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TRADITIONAL BELIEFS AND BEHAVIORS AFFECTING

CHILDBEARING PRACTICES OF

CROW INDIAN WOMEN

by

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A thesis submitted in partial fulfillment
of the requirements for the degree
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The purpose of this study was to explore and to describe the traditional beliefs and behaviors that currently affect childbearing practices of Crow Indian women.

The design of the study was an exploratory and a descriptive ethnographic study and consisted of two stages. The first stage of the study collected data through unstructured interviews of key informants who were culturally knowledgeable Crow Indian women. This first stage of the study explored and described traditional beliefs and behaviors that affected childbearing practices of Crow Indian women in the past and at the present time. The second stage of the study collected data through structured interviews of participants who were pregnant Crow Indian women. The questions in the structured interview were part of a data collection method employed in a study currently being conducted on the Navajo Indian Reservation and were modified to reflect the Crow Indian culture. Modifications in the original questions were based on the literature review and the data collected in the first stage of the study. This second stage of the study explored and described traditional beliefs and behaviors that affected childbearing practices of Crow Indian women at the present time.

The findings of this study identified and described contemporary childbearing practices of Crow Indian women and their families. Beliefs and behaviors in traditional and modified form appeared to influence contemporary childbearing practices and Crow Indian life in general. The majority of the Crow Indian people were transitional in life style between traditional Crow Indian culture and the modern Anglo society and were influenced by a wide variety of both traditional and modern beliefs and behaviors. Respect for and/or participation in combinations of traditional practices were suggestive of the type of life style practiced by individual Crow Indian people.

The findings of this study supported the general concept that culture is a major variable in the determination of health and in the utilization of health care services. Through scientific knowledge and further research, modern health care services that are compatible with traditional beliefs and behaviors of the Crow Indian culture and that meet the unique needs of the Crow Indian people can be provided.
Chapter 1

INTRODUCTION

Culture is viewed as a major variable in the determination of health and in the utilization of health care services. Culture influences the development and maintenance of many health practices. The present Crow Indian culture consists of diverse contrasts between traditional and modern life styles. Traditional beliefs and behaviors still influence many health practices of the Crow Indian people.

Childbearing is an important part of Crow Indian life. Traditional beliefs and behaviors still influence many pregnancy and birth practices of the Crow Indian women and their families. How much influence these traditional beliefs and behaviors exert on childbearing in the present Crow Indian culture has not been investigated. This study explores and describes the cultural basis of contemporary childbearing practices of Crow Indian women. The data of this study assist health care professionals to understand the influence of culture on the childbearing practices of Crow Indian women and to adapt modern health care services to the unique needs of the Crow Indian women.

General Problem Area

Culture is often viewed as a major variable in the determination of health and in the utilization of health care services. Culture
influences beliefs and behaviors related to health practices and determines acceptance or rejection of modern health care services. The modern health care professional needs to be cognizant of and respectful of the role of culture in the determination of health in order to provide quality health care to all people.

The author's interest in the role of culture in the determination of health developed from her professional nursing values which encouraged a holistic approach to health, from her concern for providing quality health care services to minority groups, and from her direct experiences in providing community health nursing services on the Crow Indian Reservation in Montana. As the author worked with the Crow Indian people over the past six years, she began to recognize a strong cultural basis for their health beliefs and behaviors. Many of these Crow Indian health beliefs and behaviors were very subtle and were not directly communicated to non-Indian health care professionals. This study provided the author with an opportunity to systematically explore the cultural basis of health beliefs and behaviors of one segment of the Crow Indian population.

Specific Problem Area

The Crow Indian Reservation is located in Big Horn and Yellowstone counties of southcentral Montana and presently encompasses 1,574,394 acres of land. The estimated total Indian population for the Crow Indian Reservation in 1980 was 5,649. This population estimate is for
all Indian people. However, the majority of the Indian people on the reservation are Crow Indians (U.S. Department of Health, Education, and Welfare, 1980, pp. 4-7). The total number of known enrolled Crow Indians on November 21, 1980 was 6,597. Of this total, 4,936 known enrolled Crow Indians reside on the Crow Indian Reservation (Crow Indian Tribe, 1980).

The majority of the Crow Indian Reservation is located in Big Horn County, Montana and a small portion of the reservation is located in rural Yellowstone County, Montana. The population density of all races for Big Horn County in 1977 was 2.1 persons per square mile and for Yellowstone County was 38.1 persons per square mile. The population density for Yellowstone County includes Billings which is the largest city in Montana and, therefore, does not accurately reflect the population density of rural Yellowstone County or the Crow Indian Reservation (Montana State, 1978, p. 8).

The Crow Indian Reservation is a land of diverse contrasts between traditional and modern life styles. The Crow Service Unit Profile Fiscal Year 1980 describes the social and cultural characteristics of the Crow Indian Reservation and reports, "The social, cultural, and religious (value) systems of the Crow Indian are based on ancient native philosophical beliefs and are perpetuated through traditions, customs, legends, myths, and clan systems" (U.S. Department of Health, Education, and Welfare, 1980, p. 15). Many cultural beliefs and behaviors persist and include traditional prayers and fasting, use of
medicine bundles, and religious ceremonies such as the Sun Dance, the Tobacco Society, and the sweat lodge. The Crow Indian language is spoken by the majority of the Crow Indian people with Crow as the primary language and English as the secondary language. The Crow Service Unit Profile Fiscal Year 1980 also describes the economic and educational characteristics of the Crow Indian Reservation and reports, "The basis of the Crow economy and income is his reservation land which he uses directly as a farmer or livestock operator and also as a landlord or lessee. Families generally own and control sizeable acreages of land" (U. S. Department of Health, Education, and Welfare, 1980, p. 11). Proposed development of coal resources provides a potential opportunity for further economic development. Many educational gains have been made recently. As of 1980, there were 119 known enrolled Crow Indians with baccalaureate degrees and 10 known enrolled Crow Indians with masters degrees (U. S. Department of Health, Education, and Welfare, 1980, p. 10).

Pregnancy is a very important part of the Crow Indian woman's life and of the Crow Indian family's life. During the years 1971 to 1976, the average birth rate for Indian people in Big Horn County was 30.7 per 1,000 estimated population and in Yellowstone County was 48.9 per 1,000 estimated population. These birth rates are much higher than the average birth rate for all races in the United States which was 15.5 per 1,000 estimated population for that same period of time (Kellogg & McCracken, 1976, p. 4). These rates are for all Indian
people. However, the majority of the Indian people in these counties are Crow Indians. During the year 1976, the fertility rate for Indian women ages 15 to 44 years in Big Horn County was 168.7 per 1,000 estimated population and in Yellowstone County was 238.9 per 1,000 estimated population. These fertility rates are much higher than the fertility rate for all races in the United States which was 65.8 per 1,000 estimated population for that same period of time (Kellogg & McCracken, 1977, p. 6). These rates are for all Indian people. However, the majority of the Indian people in these counties are Crow Indians.

The birth and fertility rates of Indian people in Yellowstone County are much higher than the birth and fertility rates of Indian people in Big Horn County. The reason for this difference is that Yellowstone County includes Billings which is the largest city in Montana. Many young Indian people move to Billings to obtain college education and/or vocational training or to seek employment. Thus, Billings has a large population of Indian people in the childbearing ages and Yellowstone County has high birth and fertility rates for Indian people. The birth and fertility rates of Indian people in both Big Horn and Yellowstone counties are much higher than birth and fertility rates of all races in the United States. Reasons for this difference are that Indian women often desire several children and that Indian families are often larger than non-Indian families.

A birth rate and a fertility rate for known enrolled Crow Indians
residing on the Crow Indian Reservation were calculated for 1979 by the author from data in the Crow Per Capita Rolls. These calculations indicated a 1979 birth rate of 26.2 per 1,000 enrolled Crow Indians residing on the Crow Indian Reservation and a 1979 fertility rate of 103.5 per 1,000 enrolled Crow Indian women residing on the Crow Indian Reservation (Crow Indian Tribe, 1980).

The birth and fertility rates of enrolled Crow Indians are lower than the birth and fertility rates of Indian people in Big Horn and Yellowstone counties but are still much higher than birth and fertility rates of all races in the United States. The reason for this difference in rates is that enrolled Crow Indians occasionally marry other Indians or other races. Intermarriage allows enrolled Crow Indians to produce children who are not eligible for tribal enrollment and who are not included in the calculations of birth and fertility rates for enrolled Crow Indians. Thus, birth and fertility rates of enrolled Crow Indians appear lower than birth and fertility rates of Indian people in general. It is impossible to determine completely accurate birth and fertility rates of enrolled Crow Indians. However, the above data indicate that birth and fertility rates of enrolled Crow Indians are much higher than birth and fertility rates of all races in the United States.

Childbearing is an important part of Crow Indian life. Many traditional beliefs and behaviors still affect childbearing in the Crow Indian culture and influence pregnancy and birth practices of the
Crow Indian women and their families. How much influence these traditional beliefs and behaviors exert on the contemporary childbearing practices of the Crow Indian women has not been investigated.

**Purpose of Study**

The purpose of this study is to explore and to describe the traditional beliefs and behaviors that currently affect childbearing practices of Crow Indian women.

**Definition of Terms**

For the purpose of this study, definitions include the following:

- **Traditional**—maintaining the beliefs and behaviors that have existed for generations;
- **Beliefs**—perceptions of what is held to be true;
- **Behaviors**—observable interactions of man with the environment;
- **Currently**—at the time of this study (May, June, and July 1980);
- **Affect**—influence;
- **Childbearing**—process of pregnancy and birth;
- **Practices**—methods; and
- **Crow Indian**—officially enrolled in the Crow Indian tribe.

**Rationale**

Culture is gaining recognition as a major variable in the determination of health. Many health care professionals are becoming
interested in the influence of culture on health beliefs and behaviors and on client acceptance or rejection of modern health care services. These health care professionals are beginning to explore and develop a conceptual and/or theoretical basis for the role of culture as a major variable in the determination of health.

Leininger (1978b) stresses the importance of culture in nursing science and defines transcultural nursing as:

The learned scientific and humanistic subfield of nursing which focuses upon the comparative study and analysis of different cultures and subcultures in the world with respect to caring and nursing care behaviors of people and their health-illness practices, beliefs, and values with the goal of providing culture-specific and culture-universal nursing care practices. (p. 160)

Leininger (1976, 1977a, 1977b, 1978a, 1978b, 1979) believes that every culture has its own health care system which may differ from the predominant American professional health care system. Nursing must modify modern health care practices to fit the specific cultural health care systems served. Culturological assessments are as necessary as physical and psychological assessments in the nursing process. Planning and implementing of health care services needs to be developed with the cultural groups according to their goals.

Leininger also stresses that transcultural nursing is based on the concepts and the theories of nursing and anthropology. Simply working with a culture or being a member of a particular ethnic group does not replace scientific knowledge and expertise.

Osborne (1976) also sees a direct relationship between nursing and
anthropology. Believing that both nursing and anthropology view man holistically, Osborne contends:

Cross-cultural nursing studies will contribute to our understanding of our patients as psychological, social, and cultural beings. Such studies will also contribute to our increased effectiveness in the organization and presentation of nursing services to a variety of publics which comprise the complex Western community. (p. 12)

Paul (1955) stresses the need to consider culture when planning and implementing new health care services. In describing the modern health care professional, Paul states:

With health at the center of his perceptual system, he often finds it difficult to view health as laymen customarily perceive it. If he wishes to work effectively with groups of people, he must overcome his trained incapacity and learn to see health from the standpoint of the man in the community. (p. 460)

Mechanic (1979) also stresses the effects of cultural beliefs and behaviors on modern health care utilization and acceptance. Mechanic states:

Cultural conceptions define the ways people deal with personal and group distress, their views on and management of the problem of birth and death, and the relationship between the medical sector and failures in functioning. They define what are acceptable uses of the physician and the range of appropriate practitioners for dealing with the great variety of human maladies. (p. 173)

This study provides a beginning basis for understanding the role of culture as a major variable in the determination of the health of the Crow Indian people. The study provides descriptive data about traditional beliefs and behaviors that affect childbearing practices of Crow Indian women. These descriptive data are to be used by the
author and other health care professionals to understand the Crow Indian woman as a physical, psychological, social, and cultural being and to plan and develop a holistic approach to providing health care services to Crow Indian women. The study serves as a beginning basis for further research to develop a conceptual and/or theoretical basis for the role of culture as a variable in the determination of health for the Crow Indian people and for subcultures in general.

**Practical Application**

Research is gaining recognition for its practical contribution to the services of humankind as well as for its pure contribution to the understanding of humankind. Many researchers are making a strong demand for relevance and practical application from research.

Deloria (1970), in describing the extensive research done on the American Indian, describes the situation as:

> Into each life, it is said, some rain must fall. Some people have bad horoscopes, others take tips on the stock market. McNamara created the TFX and the Edsel. Churches possess the real world. But Indians have been cursed above all other people in history. Indians have anthropologists. (p. 83)

Deloria concludes:

> The implications of the anthropologist... should be clear for the Indian. Compilation of useless knowledge "for knowledge's sake" should be utterly rejected by the Indian people. We should not be the objects of observation for those who do nothing to help us. (p. 98)
It would be wise for anthropologists to get down from their thrones of authority and pure research and begin helping Indian tribes instead of preying on them. (p. 104)

Spradley (1979) also believes in the need for ethnographic research to serve humankind. He states, "Cultural description can be used to oppress people or to set them free" (p. 13).

Pelto and Pelto (1973) point out that ethnographic research can contribute to the welfare of the people studied in many ways. They suggest that effective political or social action depends on descriptive data upon which to base requests, demands, and charges. They contend:

The political and social power inherent in local action movements is now richly evident—to national leaders as well as to the people themselves. The effectiveness of such movements, according to our time-honored social theory, can be increased if the people involved in them have adequate information—data and ideas about the social system they seek to manipulate. (p. 283)

This study has practical application to modern health care services on the Crow Indian Reservation. The study provides descriptive data about traditional beliefs and behaviors that affect childbearing practices of Crow Indian women. These descriptive data are to be used by tribal members and health care professionals to plan health care services that are consistent with traditional beliefs and behaviors affecting childbearing in the Crow Indian women and to implement health care services that meet the unique needs of Crow Indian women. This study serves as a beginning basis for the implementation of modern health care services that are compatible
with the traditional health practices of the Crow Indian people.

The present Crow Indian culture retains many traditional beliefs and behaviors that influence health and childbearing practices. This study explores and describes the cultural basis of childbearing beliefs and behaviors of Crow Indian women. The data of this study contribute to both the theoretical understanding of the role of culture as a variable in the determination of the health of the Crow Indian women and the practical implementation of modern health care services that are compatible with the traditional health practices of the Crow Indian women.
Chapter 2

LITERATURE REVIEW

Literature related to the traditional beliefs and behaviors that affect childbearing practices of Crow Indian women was limited. Historical accounts by older Crow Indians living in the early 1900s described some traditional childbearing and infant care practices and included references to the effects of traditional Crow Indian religion on health and childbearing. Anthropological accounts specific to the Crow Indians began in the early 1900s and continued to the present. Anthropological accounts also described some traditional childbearing and infant care practices and included references to the effects of family relationships on health and childbearing. Additionally, the anthropological accounts provided extensive elaborations of traditional Crow Indian religion and medicine. Emphasis was placed on the influence of traditional religion and medicine on all aspects of Crow Indian life. Medicine Crow's work was especially valuable because of his education as an anthropologist and his life experience as an enrolled Crow Indian. Early historical accounts by health care professionals dated back to the 1800s and related personal experiences in providing health care to the Plains Indians. Holdner's work was specific to the Crow Indians, but the remainder of the references applied to other Plains Indian tribes or to Plains Indians in general.
Other historical accounts consisted of review and comparison of historical literature related to many Indian tribes. All the historical accounts by health care professionals were limited to descriptions of the physical aspects of childbearing and infant care practices, menstrual taboos, and traditional medicine. Modern accounts by American Indian health care professionals related personal observations of and participation in modern Indian life styles. Emphasis was placed on the effects of acculturation on traditional practices and life styles. Other modern accounts described traditional childbearing and infant care practices that still exist in specific Indian tribes. No modern accounts described the contemporary childbearing practices of Crow Indian women today.

**Historical Accounts by Early Crow Indians**

Historical accounts by older Crow Indians living in the early 1900s described traditional family life, pregnancy and birth practices, and Crow Indian religion and medicine. These accounts consisted of the stories and impressions of respected Crow Indians and were recorded by white men studying and/or working with the Crow Indian Tribe.

During the early 1900s, Linderman (1962, 1972) personally studied the Plains Indian tribes and recorded the life stories and impressions of many tribal elders as they related them to him. Two of the older and respected Crow Indians that Linderman interviewed were Plenty-Coups, chief of the Crow Indians, and Pretty-Shield,
medicine woman of the Crow Indians. Within these accounts were references and descriptions of family life, pregnancy, and birth.

Plenty-Coups stressed that the Crow Indian people love children. The following account described the Crow Indian woman's preparation for birth:

During the summer and fall when the pool is low it has a smooth muddy shoreline that leads into a shadowy cave at the back. In this soft little beach Crow women who expected babies often saw the tiny footprints of The-little-ones-of-the-pool, a boy and a girl who dwelt there in eternal childhood and who possessed the power to tell coming Crow mothers the sex of their unborn children. To learn if her child would be a son or a daughter the Crow woman secretly made a bow and four arrows: one red, one blue, one black, and one yellow. Besides these she made a hoop and a stick and placed them all on the little beach beside the pool, leaving them undisturbed for four nights and four days. If, when she returned, the bow and arrows were gone she knew her child would be a boy, that his spirit had taken the mimic weapons to play with. A girl would have taken the hoop and stick. (1962, pp. 81-82)

Pretty-Shield described the birth process in more detail.

Birth occurred in a maternity lodge. A midwife was hired for a substantial fee of horses and blankets to assist with the birth process. Dressed in buffalo robes and her face covered with mud, the midwife carried grass-that-the-buffalo-do-not-eat and ignited it on specific burning coals in the maternity lodge. The woman in labor assumed a traditional position of kneeling on buffalo robes and of grasping onto stakes. Immediately after birth, a strip of buffalo skin was wrapped tightly around the woman's waist. Work assumed immediately after birth but the woman was careful to use short steps in walking and
and to avoid warm food and drink for one month.

According to Pretty-Shield, the newborn baby was covered with a grease containing red paint, buffalo chip powder, and fine clay. The baby was wrapped in soft buckskin lined with buffalo hair and rawhide to keep the head from falling. The baby was carried in the mother's arms until six months of age and then was transferred to a back cradle. The boy baby was washed with cold water because he needed to become tough.

Pretty-Shield also reported that only a respected person could name the baby. If the mother was viewed as wise, she could name her own baby. If the baby became sick, a new name was selected.

Nabokov (1967), basing his work on field manuscript of the 1920s, documented the life of Two Leggings, a Crow Indian warrior. Two Leggings described the significance of Crow Indian medicine as:

Our bundles, the songs belonging to them, and the ceremony for using them were all taught to us in our dreams. Together they made our medicine. A man who ordered his life with this help was a good and happy man and lived for a long time. (p. 28)

Marquis (1974), a physician for the Crow Indians in the early 1900s, recorded the life story and impressions of Thomas LeForge, a white man married to a Crow Indian woman and living with the Crow Indian tribe. LeForge made references to many aspects of traditional Crow Indian family life.

LeForge described the traditional roles of Crow Indian men and women. Men were hunters of food and protectors of the tribe. Women
were responsible for all other work. If a Crow Indian man tried to help the Crow Indian women in their work, the other men would question his motives and the women would think poorly of him.

LeForge described parent and child relationships in the Crow Indian tribe. The first born child was given to the paternal grandparents when the child reached one year old and was ready to be weaned from the mother. From then on, this child remained with the grandparents. Other children, if too much of a burden, were disposed of in a similar manner. LeForge believed:

This old-time practice was good for the young parents, it was good for the elderly foster parents, it was good for the tribe, as it left physically capable young couples free from worries of providing for their children and thus enabled them to go producing more. (p. 165)

LeForge related that it was bad luck for natural parents to name their own child. The naming service was provided by a special friend upon request. Often the name came spontaneously from some peculiar event connected to the life of the special friend.

LeForge also described in-law relationships in the Crow Indian tribe. Son-in-law and mother-in-law did not communicate directly to each other and did not use the other's name. All communication was through a third party and was directed to "that man" or "that woman". However, son-in-law and mother-in-law did think well of each other and helped each other as long as direct communication was not required. Son-in-law and father-in-law were very respectful of each other and communicated freely.
LeForge pointed out that traditional medical practices and spiritual devotions were allied very closely and were identical in many areas of Crow Indian life. Traditional medicine men received very liberal fees of horses, blankets, and robes for their services. These fees were believed to please the Great Spirit. If a patient did not pay properly, he would linger in ill health and probably die.

LeForge also explained the significance of red paint (as earlier referred to by Pretty-Shield). Red paint was the blood that fell to earth when four giants fought in heaven. Its use strengthened body and soul.

LeForge also described the separation of married women during menstruation from the rest of the tribe. The menstruating women sought shelter in a willow lodge and underwent a sweat bath and intense purification before returning to the tribe.

Anthropological Accounts Specific to Crow Indians

Anthropological accounts specific to the Crow Indians elaborated on many aspects of Crow Indian life and emphasized the influence of traditional religion and medicine on all aspects of Crow Indian life. Childbearing was and still is viewed as an important aspect of Crow Indian life. These anthropological accounts provided valuable information because childbearing practices were presented in the context of the total Crow Indian life style.

Lowie (1956), an anthropologist studying the Plains Indians and
the Crow Indians in depth during the early 1900s, provided a limited description of the birth process among Crow Indian women at the time. All obstetricians were Crow Indian women and no men, not even the husband, were present during the delivery "lest their presence delay the delivery" (p. 33). Medications used by obstetricians to treat confinement cases included a combination of a root and a horned toad to be rubbed on the woman's back, a juice of certain weeds to be drunk by the woman to hasten delivery, two roots to be chewed by the woman to ease suffering, and a portion of pemmican (sliced, dried, and pounded meat, mixed with melted fat) to be eaten only once after delivery. The position for delivery was kneeling with legs spread wide apart and with hands grasping stakes in front of the woman. Obstetricians received generous fees of horses, cattle, blankets, and money for their services.

Lowie also provided a description of infant care among the Crow Indian people. The naming process occurred about four days after birth. Most commonly, the father invited a person of distinction (usually a noted warrior) to provide the name. The name was to reflect some experience (physical or visionary) of the godfather. The naming ceremony included lifting the baby four times, a little higher each time, and holding incense towards the baby's face which was painted red. The godfather received compensation for the naming ceremony either immediately or at a later date if the baby proved healthy. If the baby proved sickly, the godfather renamed the baby and/or another
man was chosen to rename the child. If the baby was a girl, the portion of the cord that dropped off was rolled into a piece of cloth and put into a beaded sack to be placed on her cradleboard and later to be worn on the back of her elk tooth dress. The cradleboard was a tapering board covered with skin and with a pocket formed from three pairs of beaded flaps with strings. Lullabies were based on dreams or ancient stories.

Lowie elaborated on the forms of and significance of the Crow Indian religion. He described the Tobacco Society (a ceremonial group which cared for and worshipped the sacred medicine tobacco), the Sun Dance (a prayer for vengeance which involved three days of fasting and praying), and the sweat bath (a means of prayer). General religious concepts included the following:

A direct revelation without priestly go-between was the obvious panacea for human ills, the one secure basis of earthly goods. It might come as an unsought blessing, but only by a lucky fluke; hence a Crow strove for it by courting the pity of the supernatural in the traditional way. To any major catastrophe, to any overwhelming urge, there was an automatic response: you sought a revelation. (p. 237)

The Crow world-view. ... precludes nothing from the range of the mystically potent, but this individual conscious-ness ascribed power to a relatively narrow selection of beings, their identity being determined by chance experience. ... Crow "gods" are not clear-cut beings with sharply defined cosmic or social functions. Divine power is not concentrated in a few major personalities, let alone a single supreme ruler, but diffused over the universe and likely to crop up in unexpected places. A Crow does not first envisage a god and then worship him; he starts with the thrill, with the sense of a supernatural agency, and objectifies his emotional stirrings. (p. 251)
The individual Crow seems absolutely free in his religious life. He may believe what he will as to creation, cosmology, and the hereafter; he is not coerced to worship this or that deity; he is apparently guided only by his own specific vision, personally or vicariously experienced. (p. 254)

Native theory often ascribes physical ailments to supernatural causes, such as the breach of a taboo or the malevolence of a ghost. Even complete innocence was no excuse. Sorcery was sometimes used to afflict a personal enemy. (pp. 61-62).

Lowie also described the significance and the practice of sweat baths. Sweat baths were viewed as a means of prayer and offering. The sweat lodge was a small dome-shaped willow structure covered with robes and blankets to prevent heat escape. Rocks, which had been heated in a fire for hours, were placed in a pit within the sweat lodge. The celebrants stripped and solemnly entered the sweat lodge. Water was poured over the rocks in a ceremonial manner to form steam. Praying continued through four quarters of water pouring.

Wildschut (1960), a Billings, Montana businessman turned ethnologist, began collecting Crow Indian medicine bundles in 1918. By 1927, he had accumulated 260 medicine bundles from Crow Indian people. Wildschut described two healing medicine bundles which were specifically used in women's diseases. One medicine bundle used to treat barren women consisted of a rawhide case which contained a miniature cradleboard and doll. On the front of the cradleboard was a beaded packet of medicine and sweetgrass used in a ceremonial smudge. The other medicine bundle used to treat women's diseases consisted of a
rawhide case which contained the skin of a "fishduck" and a flat spatula-shaped wooden instrument. Wildschut also described love medicine bundles that were used for unrequited love affairs. These bundles were used to attract the affections of another person, to revive a lost love, or to retrieve an unfaithful wife.

Wildschut and Ewers (1959) also described Crow Indian cradleboards. The cradleboard consisted of a flat board 40 inches long and 12 inches wide at the top tapering to almost a point at the bottom. The cradleboard was covered with soft buckskin which provided a hood for the baby's head and a covering for the baby's body. Three broad buckskin straps held the baby in place. Elaborate beadwork covered the hood and the straps of the cradleboard.

Medicine Crow (1939, 1980), an anthropologist and an enrolled Crow Indian, described family and clan relationships in the Crow Indian culture. Children brought joy to the family; adult members brought resources necessary for survival to the family; and elder members brought stability and wisdom to the family. Men functioned to preserve and protect the tribe while women functioned to complete domestic tasks. Clan needs were of first priority; tribal needs were of second priority; and family and individual needs were of low priority. Matrilineal clan members shared responsibilities for general clan welfare. Patrilineal clan elders maintained tribal honor and pride and served as role models for younger clan members. Patrilineal clan cousins served as a social control factor through "teasing"
(publicly ridiculing) family members who exhibited unacceptable social behaviors. Childrearing was a clan responsibility rather than a parental responsibility with boys attached to paternal uncles and girls attached to grandmothers. Grandparents often raised the children and had priority in the affection of the children. Traditional Crow Indian weddings were gift exchanges only—not ceremonies or rituals. The gift exchanges were reciprocal with the bridegroom's family dressing (giving presents) the bride at one feast and the bride's family dressing the bridegroom at a later feast. Gifts were shared with the respective families and clans.

Medicine Crow provided a description of the pregnancy and birth processes among Crow Indian women. Indian religion was a basic ingredient in childbearing and childrearing practices in the Crow Indian culture. As soon as the pregnancy was known, expectant parents and clan members made religious pledges with wishful prayers for a healthy infant. At birth, midwives cut the cord ritually and placed it within a special bundle that was later worn on the dress or shirt. This cord process was viewed as the beginning of the infant's religious life and as the wish for the infant to grow into a healthy, strong, and wise member of the tribe. Four days after birth, the infant was named by tribal elders or clan relatives. The name served as a challenge for the infant's future life by incorporating responsibilities for which the infant must strive during life. Lullabies for the infant were actually prayer songs and served to teach the
infant about a virtuous life. Ridicule and reward were used to train the child. Physical punishment was never used.

Medicine Crow elaborated further on the Crow Indian religious beliefs. The Great Spirit was the creator of life and the grantor of power. Inanimate objects, plants, and animals were blessed with inherent supernatural powers from the Great Spirit and were divinely more powerful than human beings. The Crow Indian, therefore, sought to align himself with one of these magical powers and to live in harmony with nature and the Great Spirit. Traditional medicine men possessed knowledge of many divine powers which allowed them to heal.

Frey (1974, 1979), a modern anthropologist studying the Crow Indians, outlined the social roles of men and women in modern Crow Indian culture. Men dominated over women politically and sexually. Living together was considered being married. Marriage did occur in some cases and was characterized by gift exchanges between involved in-laws. Social role expectations prevented men from helping with household chores and from participating in the care of children.

Frey made only one limited reference to childbearing in the Crow Indian culture. He pointed out that during birth "only the 'sisters' and the 'mothers' are supposed to 'suffer' with the mother, not a husband" (1979, p. 145).

Frey elaborated on the importance of the clan uncle relationship in the Crow Indian culture. He stated:
If a person is to be acknowledged by others as participating in Apsaalooke (Crow) culture, even if he is not involved in any form of traditional religion—Native American Church or Sun Dance—does not partake of pow wows or even Crow Fair, the minimal requirement is that he "feast his clan uncles". (1979, p. 73)

The basis for the clan uncle relationship was the reciprocity between the individual and his clan uncle. As Frey pointed out:

In exchange for gifts of respect, feasts and presents, a clan uncle will reciprocate with gifts of praise, prayer and protection to the individuals. (1979, p. 74)

The clan uncle prayed that a good blessing be bestowed on the individual. Belief in the clan uncle relationship superceded all other religious beliefs. Frey elaborated:

Depending on his own religious orientation, the clan uncle prays accordingly for the one, be it Baptist, Catholic, Christian Fundamentalist, Native American Church, Sun Dance, or any combination therein. Of interest, while many Christian Fundamentalists such as the Pentecostals reject most expressions of Indian culture, especially traditional religion as attributes of the Devil, they will nevertheless still adhere to the biilápxe (clan uncle) system and offer prayer when requested. (1979, p. 79)

Frey also elaborated on Crow Indian medicine and religion. Major themes to Crow Indian medicine and religion were the following:

1. Crow Indian culture allowed for ideological tolerance and individuality. Crow Indian people were active participants and believers in many forms of Indian religion (Sun Dance, clan uncle, medicine man, sweat bath), Native American Church, and/or Christian sects.

2) Crow Indian religion manifested reciprocity. Gifts and/or
sacrifices were made in the hope that prayers would be answered.

3) Crow Indian medicine was religion. Indian medicine was a power derived from and sanctioned by the Supreme Being and mediated through a medicine father.

4) Crow Indian medicine complemented non-Indian medicine. Crow Indian people freely utilized both Indian and non-Indian medicine.

Crow Indian medicine was a very private, individualistic expression of religion which affected lives, protected health, and promoted well-being. Medicine bundles contained physical expressions of medicine fathers such as animal fur, feathers, and rocks and assisted the bearer in using his medicine or power. Medicine was either preventative (general welfare) or doctoring (curing of disease). Many individuals possessed individual preventative medicine but only a few individuals were medicine men. Medicine men had several medicine fathers and many medicines to doctor a variety of afflictions.

**Historical Accounts by Health Care Professionals**

Early historical accounts by health care professionals related personal experiences in providing health care to Plains Indians. The Crow Indian tribe was part of the Plains Indian culture. The Great Plains area extended from Canada to southern Colorado and was bordered by the Rocky Mountains on the west and the Mississippi River on the
east. Plains Indian culture was derived from a culturally homoge-
eous origin which was particularly adapted to early environmental and
economic circumstances in the Great Plains area. Although each Plains
Indian tribe was a distinct entity, Plains Indian people shared many
common cultural characteristics and aspects of traditional life style
that separated them from other Indian groups (Schultz, 1975).
Other historical accounts by health care professionals consisted of
extensive review and comparison of historical literature related to
many Indian tribes. Although each Indian tribe was a distinct entity,
Indian people shared some common cultural characteristics and tradi-
tional life styles that separated them from non-Indian people. These
historical accounts were limited because only descriptions of the
physical aspects of childbearing practices were presented, because
other aspects of the total life style that influence childbearing prac-
tices were not presented, and because the medical and/or masculine
viewpoint was emphasized.

Holdner (1892a, 1892b), physician on the Crow Indian Reservation
until 1889, described pregnancy and birth practices among Crow Indian
women. Holdner noted that Crow Indian women had a very low birth
rate—much lower than white women of that period. His hypotheses for
the low birth rate among Crow Indian women included rareness of twins,
low fertility, and separation of the sexes during menstruation and
lactation. Labor and delivery was usually easy, rapid, and safe.
Births occurred in the family lodge or in the countryside if the tribe
was on the move. Positions most favored for birth included squatting or kneeling with grasping of thighs or of the hands of a female friend. Occasionally, supine or standing positions were used. Abdominal massages and abdominal pressures through wide belts were used by midwives. Indian women rarely sought modern medical assistance with birth because they viewed the birth process as a physiological process for which nature was competent and because they possessed a sense of modesty which prevented them from being comfortable with the presence of males at childbirth. Both the cord and placenta were classified as charms and were disposed of or preserved in special ways. The portion of the cord sloughing off was often made into an amulet to be worn around the infant's neck.

Holdner also described the Crow Indian view of menstruation. Menstruating women were believed to be unclean and were physically separated from the tribe.

Parker (1891-1892), conducting an ethnological study of Indian womanhood in the 1890s, described pregnancy and birth practices among Indian women. Parker noted that birth rates were usually low and rarely exceeded four children per woman. His hypothesis for the low birth rate among Indian women was that the husband could not easily provide food for large families. Abortions were practiced to maintain low birth rates. Discomforts and/or complications of pregnancy were rare. Births occurred alone or accompanied by a female friend or relative. Husbands were prohibited from the delivery unless an
emergency occurred and no woman was present. Positions for delivery included standing, sitting, kneeling, and squatting and often utilized a stake or pole to grasp or to lean over. Normal physical activity resumed immediately after birth. Physical activity was thought to facilitate the flow of lochia.

Parker also described infant care practices among Indian people. Infants were placed in cradleboards immediately after birth and remained in cradleboards except for brief periods of bathing for the first ten to twelve months of life. Infants were also breastfed and were always in the presence of their mothers until weaned.

Parker also described in detail views and practices related to menstruation. Menstruation was viewed as unclean. In some tribes, the discharge after birth was also viewed as unclean. Indian women were physically separated from the tribe during menstruation and postpartal bleeding and remained isolated in a little lodge about a quarter mile from the tribe until all bleeding ceased. Indian women were expected to fast during this period in order to facilitate the occurrence of important dreams. Clothes worn during menstruation or after birth were carefully burned.

Godfrey (1894), physician on the Fort Washakie Reservation of Wyoming during the 1890s, described pregnancy and birth practices among Arapahoe and Shoshone Indian women. Indian women were healthy and strong because of the enormous amount of physical work they did. Godfrey reported that most of these Indian women bore ten to twelve
children. Discomforts and/or complications of pregnancy were rare. Labor and delivery was usually short and easy. Position for birth was semirecumbent using a headrest made of sticks covered with skin or cloth. The wedge-shaped headrest was placed on the bed of the pregnant woman. Midwives did not exist but births were usually attended by two or three older women. Men were prohibited from the delivery area. Older Indian women were used in difficult labors and usually applied abdominal pressure by having the pregnant woman lay over a pole. Medicine men were also used in extremely difficult labors and usually conducted a pow wow calling upon the Great Spirit for assistance. Modern medical assistance with birth was only sought in extremely difficult labors or in cases of retained placentas. The cord attached to the retained placenta was often tied around the woman's leg to prevent it from slipping back up into the body.

Godfrey also described the Arapahoe and Shoshone view of menstruation. Menstruating women were physically separated from the tribe and remained in a small tepee until all bleeding ceased.

Grinnell (1896), an ethnologist studying the Blackfeet Indian Reservation of Montana, described pregnancy and birth practices among Blackfeet Indian women. Birth occurred in a special lodge specific to the birth process. Medicine women or midwives were hired to assist with the delivery. These medical services were provided only to the extent of the fee provided. Cords were cut with a special arrowhead and afterbirths were disposed of by burying, throwing in
Grinnell also described infant care practices among the Blackfeet Indian people. Infants were washed in cold water, covered with red paint, and prayed for by relatives. This process was repeated daily for up to two weeks.

Rothrock (1939), basing his work on letters, diaries, and reports of army officers and surgeons stationed near western Plains Indian people, described pregnancy and birth practices among Indian women. Most Plains Indian women were healthy and bore only two children. Rothrock's hypotheses for this low birth rate included lack of adequate nutrition in the women, constant drudgery, lactation for two years, and plural marriages. Childlessness was not unusual. Most labors and deliveries were easy and lasted only one to two hours. Rothrock's hypotheses for these easy deliveries included healthy bodies and strenuous life style of the women and small sizes of the fetuses due to limited nutrition. The Indian women maintained their strenuous life style until delivery and resumed it immediately after delivery. Most deliveries were accomplished in privacy. Occasionally, other Indian women assisted in the delivery process. Positions for birth included squatting, kneeling with inclination forward or backward, or standing. Occasionally, Indian women bent over poles or applied belts to hasten the natural birth process. Medications used in labor included herbs, roots, and barks.

Gregg (1965), a pioneer nurse with the Indian Service between
1922 and 1937, related her experiences in maternal and child health among Indian people. Gregg noted that the new mother and infant were often separated from the rest of the tribe for up to one month after birth. The first child born to a woman was usually given to the grandmother to raise because the grandmother no longer had anything to love. Infant care included wrapping the infant tightly in quilted blankets, rocking in homemade hammocks, applying puffballs to the navel cord to aid the drying process, and breastfeeding on demand.

Vogel (1970), thoroughly researching Indian medicine, described a variety of Indian medicine practices related to childbirth. Natural medicines made from ground rattlesnakes, herbs, leaves, berries, roots, and barks, were used by early Indian women to promote labor, to relieve pain, to control postpartal bleeding, and to prevent pregnancy. Positions for birth included squatting or kneeling and holding onto a female attendant, sash, rope, or stake. Assistance from female midwives consisted of pressure over the abdomen to aid expulsion of the infant. Bandages or belts were tied over the abdomen immediately after birth to prevent bleeding. Contraception was practiced through herbal means, lactation, and abstinence. Abortion, necessitated due to poverty, was practiced through herbal and physical means.

Vogel also described the menstruating women as being sources of taboo. Menstruating women were physically separated from the tribe.

Vogel also described the use of peyote in Indian cultures.
Peyote, a cactus with narcotic effects, was used by Indian people in the southwestern portion of the United States as early as the 1700s and spread throughout all Indian people in the United States by the late 1800s and the early 1900s. While the main use of peyote among Indian people was for religious purposes in the Native American Church, peyote was also used for healing purposes. Vogel documented use of peyote as a drink in fever, as a lotion to hands and feet, as a pain killer, as a poultice to wounds, snakebites, and fractures, as a cure for rheumatism, and as a form of primitive psychotherapy.

Vogel briefly described the practice of clay or earth eating in Indian cultures. Clay or earth was swallowed for vague abdominal problems, was boiled and made into a liquid for acute indigestion, and was spread over certain foods to prevent stomach souring. Clay or earth eating also occurred in periods of food scarcity.

Wolman (1970), a physician interested in infant care in Indian cultures, described the use of cradleboards among Indian people. Cradleboards served to protect the infants from harm and to develop strength in the infants. Cradleboards were closely associated with the infants who used them. Cradleboards of infants who grew strong were given to other infants in the hope of providing them with strength. Each Indian tribe had its own distinctive style of cradleboard and its own customs regarding its use.

Lozoff (1978), a physician exploring parent and infant relationships in early societies, explained the cause of birth intervals of
three to four years for women in hunter-gatherer societies. The women in hunter-gatherer societies practiced breastfeeding for three to four years and physically carried infants throughout their daily activity. Prolonged lactation and increased physical weight requirements decreased the women's fat reserve to below the critical level for ovulation. Ovulation resumed when the children became independently mobile and consumed solid food.

Modern Accounts by American Indian Health Care Professionals

Modern accounts by American Indian health care professionals related personal observation of and participation in modern Indian life styles. These accounts described the effects of acculturation on traditional practices and life styles and provided insight about the acculturation of Indian people into the dominant life style. These accounts were limited because generalities based on personal experience rather than systematic study were emphasized.

Farris (1976, 1978), a Cherokee Indian with a Master of Science in Nursing education, related that many of the early traditional practices regarding childbearing in the Indian people were changed and/or lost over the years and that the vast majority of Indian women now use modern health care facilities for prenatal care and for birth. Traditional practices that continued to endure evolved around the healing and spiritual role of the traditional medicine man in the woman's pregnancy. Farris emphasized that Indian people were all in
different stages of acculturation to the dominant society and, thus, maintained traditional values in varying degrees. Traditional Indian culture that remained was that which had been found useful in enriching individual life.

Primeaux (1977a, 1977b), a Cherokee Indian with a Master of Science in Nursing education, stressed the intimacy of traditional Indian religion and health care beliefs and the influence of the traditional medicine men on modern health care behaviors. She also stressed the continued influence of the extended family on the Indian way of life.

Backup (1979), an American Indian with a Master in Nursing education, described general health beliefs of modern Indian people and related that Indian people have a "holistic view of life" and that "all medicine men consider the health of the individual including body, mind, and soul" (p. 22). She also described the influence of the extended family, the love and respect for children, the powerful role of the grandmother, the continued use of traditional medicine men, and the importance of traditional religion in the healing process.

Good Trucks (1973), an American Indian with a Master in Social Work education, described the principle of non-interference in modern Indian culture. Non-interference was viewed as respect for the self determination of the individual and prohibited any type of interference in the activities of another individual. Alternatives and/or
consequences of specific actions were pointed out but each individual determined his/her own course of action. Indian people deeply respected the interests, responsibilities, and pursuits of other individuals and did not intervene or influence the actions and decisions of another individual. This principle of non-interference applied to all relationships including parent and child relationships.

Modern Accounts Specific to Other Indian Tribes

Many researchers described traditional beliefs and behaviors that continued to affect contemporary childbearing practices in specific Indian tribes other than the Crow Indian tribe. These descriptions included the following traditional beliefs and behaviors:

**NAVAJO**

1) Pregnancy can not and should not be altered or prevented (Doran, 1972).

2) Planning for the infant before birth was dangerous to the infant (Loughlin, 1965; Polacca, 1973).

3) The Blessingway was a precautionary ceremony enacted during pregnancy to ensure the health and welfare of the infant (Kluckhohn & Leighton, 1960; Sevcovic, 1979).

4) The Blessingway was a means of praying for a certain sex of the infant (Sevcovic, 1979).

5) Health practices including hard work, strenuous exercise, and not sleeping during the day kept the infant small and,
thus, promoted an easy delivery (Bailey, 1975).

6) A juniper-ash and water preparation was used to relieve heartburn in pregnancy (Sevcovic, 1979).

7) Raisins eaten during pregnancy caused brown spots on the infant's or the mother's skin (Sevcovic, 1979).

8) Failure of the pregnant women to observe behavior taboos during pregnancy caused deformity of the infant (Kluckhohn & Leighton, 1960).

9) Tying knots or braiding caused complications in birth. Untying knots (such as hair braids) served as a precautionary act in labor (Bailey, 1975; Sevcovic, 1979).

10) Attending funerals or looking at dead animals during pregnancy caused illness in the infant and/or the parent (Sevcovic, 1979).

11) The ceremonially defined position for delivery was squatting (Bailey, 1975; Kluckhorn & Leighton, 1960; Sevcovic, 1979).

12) Corn pollen was the first food an infant received (Kluckhohn & Leighton, 1960; Sevcovic, 1979).

13) Molding or pressing the body of the newborn produced strength and beauty (Bailey, 1975).

14) Contact and/or improper disposal of the birth discharge (and menstrual blood) caused illness (Bailey, 1975; Sevcovic, 1979).

15) The infant's first meconium stool was used to remove the
mask of pregnancy (Sevcovic, 1979).

16) The umbilical cord possessed magical properties (Bailey, 1975).

17) The umbilical cord was buried in the land of the family so that the child felt an attachment to the land (Sevcovic, 1979).

18) Strangers and/or non-family members providing too much attention to the baby were suspected of practicing witchcraft on the baby (Polacca, 1973).

19) The extended family provided extensive physical, psychological, and social support to the pregnant woman and influenced childrearing practices (Bailey, 1975; Loughlin, 1965; Sevcovic, 1979).

20) The Navajo system of health recognized two sources of illness—taboo transgression (internal) and witchcraft (external) (Walker, 1974).

PAPAGO

1) Thinking bad thoughts during pregnancy caused harm to the infant and the family (Aamodt, 1976).

2) Children were valued in the Indian family (Aamolt, 1976).

3) Individuals were allowed to make their own decisions in the Indian culture (Aamodt, 1976).
PIMA

1) Improper actions with animals by the mother or the father during pregnancy caused physical deformity in the infant (Bahr, Gregorio, Lopez, & Alvarez, 1974).

2) Pollution by menstruating women created stomach pains in men (Bahr, Gregorio, Lopez, & Alvarez, 1974).

OMAHA

1) Large numbers of children were viewed as a means of personal and cultural survival (Liberty, Hughey, & Scaglion, 1976).

MUCKLESHOOT

1) Visible preparation for the baby before birth was dangerous to the baby and often resulted in the death of the baby (Horn, 1975).

2) The female members of the extended family provided extensive physical, psychological, and social support to the pregnant woman (Horn, 1975).

3) Pregnant women desired information about pregnancy and birth but were hesitant to ask questions. Pregnant women expected the health care professional to anticipate and to provide what information they needed to know (Horn, 1975).

Literature related to the traditional beliefs and behaviors that
affect childbearing practices of Crow Indian women was limited. Historical accounts by older Crow Indians of the early 1900s and anthropological accounts specific to the Crow Indians provided the most valuable information about childbearing practices of the Crow Indian women. Other historical and modern accounts provided limited supplemental information about traditional health and childbearing practices and about the effects of acculturation on traditional practices. No modern accounts described the contemporary childbearing practices of Crow Indian women today.
Chapter 3

METHODOLOGY

This study was an exploratory and a descriptive ethnographic study to identify traditional beliefs and behaviors currently affecting childbearing practices of Crow Indian women. The study consisted of two stages. The first stage of the study developed an ethnographic description of traditional childbearing practices of Crow Indian women while the second stage of the study developed a statistical description of the traditional childbearing practices currently existing among Crow Indian women. The first stage of the study explored and described traditional beliefs and behaviors that affected childbearing practices of Crow Indian women in the past and at the present time. Data were collected through unstructured interviews of key informants who were culturally knowledgeable Crow Indian women. The second stage of the study explored and described traditional beliefs and behaviors that currently affected childbearing practices of Crow Indian women at the present time. Data were collected through structured interviews of participants who were pregnant Crow Indian women. The questions in the structured interviews were part of a data collection method employed in a study currently being conducted on the Navajo Indian Reservation to determine the importance of traditional beliefs in the childbearing of Navajo Indian women. Modifications in the original structured
interview were made to reflect Crow Indian culture and were based on the literature review and on data collection from the key informant interviews in the first stage of the study. Participants in the structured interviews were allowed to provide supplementary comments and data in addition to answering the structured questions if they desired. The author conducted all the interviews and carried out all the data collection for the study.

Stage One

The first stage of the study explored and described traditional beliefs and behaviors that affected childbearing practices of Crow Indian women in the past and at the present time. Data were collected through unstructured interviews of key informants who were culturally knowledgeable Crow Indian women.

Sample. Spradley (1979) described key informants as native speakers who willingly provided information to the researcher about ordinary knowledge and common life experience of the culture. Key informants were viewed as specialists in their culture. The sample for the unstructured interviews included six Crow Indian women who were knowledgeable of and actively involved in the traditional belief and behavior system of the Crow Indian tribe. These six key informants were known to the author prior to the study because the author worked as a community health nurse on the Crow Indian Reservation for the previous six years. The key informants were selected for their knowledge of and their participation in the traditional belief and
behavior system of the Crow Indian tribe, for their interest in this study, and for their willingness to communicate freely with the author. All key informants were enrolled Crow Indians.

**Setting.** Home settings were used for all but one of the key informant interviews. The one key informant interview occurring outside the home setting was conducted in the work setting of the key informant at her request.

**Instrument.** Unstructured interviews of key informants who were culturally knowledgeable Crow Indian women were used to collect data about traditional beliefs and behaviors affecting childbearing practices of Crow Indian women in the past and at the present time. Open-ended ethnographic questions were designed to encourage the key informants to describe traditional beliefs and behaviors affecting childbearing practices in the Crow Indian culture. Open-ended ethnographic questions used to begin or stimulate the unstructured interviews of the key informants included the following:

1) What things do Crow Indian women do (or not do) during pregnancy (or labor and delivery or after birth)?

2) What things do Crow Indian women want to talk (or not talk) about during pregnancy (or labor and delivery or after birth)?

3) What kinds of traditional health care do Crow Indian women use (or not use) during pregnancy (or labor and delivery or after birth)?
4) What things do Crow Indian families do (or not do) while a female member is pregnant (or in labor and delivery or has just given birth)?

5) What happens (or does not happen) to the new baby when it goes home from the hospital?

6) What things do Crow Indian families do (or not do) for the new baby?

7) What things can nurses do (or not do) to help Crow Indian women (or Crow Indian families) during pregnancy (or labor and delivery or after birth)?

Data collected from the key informant interviews were recorded by the author through note taking during the interview and through rewriting in the narrative form immediately after the interview. This method of data recording was used because it encouraged spontaneity in the interview and because it was acceptable to the key informants.

Key informant interviews consisted of several sessions of approximately one to two hours duration each. Initial sessions asked the above open-ended questions in order to collect basic data. Follow-up sessions repeated the same or similar open-ended questions in order to substantiate and expand data. Key informant interviews were initiated in May 1980 to provide a data base for the refinement and adaptation of the structured interview used in the second stage of this study and were continued in June and July 1980 to clarify and expand the data.

Data Analysis. Data collected from the unstructured interviews of
key informants were analyzed for commonalities and differences in responses. Common responses were categorized whenever possible according to categories used by the key informants. Data were presented in narrative form and in quotations of significant and clarifying information. Emphasis was placed on descriptive ethnographic analysis. The data from the unstructured interviews of key informants are in Chapter 4.

Stage Two

The second stage of the study explored and described traditional beliefs and behaviors that affected childbearing practices of Crow Indian women at the present time. Data were collected through structured interviews of participants who were pregnant Crow Indian women.

Sample. The sample for the structured participant interviews included all the Crow Indian women who were known as pregnant on June 30, 1980. Known as pregnant was defined as diagnosis by nurse or physician or as self-report by patient. Definite laboratory and physical examination results or active participation in modern prenatal health care clinics were not required for this definition of pregnant. The sample consisted of a majority (67.4%) of the total number of known pregnant Crow Indian women and was limited only by inability to locate individual women on the reservation, by the woman's decision not to participate in the study, or by delivery occurring before the interview. The decision to use this sample was made because traditional beliefs and behaviors affecting childbearing were believed to be most prevalent in Crow Indian women who were directly experiencing
childbearing and who were participating in childbearing practices. All participants were enrolled Crow Indian women.

A total of 43 Crow Indian women were known as pregnant on June 30, 1980. However, only 29 of these 43 Crow Indian women who were known as pregnant were actually interviewed. Factors contributing to this smaller sample size included the following:

1) Inability to locate individual due to population mobility (i.e., summer traveling to powwows and/or rodeos or unavailability suggestive of alcoholic habits) -- 5 women;

2) Inability to reach individual due to difficult roads to home -- 1 woman;

3) Residence off the reservation -- 2 women;

4) Hospitalization out-of-state due to complications -- 1 woman;

5) Decision not to participate in study -- 1 woman; and

6) Delivery occurring before interview accomplished -- 4 women.

Of the 29 pregnant Crow Indian women who participated in the structured interviews, 14 women offered supplementary comments and data about traditional beliefs and behaviors affecting childbearing.

Setting. Home settings were used for all but two of the participant interviews. The two participant interviews occurring outside the home settings were conducted in the work settings of the participants at their request.

Instrument. Structured interviews of participants who were pregnant Crow Indian women were used to collect data about traditional
beliefs and behaviors affecting contemporary childbearing practices of Crow Indian women. The basic structured interview was initially developed as part of a data collection method employed in a study currently being conducted on the Navajo Indian Reservation to investigate the importance of traditional beliefs in the childbearing of Navajo Indian women. The study on the Navajo Indian Reservation is being conducted by a group of nurse-midwives who worked under the auspices of the Western Interstate Commission on Higher Education to develop the project and later applied to the United States Public Health Service for funding to carry out the project. Written permission for the author to use and modify the structured interview on the Crow Indian Reservation was sought and obtained. Copies of the letters of request and permission are in Appendix A.

Both similarities and differences in cultural practices existed between the Navajo and Crow Indian tribes. The similarities in cultural practices between the two tribes allowed the original interview from the Navajo study to be used on the Crow Indian Reservation. These similarities in cultural practices were related to the retention of the native language as the primary language, the maintenance of many traditional practices and life styles, and the importance of childbearing in the culture. The differences in cultural practices between the two tribes required modifying part of the original interview from the Navajo study before use on the Crow Indian Reservation. These differences in cultural practices were related to the geographic
isolation of the Navajo Indian people from the dominant Anglo society, the increased utilization of modern health care services on the Crow Indian Reservation, and the variations in environmental effects on the two reservations. Additional differences in cultural practices were related to differences in social structure with the Navajo Indian culture being matrilineal and the Crow Indian culture being patri­lineal. Modifications in the original questions from the Navajo study were made by the author in order to reflect the Crow Indian culture. Questions which were culturally inappropriate for the Crow Indian people were modified or deleted from the interview. Questions which reflected additional Crow Indian beliefs and behaviors were added to the interview. These changes were based on the literature review and on data collection from the key informant interviews in the first stage of this study. A copy of the structured interview with definitions is in Appendix B. Prior to the interviews, demographic data about the participants were obtained by the author from individual health records at the Crow Service Unit of Indian Health Service. This method of data collection was used because it provided accurate information about the prenatal history of the participants and because it allowed the actual interview questions to center on traditional practices. The author conducted all of the structured interviews of the participants. Participants were allowed to provide supplementary comments and data in addition to answering the structured questions if they desired. Data collected from the participant interviews were
recorded by the author through note taking during the interview and through rewriting in narrative form immediately after the interview. This method of data recording was used because it encouraged spontaneity in the interview and because it was acceptable to the participants.

One portion of the original structured interview from the Navajo study assessed the degree of traditionalism of the pregnant woman. The purpose of this traditionalism assessment was to evaluate the effectiveness of using the responses to the interview questions as a basis for determining belief categories of the woman. Belief categories were viewed as being on a continuum ranging from traditional to modern. Specific belief categories included the following:

- traditional--maintaining the beliefs and traditions that have persisted for generations;
- transitional--subscribing to some aspects of the old ways and beliefs while at the same time not completely embracing a new or changing system; and
- modern--trying new ways of doing things, developing beliefs and acquiring knowledge to fit the current way of life.

The pregnant woman independently rated herself with the above categories at the conclusion of the interview and based the rating on her perception of her belief system. The interviewer rated the pregnant woman before and after the interview with the same categories and provided reasons for the selection of each category. Ratings of the
traditionalism assessment were reviewed to determine the correspondence between and accuracy of the raters and to identify possible correlations between ratings and beliefs.

The author modified this traditionalism assessment for use with the pregnant Crow Indian women. The belief categories and their definitions were modified to include the following:

- **traditional**—maintaining the beliefs and behaviors that have persisted for generations;
- **transitional**—maintaining some of the beliefs and behaviors that have persisted for generations but also developing some of the new beliefs and behaviors that are consistent with the current life style; and
- **modern**—developing the new beliefs and behaviors that are consistent with the current life style.

The pregnant woman independently rated herself with the above categories at the conclusion of the interview and based the rating on her perception of her belief system. The author rated the pregnant woman before and after the interview with the same categories. The rating before the interview was based on the presence or absence of any form of traditional Crow Indian culture (such as cedar or sage over the doorway or sweat lodge in the yard) observed in the pregnant woman's home environment. The rating after the interview was based on the pregnant woman's responses to the questions. Additionally, a culturally knowledgeable Crow Indian woman who knew all the pregnant
Crow Indian women in the study rated each pregnant woman using the same categories. The culturally knowledgeable Crow Indian woman was instructed in the definitions of the traditionalism ratings by the author and based the rating on her previous knowledge of the behavior of the pregnant woman and her family. The ratings by the culturally knowledgeable Crow Indian woman were done prior to the initiation of any interviews.

Participant interviews of pregnant Crow Indian women consisted of only one session of approximately one hour duration. Participant interviews were conducted in July 1980.

Pretest. A pretest of the structured interview for use with participants who were pregnant Crow Indian women was performed prior to the actual study. Three Crow Indian women who had given birth to normal healthy infants within the past three years were interviewed. Based on the results of this pretest, minor modifications for clarity of meaning and for sensitivity to the Crow Indian culture were required in the structured interview. The data collected from this pretest were not used in the actual study and data analysis.

Data Analysis. Data collected from the structured interviews of the participants were analyzed for commonalities and differences in responses. Data were presented in narrative form, in quotations of significant and clarifying information, and in descriptive statistics in the narrative and in tables. Emphasis was placed on descriptive statistical analysis and interpretation. Statistics included
frequencies, cross tabulations, and correlations. The data from the structured interviews of participants are in Chapter 5.

Control

Controls for validity and reliability were incorporated into the methodology of the study. The unstructured interviews provided for the validity component of the methodology and allowed for the checking of the accuracy of the data. Edgerton and Langness (1974) pointed out that the informal approach to interviewing promoted accuracy of answers because questions were asked in many different ways to make certain that the topic was understood and because the questions were asked on various occasions to make certain that the information was consistent and true. The structured interviews provided the reliability component of the methodology and allowed for the checking of the representativeness of the data. Edgerton and Langness (1974) pointed out that the more formal approach to interviewing allowed for a determination of representativeness of the answers because the same questions were applied to a large number of people who were in some way representative of the total population.

Controls for extraneous variables were incorporated into the methodology of the study. Stable personality variables were controlled for by asking some of the open-ended questions in different ways and by asking some of the structured questions in both personal and impersonal ways. Transient personality variables were controlled
for by conducting all interviews at the convenience of the informants. Situational variables were controlled for by conducting the interviews in the individuals' home settings whenever possible and by rescheduling the interview if the home settings were temporarily nonconducive to communication. Variables related to the administration of the interviews were controlled for by having the author personally conduct all interviews and by following the same format for all interviews. Clarity was controlled for by defining all important terms within the questions in the same way for each informant and by pretesting the structured questions for understandability and for cultural sensitivity.

**Human Rights**

Human rights were respected and protected throughout this study. Individuals were not exposed to any physical, psychological, and/or social stress or harm. The only possible stress or harm related to participation in the study was the result of individual concern about abiding by cultural rules. Risks to individuals were minimal. All participation was entirely voluntary and individual responses were strictly confidential.

The Human Subjects Committee of Montana State University received an abstract of the study and granted approval for the study to be conducted. Copies of the abstract and the letter of permission are in Appendix C.

The Office of the Crow Tribal Chairman, the Health Services
Division of the Crow Tribe, the Health Board of the Crow Tribe, and the Crow Service Unit of Indian Health Service all received an explanation of the purpose, nature, design, and potential benefits of the study and an assurance of respect for and protection of the human rights of all key informants and all participants. The explanation and assurance were given verbally by the author and in a written abstract of the study. Questions were answered and discussions were held with the above agencies before the study was initiated. The Chairman of the Crow Tribe and the Crow Service Unit Director of Indian Health Service both provided written letters of permission for this study to be conducted. Copies of the abstract and the letters of permission are in Appendix D.

Each key informant and each participant received an explanation of the purpose and nature of the study and an assurance of voluntary participation and individual confidentiality. The explanation and assurance were given verbally by the author and in a written letter with attached consent form. Questions were encouraged and answered before the individual signed the form. Signed consent forms for the study were stored in a locked file on the Billings Extended Campus of Montana State University School of Nursing and will be destroyed at the end of five years. Copies of the letter of explanation with attached consent form and documentation of the disposition of signed consent forms are in Appendix E.

This study was an exploratory and a descriptive ethnographic
study to identify traditional beliefs and behaviors currently affecting childbearing practices among Crow Indian women. The study consisted of two stages. The first stage of the study consisted of unstructured interviews of key informants who were culturally knowledgeable Crow Indian women and collected data about traditional childbearing practices in the past and at the present time. The second stage of the study consisted of structured interviews of participants who were pregnant Crow Indian women and collected data about traditional childbearing practices at the present time. Controls for validity, reliability, and extraneous variables were incorporated into the methodology of the study. Human rights were respected and protected throughout the study. All participation was entirely voluntary and individual responses were strictly confidential.
Chapter 4

DATA ANALYSIS--STAGE ONE

ETHNOGRAPHIC DESCRIPTION

Data from the first stage of the study were developed into an ethnographic description of traditional childbearing practices of Crow Indian women. Data for this ethnographic description were collected from unstructured interviews of six key informants who were culturally knowledgeable Crow Indian women. Data were analyzed for commonalities and differences in responses about traditional beliefs and behaviors. Emphasis was placed on analysis of description rather than analysis by use of statistics. (A descriptive statistical analysis and interpretation of actual childbearing practices currently existing among Crow Indian women was developed from the data in the second stage of the study and appears in Chapter 5). Data from the key informant interviews provided a description of traditional childbearing practices in the context of the total Crow Indian life style and revealed the wide range and variety of traditional and modified childbearing practices in Crow Indian culture. Data included specific descriptions of traditional religion, prenatal care, labor and delivery, infant care, menstruation, and birth control in the Crow Indian culture.

According to all key informants, pregnancy was and still is an important part of the Crow Indian woman's life and the Crow Indian
family's life. As one woman explained, "Life is very important to the Crow Indian, so children are also very important. Children don't just belong to the parents. Children belong to the grandparents, to the family, to the clan, to the community." All key informants agreed that many traditional beliefs and behaviors affecting childbearing practices continued to exist among the Crow Indian people. Traditional childbearing practices were adhered to by the Crow Indian women according to their degree of acculturation. Modifications of traditional childbearing practices were the result of acculturation which occurred during the long and peaceful contact period between the Crow Indian people and the dominant Anglo society. The long and peaceful contact with the dominant Anglo society influenced and changed many of the traditions of the Crow Indian people. Each Crow Indian woman and each Crow Indian family participated in and/or respected the traditional and modified beliefs and behaviors affecting childbearing practices to varying degrees. Additionally, each Crow Indian woman and each Crow Indian family practiced and/or accepted modern health care services for pregnancy and birth to varying degrees.

Traditional Religion

Adherence to beliefs about traditional Crow Indian religion and to beliefs about the supernatural was common but varied in contemporary Crow Indian culture. The variety of Crow Indian religious practices still observed in traditional or modified form included praying of clan
uncles, use of medicine men, opening of medicine bundles, participation in sweat baths, fasting in Sun Dance, adoption into Tobacco Society, and belief in the Native American Church and its peyote rituals. The Sun Dance, originally a quest for vengeance, was modified to a quest for spiritual power. The Native American Church, although not native to the Crow Indian people, was described and accepted as an Indian religion and as a means of maintaining Indian beliefs. Both the Sun Dance and the Native American Church were part of a revitalization movement among several Indian tribes. This revitalization movement, which represented attempts to recapture and to maintain native beliefs, gained wide acceptance among Indian people. The variety of supernatural beliefs still observed in the Crow Indian culture included concern about dreams and about evil spirits.

All key informants agreed that the highly respected clan uncle was most influential in the Crow Indian people's lives. Belief in the power of the clan uncle superceded all other traditional and non-traditional religious beliefs. As one woman explained, "You can be any religion and the clan uncle will still pray for you."

Dreams were believed to be very important forecasters of the future. Clan uncles and/or medicine men were often consulted for the interpretation of dreams. If dreams were good, the clan uncle or medicine man explained to the person how to proceed in order to optimize good results. If dreams were bad, the clan uncle or medicine man prayed with the person in order to prevent bad results.
Evil spirits and/or witches were still believed to exert influence on a person's life and to be especially prevalent in the hospital. Evil spirits often attacked through indirect means which included witchcraft practiced on diapers improperly disposed, clothes left on the washline at night, or dirty dishes left on the table. Cedar or sage was still used in the home to keep evil spirits away from the family. Often, the cedar or sage was hung over the door to prevent evil spirits from entering or was burned as incense to drive evil spirits from the home. A family used cedar or sage depending upon what the clan uncle or medicine man recommended.

Prenatal Care

Many traditional practices of pregnancy were retained in contemporary Crow Indian culture. Major traditional practices still observed during pregnancy included clan uncle prayers to ensure a safe pregnancy, clay eating to relieve heartburn or food cravings, participation in sweat baths to promote an easy delivery, and lack of preparation for the baby to prevent harm to the baby. Other traditional practices during pregnancy included methods to influence or determine the sex of the unborn child, the time of birth, or the difficulty of labor.

All key informants described the importance of the clan uncle in the woman's pregnancy. Clan uncles were older patrilineal clan members who were very protective of the pregnant woman. The clan uncles
referred to both male and female members of the patrilineal clan because the native Crow Indian language did not distinguish the sex of the subject. A special clan uncle was often requested by the family to pray for the pregnant woman. The clan uncle's prayers included "the wish for a safe pregnancy and a healthy infant". The clan uncle relationship and the act of praying were more important than specific religious beliefs. Praying occurred even if the clan uncle and the pregnant woman belonged to different religions. The same special clan uncle was often recalled to provide peyote to the woman in labor or to provide a Crow Indian name to the infant at the appropriate time.

In return for praying, the clan uncle was honored with a feast and was provided with gifts. Four gifts were usually provided because four was believed to be a magical number in the Crow Indian culture. Gifts included cigarettes because the smoke of cigarettes was believed to draw a person closer to good spirits. Other gifts included Pendleton blankets, shawls, and money.

The practice of eating clay for heartburn and/or food cravings during pregnancy was described by key informants. The clay employed was described as a "white chalklike" clay found along the streams in the mountains on the Crow Indian Reservation. Families often went to the mountains on the reservation for recreational, hunting, and/or religious purposes and often brought home some of the clay in buckets for future use. This clay was used for heartburn and/or food cravings in pregnancy, for diarrhea especially in infants and young
children, and for "just feeling good". Only small amounts of clay were "chewed" or "nibbled". Key informants were divided in their views about the reason for clay eating. Some key informants theorized that clay eating was the result of a dietary deficiency while others believed that clay eating was simply a form of enjoyment. The practice of clay eating was known to have persisted for many years but no explanations of its origin were given. No religious or traditional significance was given to clay. The clay was freely shown and offered to the author by two separate families. In both instances, the clay was kept in quart jars, appeared off-white in color, felt moist and moldable in consistency, and tasted bland and gritty. Clay eating was limited to the "white chalklike" clay found on the Crow Indian Reservation. No other forms of clay, dirt, or non-food substances were eaten by the Crow Indian people. No forms of food prohibitions or taboos during pregnancy were identified.

The practice of participating in traditional sweat baths during pregnancy was described by key informants. The practice was described as "spiritual, medicinal, and relaxing" and was believed to promote an easy delivery. The pregnant woman positioned herself close to the hot rocks and steam in order to fully warm the abdomen, buttocks, and perineum. Soap was used to cleanse the body and, thus, promote a healthy pregnancy. The pregnant woman did not usually participate in the swimming after the sweat bath because the exposure to the cold water was believed to promote early labor.
Participation in sweat baths occurred regularly, usually at least weekly, for those pregnant women who believed in the importance of traditional sweat baths.

According to the majority of the key informants, getting things ready for the baby before birth was wrong and was potentially harmful to the baby and/or to the family. Getting things ready included preparing clothes, bottles, diapers, baby care products, baby furniture, and so forth. Reasons for not getting things ready for the baby included:

It's not good to get your hopes up. Something will happen to the baby.

The mother feels too bad if something happens to the baby and she has to go home to all those things.

Families avoid disappointment if the baby dies or is adopted and they don't have a lot of new baby things.

Two women did indicate that getting "just a few" things ready for the baby for use during its first few days of life "might" be acceptable. However, in most cases, it was the husband's (partner's) and grandparents' responsibility to obtain the necessary things for the baby "after" it was born. The new mother did not personally have to worry about obtaining things for the baby and devoted her time and energy to caring for the baby. Occasionally, the baby was even dressed in "hand me down" clothes for the first few months of life to "prevent illness". Baby showers occurred after birth and after the baby proved to be healthy.
The key informants described various ways in which the pregnant woman could influence or determine the sex of her unborn child. One method of praying for the sex of the unborn child was to place either a ball and hoop for a girl or a bow and arrows for a boy, depending on the preference for sex, at a special pond in the Pryor Mountains and to then pray for the granting of this wish. One method of determining the sex of the unborn child was to throw a ball to the pregnant woman. If the pregnant woman caught the ball with her hands, the unborn child was a boy. If the pregnant woman, however, caught the ball with her blouse or her dress, the unborn child was a girl. Another method of determining the sex of the unborn child was to observe the pregnant woman with small children. If one sex appeared to "really fight" or be uncooperative with the pregnant woman, the unborn child was of the opposite sex. If, however, one sex appeared to be "really close" or cooperative with the pregnant woman, the unborn child was of the same sex.

One Crow Indian woman also described a method to determine when the baby would be born. By this method, the time of birth was calculated using the number of full moons passing since the last menstrual period. The exact details of this method were not known.

Another Crow Indian woman described a method to determine whether the pregnant woman's labor and delivery would be easy or difficult. In this method, a toad was dropped in the top of the pregnant woman's blouse or dress. If the toad fell out easily, the
labor and delivery was to be easy also. If, however, the toad became caught and did not fall out easily, the labor and delivery was to be long and difficult. The toad was believed to have special magical significance for the Crow Indian people and the toad's predictions were highly respected by the Crow Indian people.

Labor and Delivery

Women in contemporary Crow Indian culture totally accepted birth in the hospital under the control of modern health care professionals. Thus, many traditional practices during labor and delivery were discarded or modified in order to adapt to birth in the modern health care system. Major traditional practices still considered during labor and delivery centered on the role of the husband (partner) in the birth process and the use of peyote in labor. The traditional role of the husband (partner) was identified to be changing and was influenced by modern health care practices which recently emphasized and encouraged active involvement of the father in the birth process. Although the use of peyote during labor was not native to the Crow Indian women, it did accompany clan uncle prayers for a safe delivery and did reflect the traditional role of the clan uncle in the woman's pregnancy. Other traditional practices in labor and delivery were remembered but no longer observed.

The key informants discussed which family member should be present with the pregnant woman during the birth process. The key
informants were divided in their beliefs about the husband's (partner's) role in birth. Some key informants believed that the pregnant woman's husband should be present "just to see how hard birth really is" while others believed that the pregnant woman's husband should not be present because "husbands only make labor harder". In most cases, the pregnant woman's mother was believed to be able to provide the most support to the pregnant woman during labor and delivery and was, thus, believed to be the most appropriate family member to be in the delivery room with the pregnant woman. One woman emphasized, "It is okay to offer the opportunity for the husband to be in the delivery room but he should not be pushed if he does not want to be there. He should be allowed to have a traditional masculine role if he wants it." The traditional masculine role prohibited the husband from being part of the birth process. Additionally, the traditional feminine role stressed modesty and also prohibited the husband from being part of the birth process. Modesty often caused the pregnant woman to delay seeking modern health care that involved pelvic examinations by male physicians and to hesitate to accept modern health care that encouraged the husband's involvement in the birth process.

The practice of using peyote in labor was described by all key informants. Key informants based their descriptions of peyote use on various sources of information. Some described personal use of peyote at the births of their own children while others only described
acquaintance with women who had related the use of peyote in labor. The practice of using peyote in labor was described as a religious part of the Native American Church and was intended to make the birth process safer and the baby healthier. One woman explained, "If you don't use peyote in labor and the baby is healthy, it is okay. If you don't use peyote in labor and the baby is not healthy, you really feel bad." Peyote use was also believed to make labor "easy". However, two women questioned if their labors were truly easier because of peyote. One woman described reluctance to try peyote in her labor. She explained, "I didn't want to take it. I threw it down. But my family got mad so I went ahead and took it anyway. I don't think it helped." Another woman took peyote at home and then was given other medication at the hospital. She described her labor as "really difficult" and believed that the peyote, the medications at the hospital, or the combination of the drugs contributed to the difficult labor. In most cases, the peyote was given to the pregnant woman after labor began but before she entered the hospital. A clan uncle provided the peyote and prayed with the pregnant woman for a safe delivery and a healthy baby. In other cases, peyote was brought by grandmothers or mothers to the pregnant woman while she was in the hospital if labor was believed to be proceeding too slowly or too painfully. In one other case, peyote was taken immediately after delivery. This occurred because labor proceeded so rapidly that the baby was born before the clan uncle arrived with the peyote. Peyote
meetings were also held two months after birth to provide thanks for a healthy baby.

Labor and delivery practices of early days were remembered by key informants. Delivery occurred in a special tent separate from the family because the presence of blood during birth was viewed as a form of contamination to medicine bundles. The position for birth was kneeling or squatting and holding onto stakes. Delivery was easy and rapid. Immediately after birth, the woman stood to allow the placenta to fall out and the clots to drain. The placenta was disposed of carefully because it was viewed as a part of the baby. If dogs or wild animals were allowed to get hold of the placenta, harm would come to the baby. Often, the placenta was placed high in a tree away from people and allowed "to blow to the four winds". In other cases, the placenta was carefully burned. After delivery, the woman resumed her normal activity with only brief limitation. This brief limitation or modification of normal activity included walking with short shuffling steps and riding sideways on a horse. All of the Crow Indian women agreed that these traditional practices no longer exist. As one woman summarized, "The Indian women now have their babies like white women. They scream and cry. Indian women never did that in the past."

Infant Care

Traditional practices in infant care continued to exist in
contemporary Crow Indian culture but were observed in many modified forms and to varying degrees. Major traditional practices still observed in infant care included the importance of naming the baby, the saving of the umbilical cord, the use of the cradleboard, and the involvement of other family members in the care of the baby. Practices related to the naming of the baby were now expanded to include both the English and the Crow Indian names. Methods of saving the umbilical cord were now changed into many different forms. The amount of time the cradleboards were now used was shortened substantially. Extended family members retained varying amounts of influence in the care of the baby. Other traditional practices in infant care were remembered but no longer observed.

According to all key informants, practices related to the naming of the baby were very important. Clan uncles normally provided the Crow Indian name to the baby after one year of life. Crow Indian names were selected to incorporate a challenge or "something for the child to live up to" in the future. This challenge was considered very important to the future success of the child. The Crow Indian name was often withheld until the child was in need of a challenge or of special attention or until the parents could afford the naming ceremony. The parents were required to pay the clan uncle for providing the name. This payment usually consisted of four gifts and often included shawls, blankets, quilts, or Pendleton blankets. Traditionally, the Crow Indian name was provided four days after
birth. However, this was at a time when English names did not exist. Once English names became widely accepted and used, the need to provide the Crow Indian name four days after birth no longer existed. Parents or grandparents now provided the English name to the baby within a few days of birth. English names were often selected from among the English names of respected relatives.

The practice of saving the umbilical cord when it dried and fell from the baby's navel was described by key informants. Saved cords were beaded into small diamond-shaped pillows that were worn on the girl's elk tooth dress or on the boy's beaded belt. Occasionally, these saved cords were beaded into bands that were worn around the neck. The wearing of these beaded cords was believed to "keep illness away". Additionally, these beaded cords were to be "shared" with future children and grandchildren as part of a person's heritage. Sometimes, the cords were simply saved in jars without beading. One other briefly mentioned use of these cords was disposal through "throwing the cord on an anthill and letting the ants eat it". This practice was thought to prevent "jitteriness" in the baby. Several Crow Indian women expressed concern that the cords were now being "lost at the hospital" and/or were being "cut too short to save or bead". Ideal length of cords was described as about four inches.

The key informants expressed divided views on the current use of traditional cradleboards. Some key informants viewed the use of the cradleboard as a convenient and secure way to carry the baby and
to promote the baby's comfort while others viewed the use of the cradleboard as merely a fad. However, all of the Crow Indian women agreed that cradleboards were used for only brief periods of time and not for the full year of the baby's life as traditionally practiced.

One Crow Indian woman described the practice of "throwing the baby away". This practice occurred if previous babies had died or if the present baby was very sick. Other family members who were successful at raising children "caught the baby" and raised it. If the infant later proved to be healthy, the parents "bought the baby back" through four gifts. The parents believed that they disassociated themselves from unsuccessful parenting skills when they "threw the baby away" and that they associated themselves with successful parenting skills when they "bought the baby back". Failure to "throw the baby away" when this practice was recommended by a clan uncle or an elder family member could result in the death of the baby.

The key informants described the role of the pregnant woman's mother in the birth process and in family life. Mothers were viewed as resource people who provided instructions about pregnancy, birth, and infant care. As one woman explained, "We learn all things from our mothers. Mothers tell us what to do in all areas of life." Often, the mother of the pregnant woman cared for and raised the first born child in order to teach the young woman how to mother.

Infant care practices of early days were remembered by key
informants. Diapers consisted of two layers of rawhide separated by a layer of dried buffalo chips. A thin layer of soft rawhide was next to the baby's skin, a layer of dried and absorbent buffalo chips followed, and a thick layer of tough rawhide was on the outside. After about three voidings, this diaper was replaced. Red clay ground finely and sprinkled over buffalo grease or fat was used to prevent skin rashes and plain buffalo grease or fat was used to prevent dry skin. All of the Crow Indian women agreed that these traditional practices no longer existed.

Menstruation

Practices related to menstruation and postpartal bleeding were described by the key informants. Both menstruation and postpartal bleeding were viewed as harmful to Indian medicine and as "making Indian medicine sour, bitter, and impure". Additionally, menstruation and postpartal bleeding were believed to be especially "hard on men" and to "create respiratory distress". During menstruation and postpartal bleeding, the woman stayed away from the Sun Dance and from any ceremony that involved the use of Indian medicine bundles. Attendance at peyote meetings and attendance at social occasions was not prohibited.

Birth Control

Traditional means of spacing children in Crow Indian culture were
replaced by modern methods of birth control. Traditional means of spacing children still remembered included breastfeeding, polygamy, abortion, and abstinence.

The key informants described breastfeeding as a means of birth control available in early days. Breastfeeding was believed to be the "natural" means of birth control or of "spacing children" in early days. Breastfeeding was the only kind of infant feeding available at that time and usually continued for at least two years. In fact, one woman indicated that breastfeeding often persisted for up to five years or until peer pressure from other children caused the child to wean himself. Breastfeeding was viewed as a very natural means of spacing children and was well accepted by the women. All of the Crow Indian women agreed that the women today had other responsibilities and/or interests outside of the home and devoted only minimal or no time to breastfeeding. Today, breastfeeding was no longer viewed as a method of birth control.

Other means of spacing children available in early days were remembered by key informants. In pre-reservation days, polygamy was practiced. When a woman was pregnant and/or caring for a baby, she remained physically separated from her husband for up to two years while another wife took her place. Additionally, in pre-reservation days, men were often gone on war or hunting parties for long periods of time and were, thus, physically separated from their wives. If pregnancy did occur at an interval thought to be too close,
abortion was practiced through what was believed to be either herbal or physical means. Abortion was believed to be a practical necessity for pregnancies that were too close because tribal resources were limited and could not support large numbers of children. As one woman explained, "The youngest child suffered greatly if pregnancies were too close." Additionally, some older women were believed to understand the menstrual cycle and to recommend to younger women that abstinence from sex during the menstrual cycle and for two weeks thereafter be practiced. All of the Crow Indian women agreed that these traditional means of spacing children no longer existed. Instead, modern methods of birth control were used today.

Data from the first stage of the study were developed into an ethnographic description of traditional childbearing practices among Crow Indian women. Childbearing remained an important part of the Crow Indian woman's life and of the Crow Indian family's life. Many traditional beliefs and behaviors affecting childbearing practices still existed among the Crow Indian people. However, traditional childbearing practices now existed in modified forms due to the acculturation of the Crow Indian people to the dominant Anglo society. Crow Indian women and their families participated in and/or respected the traditional and modified childbearing practices to varying degrees.
Chapter 5

DATA ANALYSIS--STAGE TWO

STATISTICAL DESCRIPTION

Data from the second stage of the study were developed into a statistical description of traditional childbearing practices currently existing among Crow Indian women. Data for this statistical description were collected from structured interviews of 29 participants who were pregnant Crow Indian women. Data were analyzed for commonalities and differences in responses about traditional beliefs and behaviors and for correlations between demographic characteristics and responses about traditional beliefs and behaviors. Emphasis was placed on descriptive statistical analysis and interpretation. (A descriptive ethnographic analysis of traditional childbearing practices among Crow Indian women was developed from the data in the first stage of the study and appears in Chapter 4). Data from the participant interviews provided a description of traditional childbearing practices that currently exist among Crow Indian women and showed the distribution of actual childbearing practices in contemporary Crow Indian culture. Data included specific descriptions of demographic characteristics, traditional beliefs and behaviors, indicators of traditional lifestyle, traditionalism assessment, and supplementary comments of the women.
According to the responses of the pregnant Crow Indian women, many traditional beliefs and behaviors affecting childbearing practices existed in Crow Indian people today. These traditional beliefs and behaviors affecting childbearing practices were adhered to by the pregnant Crow Indian women according to their degree of acculturation and were observed in many different forms and in varying degrees.

**Demographic Characteristics**

Demographic characteristics collected about the pregnant Crow Indian women included data related to residence location, age, marital status, religious affiliation, education, employment, husband (partner), prenatal history, housing, and income. This data provided a description of the unique characteristics of the Crow Indian women and reflected many of the unmet needs of the Crow Indian women and their families.

**Residence Location.** Residence location of the pregnant Crow Indian women indicated that the women in the study were fairly representative of the Crow Indian Reservation. Location of residence by specific community included 11 women residing in the Crow Agency area, 9 women residing in the Lodge Grass area, 4 women residing in the Wyola area, 3 women residing in the Hardin area, and 2 women residing in the Pryor area. Table 1 provides a geographical description of Crow Indian women by comparing the distribution of the women in this
Table 1

Geographical Distribution of Crow Indian Women

<table>
<thead>
<tr>
<th>Area of Residence</th>
<th>Pregnant&lt;sup&gt;a&lt;/sup&gt;</th>
<th>In Child-bearing Age&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crow Agency</td>
<td>37.9</td>
<td>41.4</td>
</tr>
<tr>
<td>Lodge Grass</td>
<td>31.0</td>
<td>27.4</td>
</tr>
<tr>
<td>Pryor</td>
<td>6.9</td>
<td>11.5</td>
</tr>
<tr>
<td>Hardin</td>
<td>10.3</td>
<td>8.9</td>
</tr>
<tr>
<td>Wyola</td>
<td>13.8</td>
<td>5.8</td>
</tr>
<tr>
<td>St. Xavier</td>
<td>0</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Note. Total exceed 100.0% due to rounding.

<sup>a</sup> \( n = 29 \)

<sup>b</sup> \( n = 1217 \) (calculated from 1980 Crow Per Capita Rolls)
study to the distribution of the total number of women in the childbearing age (defined as 15 to 44 years). Only the community of Wyola showed a difference of more than 5% in the distribution of the women in the study compared to the total number of women in the childbearing age and only the community of St. Xavier which includes less than 5% of the total number of women in the childbearing age was not represented in the women in the study. Thus, the distribution of the women in the study was similar to and roughly equivalent to the distribution of the total number of women in the childbearing age on the Crow Indian Reservation. Location of residence by type of area included 18 women residing in communities (defined as having organized community water and/or sewage systems for homes) and 11 women residing in remote areas (defined as having individual wells and septic systems for homes). Thus, the women in the study represented both community and remote areas of the Crow Indian Reservation.

**Age.** Age of the pregnant Crow Indian women was spread throughout the childbearing age. Age of the women ranged from 16 to 41 years. The average age of the women was 23.7 years. Age breakdown included 7 women younger than 19 years old, 11 women between 19 and 24 years old, 9 women between 25 and 34 years old, and 2 women older than 34 years old. A total of 9 women were in high risk prenatal categories due to age (defined as under 19 years of age or over 34 years of age).

**Marital Status.** Marital status of the pregnant Crow Indian women indicated that a large proportion (89.7%) of the women
maintained a close relationship with the father of the child. Marital status of the women included 1 single woman, 13 legally married women, 13 women living together with the father of the child, and 2 divorced women. (Living together was defined as mutual consent or understanding in which both members live as man and wife without undergoing a traditional, religious, or civil ceremony). Thus, a total of 26 women had some form of close relationship with the father of the child. Only 3 women were in a high risk prenatal category due to being a single parent (defined as absence of the father of the child from the family relationship). However, these 3 women categorized as being single parents received physical and emotional support from a variety of extended family members.

**Religious Affiliation.** A large proportion (96.6%) of the pregnant Crow Indian women practiced some form of non-traditional religion. Non-traditional religion encompassed a variety of religious affiliations and included 14 women of Catholic religion, 7 women of Pentecostal religion, 4 women of Baptist religion, 2 women of Mormon religion, 1 woman of Christian religion, and 1 woman who was not affiliated with a non-traditional religion. Thus, all but 1 woman practiced some form of non-traditional religion.

**Education and Employment.** Educational and employment status of the pregnant Crow Indian women revealed a wide variety of educational backgrounds and types of employment. Low educational attainment and a high rate of unemployment were prominent characteristics of the women
as a group. Educational background of the women ranged from completion of 6th grade to baccalaureate degree. Educational background included 10 women with less than a high school education, 11 women with a high school education or its equivalent (G.E.D.), and 8 women with more than a high school education. Table 2 illustrates the educational background of the women. Employment status included 23 women unemployed, 1 woman student, and 5 women employed. Table 3 shows the employment status of the women. Educational and employment status of the women were reviewed to determine if low education or unemployment were related to age (under 19 years of age). Women under 19 years of age were not necessarily expected to have completed high school or obtained employment. Of the 10 women who had less than a high school education, only 4 women were under 19 years of age, and of the 23 women who were unemployed, only 6 women were under 19 years of age. Thus, age was one possible factor, but not the only factor, affecting the low educational attainment and the high unemployment rate of the women.

The women also participated in other forms of work in the home setting. This work included child care, care of family livestock, and beadwork. All the women with children provided primary care for their own children. In addition, 7 women cared for other children often (defined as four hours or more a day) and 11 women cared for other children sometimes (defined as less than four hours a day). Livestock production was a major source of income for the
Table 2

Educational Background of Pregnant Crow Indian
Women and Husbands (Partners)

<table>
<thead>
<tr>
<th>Highest Degree of Education</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 12th Grade</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>High School Degree</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>G.E.D.</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Vocational Training</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Some College</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>College Degree</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>
Table 3

Employment of Pregnant Crow Indian
Women and Husbands (Partners)

<table>
<thead>
<tr>
<th>Employment</th>
<th>Number of Women</th>
<th>Number of Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployed</td>
<td>23</td>
<td>7</td>
</tr>
<tr>
<td>Student</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Military</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Clerical</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Laborer</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Technical</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Professional</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>29</td>
</tr>
</tbody>
</table>
Crow Indian people. Care of family livestock was a daily activity for 1 woman and an occasional activity for 6 women. The Crow Indian people were known for their fancy beadwork and other Indian people traveled from as far as New Mexico and Arizona to trade turquoise and other jewelry for the beadwork. Beadwork was done often (defined as eight hours or more a month) by 3 women and sometimes (defined as less than eight hours a month) by 8 women.

**Husbands (partners).** Demographic characteristics of the husbands (partners) of the pregnant Crow Indian women included a wide variety of characteristics. A large proportion (75.9%) of the men were enrolled Crow Indians. Ethnic background of the men included 22 enrolled Crow Indians, 4 non-Crow Indians, 1 white man and 2 men of unknown race. Ages of the men ranged from 17 to 48 years with 2 men's ages unknown. The average age of the men was 30.5 years. The average age (30.5) of the men was 6.8 years older than the average age (23.7) of the women. Age breakdown included 4 men younger than 19 years old, 9 men between 19 and 24 years old, 12 men between 25 and 34 years old, 2 men older than 34 years old, and 2 men of unknown age. Educational background of the men ranged from completion of 10th grade to masters degree. Educational background included 6 men with less than a high school education, 8 men with a high school education or its equivalent (G.E.D.), 10 men with more than a high school education, and 5 men of unknown education. Table 2 illustrates the educational background of the men and provides a comparison of the
educational background of both the women and the men. The general education level of the men was higher than the general education level of the women. Employment status included 7 men unemployed, 3 men students, 17 men employed, and 2 men of unknown employment status. Table 3 shows the employment status of the men and provides a comparison of the employment status of both the women and the men. The unemployment rate (24.1%) of the men was only a third of the unemployment rate (79.3%) of the women. Educational and employment status of the men were reviewed to determine if low education or unemployment were related to age (under 19 years of age). Men under 19 years of age were not necessarily expected to have completed high school or obtained employment. Of the 6 men who had less than a high school education, none were under 19 years of age, and of the 7 men who were unemployed, only one was under 19 years of age. Thus, age was not a factor in the educational level or the employment of the men.

Prenatal History. Prenatal history of the pregnant Crow Indian women revealed multiple risk factors. A large proportion (93.1%) of the women exhibited some form of risk factor that affected their current pregnancy. Prenatal risk factors increased the women's needs for specialized and individualized health care. Gravida status ranged from 1 to 7 with an average of 2.7. Para status ranged from 0 to 5 with an average of 1.3. Number of living children ranged from 0 to 5 with an average of 1.2. A total of 8 women were in a high risk prenatal category due to multiparity (defined as more than 3
pregnancies). Abortion status ranged from 0 to 2 with an average of 0.34. A total of 9 women were in a high risk prenatal category due to previous abortion (defined as elective or spontaneous). Prenatal care was initially obtained by 17 women during the first trimester of pregnancy, by 8 women during the second trimester of pregnancy, and by 4 women during the third trimester of pregnancy. Thus, 12 women were in a high risk prenatal category due to late prenatal care (defined as initial prenatal care after the first trimester of pregnancy). Additionally, 5 women were in a high risk prenatal category due to irregular prenatal care (defined as failure to keep follow-up prenatal clinic appointments). Reasons for not keeping follow-up prenatal clinic appointments included time of the clinic (early morning), denial of the pregnancy, and conflicts with other family responsibilities. Only 3 women reported difficulty obtaining transportation to prenatal clinics. This difficulty occurred only in women residing in distant parts of the reservation (mileage to prenatal clinic over 80 miles one way) or referred to specialist service off the reservation (mileage to specialist services over 60 miles one way). Table 4 provides a further breakdown of prenatal risk factors of the women. Only 2 women did not exhibit risk factors during their current pregnancy. Thus the majority (93.1%) of the women were at risk during their current pregnancy.

Housing. Characteristics of the housing of the pregnant Crow Indian women disclosed the daily living conditions of the women and
Table 4

Risk Factors of Pregnant Crow Indian Women

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Number of Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Under 19 Years</td>
<td>7</td>
</tr>
<tr>
<td>Age Over 34 Years</td>
<td>2</td>
</tr>
<tr>
<td>Single Parent</td>
<td>3</td>
</tr>
<tr>
<td>Multiparity</td>
<td>8</td>
</tr>
<tr>
<td>Previous Abortion</td>
<td>9</td>
</tr>
<tr>
<td>Late Prenatal Care</td>
<td>12</td>
</tr>
<tr>
<td>Irregular Prenatal Care</td>
<td>5</td>
</tr>
<tr>
<td>Unplanned Pregnancy</td>
<td>5</td>
</tr>
<tr>
<td>Previous Delivery Problems</td>
<td>4</td>
</tr>
<tr>
<td>Previous Infant Death</td>
<td>2</td>
</tr>
<tr>
<td>None</td>
<td>2</td>
</tr>
</tbody>
</table>

Note. Column totals more than \( n = 29 \) because each woman could have more than one risk factor.
provided insight into the ability of the women to care for themselves and their families. Type of housing included 24 government subsidized homes, 3 trailers, 1 apartment, and 1 log cabin. Living arrangements included 14 women and their immediate families residing in their own homes and 15 women and their immediate families residing in the homes of other families (usually parents, grandparents, or siblings). Families residing together contributed to the general welfare of many individuals but also increased the crowdedness of many homes. Number of people residing in the homes of the women ranged from 2 to over 20 with an average of 5.7.

Most homes had standard utilities. Community water systems provided water for 17 homes and individual wells provided water for 9 homes. Water was lacking in 2 homes due to broken plumbing and in 1 home due to total lack of a water system. Thus, a total of 3 homes lacked adequate water systems. These homes also lacked functional toilet systems. Lack of adequate water system and functional toilet system increased the physical work demands of the women and/or limited their ability to maintain proper sanitation in the home. Women whose homes lacked adequate water systems were required to carry water for drinking and cooking purposes from nearby homes or irrigated ditches. Purity of this carried water was questionable. Bathing was accomplished at relatives' homes. Functional refrigerators were present in all homes. Heat was present in all homes and was provided by natural gas in 15 homes, by coal in 10 homes, by propane in 3 homes,
and by electric heater in 1 home. Telephones existed in 18 homes.

Income. Nuclear family income (defined as income of the woman and her husband or partner) of the pregnant Crow Indian women ranged from nothing to over $18,000 annually. The women without incomes were young teenagers residing with and dependent upon their parents. The women with high incomes were employed women whose husbands (partners) were also employed or unemployed women whose husbands were employed in high paying professional and/or federal jobs. Annual income included 13 women with nuclear family incomes below $3,000, 7 women with nuclear family incomes between $3,000 and $8,999, 2 women with nuclear family incomes between $9,000 and $14,999, and 7 women with nuclear family incomes over $15,000. Table 5 includes a breakdown of the annual income of the women and their nuclear families.

Annual income of the women was reviewed to determine if low income was related to age (under 19 years of age). Women under 19 years of age were not necessarily expected to have obtained employment. Of the 13 women with nuclear family incomes below $3,000, 5 women were under 19 years of age. Thus, age was one possible factor, but not the only factor, affecting low income.

The nuclear family incomes of the women were compared to the 1977 poverty index of the United States Bureau of the Census to determine the amount of poverty present among the women. The 1977 poverty index was the most recent reference available (U. S. Department of Commerce, 1979). This comparison revealed that 15 women were below
Table 5

Annual Income of Pregnant Crow Women

<table>
<thead>
<tr>
<th>Annual Income</th>
<th>Number of Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 to $2,999</td>
<td>13</td>
</tr>
<tr>
<td>$3,000 to $5,999</td>
<td>6</td>
</tr>
<tr>
<td>$6,000 to $8,999</td>
<td>1</td>
</tr>
<tr>
<td>$9,000 to $11,999</td>
<td>1</td>
</tr>
<tr>
<td>$12,000 to $14,999</td>
<td>1</td>
</tr>
<tr>
<td>$15,000 to $17,999</td>
<td>4</td>
</tr>
<tr>
<td>$18,000 and Over</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>
poverty levels, 4 women were at or near poverty levels, and 10 women were above poverty levels. Thus, a large proportion (65.5%) of the women were experiencing financial hardship. However, the poverty determination did not accurately reflect the economic status of the women because it did not account for recent inflationary trends or for the effects of the extended family. Recent inflationary trends decreased the real value of the women's incomes and placed the women closer to poverty levels. Extended Indian family members shared resources freely and were either a source of support or a burden to the individual. Thus, while it was difficult to determine economic status, the majority (65.5%) of the women appeared to be living at or near the poverty level.

A large proportion (79.3%) of the women received supplemental income from government programs. Six women received food stamps, 5 women received food commodities, 21 women received WIC (Women, Infant and Children) Program foods, and 3 women received welfare assistance. Only 6 women did not receive supplemental income from government programs.

**Traditional Beliefs and Behaviors**

Data related to the traditional beliefs and behaviors collected from the pregnant Crow Indian women included characteristics of traditional religion, variety of religions, general culture, health beliefs and behaviors, family roles, clan relationships, husband
(partner) role in childbearing, clay eating, participation in sweat baths, lack of preparation for baby, use of peyote in labor, general birth practices, general infant care, saving of cord, use of cradleboard, naming of baby, breastfeeding, and birth control. This data provided a description of the contemporary childbearing practices of the Crow Indian women and reflected the unique cultural needs of the Crow Indian women and their families.

Traditional Religion. Traditional Crow Indian religion remained an important influence in the lives of the pregnant Crow Indian women. Traditional Crow Indian religion was defined as belief in any one of the following traditional systems: praying of clan uncles, use of medicine man, participation in sweat baths, fasting in Sun Dance, and adoption into Tobacco Society. Belief in traditional Crow Indian religion included actual physical participation in the ceremonies derived from the belief system and/or a voiced expression of respect for the belief system. Thus, belief in traditional Crow Indian religion encompassed specific behaviors and/or expressions of respect for such behaviors. Clan uncles were asked to pray for health and welfare by 17 women and were respected as important sources of religious support and protection by 2 women. Thus, a total of 19 women held some form of belief about the praying of clan uncles. Medicine men were used for health and welfare problems by 6 women and were respected as sources of both religion and medicine by 6 women. Thus, a total of 12 women held some form of belief about the use of medicine
men. Sweat baths were participated in by 15 women and were respected as a means of praying by 4 women. Thus, a total of 19 women held some form of belief about participation in sweat baths. Sun Dances were previously entered into by 10 women and were respected as a means of devotion by 7 women. Thus, a total of 17 women held some form of belief about the significance of the Sun Dance. The Tobacco Society was respected by 3 women. Because the Tobacco Society was a selective society with membership only through adoption, the women were required to await adoption before participation occurred. Table 6 summarizes the traditional religious beliefs of the women. Overall, a large proportion (72.4%) of the women reported belief in some system of traditional Crow Indian religion. The clan uncle appeared to be most consistent and most influential in the traditional Crow Indian religion of the women. Belief in the clan uncle allowed the women to utilize the support of the clan uncle in addition to any other traditional or non-traditional religious practices they chose.

Variety of Religions. Religious beliefs of the pregnant Crow Indian women evolved from a variety of religions and revealed a variety of religious practices. The variety in religious beliefs of the women reflected both the overall traditional Crow Indian culture, which allowed for religious freedom and tolerance and which encouraged the development of individualized and personalized beliefs, and the acculturation of the Crow Indian people to the dominant Anglo society, which introduced many non-traditional religions. In terms of individual religions, 21 women
Table 6

Traditional Religious Beliefs of Pregnant Crow Indian Women

<table>
<thead>
<tr>
<th>Traditional Religious Belief</th>
<th>Participation</th>
<th>Respect Only</th>
<th>No Belief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clan Uncle</td>
<td>17</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Medicine Man</td>
<td>6</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>Sweat Bath</td>
<td>15</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Sun Dance</td>
<td>10</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Tobacco Society</td>
<td>0</td>
<td>3</td>
<td>26</td>
</tr>
</tbody>
</table>

Note. Columns total more than n = 29 because each woman could practice more than one traditional religious belief.
believed in traditional Crow Indian religion, 7 women believed in the Native American Church and its peyote rituals, and 28 women believed in non-traditional religions. In terms of combinations of religions, 1 woman believed in traditional Crow Indian religion and the Native American Church, 14 women believed in traditional Crow Indian religion and non-traditional religion, and 6 women believed in traditional Crow Indian religion, the Native American Church, and non-traditional religion. Table 7 summarizes the religions of the women. Overall, a large proportion (72.4%) of the women believed in traditional Crow Indian religion and some other religion. Belief in a variety of traditional and non-traditional religions allowed the women to obtain support from many different sources.

Only a small proportion (27.6%) of the pregnant Crow Indian women denied all belief in traditional Crow Indian religion. The women denying belief in traditional Crow Indian religion did, however, practice non-traditional religions which included 4 women of Pentecostal religion, 2 women of Catholic religion, and 1 woman of Baptist religion. Of interest, the Pentecostal religion strictly forbade the maintenance of traditional practices; the Catholic religion allowed the continuation of traditional practices and encouraged the fusion of the two beliefs systems; and the Baptist religion only recently began to allow the continuation of traditional practices. Thus, the influence of non-traditional religions on traditional practices was unclear.

General Culture. The pregnant Crow Indian women exhibited a
Table 7

Religion of Pregnant Crow Indian Women

<table>
<thead>
<tr>
<th>Individual Religion</th>
<th>Number of Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Crow Indian</td>
<td>21</td>
</tr>
<tr>
<td>Native American Church</td>
<td>7</td>
</tr>
<tr>
<td>Non-traditional</td>
<td>28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Combination of Religions</th>
<th>Number of Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Crow Indian and Native American Church</td>
<td>1</td>
</tr>
<tr>
<td>Traditional Crow Indian and Non-traditional</td>
<td>14</td>
</tr>
<tr>
<td>Traditional Crow Indian, Native American Church, and Non-traditional</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Columns do not equal n = 29 because each woman could practice more or less than one religion.
variety of behaviors characteristic of the Crow Indian culture. The Crow Indian language was the primary and the native language of 23 women who were also fluent in the English language. The English language was the only language of 6 women who lacked all ability in the Crow Indian language. In the home setting, the Crow Indian language was always used by 12 women; and Crow Indian language and the English language were both used in about equal amount by 8 women; and the English language was always used by 9 women. Presence of individuals who could not understand or speak the Crow Indian language determined which language was used in the home. Traditional dress (defined as buckskin, beadwork, and/or moccasins) was worn only on ceremonial and social occasions by 11 women and was never worn by 18 women. Traditional ceremonies and social occasions were normally attended by 23 women and were never attended by 6 women. Of the 23 women normally attending these traditional ceremonies and social occasions, 7 women ceased attendance during pregnancy and 13 women ceased attendance during menstruation and postpartal bleeding. All women ceased attendance of Sun Dance during menstruation and postpartal bleeding. Table 8 includes a summary of the general cultural characteristics of the women.

**Health Beliefs and Behaviors.** The pregnant Crow Indian women maintained many traditional beliefs and behaviors that influenced their general health practices. The traditional beliefs and behaviors that influenced health practices were based on beliefs about
Table 8

General Traditional Beliefs and Behaviors
Of Pregnant Crow Indian Women

<table>
<thead>
<tr>
<th>Tradition</th>
<th>Participation</th>
<th>No Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crow Language</td>
<td>23</td>
<td>6</td>
</tr>
<tr>
<td>Traditional Dress</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>Traditional Ceremonies</td>
<td>23</td>
<td>6</td>
</tr>
<tr>
<td>Clan Uncle for Health</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>Medicine Man for Health</td>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td>Clan Uncle/Medicine Man for Bad Dream</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Cedar/Sage in Home</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>Belief in Witches</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td>Belief in Haunted Hospital</td>
<td>5</td>
<td>24</td>
</tr>
</tbody>
</table>

Note. Columns total more than n = 29 because each woman could participate in more than one tradition.
traditional Crow Indian religion and beliefs about the supernatural. Clan uncles previously prayed for health problems of 17 women, and medicine men previously treated health problems of 6 women. All 6 women who had health problems treated by a medicine man also had health problems prayed for by clan uncles. Clan uncles and/or medicine men were previously consulted about bad dreams by 16 women. Cedar or sage was used in the home by 18 women to keep evil spirits away from the family. Beliefs about witches and witchcraft were definitely held by 7 women, were held to an undecided degree by 3 women, and were denied by 19 women. Thus, a total of 10 women expressed some form of belief in witches. The belief that the hospital was haunted was known to occur among Indian people by 14 women. However, the belief that the hospital was haunted was definitely held by only 1 woman, was held to an undecided degree by 4 women, and was denied by 24 women. Thus, only 5 women expressed some form of belief that the hospital was haunted. Table 8 includes a summary of the traditional beliefs and behaviors that influenced the general health practices of the women.

**Family Roles.** Family members exerted much influence in the health care processes of the pregnant Crow Indian women. Although a variety of family members were involved in the health care processes of the women, the husband (partner) and the mother were identified most often in the important health care processes of the women. Traditionally the mother was always important in all aspects of Indian life and especially in the health care processes of her family.
The husband (partner) only recently gained importance in the health care processes of his wife due to the acculturation of the Crow Indian people to the dominant Anglo society and the influence of modern health care services available to the Crow Indian people.

Persons with whom the women would discuss a possible need for surgery included husband (partner) for 6 women, mother for 10 women, grandmother for 1 woman, sister for 1 woman, both husband (partner) and mother for 4 women, non-family person (priest, second physician, someone who had surgery, everyone) for 4 women, and no one for 3 women. Of interest, a total of 10 women involved their husbands (partners) in the surgery discussion process and a total of 14 women involved their mother in the surgery discussion process.

Persons who would make the final decision about possible surgery for the woman included mother for 1 woman, grandmother for 1 woman, both husband (partner) and self for 3 women, both mother and self for 2 women, total of mother, husband (partner), and self for 3 women, self alone for 18 women, and no person specified by 1 woman. Of interest, a total of 6 women involved their husbands (partners) in the surgery decision process and a total of 6 women involved their mothers in the surgery decision process. Additionally, a large proportion (89.7%) of the women involved themselves in the surgery decision process.

Persons whom the women desired to be present with them during birth included husband (partner) for 12 women, mother for 5 women,
sister for 1 woman, both husband (partner) and mother for 4 women, non-family person (anyone) for 1 woman, and no one for 6 women. Of interest, a total of 16 women involved their husbands (partners) in the birth process and a total of 9 women involved their mothers in the birth process.

The women preferred husband (partner) participation to a substantially greater degree than mother participation in only the birth process. In all other health care processes and combinations of health care processes, the women preferred mother participation to a nearly equal or substantially greater degree than husband (partner) participation. Table 9 compares the women's preferences for husband (partner) or mother participation in important health care processes. Mother participation in the health care processes of the women appeared to be stronger and more consistent than the husband (partner) participation.

Clan Relationships. The pregnant Crow Indian women's different levels of knowledge about clan relationships were indicative of acculturation to the dominant Anglo society. Prior to contact with the dominant Anglo society, clan relationships were the primary source of welfare and pride among the Crow Indian people and were known to all Crow Indian people. Clan relationships were now known matrilineally by 18 women and patrilineally by 14 women. Of the women who knew their clan relationships, 4 women knew the matrilineal clan only by its Crow Indian name and 2 women knew the patrilineal clan only by its Crow Indian name. Clan relationships were not known matrilineally
Table 9

Comparison of Husband (Partner) and Mother Participation
Preferred by Pregnant Crow Indian Women

<table>
<thead>
<tr>
<th>Process</th>
<th>Husband (Partner) Participation</th>
<th>Mother Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery Discussion</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Surgery Decision</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Both Surgery Discussion and Decision</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Birth</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Both Surgery Discussion and Birth</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Both Surgery Decision and Birth</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>All -- Surgery Discussion and Decision and Birth</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

Note. Columns total more than n = 29 because each woman could desire husband (partner) or mother participation in more than one process.
by 11 women and were not known patrilineally by 15 women. All 11 women who did not know their matrilineal clan also did not know their patrilineal clan. Of the 11 women who did not know their matrilineal and patrilineal clans, 6 women believed in the clan uncle system and 5 women did not believe in the clan uncle system. Thus, 6 women were able to believe in the clan uncle system without knowing exact clan relationships.

Husband (Partner) Role in Childbearing. The pregnant Crow Indian women's desires about husband (partner) role in the childbearing process reflected the transitional role of men in Crow Indian culture. Traditionally, the husband (partner) was not involved in the childbearing process. Only recently, the husband (partner) gained importance in the childbearing process due to acculturation to the dominant Anglo society which now encouraged equality in marital relations and to the influence of the modern health care system which now encouraged the active involvement of the father in the birth process. Assistance from the husband (partner) with household chores during pregnancy was desired by 19 women; presence of the husband (partner) during the birth process was desired by 16 women; and assistance from the husband (partner) with care of the baby was desired by 26 women. However, only a small proportion (37.9%) of the women desired the participation of the husband (partner) in all three areas of household chores, birth, and baby care. Table 10 summarizes the husband (partner) participation desired by the women. Although the women desired the
Table 10

Husband (Partner) Participation Desired
By Pregnant Crow Indian Women

<table>
<thead>
<tr>
<th>Process</th>
<th>Husband (Partner) Participation</th>
<th>No Husband (Partner)(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Chores</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>Birth Attendance</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Baby Care</td>
<td>26</td>
<td>3</td>
</tr>
<tr>
<td>Household Chores and Birth Attendance</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>Household Chores and Baby Care</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>Birth Attendance and Baby Care</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>All -- Household Chores, Birth Attendance, and Baby Care</td>
<td>11</td>
<td>18</td>
</tr>
</tbody>
</table>

**Note.** Columns total more than \( n = 29 \) because each woman could desire husband (partner) participation in more than one process.

\(^a\)This category includes 3 women who were single parents due to marital status of single or divorced.
participation of the husband (partner) in the childbearing process, this desired participation was often incomplete and did not involve all aspects of childbearing.

Clay eating. The practice of clay eating during pregnancy was intended to relieve heartburn and/or food cravings related to the pregnancy. The pregnant Crow Indian women were familiar with the white chalklike clay which was found in the mountains on the Crow Indian Reservation and which was employed in clay eating. The practice of clay eating for any reason was known to occur among Indian people by 23 women and the practice of clay eating during pregnancy for heartburn and/or food cravings was known to occur among Indian women by 11 women. However, only 7 women ate or planned to eat clay during their current pregnancy for heartburn and/or food cravings and only 1 woman was undecided about whether to eat clay during this current pregnancy if heartburn and/or food cravings developed. Thus, a small proportion (27.6%) of the women still expressed some interest in eating clay during their current pregnancy.

Participation in Sweat Bath. The practice of participating in traditional sweat baths during pregnancy was intended to promote an easy delivery. The pregnant Crow Indian women expressed divided interest about participation in traditional sweat baths during their current pregnancy. The practice of participating in traditional sweat baths during pregnancy to promote an easy delivery was known to occur among Indian women by 17 women. However, only 8 women participated in
or planned to participate in traditional sweat baths during their current pregnancy and only 4 women were undecided about whether to participate in traditional sweat baths during their current pregnancy. Thus, slightly less than half (41.4%) of the women still expressed some interest in participating in traditional sweat baths during their current pregnancy.

**Lack of Preparation for Baby.** Beliefs that prevented preparation for the baby prior to birth were intended to prevent harm to the baby and were only partially adhered to by the pregnant Crow Indian women. Beliefs that prevented preparation for the baby prior to birth were held by 13 women and were denied by 16 women. Thus, slightly less than half (44.8%) of the women still expressed concern about the effects of early preparation for the baby.

**Use of Peyote in Labor.** The practice of using peyote in labor was intended to make the birth process safer and the baby healthier. The pregnant Crow Indian women expressed only limited acknowledgement of peyote use in labor. The practice of peyote use in labor was known to occur among Indian women by 10 women. However, 27 women denied all plans to use peyote in their labors and only 2 women were undecided about whether to use peyote in their labors. Thus, only a very small proportion (6.9%) of the women expressed some interest in use of peyote in their labors. Because peyote use was legal only in religious ceremonies of the Native American Church, the women were possibly hesitant to describe or acknowledge personal peyote use in
labor for fear that this use would be interpreted as illegal or harmful.

**General Birth Practices.** The pregnant Crow Indian women exhibited a variety of preferences related to traditional birth practices. Although squatting was the traditional position for birth, only 1 woman preferred squatting as the position for birth and 28 women preferred lying as the position for birth. This change in preferences for the position of birth was definitely an adaptation to birth in a modern health care system. Only 6 women desired to hold any type of traditional or religious object (Indian medicine or rosary) during birth. However, a large proportion (82.8%) of the women desired to hold the baby immediately after birth.

**General Infant Care.** Raising and caring for the baby was traditionally viewed as the responsibility of the grandparents and/or other family members. However, the plans of the pregnant Crow Indian women conflicted with this traditional practice. A large proportion (96.6%) of the women planned to raise and care for their babies. Only 1 woman planned to allow another family member to raise and care for her baby. This woman planned to allow her mother to raise and care for her baby because she wanted to return to school to complete her education. Thus, only 1 woman expressed interest in allowing another family member to raise and care for her baby.

**Saving of Cord.** Saving of the umbilical cord after it dried and fell from the baby was a traditional practice that was modified into
a variety of forms through the acculturation process. The pregnant
Crow Indian women retained a strong interest in saving the baby's cord.
Saving of the baby's cord was planned by 19 women and was being con­
sidered by 5 women. Thus, large proportion (82.8%) of the women
still expressed some interest in the saving of the baby's cord.

Use of Cradleboard. The use of a cradleboard was a traditional
means of carrying the baby. The pregnant Crow Indian women expressed
divided interest in the use of the cradleboard. Use of a cradleboard
was planned by 8 women and was being considered by 5 women. Thus,
slightly less than half (44.8%) of the women still expressed some
interest in the use of a cradleboard.

Naming of Baby. Naming the baby remained a very important part
of traditional baby care planned by the pregnant Crow Indian women
and now included both the Crow Indian name and the English name. The
giving of a Crow Indian name to the baby was being planned by 18
women and was being considered by 4 women. Thus, the majority (75.9%)
of the women expressed some interest in giving a Crow Indian name to
the baby. Persons who were designated to provide the Crow Indian name
for the 18 women who definitely planned on this traditional practice
included clan uncle for 9 women, tribal elder for 2 women, baby's
grandparents for 3 women, and no person designated yet for 4 women.
Table 11 includes a summary of persons designated by the women to
provide the Crow Indian name to the baby. Of interest, older family,
clan, or tribal members were designated to provide the Crow Indian name.
Table 11

Person Designated to Name Baby
By Pregnant Crow Indian Women

<table>
<thead>
<tr>
<th>Person</th>
<th>Number of Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Crow Indian Name</td>
</tr>
<tr>
<td>Clan Uncle</td>
<td>9</td>
</tr>
<tr>
<td>Tribal Elder</td>
<td>2</td>
</tr>
<tr>
<td>Baby's Grandparents</td>
<td>3</td>
</tr>
<tr>
<td>Husband (Partner)</td>
<td>0</td>
</tr>
<tr>
<td>Sister</td>
<td>0</td>
</tr>
<tr>
<td>Husband (Partner) and Self</td>
<td>0</td>
</tr>
<tr>
<td>Self</td>
<td>0</td>
</tr>
<tr>
<td>Undecided</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

\[ a \bar{n} = 18 \]
\[ b \bar{n} = 29 \]
Crow Indian names were to be provided anytime according to 2 women, within two weeks of birth according to 1 woman, after one year of age according to 13 women, and no time selected yet by 2 women. Thus, the majority (72.2%) of the women were going to provide Crow Indian names after one year of life. Persons designated to provide the English name included husband (partner) for 3 women, baby's grandparents for 2 women, sister for 1 woman, both husband (partner) and self for 8 women, self for 8 women, and no person designated yet for 7 women. Table 11 includes a summary of persons designated by the women to provide the English name to the baby and provides a comparison to persons designated by the women to provide the Crow Indian name to the baby. Of interest, younger family members were usually designated to provide the English name. Thus, older family members provided the Crow Indian name and younger family members provided the English name. English names were to be provided before birth according to 1 woman, immediately after birth according to 14 women, and within three days of birth according to 14 women. Thus, the majority (96.6%) of the English names were provided near the time of birth. The timing of the provision of the English name was definitely an adaptation to Montana state law requirements. Thus, Crow Indian names were usually provided after the baby reached one year of age while the English names were provided near the time of birth.

Breastfeeding. Breastfeeding was still viewed as an acceptable means of infant feeding but was no longer used as an acceptable means of
spacing children by the pregnant Crow Indian women. Breastfeeding was planned by 9 women and was being considered by 3 women. Thus, slightly less than half (41.4%) of the women expressed some interest in breastfeeding. Reasons for not breastfeeding were provided by the 17 women who were not going to breastfeeding and by the 3 women who were undecided about whether to breastfeed. Major reasons for not breastfeeding included conflicts with other responsibilities for 8 women, lack of accurate information for 4 women, previous failure for 5 women, and no reason for 3 women. Table 12 provides a further breakdown of reasons given by the women for not breastfeeding. Table 13 summarizes all traditional childbearing beliefs and behaviors.

Birth Control. Birth control preferences of the pregnant Crow Indian women reflected a combination of traditional and modern beliefs and behaviors. The total number of children desired by the women ranged from 1 to 9 with an average of 4. The desire for several children reflected the traditional importance of life and of children in the Crow Indian culture. Length of time desired until the next pregnancy occurred was identified to be of no significance for 2 women, one year for 1 woman, two years for 1 woman, and three years for 15 women. Additionally, 9 women reported that they did not desire future pregnancies. Thus, the majority (82.8%) of the women desired to postpone pregnancy for at least three years or permanently. Types of birth control to be used after delivery were modern methods and included pills by 4 women, intrauterine device by 9 women, diaphragm by
spacing children by the pregnant Crow Indian women. Breastfeeding was planned by 9 women and was being considered by 3 women. Thus, slightly less than half (41.4%) of the women expressed some interest in breastfeeding. Reasons for not breastfeeding were provided by the 17 women who were not going to breastfeeding and by the 3 women who were undecided about whether to breastfeed. Major reasons for not breastfeeding included conflicts with other responsibilities for 8 women, lack of accurate information for 4 women, previous failure for 5 women, and no reason for 3 women. Table 12 provides a further breakdown of reasons given by the women for not breastfeeding. Table 13 summarizes all traditional childbearing beliefs and behaviors.

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### Table 12

Reasons for Not Breastfeeding Provided
By Pregnant Crow Indian Women

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of Women&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict with Work</td>
<td>3</td>
</tr>
<tr>
<td>Conflict with School</td>
<td>3</td>
</tr>
<tr>
<td>Inconvenience</td>
<td>2</td>
</tr>
<tr>
<td>Inexperience</td>
<td>2</td>
</tr>
<tr>
<td>Fear of Side Effects</td>
<td>2</td>
</tr>
<tr>
<td>Previous Failure</td>
<td>5</td>
</tr>
<tr>
<td>No Reason</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<sup>a</sup> $n = 20$
Table 13

Traditional Childbearing Beliefs and Behaviors
Of Pregnant Crow Indian Women

<table>
<thead>
<tr>
<th>Tradition</th>
<th>Definite Participation</th>
<th>Undecided Participation</th>
<th>No Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clay Eating</td>
<td>7</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>Sweat Bath</td>
<td>8</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>No Preparation</td>
<td>13</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Peyote in Labor</td>
<td>0</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>Saving of Cord</td>
<td>19</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Cradleboard</td>
<td>8</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>Crow Name</td>
<td>18</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>9</td>
<td>3</td>
<td>17</td>
</tr>
</tbody>
</table>

Note. Columns total more than n = 29 because each woman could participate in more than one tradition.
2 women, rhythm by 1 woman, natural family planning by 1 woman, tubal ligation by 3 women, no method selected yet by 7 women, and no birth control desired by 2 women. No traditional means of spacing children were identified by the women.

Indicators of Traditional Life Style

Data were crosstabulated to determine if any correlations existed within the data and to identify indicators of traditional life style existing in the Crow Indian culture. Indicators of traditional life style were viewed as aspects of the culture which possessed predictive value about the types of traditional beliefs and behaviors possessed by individual women. Crosstabulations of the data included both demographic characteristics and traditional beliefs and behaviors of the pregnant Crow Indian women.

Demographic characteristics of the women were crosstabulated with traditional beliefs and behaviors of the women to determine if any correlations existed. No correlations were found between these data. An explanation for this lack of correlation between demographic characteristics and traditional beliefs and behaviors of the women related to the independence of individual demographic characteristics and individual beliefs and behaviors. The Crow Indian people accepted a variety of modern life styles without rejecting their traditional beliefs and behaviors. Changes in individual demographic characteristics of the women did not affect changes in individual beliefs or
behaviors and were not indicative of individual beliefs and behaviors.

Traditional beliefs and behaviors of the women were crosstabulated to determine if any specific patterns of beliefs and behaviors existed. No specific patterns were found within these data. An explanation for this lack of specific patterns among traditional beliefs and behaviors of the women related to the acculturation of the Crow Indian people. The Crow Indian people were in a transitional stage of acculturation and manifested a combination of traditional and modern beliefs and behaviors. Individual traditional beliefs or behaviors were observed by the women without being a part of a traditional life style and were not indicative of a traditional life style.

The strength of certain traditional beliefs and behaviors, as evidenced in statistical frequencies in the structured interviews of the pregnant Crow Indian women and emphasized in ethnographic explanations in the unstructured interviews of the key informants, suggested that indicators of traditional life style existed within the data. The emphasis placed on the importance of the clan uncle was especially suggestive of the clan uncle's influence in the Crow Indian culture and of the clan uncle's potential value as an indicator of traditional Crow Indian life style. The existence of other potential indicators and/or combinations of potential indicators of traditional life style was also possible.

Overall, indicators of traditional life style in the Crow Indian
culture were not found through the crosstabulation analysis. Indicators were not found because the sample size was too small and the data analysis method did not allow for combinations of variables. However, the emphasis placed on certain traditional beliefs and behaviors in the structured interviews of the pregnant Crow Indian women highly suggested the presence of indicators of traditional life style. These potential indicators included the belief in the clan uncle, the use of cedar and sage, and participation in sweat baths.

**Traditionalism Assessment**

Traditionalism assessments of the pregnant Crow Indian women were done to determine the effectiveness of using responses to the structured interview questions as a basis for determining the belief categories of the women. Belief categories were viewed as being on a continuum ranging from traditional to modern and included specific categories of traditional (defined as maintaining the beliefs and behaviors that have persisted for generations), transitional (defined as maintaining some of the beliefs and behaviors that have persisted for generations but also developing some of the new beliefs and behaviors that are consistent with the current life style), and modern (defined as developing the new beliefs and behaviors that are consistent with the current life style). Each pregnant Crow Indian woman rated herself at the conclusion of the interview based on her perception of her belief system. The author rated the woman before the interview based on the presence or absence
of any form of traditional Crow Indian culture observed in the woman's home environment and again after the interview based on the woman's responses to the structured interview questions. Additionally, a culturally knowledgeable Crow Indian woman who knew all the pregnant women rated each woman prior to the initiation of the interviews based on previous knowledge of the behavior of the woman and her families.

The ratings provided by the pregnant Crow Indian women themselves included 23 women perceiving themselves as transitional, 5 women perceiving themselves as modern, and 1 woman unable to determine her belief perceptions. No women perceived themselves as traditional. Thus, a large proportion (79.3%) of the women acknowledged a strong transitional role that incorporated both traditional and modern beliefs and behaviors. The transitional role allowed the women to maintain both traditional and modern beliefs and behaviors and to avoid any stress related to the total rejection of traditional culture. Of interest, 2 women who denied all belief in traditional Crow Indian religion and 2 women who denied all belief in the influential and respected clan uncle still perceived themselves as transitional. Thus, a small proportion (13.8%) of the women were hesitant to totally reject their traditional culture even though they denied major beliefs related to traditional Crow Indian religion. The modern ratings were provided by the women who denied all belief in traditional Crow Indian religion and who did not participate in any traditional ceremonies or social occasions. No traditional ratings were provided by the women because all the women
incorporated some aspects of modern beliefs and behaviors into their life styles.

The ratings of the pregnant Crow Indian women provided by the author before the interview and based on observation of traditional culture in the home environment included 1 woman rated as traditional, 23 women rated as transitional, and 5 women rated as modern. This set of ratings did not correspond significantly with any of the other sets of ratings provided by the pregnant women themselves, the author after the interviews, or the culturally knowledgeable Crow Indian woman. Although the ratings acknowledged a strong transitional role among the women, the transitional ratings for individual women did not correspond significantly with other individual ratings. These ratings were not effective in determining the belief categories of individual women.

The ratings of the pregnant Crow Indian women provided by the author after the interview and based on responses to the structured interview questions included 19 women rated as transitional and 10 women rated as modern. No women were rated as traditional after the interviews. Thus, the author acknowledged that a large proportion (65.5%) of the women maintained a transitional role that incorporated both traditional and modern beliefs and behaviors and that was similar to the transitional ratings provided by the women themselves. However, the author used the transitional rating slightly less frequently than the women and did not rate the women as transitional
unless they indicated a belief in traditional Crow Indian religion or in the use of the clan uncle. The modern rating was used for the women who denied all belief in traditional Crow Indian religion or in the use of the clan uncle. No traditional ratings were provided by the author because all the women exhibited some aspects of modern beliefs and behaviors in their life styles. The author's ratings corresponded with the ratings of the women themselves for 19 of the transitional ratings and for 5 of the modern ratings. A small proportion (17.2%) of the author's ratings after the interviews did not correspond with the women's perceptions.

The ratings of the pregnant Crow Indian women provided by the culturally knowledgeable woman and based on previous knowledge of the behavior of the women were the most diverse and included 6 women rated as traditional, 9 women rated as transitional, and 14 women rated as modern. This set of ratings did not correspond significantly with any of the other sets of ratings provided by the women themselves, the author before the interviews, or the author after the interviews and did not acknowledge a strong transitional role among the women. These ratings were not effective in determining the belief categories of the women.

Overall, the traditionalism assessment indicated significant correspondence between the belief perceptions of the pregnant Crow Indian women themselves and the ratings by the author after the interviews and based on responses to the structure interviews. Table 14
Table 14

Traditionalism Assessment Ratings
For Pregnant Crow Indian Women

<table>
<thead>
<tr>
<th>Rater</th>
<th>Traditional</th>
<th>Transitional</th>
<th>Modern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant Women</td>
<td>0</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>Author Pre-Interview</td>
<td>1</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>Author Post-Interview</td>
<td>0</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>Crow Indian Woman</td>
<td>6</td>
<td>9</td>
<td>14</td>
</tr>
</tbody>
</table>

Note. The ratings of the author after the interviews corresponded with the ratings of the pregnant women themselves for 24 of the 29 women. This included correspondence for 19 transitional ratings and 5 modern ratings.
summarizes the traditionalism assessment ratings of the women. The ratings by the author before the interview were not effective because these ratings were based only on incidental observation, and the ratings by the culturally knowledgeable Crow Indian woman were not effective because these ratings were based only on previous behavior. The traditionalism assessment ratings based on the responses to the structured interviews were most indicative of the belief perceptions of the women because these ratings were based on systematic questioning. This form of traditionalism assessment offered the potential of becoming an accurate and reliable means of determining the belief categories of the women.

Supplementary Comments of Pregnant Crow Indian Women

Fourteen pregnant Crow Indian women voluntarily provided supplementary comments and data to explain their answers to the structured questions. The women expressed the desire to provide more information in order to clarify their answers and in order to avoid misinterpretation of meaning. Supplementary data centered on topics that were of major importance or of special interest to the women.

The pregnant Crow Indian women provided many comments about traditional Crow Indian religion. These comments included:

Faith, not religion, is important. It is what you feel—not what you do.

I respect the traditional Indian religion, but I do not participate in it. I must cope with the modern world.
Everyone has his own beliefs. A person must do what he believes.

The women also provided additional comments about the combinations of religions they practiced. These comments included:

Some religions like the Pentecostal are too strict. They won't allow us to practice our Indian ways.

Various religions in one person or one family are okay. There is no conflict. My grandfather is a medicine man. Other people go to him but we don't. It's still okay. We all get along.

The women emphasized that variety in religious practices was well accepted even within close family relationships.

The pregnant Crow Indian women volunteered comments about their lack of specific knowledge of their clans. The women providing these comments were young and did not know to what clan they belonged. These women explained that it was not "really necessary" for them to know the names of their clan or to personally know their clan uncles. If they were in need of a clan uncle to pray for them, they would go to their parents or grandparents who would then select the proper clan uncle and who would make all the arrangements for the praying. Parents or grandparents would also take care of paying the clan uncle for the services.

The pregnant Crow Indian women explained that the presence of a non-Crow Indian husband (partner) often determined whether the Crow Indian language was spoken in their home. As one woman clarified, "We would speak Crow all the time but my husband does not understand it. When he is gone, we speak Crow."
Individual comments from the pregnant Crow Indian women related to specific beliefs and behaviors affecting childbearing practices. These individual comments usually explained or expanded the personal beliefs and behaviors of the individual women.

One pregnant Crow Indian woman explained that men in her family were expected to maintain a very masculine role and were not allowed to do any kind of feminine work. The reason for this very masculine role was related to demands of her grandfather's Indian medicine. The woman believed that men in other families could participate in some forms of feminine work "if it was not against their family's Indian medicine".

The pregnant Crow Indian women also gave explanations about the amount of clay they consumed. Amounts averaged about "a half teaspoon a day" or "a chunk the size of an orange lasts a month". Only one woman admitted "eating a lot at one time". She explained further, "I crave it. I just can't get enough. Then suddenly I stop and I don't want it anymore."

One pregnant Crow Indian woman explained that she would like to participate in traditional sweat baths more frequently but was not able to do so because the family did not have its own sweat lodge. She said, "I would use the sweat bath more often if I could. Right now I have to wait to be invited to participate."

One pregnant Crow Indian woman stated that she did not believe in getting things ready for the baby before birth but admitted that she had
just recently bought "a few clothes" for the baby. She clarified, "I thought I was going to deliver early. My husband and my sisters are all gone. There would be no one here to help me." She stressed that she bought just enough clothes to "get by" until the family returned.

One pregnant Crow Indian woman explained the circumstances of the death of a previous baby. She stated, "My baby was ill from birth. My grandmother said to give her away. My grandmother told me I could always buy her back when she got better. I didn't believe my grandmother and I didn't do it. My grandmother says that is why my baby died."

One pregnant Crow Indian woman clarified her indecision about the use of peyote in labor. She stated that she would "probably take peyote if a clan uncle said to".

One pregnant Crow Indian woman expanded her ideas about saving the baby's cord. She planned to give the cord and a piece of her grandfather's Indian medicine to the child to wear when it entered the teenage years. This woman believed that the teenage years were a very stressful and potentially dangerous period in life and that the cord and Indian medicine would protect the child from harm.

One pregnant Crow Indian woman expanded her ideas about the Crow Indian naming practice. She planned to delay the Crow Indian naming practice until the teenage years. This woman also believed that the teenage years were a very stressful period in life and that the giving of a Crow Indian name at that time would provide a goal in life for the child.
The pregnant Crow Indian women provided suggestions about how the nurse could help them during pregnancy. Several major functional suggestions were provided. These major functional suggestions would have the nurse do the following:

1) Make home visits to discuss pregnancy, to explain the labor and delivery process, and to teach infant care practices;
2) Provide reassurance about the labor process;
3) Provide comfort during labor;
4) Remain with the woman throughout the entire labor and delivery process instead of leaving the woman at the end of the work shift; and
5) Check the woman's condition frequently and explain things to her throughout the hospitalization.

The women providing these suggestions admitted that these suggestions were related to their concerns and/or fears about the pregnancy and birth processes. The women believed that the nurse could be very helpful in relieving anxiety and in providing factual information. A few minor structural suggestions were also provided. These minor structural suggestions would have the nurse do the following:

1) Provide afternoon (rather than early morning) prenatal clinics;
2) Allow all family members to visit the new mother and baby in the hospital; and
3) Take pictures of the baby at birth.

The women providing these suggestions believed that these suggestions improve their relationship with modern health care services. The women did not identify the role of the nurse in meeting their cultural health needs during pregnancy and birth. The women viewed the nurse as part of the modern health care system and did not appear to realize that the nurse possessed the concern and the ability to assist them in meeting their cultural health needs.

Data from the second stage of the study were developed into a statistical description of contemporary childbearing practices among Crow Indian women today. Childbearing remained an important part of the Crow Indian woman's life and of the Crow Indian family's life. Many traditional beliefs and behaviors affecting childbearing practices still existed among the Crow Indian people today. However, contemporary childbearing practices were now adhered to by Crow Indian women according to their degree of acculturation to the dominant Anglo society and were observed in many different forms and in varying degrees. The majority of the Crow Indian women exhibited a strong transitional role between traditional Crow Indian culture and the modern Anglo society.
Chapter 6

CONCLUSION

The findings of this study identified and described contemporary childbearing practices of Crow Indian women and their families. Beliefs and behaviors in traditional and modified form appeared to influence contemporary childbearing practices and Crow Indian life in general and were suggestive of a strong transitional life style of the Crow Indian people. Respect for and/or participation in combinations of traditional practices were suggestive of the type of life style practiced by individual Crow Indian people. The findings of this study supported the general concept that culture is a major variable in the determination of health and in the utilization of health care services. Additionally, the findings of the study provided implications for professional nursing practice in general and on the Crow Indian Reservation and identified many areas of concern that require further research.

Summary and Conclusions

The findings of this study suggested that the majority of the Crow Indian people were transitional in life style between traditional Crow Indian culture and the modern Anglo society and were influenced by a wide variety of both traditional and modern beliefs and behaviors.
This transitional life style applied to all aspects of Crow Indian life including health and childbearing practices and indicated that many traditional beliefs and behaviors affected current health and childbearing practices of the Crow Indian people. Respect for and participation in several practices of traditional Crow Indian culture suggested a life style that was more traditional than modern.

Life styles are determined by belief systems and are identified through specific behaviors. Life styles exist on a continuum ranging from traditional to modern with the transitional range occurring midway between the two ends of the continuum. The transitional range incorporates many forms and varying degrees of beliefs and behaviors from both the traditional and the modern life styles. The transitional range allows individuals to form a neutral relationship with both conflicting life styles and to maintain beliefs and behaviors of value from both life styles. Within the transitional range, expressions of either traditional or modern beliefs and behaviors emerge and dominate or exist in approximately equal proportions.

The majority of the Crow Indian women perceived themselves as maintaining a strong transitional role between traditional Crow Indian culture and the modern and dominant Anglo society. The author also perceived the Crow Indian women as maintaining a strong transitional role based on the women's responses in the interviews. This transitional role allowed the women to maintain both traditional and modern beliefs and behaviors and to avoid any stress related to total
rejection of traditional culture.

The transitional role of the Crow Indian women exhibited a wide variety of beliefs and behaviors and included many forms and varying degrees of traditional and modern life styles. Some women were closer to the traditional end of the transitional range and exhibited primarily traditional life styles; other women were about midway in the transitional range and exhibited approximately equal proportions of traditional and modern life styles; and still other women were closer to the modern end of the transitional range and exhibited primarily a modern life style.

Belief in the clan uncle, use of cedar or sage, and participation in sweat baths were major traditional practices that continued to strongly influence the Crow Indian culture today. These traditional practices contained strong themes of traditional Crow Indian religion and continued to exist even while other non-traditional religions were accepted and vigorously practiced. Thus, the Crow Indian women appeared to be able to incorporate many diverse religious beliefs and behaviors into their transitional life style.

Totally traditional life styles failed to survive in the Crow Indian culture because all the women incorporated some aspects of modern beliefs and behaviors into their life style. Totally modern life styles were established in only a small proportion of the women who rejected all respect for and all participation in traditional beliefs and behaviors.
In terms of childbearing practices, the majority of the Crow Indian women demonstrated a strong transitional role between traditional Crow Indian culture and the modern health care system. This transitional role exhibited a wide variety of beliefs and behaviors and included many forms and varying degrees of traditional and modern childbearing practices. Each woman individually selected the practices which were of value to her and in which she wished to participate.

The Crow Indian women maintained those traditional practices which were believed to promote the health and well-being of the woman and the baby (i.e., saving of cord, providing a Crow Indian name) and utilized those modern practices which made pregnancy and birth easier and safer (i.e., delivery in the hospital) or which were highly encouraged or popularized by modern health care systems (i.e., husband or partner participation in the birth process). Saving of the baby's umbilical cord and providing a Crow Indian name to the baby were major traditional childbearing practices that continued to strongly influence the Crow Indian culture today. These traditional practices provided a means to ensure the health and well-being of the baby and continued to exist even while other modern practices were accepted and utilized. Thus, the Crow Indian women appeared to be able to participate in a wide variety of traditional and modern childbearing practices.

Totally traditional childbearing practices failed to exist in the Crow Indian culture because all the women chose to deliver in the hospital setting under the control of modern health care professionals.
Totally modern childbearing practices were established only in a small proportion of the women who rejected all respect for and all participation in traditional childbearing practices.

Childbearing practices related to prenatal care and to infant care appeared to demonstrate the greatest retention of traditional beliefs and behaviors. Even if Crow Indian women accepted modern health care services for prenatal care and for infant care, the women were not directly controlled by modern health care professionals and were able to maintain many traditional practices in original or minimally modified form. Traditional practices of clay eating and participating in sweat baths existed with little or no modification; the traditional naming practice remained very popular and expanded to include the English name; and the traditional saving of the cord included additional methods of preservation or disposal. Other traditional practices such as lack of preparation for the baby, use of the cradleboard, and breastfeeding still existed in varying degrees. Thus, retention of traditional practices related to prenatal care and to infant care continued even when modern health care services were accepted.

Childbearing practices related to labor and delivery appeared to demonstrate the least retention of traditional beliefs and behaviors. All Crow Indian women now delivered in the hospital under the direct control of modern health care professionals. Traditional practices related to labor and delivery were greatly modified and/or omitted in
order to adapt to delivery in a modern health care system. The traditional position for birth was practically non-existent; the traditional use of clan uncle prayers and peyote use in labor was seldom present and/or greatly disguised; and the traditional role prohibiting the husband's (partner's) presence during the birth process was rapidly changing toward acceptance of the modern role of actively involving the husband (partner) in the birth process. Thus, traditional childbearing practices related to labor and delivery appeared to be greatly modified and/or omitted when modern health care services were accepted.

The Crow Indian women participated in a wide variety of traditional and modern childbearing practices. Traditional beliefs and behaviors affecting childbearing practices retained the greatest influence when not in direct conflict with and/or not under the direct control of the modern health care system. The Crow Indian women appeared to prefer the transitional role in childbearing whenever possible.

Two major factors appeared to be responsible for the strongly transitional role of the Crow Indian people. These major factors were the general ideological theme of traditional Crow Indian religion which encouraged tolerance and individuality and the acculturation of the Crow Indian people to the Anglo society.

The first factor that allowed the Crow Indian people to develop a strong transitional role was the general ideological theme of traditional Crow Indian religion. Traditional Crow Indian religion allowed and encouraged ideological tolerance and individuality and was practiced
in many forms and to varying degrees. The traditional Crow Indian religion encouraged each person to seek and develop a personal and unique belief system and to manifest this belief system through individualized behaviors. Crow Indian people were free to participate (or not participate) in a variety of traditional religious practices which included but were not limited to prayers of the clan uncle, use of the medicine man, participation in sweat baths, fasting in the Sun Dance, and adoption into the Tobacco Society. As additional religious practices were introduced into the Crow Indian culture by the Anglo society or by other Indian tribes, the Crow Indian people were again free to participate (or not participate) in a variety of new religious practices.

Each Crow Indian person retained the traditional religious practices that provided the individual opportunity for spiritual power and reassurance of well-being and also accepted new religious practices that expanded the possibilities of obtaining such spiritual power and well-being.

The anthropological works of both Lowie and Frey substantiated the effects of traditional Crow Indian religion on individual Crow Indian people. Lowie (1956) clearly defined the theme of Crow Indian religion when he described the Crow Indian as being "absolutely free in his religious life" (p. 254) and as being "guided only by his own specific vision" (p. 254). Frey (1974) portrayed the tolerance characteristic of Crow Indian religion when he described the ability of multiple religious beliefs and practices to exist within one individual
without "contradiction in one's own mind or social pressure from others" (p. 4).

Traditional religion was the major influence in Crow Indian culture and pervaded all aspects of Crow Indian life. The general ideological theme of traditional Crow Indian religion that allowed and encouraged tolerance and individuality in beliefs and behaviors also pervaded all aspects of Crow Indian life. The Crow Indian people were free to participate (or not participate) in a variety of traditional and modern practices and to develop a unique and personalized life style which incorporated both traditional and modern beliefs and behaviors. Thus, the Crow Indian people appeared to easily adapt to a transitional life style.

Although the Crow Indian people easily incorporated a variety of traditional and modern beliefs and behaviors into their transitional life styles, conflicts arose when individual needs were ignored or denied by the dominant Anglo society. Individual Crow Indian people often experienced frustration in dealing with the complex bureaucracy of the modern Anglo society. Burnette and Koster (1974) quoted Susie Yellowtail, the first Crow Indian registered nurse, who believed that the Crow Indian people were returning to the use of the medicine man because the medicine men "are always sympathetic to the patient and always available" (p. 97).

The second factor that allowed the Crow Indian people to develop a strong transitional role was acculturation of the Crow Indian people
to the Anglo society. Acculturation of the Crow Indian people occurred during their long and peaceful contact with the dominant Anglo society. The Crow Indian Tribe always developed and maintained friendly relationships with the Anglo society and was never at war with the United States. The placement of the Crow Indian people onto a reservation and the subsequent decrease in the amount of reservation lands allowed the Anglo society to dominate the Crow Indian people and to influence many of their traditional practices and life styles. The Crow Indian people managed to retain a strong cultural identity and to preserve many traditional beliefs and behaviors. The Crow Indian people appeared to retain traditional practices where possible and where culture was protective and enriching and to accept and adapt to the dominant Anglo society in areas where change was beneficial, practical and/or forced.

The description of the acculturation of Indian people in general, as interpreted by American Indian health care professionals, was compatible with the acculturation process occurring in the Crow Indian people. Farris (1978) emphasized that Indian people were all in different stages of acculturation and that retained traditions offered usefulness and/or enrichment to life.

Acculturation was a long, difficult, and unending process for the Crow Indian people. The Crow Indian people were only able to preserve the traditional practices that did not conflict with the dominant Anglo society or that were hidden from view of the Anglo society. Many practices in the Anglo society created conflicts for the Crow Indian
people. As Medicine Crow (1939) summarized:

No matter how fully a Crow may understand the white man's world and adapt himself to it, he will never find the real nature of it. Until the Indian is completely assimilated into the white man's world, he will continue to have his problems. His problem is a human problem and not a race problem. (p. 107)

Variations of the transitional role of the Crow Indian people appeared to exist and to be identifiable through certain specific beliefs and behaviors. Some transitional life styles of the Crow Indian people appeared to incorporate certain specific beliefs and behaviors indicative of a more traditional viewpoint. The influence of the clan uncle appeared to be the most powerful traditional force that still existed today. The power of the clan uncle arose from the role of protection and pride and from the ability to supersede all other religious beliefs. The clan uncle served the Crow Indian people without mandating the presence of any other specific beliefs and/or behaviors.

The anthropological works of both Medicine Crow and Frey substantiated the importance of the clan uncle in Crow Indian culture. Medicine Crow (1980) emphasized the power of the clan system by describing the clan needs as being of "first priority" in Crow Indian life. The influence of the clan uncle was derived from the power of the clan and functioned to maintain tribal honor and pride and to serve as role models for the Crow Indian people. Frey (1979) described the role of the clan uncle as providing "praise, prayer, and protection" (p. 74) to the individual Crow Indian people and the power of the clan uncle as
superceding all other religious beliefs. Frey interpreted the clan uncle relationship as the "minimal requirement" (p. 73) for participating in the Crow Indian culture.

Belief in the clan uncle did not appear, however, to be the sole determining factor for participation in the more traditional life styles of Crow Indian culture today. A few Crow Indian women perceived themselves as maintaining a transitional belief system without respecting or using the clan uncle, and a few women expressed respect for the clan uncle without participating in any other traditional practices. Thus, other factors were also involved in the determination of Crow Indian life style.

Although the clan uncle appeared to be the most powerful force of traditional Crow Indian culture, other traditional practices also exerted strong influence on the Crow Indian people. The use of cedar and sage to keep evil spirits away from the family and the participation in sweat baths as a means of prayer both were strong forces that still existed in traditional Crow Indian culture today.

Respect for or participation in only one practice of traditional Crow Indian culture was not indicative of strong traditional beliefs and behaviors and suggested a life style that was more modern than traditional. In contrast, however, respect for and participation in several practices of traditional Crow Indian culture appeared to be indicative of strong traditional beliefs and behaviors and suggested a life style that was more traditional than modern. Combinations of
practices of traditional Crow Indian culture that appeared to possess potential predictive value for the more traditional life styles of Crow Indian culture included the belief in the clan uncle, use of cedar and sage, and participation in sweat baths.

The potential existence of indicators of traditional life style offered the modern health care professional the opportunity to develop and implement a means of systematically assessing the cultural health needs of individual Crow Indian people and of providing consistent holistic health care to the Crow Indian people. Crow Indian people with more traditional life styles maintained many traditional beliefs and behaviors about health and childbearing. With the potential means to accurately determine the types of life styles present in the Crow Indian people and with a scientific body of knowledge about traditional Crow Indian culture, the modern health care professional can possess the ability to predetermine what health care services are acceptable to Crow Indian people and what modifications in services are required to meet cultural needs. Thus, through knowledge and research, modern health care services that are compatible with traditional beliefs and behaviors of the Crow Indian culture and that meet the unique needs of individual Crow Indian people can be provided.

Limitations of Study

This study exhibited some limitations that affected the interpretation of the findings. Limitations included the following:
1) The findings of this study were specific to the Crow Indian Tribe and could not be generalized to other Indian people.

2) The data of the study were obtained from personal interview rather than empirical observation.

3) The author could have misinterpreted or failed to record some of the interview data of the study.

4) The key informants and the participants of the study could have provided information based on idealism and pride rather than on reality.

5) The key informants and the participants of the study could have failed to provide information about very common beliefs and behaviors that were not recognized as important or unique, about very personal beliefs and behaviors that were not easily shared with a non-Indian interviewer, or about very sacred beliefs and behaviors that were not verbalized due to cultural taboos.

The above limitations are common to the interview process and exist to varying degrees in all interviews. Efforts were made to obtain as accurate and as complete data as possible within the limitations of the interview process.

Implications for Professional Nursing Practice

The findings of this study provided many implications for
professional nursing practice. These implications included general concepts applicable to all professional nursing practice and specific facts applicable to professional nursing practice on the Crow Indian Reservation.

The findings supported the general concept that culture is a major variable in the determination of health and in the utilization of health care services. All people are affected by some form of cultural health beliefs and behaviors. These culturally induced practices are not always compatible with modern health care services and often determine the degree to which modern health care services are accepted or rejected. Systems of cultural rules for behavior are very complex and their manifestations exist in widely varying forms within any cultural group. Some people maintain all old traditions and reject all modern practices; other people maintain a combination of old traditions and modern practices; and still other people reject all old traditions and maintain all modern practices. Professional nursing practice needs to initiate communication respectful of health beliefs and behaviors of people and to involve cultural groups in the planning and implementing of specific health programs in order to provide quality health care consistent with the unique needs of the people served.

Traditional beliefs and behaviors that affect health and childbearing in the Crow Indian culture exert influence on professional nursing practice on the Crow Indian Reservation. It is essential that professional nurses practicing on the Crow Indian Reservation recognize,
understand, and respect traditional beliefs and behaviors that affect
the health and childbearing practices of the Crow Indian people and
that determine the extent of acceptance or rejection of modern health
care services by the Crow Indian people. Many Crow Indian people main­
tain traditional beliefs and behaviors, others develop a combination
of traditional and modern beliefs and behaviors; and still others
accept modern beliefs and behaviors. It is essential that the profes­
sional nurse practicing on the Crow Indian Reservation develop skill in
conducting cultural assessments and in modifying health care to meet
unique cultural needs.

Traditional beliefs and behaviors that affect childbearing practices
in the Crow Indian women and that need to be recognized and considered
by the professional nurse practicing on the Crow Indian Reservation
include the following:

1) Some Crow Indian women express concerns and/or fears about
pregnancy and the birth process and desire factual informa­
tion and reassurance from the professional nurse in order
to relieve anxiety.

2) Some Crow Indian women eat clay during pregnancy in order
to relieve food cravings and heartburn. These women require
careful nutritional assessments with specific questions about
clay eating and individualized counseling about nutritional
needs and about alternative methods of relieving heartburn.

3) Some Crow Indian women do not believe in getting things ready
for the baby before birth. Instructions about preparation for the baby and about infant care can be omitted or modified until after delivery if the woman does not believe in getting things ready for the baby before birth.

4) Some Crow Indian women maintain strong beliefs about modesty and need as much privacy as possible during pelvic examination and during the birth process.

5) Some Crow Indian women maintain close relationships with their mothers and desire the mother's involvement in important health processes. The mother can be involved in important health processes of the woman if this is the choice.

6) Some Crow Indian women want family members other than the husband (partner) to be present during the birth process and need assistance in exploring which family member can provide the most support during the birth process. The opportunity for the husband (partner) to participate in the birth process can be offered but not overly stressed in order that the woman remain free to decide who will be with her during the birth process.

7) Some Crow Indian women use peyote during labor. The basic physiological effects of peyote on the woman and the baby need to be considered during the administration of other medication and during the birth process. Recognition and acceptance of peyote use as a religious and health practice can promote
communication that accurately determines the amount of peyote ingested.

8) Some Crow Indian women want to hold the baby immediately after birth. The opportunity to hold her baby immediately after birth can be offered to the woman but not required if the woman is hesitant.

9) Some Crow Indian women want to save the umbilical cord when it dries and falls from the baby. The women can be encouraged to specify the length of the cord to remain on the baby if this is a major concern. If the baby is in the hospital when the cord falls from the body, wishes about disposal of the cord need to be determined.

10) Some Crow Indian women involve many family members in the care of the baby. Bonding between the baby and significant family members who will be providing care to the baby can be allowed and encouraged.

11) Some Crow Indian women "throw the baby away" if it is ill. Involved social agencies, referral hospitals, and/or newborn intensive care units especially require basic information about the Crow Indian culture in order that cultural behaviors are not misinterpreted and in order that cultural needs are respected and met.

12) Some Crow Indian women are hesitant to breastfeed due to inaccurate information or inexperience and need accurate
information about breastfeeding and encouragement about their ability to breastfeed.

13) Some Crow Indian women want large families and require sensitive and individualized information about spacing pregnancies. Traditional beliefs and behaviors require recognition, respect, and consideration from the professional nurse in order that modern health care services are provided in a manner that is compatible with Crow Indian culture and that is acceptable to the Crow Indian people.

**Recommendations for Future Study**

The findings of this study identified many areas of concern that require further research. Areas identified for future research through refinement and expansion of this study methodology included studies for the following purposes:

1) To determine if any correlations exist between demographic characteristics and traditional beliefs and behaviors affecting childbearing practices or within traditional beliefs and behaviors affecting childbearing practices;

2) To evaluate the effectiveness of using indicators and traditionalism assessments in determining the belief categories and life styles of the Crow Indian women;

3) To determine the effects of separation from the reservation and the Crow Indian culture on the traditional beliefs and behaviors that affect childbearing practices of Crow Indian
women residing off the reservation; and

4) To determine the existence of traditional beliefs and behaviors that affect childbearing practices in other Indian women and to identify similarities and differences in traditional beliefs and behaviors that affect childbearing practices among different Indian tribes.

Other areas identified for future research included studies for the following purposes:

1) To explore and describe the existence of traditional beliefs and behaviors that affect other major life events such as puberty, illness, or death and to identify patterns of traditional beliefs and behaviors that affect all life events and all health practices;

2) To explore the effects of traditional beliefs and behaviors of Indian people on the acceptance or rejection of modern health care practices or services;

3) To determine the extent of clay eating practices in the Crow Indian people, to investigate the effects of clay eating on the physical and mental health of the Crow Indian people, and to analyze the clay for chemical and parasitic content;

4) To investigate the effects of beliefs such as not getting ready for the baby before birth or as "throwing the baby away" on infant bonding; and

5) To determine the extent of peyote use in labor by Crow Indian
women, to investigate both the physiological effects of peyote use on the labor process and on the unborn child and the psychological effects of peyote use on the woman's ability to cope with the labor process, and to investigate interview techniques that convey respect of the Native American Church as a religion and that elicit accurate answers about peyote use in labor.

Through future research, knowledge of the Crow Indian culture can be expanded and modern health care services acceptable to the Crow Indian people can be developed.

The findings of this study clearly indicated that the Crow Indian people were in a transitional life style between traditional Crow Indian culture and the modern Anglo society and were influenced by a wide variety of both traditional and modern beliefs and behaviors. Traditional beliefs and behaviors continued to influence Crow Indian life and appeared to possess a potential predictive value about the type of life style practiced by individual Crow Indian people. The findings of this study indicated that, through knowledge and further research, the modern health care professional can acquire the ability to provide holistic health care acceptable to the Crow Indian people. Overall, the findings of this study contributed to both the theoretical understanding of the role of culture as a variable in the determination of the health of the Crow Indian people and the practical implementation of
modern health care services compatible with traditional beliefs and behaviors of the Crow Indian culture.


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Appendix A

Letter of Request to Use Structured Interview Presented to Nurse-Midwife Group on Navajo Indian Reservation

Letter of Permission to Use Structured Interview Obtained from Nurse-Midwife Group on Navajo Indian Reservation
March 24, 1980

Mrs. B. Carol Milligan, C.N.M.
Chief, Nurse-Midwifery Branch
Navajo Area Indian Health Service
P. O. Box G
Window Rock, Arizona 86515

Dear Mrs. Milligan:

I am a graduate nursing student in the Masters of Nursing program at Montana State University and am working under the advisement of Dr. Jacqueline Taylor in developing my thesis project. As my thesis project, I am investigating traditional cultural variables related to and influencing pregnancy and birth among the Crow Indians. I have chosen the Crow Indians because the Crow tribe continues to value and maintain its culture and its native language, because the potential for improvement of maternal child health through the understanding and the consideration of the Crow Indian culture exists, and because I am knowledgeable of the basic Crow Indian culture as a result of my five years experience as community health nurse on the Crow Indian Reservation.

Dr. Taylor has informed me that you are conducting a very similar study among the Navajo Indians. She has shared a copy of the rough draft of your questionnaire for this study with me.

I would like permission to use your questionnaire among the Crow Indians. In return for the use of your questionnaire, I would furnish you with a copy of the data I obtain and a copy of my completed thesis. I am in need of the finalized version of the questionnaire if you approve this request.

Thank you for your consideration in this matter.

Yours very truly,

Rita M. Harding
P. O. Box 64
Edgar, Montana 59026

cc: Dr. Jacqueline Taylor
Miss Rita M. Harding
P.O. Box 64
Edgar, Montana 59026

Dear Rita:

I am in receipt of your letter of March 24th requesting permission to use the research questionnaire developed by our investigators for your study. This had been previously discussed among the investigators and it was determined that permission would be granted as long as credit was given to the research investigators in any written material that may be prepared either as your graduate thesis or in articles for publication. The final draft of this questionnaire is presently being typed and I will send you a copy of it along with the finalized instructions that were developed which also include our definitions.

I think your study sounds very exciting and I would be most interested in receiving a copy of your finalized study. It had been the hope of our investigative group that the questionnaire could be utilized in other areas and by different types of nursing personnel to examine cultural influences upon the provision of health care. I'm pleased we are able to assist you. I will try to get you the revised questionnaire as soon as it has been typed.

Sincerely,

Carol Milligan
Chief, Nurse-Midwifery Branch
Indian Health Service
Window Rock, Arizona 86515

BCM: dm: 4/18/80
Appendix B

Structured Interview With Definitions
PRE-INTERVIEW INFORMATION FORM

(Data to be gathered from health record, from observation, and from participant interview)

Community
1. Crow Agency
2. Lodge Grass
3. Hardin
4. Wyola
5. Pryor
6. St. Xavier

Area of residence
1. Community (home served by organized water and/or sewage system)
2. Remote area (home served by individual well and septic tank)

Age
Specify

Marital status
1. Single
2. Legally married
3. Living together (mutual consent or understanding in which both members live as man and wife without undergoing a traditional, religious, or civil ceremony)
4. Divorced

Educational background
Specify

Employment status
1. Unemployed
2. Student
3. Military
4. Clerical
5. Technical
6. Laborer
7. Professional

Race of husband (Partner)
1. Enrolled Crow Indian
2. Non-enrolled Crow Indian
3. Non-Crow Indian
4. White
5. Other -- Specify
6. Unknown

Age of husband (partner)
   Specify

Educational background of husband (partner)
   Specify

Employment status of husband (partner)
   1. Unemployed
   2. Student
   3. Military
   4. Clerical
   5. Technical
   6. Laborer
   7. Professional
   8. Unknown

Time of first prenatal care
   1. First trimester
   2. Second trimester
   3. Third trimester

Month of pregnancy this interview occurred
   Specify

Gravida
   Specify

Para
   Specify

Previous abortions (spontaneous or elective)
   Specify

Number of living children
   Specify

Prenatal risk factors
   Specify

Style of home
   1. Government
   2. Trailer
   3. Other -- Specify
Living arrangement in home
1. Own home
2. Living with another family

Water system in home
1. Community system
2. Well
3. None -- broken plumbing
4. None -- never existed

Toilet in home
1. Functional
2. None -- broken plumbing
3. None -- never existed

Refrigerator in home
1. Functional
2. None -- broken
3. None -- never existed

Heat in home
1. Natural gas
2. Coal
3. Propane
4. Electric
5. Other -- Specify

Telephone in home
1. Present
2. Absent

Cultural evaluation by knowledgeable Crow Indian women
1. Traditional (maintaining the beliefs and behaviors that have persisted for generations)
2. Transitional (maintaining some of the beliefs and behaviors that have persisted for generations but also developing some of the new beliefs and behaviors that are consistent with the current life style)
3. Modern (developing the new beliefs and behaviors that are consistent with the current life style)

Cultural evaluation by author pre-interview
1. Traditional (maintaining the beliefs and behaviors that have persisted for generations)
2. Transitional (maintaining some of the beliefs and behaviors that have persisted for generations but also developing some
of the new beliefs and behaviors that are consistent with the current life style)
3. Modern (developing the new beliefs and behaviors that are consistent with the current life style)

Cultural evaluation by author post-interview
1. Traditional (maintaining the beliefs and behaviors that have persisted for generations)
2. Transitional (maintaining some of the beliefs and behaviors that have persisted for generations but also developing some of the new beliefs and behaviors that are consistent with the current life style)
3. Modern (developing the new beliefs and behaviors that are consistent with the current life style)

Location of interview
1. Home
2. Other -- Specify
INTERVIEW INFORMATION FORM

(Data to be gathered from participant interview)

Do you speak Crow?
1. Yes
2. No

Which language do you speak in your home?
1. Crow all the time
2. Crow most of the time
3. Crow half of the time, English half of the time
4. English most of the time
5. English all of the time

How often do you wear the traditional Crow dress (buckskin, beadwork, moccasins, and so forth)?
1. Everyday
2. For special ceremonies and social occasions only
3. Never

If you had to have an operation, who would you discuss the operation with? (May choose more than one answer)
1. Grandmother
2. Mother
3. Father
4. Husband (Partner)
5. Other -- Specify

If you have to have an operation, who would make the final decision? (May choose more than one answer)
1. Grandmother
2. Mother
3. Father
4. Husband (Partner)
5. Self
6. Other -- Specify

Have you ever had a medicine man/woman hired for yourself because of a health problem?
1. Yes
2. No

Have you ever had a clan uncle pray for you because of a health problem?
1. Yes
2. No
Have you ever consulted a clan uncle or medicine man about a bad dream?
1. Yes
2. No

Do you use cedar or sage in your home?
1. Yes
2. No

Do you believe in witches or witchcraft?
1. Yes
2. No
3. Undecided

Have you ever heard someone say that the hospital is haunted?
1. Yes
2. No

Do you believe the hospital is haunted?
1. Yes
2. No
3. Undecided

Because of your Crow beliefs, are there any foods you do not eat while you are pregnant?
1. Yes -- Specify
2. No

Do you know someone who ate clay (the white chalklike clay found in the mountains on the reservation) to stop her heartburn or food cravings when she was pregnant?
1. Yes
2. No

Would you or do you eat this clay to stop your heartburn or food cravings when you are pregnant?
1. Yes
2. No
3. Undecided

Do you know anyone who eats this clay for any reason?
1. Yes
2. No

Do you know someone who participated in traditional sweat baths when she was pregnant?
1. Yes
2. No
Would you or do you participate in traditional sweat baths when you are pregnant?
1. Yes
2. No
3. Undecided

Do you believe in getting things (diapers, blankets, clothes, bottles, and so forth) ready for the baby before it is born?
1. Yes
2. No

Do you want your husband (partner) to help you with household chores while you are pregnant?
1. Yes
2. No
3. No husband (partner)

Do you go to traditional ceremonies and/or social occasions while you are pregnant?
1. Yes
2. No
3. Never go

Do you go to traditional ceremonies and/or social occasions while you are menstruating or having a birth discharge?
1. Yes except for the Sun Dance
2. No
3. Never go

If you had a choice, who would you like with you during birth?
(May choose more than one answer)
1. Grandmother
2. Mother
3. Father
4. Husband (Partner)
5. Other -- Specify

If you had a choice, would you like to hold a traditional or religious object during birth?
1. Yes -- Specify
2. No

If you had a choice, what position would you prefer during birth?
1. Lying
2. Kneeling
3. Squatting
Do you know someone who used peyote when she was in labor?
  1. Yes
  2. No

Do you plan to use peyote during your labor?
  1. Yes
  2. No
  3. Undecided

If you had a choice, would you like to hold the baby immediately after birth?
  1. Yes
  2. No
  3. Undecided

Do you plan on giving the baby a Crow Indian name?
  1. Yes
  2. No
  3. Undecided

Who will give the baby its Crow Indian name?
  1. Clan uncle
  2. Tribal elder
  3. Grandparents
  4. Other -- Specify
  5. Undecided

When will the baby get its Crow Indian name?
  1. Anytime
  2. Within two weeks of birth
  3. After one year of life
  4. Other -- Specify
  5. Undecided

Who will give the baby its English name? (May choose more than one answer)
  1. Grandparents
  2. Husband (Partner)
  3. Self
  4. Other -- Specify
  5. Undecided

When would you like to give the baby its English name?
  1. Before birth
  2. Immediately after birth
  3. Within three days of birth
4. Other -- Specify
5. Undecided

Who will care for (raise) the baby?
1. Grandparents
2. Self
3. Other -- Specify

Do you expect your husband (partner) to help with the care of the baby?
1. Yes
2. No
3. No husband (partner)

Do you plan to save the umbilical cord when it falls off?
1. Yes
2. No
3. Undecided

Are you going to use a traditional cradleboard?
1. Yes
2. No
3. Undecided

Are you going to breastfeed?
1. Yes
2. No
3. Undecided

If you are not going to breastfeed or if you are undecided about breast-feeding, what reasons prevent you from breastfeeding?
   Specify

After this baby is born, how soon do you want to get pregnant again?
1. It does not matter
2. Wait one year
3. Wait two years
4. Wait three or more years
5. Never

How many children do you want in your family?
   Specify

What birth control method do you plan to use after the baby is born?
1. Pill
2. IUD
3. Foam
4. Diaphragm
5. Rhythm  
6. Condoms  
7. Tubal ligation  
8. Other -- Specify  
9. None  
10. Undecided  

What do you think the nurse could do that would help you during your pregnancy?  
Specify  

What is your mother's clan?  
Specify  

What is your father's clan?  
Specify  

Do you consider yourself to be?  
1. Traditional (maintaining the beliefs and behaviors that have persisted for generations)  
2. Transitional (maintaining some of the beliefs and behaviors that have persisted for generations but also developing some of the new beliefs and behaviors that are consistent with the current life style)  
3. Modern (developing the new beliefs and behaviors that are consistent with the current life style)  
4. Undecided  

How many people regularly live in your home? (Include yourself)  
Specify  

What is your income level including general and welfare assistance for the year? (Include income of yourself and your husband or partner only)  
1. $0-$2,999  
2. $3,000-$5,999  
3. $6,000-$8,999  
4. $9,000-$11,999  
5. $12,000-$14,999  
6. $15,000-$17,999  
7. $18,000 and over  

Do you receive? (May choose more than one answer)  
1. Food stamps  
2. USDA commodity foods  
3. WIC food supplements  
4. None
Are you receiving general or welfare assistance?
   1. Yes
   2. No

Do you make beadwork?
   1. Often (eight hours or more a month)
   2. Sometimes (less than eight hours a month)
   3. Never

Do you take care of your own children?
   1. Often (eight hours or more a day)
   2. Sometimes (less than eight hours or more a day)
   3. Never
   4. No children yet

Do you babysit other children?
   1. Often (four hours or more a day)
   2. Sometimes (less than four hours a day)
   3. Never

Do you help care for your family's cattle and horses?
   1. Often (daily)
   2. Sometimes (less than daily)
   3. Never

Do you have trouble getting a ride to prenatal clinic?
   1. Yes
   2. No
If yes, why?
   Specify

Do you keep your prenatal clinic appointments?
   1. Yes
   2. No
If no, why not?
   Specify

What religion do you practice? (May choose more than one answer)
   1. Christian
   2. Catholic
   3. Baptist
   4. Mormon
   5. Pentecostal
   6. Native American Church (peyote)
   7. Traditional Crow Indian religion (clan uncle, medicine man, sweat bath, Sun Dance, Tobacco Society)
8. Other -- Specify
9. None

What ways do you practice traditional Crow Indian religion?
Actual participation (physical participation in ceremonies derived from belief system)
   1. Clan uncle
   2. Medicine man
   3. Sweat bath
   4. Sun Dance
   5. Tobacco Society
Respect only (voiced expression of respect for belief system but no physical participation in ceremonies derived from belief system)
   1. Clan uncle
   2. Medicine man
   3. Sweat bath
   4. Sun Dance
   5. Tobacco Society
Appendix C

Abstract of Study Presented to Montana State University

Human Subjects Committee

Letter of Permission to Conduct Study Obtained from

Montana State University Human Subjects Committee
Abstract for Proposed Research

Traditional Beliefs and Behaviors Affecting Childbearing on the Crow Indian Reservation

The purpose of this research is to explore and describe traditional beliefs and behaviors that currently affect childbearing practices of Crow Indian women in Montana. The results of this research will assist the non-Indian health care provider to understand and respect the cultural needs of Crow Indian women and their families during pregnancy and birth. With this understanding, the non-Indian health care provider can deliver health care services that are consistent with the Crow Indian culture.

The design for this research will be an explorative and descriptive ethnographic study to identify traditional beliefs and behaviors currently affecting childbearing practices among Crow Indian women in Montana. The initial stage of this research will collect data through unstructured interviews with key informants who are older Crow Indian people. The second stage of this research will collect data through structured interviews of participants who are pregnant Crow Indian women. Tentative questions for both types of interviews are attached.

The questions for the structured interviews were developed by
the Nurse-Midwifery Branch of Navajo Area Indian Health Service. \(^1\)

Permission to modify these questions for use with the Crow Indian Tribe has been granted in writing.

Human rights will be respected and protected throughout this research. All participation will be entirely voluntary and individual responses will be strictly confidential. Each key informant and each participant will receive an explanation of the purpose and nature of the study and an assurance of voluntary participation and individual confidentiality. This explanation and assurance will be given verbally by the researcher and in written letter with attached consent form. A copy of this written letter with attached consent form is attached.

The Crow Tribal Health Board and the Crow Service Unit of Indian Health Service \(^2\) will receive an explanation of the purpose, nature, design, and potential benefits of the research and an assurance of respect for and protection of the human rights of all key informants and all participants. This explanation and assurance will be given

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\(^1\)The questions for the structured interview were developed by a group of nurse-midwives who worked under the auspices of the Western Interstate Commission on Higher Education and who were funded by the United States Public Health Service. The Nurse-Midwifery Branch of the Navajo Area Indian Health Service was not involved in the development of the structured interview. This error occurred because the project director of the Navajo study also worked for the Navajo Area Indian Health.

\(^2\)These agencies were expanded to include the Office of the Crow Tribal Chairman and the Health Services Division of the Crow Tribe.
verbally by the researcher and in written abstract form. A copy of this written abstract is attached.

Data from this research will be made available to the Crow Tribal Health Board and the Crow Service Unit of Indian Health Service. ³

³These agencies were also expanded to include the Office of the Crow Tribal Chairman and the Health Services Division of the Crow Tribe.
Dear Ms. Harding:

You have the approval of the Human Subjects Committee to do your research study on "Traditional Beliefs and Behaviors Affecting Childbearing on the Crow Indian Reservation.

Please have the release forms filled out and send them to me.

Good luck with your research project.

Sincerely,

George Shroyer, Chairman
Human Subjects Committee

cc: Dr. John Jutilla, Vice President for Research
Appendix D

Abstract of Study Presented to Crow Indian Tribe and Crow Service Unit of Indian Health Service

Letter of Permission to Conduct Study Obtained from Crow Indian Tribe

Letter of Permission to Conduct Study Obtained from Crow Service Unit of Indian Health Service
Abstract for Proposed Research

Traditional Beliefs and Behaviors Affecting Childbearing on the Crow Indian Reservation

The purpose of this study is to identify traditional beliefs and behaviors that affect childbearing practices of Crow Indian women. The results of this study will assist the non-Indian health care provider to understand and respect the cultural needs of Crow Indian women and their families during pregnancy and birth. With this understanding, the non-Indian health care provider can deliver health care services that are consistent with the Crow Indian culture. All information for this study will be gathered through interviews with culturally knowledgeable Crow Indian women and with pregnant Crow Indian women. All participation will be entirely voluntary and individual responses will be strictly confidential. A written report of the results of the study will be provided to the Crow Tribe and to the Crow Service Unit of Indian Health Service.
CROW TRIBAL COUNCIL

Dr. Anna Shannon, Dean
Montana State University
School of Nursing
Bozeman, Montana 59715

July 2, 1980

Dear Dr. Shannon:

Rita Harding is employed as community health nurse at the Crow Service Unit Hospital on the Crow Indian Reservation since 1974. Rita has come to understand and respect many of the cultural differences that exist between the Crow Indian patient and the non-Indian health care provider. Rita is a student at Montana State University to obtain a Masters Degree in Nursing. Rita will continue her employment with the Crow Indian people upon the completion of her educational requirements.

Rita would like to request interview sessions with Crow Indian women about traditional beliefs and behaviors that affect childbearing practices in the Crow Indian culture. The interview sessions will be part of her educational requirements at Montana State University. The interview results will create a better understanding of the two cultural differences. The non-Indian health care provider will be able to deliver health care respectful of the childbearing practices of the Crow Indian people.

The Crow Tribe has agreed to the requested interview sessions by Rita Harding. Rita has the understanding that all human rights will be protected. The Tribal Chairman's Office and the Health Services Division of the Crow Indian Tribe will receive finalized copies of the thesis project.

Forest Horn
Chairman
To Whom It May Concern:

This letter is to document that the Crow Service Unit of Indian Health Service has been informed of the research Traditional Beliefs and Behaviors Affecting Childbearing in Crow Indian Women that Rita Harding will be conducting this summer as part of her Masters of Nursing Program at Montana State University. The Service Unit has no objections to this research being conducted and is satisfied that all human rights are being protected.

[Signature]
Alan Gillham
Service Unit Director
Appendix E

Letter of Explanation with Attached Consent Form Presented to Key Informants and Participants

Documentation of Signed Consent Forms Disposition Obtained from Montana State University School of Nursing
Dear Interview Participant:

This interview is part of a study to identify traditions that affect childbearing practices of Crow Indian women. The results of this study will assist non-Indian nurses and doctors to understand and respect the cultural needs of Crow Indian women during pregnancy and birth.

The Crow Tribal Chairman and the Crow Service Unit of Indian Health Service know about this study and will receive a written report of the results.

Your participation in this interview is voluntary. Your responses will be kept confidential. Your name will not be recorded or used.

Thank you for your consideration in this matter.

Rita M. Harding
Crow Agency, Montana

I have read the above letter. I understand my participation is voluntary. I am willing to participate in this interview.

Interview Participant
November 21, 1980

This is to certify that the School of Nursing, Billings Extended Campus will store all (35) consent forms for research conducted by Rita Harding for the study Traditional Beliefs and Behaviors Affecting Child Bearing on the Crow Indian Reservation. This data will be stored under file in Cisel Hall, Room 115 for a five year period, upon which time all documentation shall be destroyed.

Rita Harding  11/21/80
Rita Harding  MSU/SON/BEC Graduate Student

Debra Kvilhaug  11/21/80
Debra Kvilhaug  Administrative Assistant

cc: Anna Shannon, Dean
Ruth Vanderhorst, Education Director

TELEPHONE (406) 248-7045