaching hospitals where medical students' findings need verification by an experienced practitioner, thus subjecting the patient to an examination by more than one person.

A further problem with pelvic examinations is that some women, even after having several children, do not know the purpose of a pelvic examination because they have not questioned it and staff have not taken the time to explain the reason for the procedure. This was expressed by

informant F in the following way: "Even though they have had about four babies they have never asked. When they are checking the dilation, like how much you are open, all that, they never knew that's what they were checking on."

Some Indian women believe that staff will pressure them into having an abortion. Some informants explained that they initiated prenatal care late because of this fear. Informant E recalled: "I thought maybe the doctor might want to talk me out of my pregnancy. . . . So I stayed away from the doctor for as long as I could."

4.6.1.1 Technological Interventions

According to informants, technological interventions carried out during prenatal visits are believed to be detrimental and some women are fearful of them. Ultrasound, for example, is believed to affect the baby's development, delay delivery, and interfere with the communication between mother and baby.

The ultrasound affects the spiritual development of the child in terms of both physical and the spiritual as well as the emotional and cultural. But it takes awhile for the spiritual to meld into the new being that's in there. And if that's tampered with it takes longer for that to happen and that's why the long labor. . . . And when all of these are one, then that's when the baby is ready to come (Informant C).

And it's almost like it's an interference to them to have an ultrasound. . . . Like that ultrasound, it seems like it's not a natural thing. . . . It's almost like they fear for their baby. Like there'd be some kind of a disconnection between communication (Informant G).

Artificial induction of labor, fetal monitoring, and obstetrical forceps are also believed to be interferences during pregnancy. It is believed induction of labor can interfere with a child's entire life because the child is not born at the time set by the Creator.

If you induce a baby, we say it wasn't normal because you're forcing the baby to come. . . . When it's done normally, that time was set for that baby to be born and the minute the baby is born it is a time set when he's going to have just that certain time to live. They say that the Creator sets that time. . . . He sets that time and the reason why that baby came to this earth - he's got a job to do on this earth - till he's finished doing the job that the Creator has given. . . . So when you interfere with that, there's a real interference in that child's life. . . . You disturb its whole life. . . . They believe that you have no right to interfere because that life

will have a different personality when that life got older. So they actually missed altogether what the Creator meant this child to be (Informant G).

4.6.2 Summary

Some Indian women believe prenatal care is beneficial but others perceive no benefits at all. Indian women believe that fewer prenatal care visits would be adequate during normal pregnancy. However, for women with complications more frequent visits are thought to be necessary. Informants believed that experienced childbearers might challenge the present system of scheduled appointments but novices would not. Informants also thought that some experienced childbearers develop their own pattern of regular attendance based on their own perceived needs.

The primary enabling factors to prenatal care attendance were the desire for a healthy baby and believing that problems would be identified and treated (especially if complications occurred in a previous pregnancy). The primary limiting factors to prenatal care attendance were: baby-sitting problems and believing there is no need to attend because of the absence of current or past pregnancy problems.

Technological interventions are believed to be detrimental and are feared by some Indian women. Ultrasound is believed to interfere with the baby's development. It is thought to delay the melding of the spiritual, physical, emotional, and cultural components of the baby and thus to cause delay in delivery. Ultrasound is also believed to cause a disconnection in the communication between the mother and her baby.

Another belief is that induction of labor can interfere with a child's entire life because the child is not born at a time specified by the Creator. This is thought to interfere with the child's future personality development.

4.6.3 Interactions With Health-Care Providers

Indian women hold a variety of beliefs and explanations about the quality of verbal and nonverbal communication between themselves and those providing health care in prenatal clinics. This section describes these beliefs and explanations and the characteristic communication patterns of Indian women.

Indian women believe that during prenatal care visits interactions with staff should be positive. In addition to performing a physical examination, women believe staff should: a) offer explanations (about the progress of

pregnancy, tests/procedures), feedback, and reassurance; b) teach (about how to promote a healthy pregnancy); c) answer questions; d) offer patients opportunities to share their experiences and express their needs; and e) provide individualized personal care in a nonauthoritarian manner.

Some informants recounted the fear that surfaced when making their first prenatal care visit because staff failed to teach and explain what the visit would entail. When recalling her first prenatal care visit informant G remembered that she did not know what would occur: "It's almost like you're going into a foreign place where you have never been before and you question yourself what's really going to happen because you don't really know what's going to happen."

All informants stated that Indian women believe communication with staff during prenatal care visits is less than ideal, yet Indian women want good communication. The following was expressed by informant G: "Actually, they [staff] don't sometimes even talk to you. It's between the doctor and the nurse. . . . They're sitting there just like a lump on a log. You're there and that's it."

Informants stated Indian women believe prenatal visits are rushed, cold, and impersonal, with long waiting periods to see the doctor.

There doesn't seem to be much caring or understanding. It's not expressed. It's just a job and they are just worried about getting the job done and they are not thinking of the individual. . . . They're [nurses] busy doing forms, filling out your charts. . . . It seems to be a common thing that women say though, they just feel like they are sort of cows (Informant C).

Indian women believe that some interactions with staff during prenatal care visits are positive. Women think interactions are positive when staff offer explanations freely and a friendly personal approach is taken by staff. The following narrative illustrates what is thought to be a personalized caring approach by a nurse:

She [nurse] would come in there and tap somebody on the shoulder. . . and say, "How are you?" You know that touch on the shoulder is a connection to say you are important too. Everyone of them are important. . . . And she would tell them who she is and shake hands with them. So she'd introduce herself to them. . . . And then she would. . . sit there and just sit beside them and talk to them. You know, not about their pregnancy. . . it could be anything from the weather to telling her what happened to the baby. . . . I used to think. . . she must have met a lot of mothers, not just

me. . . . It's almost like she made herself available. . . . It's almost like she centered her whole attention on you. It really made you feel comfortable. All of a sudden she made you feel, you are so important (Informant G).

The informants offered a description of the characteristic behavior of Indian women during prenatal care visits. It was consistently acknowledged that many Indian women are very shy and reluctant to ask questions. Indian women hesitate to ask questions because they are afraid or they don't know what questions to ask or how to ask them. They believe that staff are very knowledgeable and educated and they don't want to appear "dumb" or make a "nuisance" of themselves by asking too many questions. Indian women think it is inappropriate for others to ask them too many direct questions. They also believe it is inappropriate to discuss personal matters with others. Indian women will disengage from communication when asked personal questions such as information about their menstrual period.

You do not talk about your periods, your menstrual cycle. . . . If you ask a woman when was her last menstrual period, they will just ignore you. They will not look at you, they will not respond, they will just clam up. . . . They would become embarrassed and they would become uncomfortable (Informant D).

Indian women tend to relate the date of their last menstrual period to an event in Nature rather than stating a precise date.

One of the ways that a lot of them will express to you is that they had their periods when they were out trapping or they had their period when their husband was fishing in the summer time or when leaves were starting to come. . . (Informant D).

Indian women tend to refrain from giving feedback to staff, even though they comprehend information provided. Informant F explained: "You can tell them a lot, but you don't get feedback from them. But what you tell them they take it in, but you don't get anything out of them."

Additionally, Indian women generally do not express satisfaction with care.

Those people that do follow their tradition. . . it's not too often that there is positive [feedback]. . . . But I am not saying that the Indian people are negative people. If things are going right then, okay, they won't say anything. But if something is not right with them they will say so. . . . If people of other cultures would understand that (Informant C).

It is customary for communication to occur in a circular manner when a woman is expressing dissatisfaction

with care. Instead of communicating directly with the health-care worker involved, women will express their dislike or dissatisfaction to a third person, who in turn discusses the situation with the health-care worker.

According to informants, language can be a barrier to communication because there are no words in the Indian language to express some concepts used in English. This is apparent in disease conditions such as hypertension and diabetes. Staff often assume that the patient knows the meaning of these terms.

The informants were consistent in stating that nonverbal communication is critical to Indian women. It is believed to be more important than verbal communication and could either enhance or hamper interactions.

Indian people communicate very much through body language and they also look at how the next person behaves through their body language. We refer more to their actions. . . . It has so much weight. More so than any words that you can say, is the way that your actions are. They are very much in tune with that (Informant D).

4.6.4 Summary

Indian women believe that interactions with health-care providers during prenatal care visits should be positive.

They think that staff should offer explanations, feedback, reassurance, answer questions, provide patients with opportunities to share their experiences, and provide individualized personal care in a nonauthoritarian manner.

Indian women believe that communication with staff during prenatal care visits is often disappointing. Prenatal care visits are believed to be rushed, cold, and impersonal, with long waits to see the doctor.

Indian women think it is inappropriate for others to ask them too many direct questions or to discuss personal matters with them. They tend to relate dates such as their last menstrual period to an event in nature rather than specifying an exact date. Direct feedback to staff regarding satisfaction or dissatisfaction with care is seldom given. Communication problems often occur when staff assume that the patient understands terminology such as hypertension and diabetes as there are no words in the Indian language for these concepts. Nonverbal communication is thought to be more critical than verbal communication and Indian women are extremely sensitive to nonverbal behaviour of staff.

The results of the study highlighted the beliefs which Indian women uphold about pregnancy and the views which they have of the prenatal-care system. In the following chapter an interpretation and discussion of the results will be made.

Chapter V
INTERPRETATION OF RESULTS, DISCUSSION, AND
CONCLUSIONS

This study identified some of Canadian Indian women's beliefs and practices surrounding pregnancy and their beliefs about the prenatal-care system.

The beliefs and practices which Indian women uphold regarding pregnancy are congruent with philosophical principles basic to the Indian culture and serve to provide guidelines for dealing with pregnancy and childbirth. The ultimate purpose of these guidelines is a healthy mother and baby.

The study indicates that urban Indian women are in various stages of culture change. Traditional Indian women continue to uphold their cultural beliefs and practices. However, with culture change non-Indian ways have been adopted. This accounts for some of the variation in the beliefs and practices found in the study. The fact that informants represented three different Indian tribes, each with their own traditions, also contributed to some diversity.

5.1 INTERPRETATION OF RESULTS IN RELATION TO THE THEORETICAL FOCUS

The Explanatory Model (EM) provided a broad theoretical focus for the study. The EM, developed by Kleinman, is a framework for exploring the notions that both patients and health-care providers have about specific illness or disease episodes. For the purposes of this study, it served as a broad theoretical framework for exploring Indian women's beliefs about pregnancy and the prenatal-care system.

The study indicates that discrepancies exist between the EMs of Indian women and those of health-care providers. Indian women explain pregnancy in a spiritual context; a blessing from the Creator. The conceptualization of pregnancy as a blessing from the Creator is a basic key concept underlying many of the beliefs and practices linked to pregnancy and accounts for the prevailing positive ethos surrounding pregnancy. It is the basis for many of the explanations which women give for behaviors and practices related to pregnancy and their attitude toward children.

Pregnancy is believed to be a natural normal process which requires no intervention; Nature is thought to nurture the baby. Since pregnancy is considered to be of divine origin, it is believed to be a natural process which is sustained by divine intervention. These results are supported by other researchers (Bushnell, 1981; Horn, 1978; Loughlin, 1965) who found American Indian women believe

pregnancy is a normal natural process requiring no intervention.

Because pregnancy is viewed as a natural process Indian women believe naturally occurring signs and symptoms identify pregnancy. Traditionally it is believed to be inappropriate to discuss suspicion of pregnancy; the presence of pregnancy is shared only when it is certain. Building false hope about such a privilege would be too disappointing.

The study indicates that traditional Indian women believe that older experienced women should attend them during childbearing rather than doctors who are believed to be appropriate care givers during illness. In a study of Northwest Coastal American Indian women, Bushnell (1981) similarly found that women believe pregnancy to be normal and natural and, therefore, see no need to consult a physician unless problems arise. They also feel that someone with experience should attend them during childbirth and manage the event.

Health-care providers, on the other hand, view pregnancy as a medical event and take a technological approach in managing the event (Jordan, 1980). Medical staff believe pregnancy should be confirmed by scientific methods as soon as suspicion of pregnancy occurs. Medical supervision is advocated throughout pregnancy to observe for

complications (Pritchard & Macdonald, 1980). Diagnostic measures such as ultrasound and fetal monitors, which Indian women consider detrimental to the developing baby, are often used to identify complications. Some Indian women believe ultrasound interferes with the melding of the biological, cultural, emotional, and spiritual components of the baby. This is believed to cause a delay in delivery and an interference with the communication between the mother and the baby. Some Indian women believe that a child's personality may be affected if its birth does not occur at the time set by the Creator.

Indian women believe they are to "take care of themselves" during pregnancy by following advocated cultural practices believed to foster a healthy pregnancy outcome. With the resurgence of traditional ceremonies, Indian women are availing themselves of the "sacred teachings" regarding pregnancy and, therefore, feel less need to depend on the prenatal-care system. Indian women believe transgressing cultural taboos related to pregnancy are direct transgressions against the Creator with dire consequences to the baby or themselves. The explanations of consequences which they offer are often spiritually based. For example, women explain that the consequence of having an abortion is that a woman may not be blessed with life again. Health-care providers on the other hand offer scientific explanations. Difficulties in conceiving are explained as

infertility or sterility due to a variety of physiologic causes including pelvic infections which may follow abortion (Pritchard & Macdonald, 1980).

Traditional Indian women are counseled to eat four sacred foods which are believed to nourish the child spiritually. Dietary practices advocated by health-care providers are based on a formal scientific concept: Canada's Food Guide which is based on four food groups analogous to the four sacred foods. The four sacred foods do not include milk and milk products. The scientific explanations about the four food groups are often confusing and perplexing to traditional Indian women. On the other hand, the explanations which traditional Indian women offer about the four sacred foods are often perplexing to staff.

Spiritual, social, and psychological factors motivate Indian women to bear children. The results of the study indicate pregnancy is viewed as a blessing and children are believed to be a gift from the Creator. Children are believed to strengthen the family unit. Femininity and masculinity are believed to be linked to one's ability to procreate. Based on these beliefs, artificial birth control and abortion are not accepted by traditional Indian women. Single motherhood is accepted and generally supported by the extended family. In some circumstances, support (financial or child care aid) may not be provided to the single mother because it is believed to be a means of teaching her that

childbearing should not precede marriage. These results concur with a study by Horn (1983) who found that a strongly held belief by American Indian teenagers is that the feminine role is most clearly identified through pregnancy and childbirth. Teenagers in her study indicated that support was available for them either in their own family or from other persons they referred to as "my people". However, they did acknowledge that many times when immediate support was required, it was not available. It is evident from the two studies that although support is generally provided, it may not always be available.

Artificial birth control and abortion may be suggested by health-care providers to Indian women. This generates conflict and emotional strife in those women who believe consequences may be an inability to bear future children. Some Indian women delay initiating prenatal care early because they believe they may be pressured into having an abortion which would transgress the Creator. Similarly, when other discrepancies exist and produce conflict for women, they likely choose to avoid the conflict and do not attend for prenatal care.

5.1.1 The Health Belief Model

The Health Belief Model (HBM) proposes that preventive health behavior (such as attending for prenatal care) is likely to occur if readiness exists in the individual (i.e.,

the threat of susceptibility to disease and seriousness of disease is perceived) and benefits of taking action outweigh barriers to taking action. Internal cues such as the perception of bodily states and external cues such as the mass media serve as a stimulus to action and initiate the process. Modifying and enabling factors influence individual perceptions which can affect taking action.

5.1.1.1 Susceptibility

The study indicates that the threat of illness during pregnancy does not exist for many Indian women. The majority of informants stated that Indian women do not believe they are susceptible to sickness during pregnancy because pregnancy is viewed as a normal natural process sustained and nurtured by Nature. Women believe that by "taking care of themselves" during pregnancy, they will have a healthy pregnancy outcome. As a result, many believe there is no need to consult a medical doctor and do not attend for prenatal care.

5.1.1.2 Seriousness

For some Indian women, the threat of serious illness during pregnancy does not exist. Half of the informants thought Indian women believe illness during pregnancy is not serious; half thought it would be somewhat or very serious. The threat of serious illness does not exist because

pregnancy is considered a normal natural process. Therefore, if a woman was healthy before becoming pregnant and had not experienced previous complications during a pregnancy she would not consider illness during pregnancy worthy of medical attention. Women who believe they are susceptible to serious illness during pregnancy are likely women who through culture change have become aware of the potential serious complications which may occur during pregnancy and who consequently attend regularly for prenatal care. They are also likely women who have themselves experienced complications during a pregnancy or have known women who did. These results support a study by Watkins (1968) which found that a group of low-income Black women who initiated prenatal care early believed they were susceptible to illness during pregnancy, whereas, fewer late initiators held such beliefs. Watkins found a higher proportion of early initiators than late initiators, believed an asymptomatic health threat could appear during pregnancy and believed a doctor could prevent or alleviate the condition.

It is evident that the beliefs which Indian women hold about susceptibility to and seriousness of illness during pregnancy are additional illustrations of discrepancies in the Explanatory Models of Indian women and those of health-care providers. Whereas, Indian women do not believe they are susceptible to serious, asymptomatic, or symptomatic

illness during pregnancy, health-care providers focus most of their care on identifying such illnesses.

5.1.1.3 Benefits and Barriers

Some Indian women believe that prenatal care is beneficial, but many others do not. Furthermore, they perceive many barriers to prenatal care attendance. The two most frequently cited barriers to prenatal care attendance were: baby-sitting problems and believing there is no need to attend because of no present or past problems with pregnancy. These results concur with the results of Watkin's (1968) investigation which found that women who initiated prenatal care late in pregnancy offered two main reasons for the delay: lack of belief in the value of prenatal care and difficulty with child care.

Health-care providers are often not cognizant of the barriers to prenatal care attendance which Indian women encounter. As a result they are insensitive to women's difficulties and expect them to comply with all appointments which they schedule regardless of the women's circumstances. Indian women believe that they have no control; negotiation about appointment times does not occur.

The study indicates that Indian women believe that their expectations of prenatal care are generally not met and they often find interactions with staff disappointing.

They believe that their expectations for teaching, explanations, and a personal, individualized, caring approach by staff are not realized. These results support a study conducted by Shapiro et al. (1983) which investigated the interaction between clients expecting a first child and their obstetricians. The ethnic background of the clients was not identified in the study. The results indicated that obstetricians generally underestimated the desire for information as reported by their patients. The majority of women in the study did not discuss, with their obstetricians, the range of topics which they previously had identified of concern to them. The results also indicated that the lower the socioeconomic class of the subject, the less likely was the subject to obtain the information she wanted (indicating less power on the part of the patient). Although subjects did not have their concerns addressed, the subjects left the encounters generally satisfied with the interaction, apparently not aware that their interests were not attended to. Whereas, women in the study by Shapiro et al. were satisfied with the encounter, Indian women in the present study experience dissatisfaction with interactions and articulate it.

A study by Bushnell (1981) also supports the results of the present study regarding the importance that Indian women place on a personalized approach by staff. Indian women in the Bushnell study indicated that the most desirable person

for teaching them during the prenatal period was a sensitive nurse who made the effort to get to know them personally.

Health-care providers who believe that identification of problems is the main focus of prenatal care are less sensitive to the emotional and learning needs of pregnant women. As a result, women are rushed through their prenatal care visits (especially if no problems exist). This precludes staff spending time with them - teaching and exploring their agendas.

Indian women tend to be very modest and shy and provide little feedback to staff regarding their satisfaction or dissatisfaction with care. An additional tendency is to not ask staff questions. Staff who are not aware of these characteristics think Indian women have no concerns or learning needs. Consequently, they do not volunteer information. Staff are often not aware that Indian women are embarrassed by being asked personal questions and that they dislike being asked many direct questions. Furthermore, staff often approach women in an authoritarian manner which is unacceptable to Indian women. Because Indian women believe their emotional and learning needs are not met, they are dissatisfied with prenatal care visits. Indian women who have experienced more social change may continue to attend regularly for prenatal care even though interaction with staff is less than ideal. More traditional women who highly value a caring, individualized approach may

be willing to forego an unpleasant encounter and decide to miss appointments.

5.1.1.4 Cue To Action

Although some Indian women experience minor discomforts of pregnancy such as fatigue and nausea and vomiting, the study indicates that others do not, therefore, an internal cue to action (i.e., to initiate prenatal care) does not exist for some women. Furthermore, some Indian women do not experience external cues to action such as radio or television programs stressing the importance of prenatal care attendance. An additional problem is that health-care providers use terminology which Indian women do not understand when explaining the need for prenatal care. For example, there are no words in the Indian language for conditions such as high blood pressure and diabetes; misunderstandings thus occur. Unless women develop signs and symptoms of a complication (a very intense cue) they believe there is no need for medical consultation.

5.1.1.5 Modifying Factors

Some Indian women believe the conventional scheduling of prenatal appointments is too frequent during normal pregnancy. This discrepancy, in addition to differences in Explanatory Models about pregnancy and prenatal care, constitute modifying factors to prenatal care attendance.

Women who believe the conventional scheduling of appointments is too frequent likely take control and schedule their own appointments based on their own perceived needs (especially if they have experienced healthy pregnancies before and are having no present problems). Staff view this as noncompliance and make judgments about the patient's lack of responsibility. This attitude is sensed by the patients who subsequently believe staff are judgmental and insensitive to their individual needs. This in turn contributes to dissatisfaction with prenatal care.

5.1.1.6 Enabling Factors

Several enabling factors, which encourage Indian women to attend for prenatal care, were identified in the study. The study indicates that Indian women who experienced a previous complication of pregnancy, a pregnancy loss, or had the encouragement of a support person, attend more regularly for prenatal care than those who do not. These results concur with those of a study by McKinlay and McKinlay (1979) which found that women who experienced complications of pregnancy attended earlier for prenatal care in subsequent pregnancies.

5.1.2 Summary

The study indicates that many discrepancies exist between the Explanatory Models of Indian women and those of health-care providers. Indian women generally do not believe that a threat to disease during pregnancy exists. However, they do believe that there are numerous barriers but few benefits to prenatal care. Internal and external cues to action are often absent or minimal. In addition, Indian women are often not satisfied with their prenatal care visits. Taken together, these factors contribute to the decreased prenatal care attendance by Indian women.

5.2 IMPLICATIONS FOR NURSING PRACTICE

Nursing practice implications which emerge from this study can be grouped into three main areas: a) assessment and planning, b) intervention, and c) evaluation. The following section discusses nursing implications related to each of these areas.

5.2.1 Assessment and Planning

Assessment of each woman's Explanatory Model of pregnancy and prenatal care will provide the nurse with information to help identify incongruencies between her/his own and the patient's Explanatory Model. With this information, the nurse can work toward more congruency

between the models to avoid conflict. The areas to consider for assessment follow.

5.2.1.1 Assessment of the Meaning of Pregnancy

Each Indian woman will experience and perceive pregnancy in her own unique way depending on cultural, social, psychological, economic, intellectual, and physical factors. Assessment of the meaning of pregnancy to each woman will provide a basis for planning individualized nursing care which is more culture specific and thus avoid conflict.

5.2.1.2 Assessment of Pregnancy Beliefs and Practices

Urban Indian women are at various stages of social change, retaining some or most of the traditional ways, or upholding but a few. Unless an assessment is done to identify the individual woman's beliefs and practices related to pregnancy, care may be planned which is of questionable value to Indian women. Assessment of a woman's beliefs regarding healthy prenatal practices, susceptibility to illness, seriousness of illness during pregnancy, and benefits of prenatal care would provide a basis for teaching, counseling, and negotiating.

5.2.1.3 Assessment of Financial/Social Status

Since transportation costs and baby-sitting problems are often identified as barriers to prenatal care attendance, it is imperative that nurses assess the financial status of Indian women and make social service referrals appropriately. Single mothers in the urban area may not have financial support from the extended family as some health-care providers assume. It is known that adolescent unwed Indian women are high risk childbearers. Prenatal care follow-up is particularly important for them.

5.2.1.4 Assessment of Indian Women's Perspective for Missing Appointments

When an Indian woman misses prenatal care appointments, the nurse should explore with the woman her reasons for missing. There may be a tendency for staff to label a patient noncompliant without investigating the woman's explanation for her absenteeism. The results of this study indicate women have practical reasons for missing appointments. When staff listen to a woman's perspective, it shows respect for the woman and helps to build a more trusting relationship. Furthermore, interventions may be planned to alleviate the problems once they have been identified.

5.2.1.5 Assessment of Level of Knowledge

Indian women who participate in prenatal care bring to the encounter various levels of knowledge regarding pregnancy and the potential risks associated with pregnancy. It cannot be assumed that women who are more experienced childbearers will have an understanding of such concepts as the growth and development of the baby, the potential risks associated with pregnancy, the rationale underlying practices advocated to promote a healthy pregnancy, or the rationale for prenatal care.

5.2.1.6 Assessment of Past Pregnancy Loss

When pregnancy loss has occurred, women fear a recurrence and are likely to attend regularly for prenatal care in subsequent pregnancies. Nurses need to be sensitive to Indian women's needs for emotional support in pregnancies that succeed a pregnancy loss. Because a prevailing belief is that miscarriage may occur as a consequence of "not taking care of yourself", women may experience guilt even though a medical cause cannot be established.

To elicit the patient's Explanatory Model, questions could be focused on identifying how the woman feels about being pregnant, what she thinks will help her to have a healthy baby, what she thinks is helpful about attending for prenatal care, and what she thinks the staff can do to improve prenatal care.

5.2.2 Implementation

Once incongruencies in Explanatory Models have been identified, the nurse can work toward making the models more congruent. This may be done through changes in the way health care is provided as well as patient teaching and negotiation.

5.2.2.1 Improving Communication/Interaction with Indian Women

Respecting an Indian woman's beliefs about pregnancy demonstrates cultural sensitivity on the part of the nurse and would foster a positive relationship. Pregnant women are highly respected in traditional Indian society. By acknowledging their special status, nurses can foster their self esteem and dignity.

The nurse should attempt to put the Indian woman at ease before examinations are conducted. Since Indian women enjoy discussing their children and pregnancy experiences, the nurse could initially introduce these topics for discussion. Questions of a personal nature should be postponed until near the end of an interview. Direct questions should be avoided as much as possible.

Communicating in a warm, friendly, caring manner will help to enhance the nurse-patient relationship. This study indicates that these were behaviors which Indian women value in health-care providers. Attending to women with interest and concern and eliciting their feelings, concerns, and needs will demonstrate respect. This may help to foster a more positive prenatal care experience.

5.2.2.2 Meeting Indian Women's Expectations of Prenatal Care

Indian women believe they should receive teaching, feedback, support, and reassurance during prenatal visits. Additionally, they believe care should be provided in a personal, individualized, unhurried manner. If staff meet these expectations, prenatal care will likely appear more attractive and beneficial to Indian women.

5.2.2.3 Negotiating

After an assessment of an Indian woman's beliefs about pregnancy the nurse can implement the following depending on each Indian woman's needs:

1. Support the woman in her belief that pregnancy is a natural process, but identify that a potential risk of susceptibility to serious, asymptomatic, or symptomatic illness exists.

2. Negotiate with each woman about the preventive aspects of prenatal care and the benefits of prenatal health care supervision to herself and her baby.
3. Negotiate with each woman about practices believed to be harmful during pregnancy (e.g., belief that prescribed iron supplements can cause jaundice in the baby; belief that strenuous activity during normal pregnancy can cause miscarriages or preterm births).

5.2.2.4 Integrating Traditional Indian Practices in Prenatal Care

Prenatal care is a white middle-class concept (Horn, 1978). Some Indian women believe there is little or no benefit to it. By providing culture-specific nursing care to Indian women, nurses would help to make prenatal care more meaningful.

Namboze (1983) suggests four guidelines that can be adopted when health-care providers attempt to integrate cultural beliefs and practices into their care giving. The following beliefs and practices can be identified and appropriate action taken:

1. Beneficial - these should be supported and adopted into health teaching.
2. Harmless - these have no scientific value and are best left alone.

3. Uncertain - these are difficult to assess as different interpretations may be possible; these need to be observed and considered further.
4. Harmful - these should be approached by health education with persuasion and convincing demonstration.

Some practices encouraged by health-care providers during pregnancy are contraindicated in traditional Indian society. Staff in prenatal clinics could prevent conflict from occurring by integrating beneficial traditional Indian practices into prenatal care. Prenatal practices which might be more culturally acceptable to Indian women include the following:

1. Ensuring adequate privacy at all times for Indian women during physical and pelvic examinations.
2. Including members of the extended family in teaching during prenatal care visits. Since grandparents have a special teaching role in Indian society nurses could collaborate with them when teaching young pregnant women.
3. Respecting the traditional Indian man's desire to refrain from participating actively in the prenatal care and childbirth experience. Since traditionally Indian men did not participate in childbirth, it may engender conflict and anxiety in him if he feels pressured from nurses to participate.

4. Encouraging husbands/partners who wish to participate actively during prenatal visits to do so (listening to the baby's heart beat and sharing their experiences and feelings about the pregnancy). Nurses need to be very sensitive to the needs of Indian men since it is only recently that they have become actively involved in the prenatal and childbirth experience.
5. Utilizing teaching strategies that are culturally meaningful to Indian women. These could include the following: implementing patient education in an informal, nonauthoritarian manner (e.g., sitting around a table sharing a cup of tea); developing instructional media such as simple diagrams to illustrate concepts related to pregnancy; using analogies related to Nature when teaching such concepts as growth and development of the baby; integrating traditional Indian teachings about healthy pregnancy practices into prenatal education (e.g., referring to the four sacred foods and foods from the land when teaching about maintaining a balanced diet during pregnancy and suggesting walking as a form of prenatal exercise). Since milk products are not included in the traditional Indian diet this would need to be considered when teaching. The nutritional value of milk products during pregnancy would need to be emphasized and milk alternatives

suggested for those who do not include it in their diet.

6. Collaborating with indigenous healers and medicine men/women in the urban area to plan for prenatal care. This would communicate respect for the Indian culture. A study by Gregory (1986) indicated that nurses in reserve communities were collaborating to a limited extent with indigenous healers and medicine men/women. Gregory recommended that this practice be fostered. When pregnancy loss has occurred, traditional healers would be particularly supportive to Indian families as this is a role they fulfill. Nurses could request the assistance of Indian women leaders in the urban area to help in planning prenatal care. Collaborating with Indian people when planning prenatal care programs would help to keep planning focused on the needs of Indian people as they believe their needs to be, rather than what health-care providers believe their needs are.

5.2.3 Evaluation

Evaluation of nursing interventions to improve Indian women's prenatal care participation is imperative to determine if nursing approaches are effective. Based on the evaluation, modifications to nursing approaches could be made. The evaluation should be conducted in collaboration with Indian women.

5.3 IMPLICATIONS FOR NURSING EDUCATION

This study indicates that nurses need to be aware of Indian women's beliefs about pregnancy and prenatal care. Nurses spend more time with patients than any other health-care worker. They also focus much of their care on promotion of health and prevention of illness. Care of mothers during childbearing is, and historically has been, one of the nurse's roles. Promotion of health and prevention of illness during childbearing is an area which all Schools of Nursing include in their curricula. It is essential that nursing curricula contain a cultural component including the health beliefs of Canadian Indian women. Unless health-care providers learn how to provide culture-specific care and implement it, it is unlikely that Indian women will utilize the health-care system adequately. There is a paucity of research related to Indian women's beliefs about pregnancy for nurse educators to draw on. This present study does contribute to the limited body of knowledge.

5.4 IMPLICATIONS FOR NURSING RESEARCH

The exploratory nature of this study helped to generate new avenues for future nursing research. Research in some of the suggested areas would contribute to the limited body of knowledge currently available to nurses regarding Indian women's health care. With more knowledge to draw on, nurses

would be able to offer more culture-specific care and serve as a patient advocate for Indian women. The following studies are suggested as worthwhile investigations:

1. A study comparing urban Indian women's beliefs about pregnancy with those of reserve Indian women.
2. A study to determine from elders, the teaching that they transmit regarding beliefs about pregnancy.
3. Studies to explore from the Indian woman's perspective: a) the experience of pregnancy loss, b) infertility, c) menopause, d) childbirth, e) migration from a reserve to an urban community, f) nurse-patient interaction during prenatal care visits, g) nutritional patterns during pregnancy, and h) needs and concerns of single pregnant women.
4. An ethnographic study exploring Indian men's perceptions of pregnancy and childbirth. Since Indian men have only recently become more involved with the childbearing experience, a study of this nature would provide nurses with knowledge that could be utilized to meet the needs of Indian men during the childbearing experience.
5. A study comparing nurses' perceptions of Indian women's expectations of prenatal care with Indian women's actual expectations.
6. An exploratory study to investigate the phenomenon of adoption in the Indian culture and childrearing Indian practices.

7. A study to determine the medication compliance patterns of pregnant Indian women.
8. A prospective, experimentally designed study to determine if interventions to influence beliefs about susceptibility to and seriousness of illness during pregnancy, and the benefits of prenatal care, improve utilization of prenatal-care services by Indian women.
9. Hypothesis testing research studies to determine if Indian women with high beliefs about a) susceptibility to illness during pregnancy, b) seriousness of illness during pregnancy, and c) the benefits of prenatal care, attend more regularly for prenatal care than women with low beliefs.

5.5 RECOMMENDATIONS

The recommendations which follow are based on suggestions made by informants. These centered on enhancing interaction between health-care providers and Indian women, and structural changes in the operation and functioning of prenatal clinics (Doctors' private offices or Outpatient Clinics). A belief strongly held by the researcher is that plans for changing prenatal care delivery should be done in consultation and collaboration with Indian people. This is the rationale for including recommendations primarily made by the informants.

1. Improving verbal and nonverbal communication between Indian women and health-care providers. Verbal communication could be fostered if staff volunteered feedback and provided explanations to women (e.g., about the progress of pregnancy, growth and development of the baby, and healthy prenatal practices). Indian women should be encouraged to express their feelings, perceptions, and needs in an environment that is quiet and unhurried. To improve nonverbal communication, a nonauthoritarian approach should be adopted by staff and an individualized, personal, caring manner should be conveyed to each woman. Staff should take time to get to know each patient and establish a trusting relationship before proceeding to examinations, teaching, and personal concerns.
2. Employing nurse midwives who could follow pregnant Indian women during normal pregnancy and childbirth. Availability of this alternate health-care provider would enable Indian women to have some choice in who attends them during childbearing. Since midwives traditionally attended women during childbearing, this would be more congruent with their cultural practices. In most Canadian provinces, midwifery is not legalized so legislative changes would be required.

3. Having available experienced (professionally and in childbearing) female doctors in prenatal clinics so Indian women who wish, may have a female doctor attend them.
4. Providing continuity of health-care providers in prenatal clinics. Interaction with one or two health-care providers would likely promote more positive visits. The desire of women for continuity of care was highlighted in another study. Poland's (1976) study investigating the effects of continuity of care indicated that when nurse continuity was provided in a prenatal clinic, appointments were less frequently missed.
5. Utilizing Indian health-care providers in prenatal clinics. Availability of personnel who understand the Indian culture and communicate in their Indian language would set the patient at ease and enhance communication.
6. Utilizing a "buddy system" for Indian women during prenatal visits. A support person could help women formulate questions to ask health-care personnel and encourage women to participate actively during the visit. The support person should ideally be an older woman who has experienced childbirth. A friend or relative of the pregnant woman might be appropriate. The support person could be present during the examination to provide comfort if the patient so desires.

7. Encouraging active participation by the patient's husband/partner during the prenatal care visit if the patient and her partner so desire.
8. Establishing a Resource Centre in prenatal clinics with a resource person and culture relevant reading material and audio visual aides.
9. Ensuring that Indian women do not have lengthy waits before seeing the doctor.
10. Providing flexibility in prenatal visit appointments and frequency of blood work so that some choice is offered to Indian women. Telephone calls to remind women of their appointments would serve as a stimulus to attend for prenatal care.
11. Structuring prenatal clinics so that Indian women can engage in telephone consultation with clinic personnel. This service would help to alleviate anxiety in the woman if minor problems occurred and reassurance was needed. Where this service is already available, it should be made known to Indian women.
12. Promoting a clinic environment where Indian women can sense a warm relaxing environment with privacy for weighing and interviewing.
13. Encouraging Indian women to establish support groups for themselves during pregnancy. This would help to empower them by utilizing their own resources.

14. Providing home visiting by Public Health Nurses to counsel and teach Indian women during pregnancy. Groups of women could meet informally with the nurse at one of the women's home.
15. Promoting and encouraging health-care providers in prenatal clinics to attend workshops and conferences related to Indian culture.
16. Encouraging health-care providers to attend workshops and conferences focusing on improving communication and interaction between patients and health-care providers.

To help alleviate some of the barriers frequently identified by Indian women, the following recommendations are made by the researcher:

1. Providing baby-sitting services in prenatal clinics for women who have baby-sitting problems.
2. Providing for transportation costs to the prenatal clinic if financial difficulties are causing a barrier to prenatal care attendance.
3. Employing a female worker in prenatal clinics whose role would be to circulate among Indian women to establish a positive relationship with them and set them at ease.
4. Establishing a prenatal clinic in a travelling van to make prenatal care more accessible.

5.6 CONCLUSIONS

This study explored the beliefs of Canadian Indian women about pregnancy and prenatal care. Rich data surfaced about Indian women's beliefs about pregnancy. Pregnancy is viewed in a spiritual context and cultural norms dictate how women are to "take care of themselves" during pregnancy in order to have a healthy baby. Transgression of these norms engenders fears of consequences such as miscarriages or preterm births.

Beliefs about pregnancy appear to influence attendance for prenatal care. However, these beliefs are influenced by factors such as spiritual, social, psychological, and physical circumstances. Pregnancy is believed to be a normal natural process requiring no intervention. As a result, women generally do not believe they are susceptible to serious, asymptomatic, or symptomatic illness during pregnancy.

The prenatal health-care delivery system which Indian women are encouraged to use is a white middle-class institution (Horn, 1978). Conflict often ensues when Indian women attend for prenatal care because their natural approach to childbearing is incongruent with the conventional technological approach to prenatal care.

Many Indian women believe that prenatal care is not beneficial but they do believe that there are numerous

barriers to prenatal care attendance. When women perceive that barriers outweigh the benefits of attending for prenatal care, they are likely to miss prenatal-care appointments. To promote better utilization of prenatal-care services, nurses should direct their goals to making prenatal care more attractive and meaningful to Indian women so that they believe the benefits outweigh the barriers. Eliciting the Explanatory Model of pregnancy and prenatal care of each Indian woman will enable health-care providers to identify discrepancies between their own model and that of the Indian woman. Through negotiation, incongruencies between models can be decreased and more positive experiences can be fostered. Improving interaction and communication with Indian women during the prenatal encounter and providing culture-specific care in a holistic fashion will help to make women more satisfied with prenatal care. Further research studies exploring Indian women's health issues would provide a body of cultural knowledge for nurses to integrate in their nursing care.

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Appendix A
INTERVIEW GUIDE

1. INFORMANT'S DEMOGRAPHIC DATA: (where lived, work, interests, children, involvement with Native women's health, schooling, age)

2. INDIAN WOMEN'S IDEAS ABOUT SPACING OF CHILDREN: (significance of having children, age to start and stop having children, how many children to have, should there be choice in having children, who should be responsible for the choice, how often should children be spaced)

3. INDIAN WOMEN'S IDEAS ABOUT CONCEPTION, AND GROWTH AND DEVELOPMENT: (how conception occurs, how baby forms, growth and development of baby, signs of pregnancy)

4. PRENATAL CARE EXPERIENCE OF INDIAN WOMEN: (expectations of staff, behavior of staff, prenatal visit experiences, communication with staff)

5. SATISFACTION WITH PRENATAL-CARE SYSTEM: (benefits of prenatal care, what like about prenatal care, what do not like about prenatal care, what could be changed)

6. INDIAN WOMEN'S IDEAS ABOUT REGULAR AND IRREGULAR PARTICIPATION IN PRENATAL CARE: (definition of regular and irregular participation, reasons for regular and irregular patterns of participation)
7. INDIAN WOMEN'S BELIEFS AND PRACTICES DURING PREGNANCY: (beliefs about: pregnancy as illness or normal healthy process, susceptibility to and seriousness of illness during pregnancy, benefits of prenatal care, things that are good for mother and baby during pregnancy, things that are harmful, how mothers and babies can be protected; what have older women (mothers, grandmothers) said are good and harmful for pregnant women)
8. INFORMANT'S PREGNANCY EXPERIENCE: (reaction to being pregnant, others' reactions, feelings about others' reactions, changes brought about by pregnancy, problems caused by pregnancy, most important experience during pregnancy)
9. INFORMANT'S PRENATAL CARE EXPERIENCE: (expectations of staff, behavior of staff, first visit, subsequent visits, what liked about visits, what did not like about visits, how could prenatal care be changed)

Appendix B

LETTER OF APPROVAL FROM THE ETHICAL REVIEW
COMMITTEE



THE UNIVERSITY OF MANITOBA

SCHOOL OF NURSING

Room 246 Bison Building
Winnipeg, Manitoba
Canada R3T 2N2

August 27, 1985

Ms. Elizabeth Sokolowski
Graduate Student
School of Nursing
University of Manitoba
Winnipeg, Manitoba
R3T 2N2

Dear Ms. Sokolowski:

Your proposal entitled "Health Beliefs about Pregnancy and Participation in Prenatal Care: A Study of the Relationship in Urban Canadian Indian Women" has been approved by the Ethical Review Committee of the School of Nursing. We wish you success in the execution of your project.

Sincerely,

Karen Chalmers, B.Sc.N., M.Sc.(A),
Assistant Professor and
Chairperson, Ethical Review Committee.

KC/vep

Appendix C

INVITATION TO PARTICIPATE IN THE STUDY

My name is Elizabeth Sokoloski. I am a student in the nursing graduate program at the University of Manitoba. I am conducting a study as part of my course work and would appreciate your participation in the study. Your name was suggested to me by _____.

The general purpose of the study is to determine what Indian women think about various aspects of pregnancy and prenatal care. The benefits of the study are that nurses will have a better understanding of what Indian women think about various aspects of pregnancy and prenatal care. This will help promote better understanding and communication between nurses and Indian women and help nurses provide better care.

If you participate in the study it will require about six tape-recorded interviews of about one hour each. All information will be kept confidential. You would be a suitable participant because you are knowledgeable about the Indian culture and are involved in Indian women's health.

Appendix D

CONSENT FORM TO PARTICIPATE IN STUDY

You are invited to participate in a study about pregnancy involving 6 to 12 Indian women from the [name of city] Indian community. You were selected to participate in the study because of your involvement in Indian women's health and your knowledge of the Indian culture.

The general purpose of the study is to determine what Indian women think about various aspects of pregnancy and prenatal care in order to promote better understanding and communication between nurses and Indian women. The benefits of the study will be that nurses will have a better understanding of what Indian women think about various aspects of pregnancy and prenatal care. This will help nurses to communicate better with Indian women and give them better care.

You are entirely free to participate or not participate. If you decide to participate it will require about six interviews of about one hour each. During this time I will ask you a variety of questions about yourself and your pregnancy experience(s). Additionally, we will discuss Indian women's health beliefs about pregnancy and various aspects of prenatal care. The interviews will be tape recorded. Tape recordings and transcripts will be kept under lock and key. Tape recordings will be erased upon completion of the study. Transcripts will be kept under lock and key until the researcher has no need for them. At this time they will be destroyed.

The only inconvenience will be that you will be interviewed about six times for a period of about one hour. You may refuse to participate and are free to withdraw from the study at any time if you choose to do so. You may also refuse to answer any questions. You will not be pressured to participate or remain in the study or answer any questions.

All information which you provide will be kept confidential. Your name will not be identified in any way with the responses which you give. If the study is published the results will be grouped so that individual responses are not recognized and the city of [name of city] will not be identified as the setting for the study.

Please feel free to ask questions at any time. My name, address, and phone number is: Elizabeth Sokoloski; [address and phone number]. If you have any questions at a later time do not hesitate to contact me.

You are making a decision whether or not to participate. Your signature below will indicate you have read the information provided above and are willing to participate in the study. You will be offered a copy of the consent form to keep. You may withdraw at any time after signing this form should you choose to discontinue participation in this study. You will not be pressured to remain in the study.

DATE: _____ PARTICIPANT'S SIGNATURE: _____

DATE: _____ RESEARCHER'S SIGNATURE: _____

If you wish to receive a copy of the results of the study please write your name and permanent address below. A summary of the results will be mailed to you.

NAME: _____

ADDRESS: _____

If you agree to have your name acknowledged as a participant in the study please sign your name below.

PARTICIPANT'S SIGNATURE: _____