THE INFANT FEEDING EXPERIENCES AND DECISION-MAKING INFLUENCES OF ABORIGINAL WOMEN IN SASKATOON

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ABSTRACT

Breastfeeding is the optimal form of infant feeding. It appears to protect children from certain childhood diseases that are over represented in the Aboriginal population. Although breastfeeding rates in the general Canadian population have increased over the past two decades, they remain lower than recommended. Rates in the Canadian Aboriginal population are even lower. Breastfeeding literature among Aboriginals is largely demographic and statistical in nature and focuses primarily on First Nations women living on reserves. The purpose of this study was to investigate the factors influencing the infant feeding decisions of Aboriginal women living in Saskatoon. Data were collected using qualitative methods, including face-to-face interviews and prolonged observation. Between October 2003 and May 2004, interviews were conducted with a total of eight participants recruited from the Food for Thought program in Saskatoon. A semi-structured prenatal interview was followed by two unstructured, in-depth interviews at approximately one month postpartum. The researcher's participation in two weekly Food for Thought sessions over the same time period allowed for prolonged observation. Observations were recorded using field notes and interviews were tape-recorded and transcribed verbatim. Observation and interview data from each participant were analyzed separately for dominant themes and then integrated to establish collective influencing factors. Results indicated influencing factors are numerous and varied in nature. Contextual (sociocultural and environmental), attitudinal, cognitive (knowledge, information and beliefs), experiential (previous infant feeding experiences), and psychological influences were revealed. The principle implication of this study for those involved with the protection, support, and promotion of breastfeeding in this population is that there are many factors capable of influencing feeding decisions. Feeding decisions are not static; they are dynamic and result from the complex interplay between influencing factors. The importance or significance of any single factor is a reflection of the circumstances surrounding the particular feeding decision.

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CHAPTER 1: INTRODUCTION

1.1 Background

Breastfeeding is considered the optimal form of infant nutrition by leading health authorities both nationally and internationally (American Academy of Pediatrics, 1997; Health Canada, 1998; World Health Organization & United Nations Children's Fund, 1989). The advantages for both the short-term and long-term benefits are well documented and include nutritional, psychological, economic, immunologic, social, environmental and health related benefits (American Academy of Pediatrics, 1997). The supporting evidence is based primarily on observational data and more recently includes the results from a large study using a quasi-experimental design (Kramer et al., 2001).

Experts agree that most normal infants' nutritional requirements are met when they exclusively receive breastmilk for the first six months of life. To meet the infant's changing nutritional requirements, at about six months of age, complementary foods should be gradually introduced with continued breastfeeding for up to two years or more if mutually desirable (Health Canada, 1998; World Health Organization, 2001). Complementary foods refer to age appropriate foods, whether locally or commercially prepared, which are introduced when breastmilk alone is insufficient to satisfy the nutritional requirements of the infant (World Health Organization, 1981).

As a result of strong public promotion, breastfeeding initiation rates in Canada have increased from 24% in the 1960s to highs of 87% in the late 1990s in some parts of the country (Health Canada, 1999). Breastfeeding initiation rates refer to the proportion of women who report breastfeeding their child regardless of duration (Health Canada, 1998). These rates however, rapidly decline in the initial six weeks and less than 35% of mothers are exclusively breastfeeding at three months postpartum (Health Canada, 1999). When compared to the recommended duration for breastfeeding, discontinuation this soon after initiation constitutes early weaning (a complete cessation

of breastfeeding). Breastfeeding duration refers to the total length of time the infant was breastfed (Health Canada, 1998).

In the United States, breastfeeding goals have been included in a national set of health objectives for 2010 (Office of Disease Prevention and Health Promotion, 2000). By 2010, the aim is that 75% of all mothers will initiate breastfeeding in hospital and that 50% will still be breastfeeding at six months (Hill, 2000). Although Health Canada has published guidelines on infant nutrition (Health Canada, 1998), numerical objectives like the United States do not exist. The Breastfeeding Committee for Canada (BCC) is advocating for specific targets to aid in establishing breastfeeding as the cultural norm (M. Sanders, National Coordinator, Breastfeeding Committee for Canada, personal communication, Jan. 13, 2003). However, because Canadian rates have generally been higher than in the U.S., (Mothers Survey, 2000) the objectives will be higher.

According to Langner and Steckle (1991), breastfeeding initiation and duration rates among Aboriginal women in Canada follow the trends of the non-Aboriginal population but are lower. Diseases such as gastroenteritis, otitis media, respiratory infections, obesity, all of which are thought to be associated with bottle-feeding, are overrepresented in Aboriginal children (Ellestad-Sayed, Coodin, Dilling, & Haworth, 1979; Evers & Rand, 1982; Gessner, Ussery, Parkinson, & Breiman, 1995; Macmillan, Walsh, Jamieson, Crawford, & Boyle, 2001; Thomson, 1994; Thomson & Philion, 1991). Diabetes among Aboriginal populations, which is currently four times the Canadian average, has also been associated with early formula-feedings (Young et al., 2002). Studies suggest the incidence of these illnesses are reduced by increasing community breastfeeding rates (Cunningham, Jelliffe, & Jelliffe, 1991; Morrow et al., 1999; Thomson, 1994; Wright, Bauer, Naylor, Sutcliffe, & Clark, 1998; Young et al., 2002).

When compared to their non-Aboriginal counterparts, Aboriginal women tend to be poorer, have less formal education, are not as healthy, have a greater chance of becoming single parents, and are more likely to be victims of violence (Status of Women's Office, 1999). In addition, the cited report states: "Culture and ethnicity are products of both personal history and wider situational, social, political, geographic and economic factors" (p. 10). With literature supporting that two of the factors, education

and economic status are associated with lower breastfeeding initiation and duration rates (Health Canada, 1999), life experiences and circumstances may also play an important role in the infant feeding practices of all women.

1.2 Problem

Socioeconomic factors (e.g. education and income) and age are strong predictors of breastfeeding behaviors (Ekstrom, Widstrom, & Nissen, 2003b; Health Canada, 1999; Maehr, Lizarraga, Wingard, & Felice, 1993; Mothers Survey, 2000; Simopoulos & Grave, 1984). In addition, growing evidence suggests that psychosocial factors (e.g. attitudes, beliefs) play a significant role (Duckett et al., 1998; Janke, 1992, 1994; Kloeblen-Tarver, Thompson, & Miner, 2002; Losch, Dungy, Russell, & Dusdieker, 1995; Martens, 1997; Martens & Young, 1997; Wambach, 1997). Research among Aboriginals suggests that cultural influences may also impact infant feeding decisions (Banks, 2003; Dodgson & Struthers, 2003; Martens, 1997, 2002; Martens & Romphf, 2002; Martens & Young, 1997; Wright, Naylor, Wester, Bauer, & Sutcliffe, 1997).

Much of the information currently available on breastfeeding in the Aboriginal population is largely demographic and statistical in nature with very little documenting the experiences of breastfeeding women. Of the reports that do exist (Banks, 2003; Dodgson & Struthers, 2003; Macaulay et al., 1989; Martens, 1997, 2001, 2002; Martens & Young, 1997), the focus is primarily on First Nations people living on reserves or in other Aboriginal communities (Wright et al., 1997).

The number of Aboriginal people moving into urban centers has been increasing steadily since the late 1960s and is expected to continue (Status of Women's Office, 1999). As they move into urban settings, they are exposed to a different way of life. As a result, many more Aboriginal people are faced with different pressures, problems and challenges when compared to life on the reserve (Status of Women's Office, 1999). In addition, urban living can contribute to decreased involvement with traditional culture (Stiegelbauer, 1996).

Recognizing that breastfeeding occurs within a specific context of time and place (Dodgson & Struthers, 2003), to understand the intricacies involved with successful promotion, support and protection of breastfeeding among Aboriginal women living in

urban centers, their experience must be explored within their specific context. The current paucity of literature reflecting infant feeding experiences in urban centers does not permit the development, assessment or refinement of strategies aimed at increasing breastfeeding rates.

1.3 Purpose of the Study

The purpose of this study was to investigate the factors influencing decisions regarding infant feeding among Aboriginal women in Saskatoon who were clients of Food For Thought.

1.4 Research Questions

1. What are the experiences of Aboriginal women that influence their decision to either breastfeed or feed a *breastmilk substitute* to their infant?

1.1 How do these women make meaning of these experiences when deciding how to feed their infant?

1.2 In what ways, if at all, are these decisions influenced late in pregnancy and in the first weeks postpartum?

2. What are the infant feeding experiences of Aboriginal women in the first weeks postpartum?

2.1 What meaning do they give to these experiences in light of the infant feeding decisions they have made?

2.2 In what ways might these experiences influence infant feeding decisions with their future children?

1.5 Important Terms

Aboriginal – "The term includes individuals who are Indian, Inuit, Metis, Registered Indian,Treaty Indian, member of an Indian Band or First Nation" (Statistics Canada, 2003).

Breastmilk – includes breastfeeding, expressed breastmilk or donor milk and undiluted drops or syrups consisting of vitamins, mineral supplements or medicines (Breastfeeding Committee for Canada, 2004).

Breastmilk Substitute – "Any food being marketed or otherwise represented as a partial or total replacement for breastmilk, whether or not suitable for that purpose" (World Health Organization, 1981).

Infant Formula – Refers to a "breastmilk substitute formulated industrially in accordance with Codex Alimentarius standards, to satisfy the normal nutritional requirements of infants up to between four and six months of age, and adapted to their physiological characteristics" (World Health Organization, 1981).

Formula-Feeding – Refers to feeding infant formula to an infant. Also referred to as bottle-feeding (World Health Organization, 1981).

1.6 Summary

The lack of data on infant feeding issues in the urban Aboriginal population beyond that of a statistical nature indicates a need for research in this area. The following chapters will review the literature, describe the research methodology, present and discuss the results and answer the research questions. Finally, recommendations will be provided followed by suggestions for future research and implications of the findings for health professionals.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Breastmilk is an unstructured living tissue and because of its capability of transporting nutrients, affecting biochemical systems, enhancing immunity, and destroying pathogens, is sometimes referred to as *white blood* (Riordan, 2004). After birth, the relationship between mother and infant changes from a physiological dependence to include physical and emotional components. Therefore, when a mother decides to breastfeed, it arguably becomes a significant part of this dependency and as such must rank as one the most important postpartum decisions she can make.

Establishment of lactation within hours of birth appears to be important for the health and development of the newborn. Colostrum is the precursor to mature breastmilk and is secreted during this time. It is low in fat and high in protein which contains enzymes, antiinfective agents, hormones, and growth factors which serve to support neonatal growth and development (Worthington-Roberts & Rodwell Williams, 2000).

Initiating breastfeeding while colostrum is still being produced is thought to decrease infant morbidity by reducing the risk of gastroeintestinal (Dewey & Nommsen-Rivers, 1995; Kramer et al., 2001) and respiratory infections (Cushing, 1998), and otitis media (Dewey & Nommsen-Rivers, 1995). These benefits are thought to arise from both passive immunity conferred through colostrum and by reducing pathogen exposure through alternate feeding practices. Colostrum also supplies the developing gastrointestinal tract (GI) with growth factors that promote the maturation of GI epithelial cells, which facilitates not only the absorption of nutrients but also the construction of physical barriers to invasion by pathogens (Riordan, 2004).

Colostrum converts slowly to mature breastmilk over approximately 10 days while continually transferring passive immunity in addition to providing nutritional requirements to the infant (Worthington-Roberts & Rodwell Williams, 2000). Fat provides about one half of the milk's calories and delivers many long chain fatty acids

such as docosahexaenoic acid (DHA) and arachidonic acid (AA) which are associated with higher visual acuity and cognitive development (Anderson, Johnstone, & Remley, 1999; Uauy & Mena, 2001; Uauy & Peirano, 1999). In spite of criticisms of insufficient evidence to support their safety and effectiveness (Simmer, 2001), some formula companies have added AA and DHA to some of their products and market them as important for cognitive development in an attempt to emulate breastmilk (Simmer, 2001).

Most of the carbohydrate in human milk is in the form of lactose which is converted into simple sugars by the enzyme lactase which is present in the infant's intestinal mucosa from birth (Worthington-Roberts & Rodwell Williams, 2000). The protein content of human milk consists of changing levels of casein and whey protein. Whey protein is more easily digested and continues to provide the immune and growth factors mentioned above (Worthington-Roberts & Rodwell Williams, 2000).

Human milk supplies adequate levels of vitamins and micronutrients to satisfy a full term healthy infant. Water soluble vitamins are present in suitable quantities unless the mother is undernourished. The full complement of fat soluble vitamins (A,D,E,K), are also provided and because they can be drawn from body storage, are minimally affected by maternal diet. Although human milk is particularly rich in vitamin E and is a good source of vitamin A, it is low in vitamin K and vitamin D. Because neonates are not capable of synthesizing adequate amounts of vitamin K at birth, they receive a bolus dose at that time to prevent vitamin K-responsive hemorrhagic disease to which they are prone (Riordan, 2004). The deficiency of vitamin D in breastmilk can lead to rickets in breastfed infants (Abrams, 2002; Binet & Kooh, 1996). Risk is greatest in children with dark skin who have minimal sun exposure or whose mothers exclude meat, fish and dairy from their diets. For children who are adequately exposed to the sun and whose mother consumes adequate vitamin D, supplements should not be required (Riordan, 2004). However, Canadian recommendations advise daily supplementation for breastfed infants (Health Canada, 1998) and the same recommendations have been recently made in the United States based on scattered reports of rickets (Gartner & Greer, 2003). Not only does this recommendation impart added cost to breastfeeding but more importantly, breastfeeding advocates are concerned that mothers may be led to believe their

breastmilk is nutritionally inadequate thus affecting their decision to breastfeed (Scanlon, 2001).

Keeping in mind the unequalled and unique qualities breastmilk described above, feeding an infant anything else would be substandard. However, many are still choosing infant formula which is felt to be due in large part to successful marketing strategies by formula companies who strive to formulate products equivalent to breastmilk (Simmer, 2001). In addition, it is has been suggested that combined with the aforementioned concern of breastmilk being deficient in vitamin D, many women are left with the message that infant formula is "good enough"(INFACT Canada, 2002a).

2.2 Past and Current Breastfeeding Rates and Trends in the General Population

Over the past several decades breastfeeding rates in Canada have changed dramatically in the general population. In 1963 breastfeeding rates were 38% in the general population compared with 75% in 1982. This increase occurred in two waves; between 1973 and 1978 and then again between 1981 and 1982 (McNally, Hendricks, & Horowitz, 1985). In 1988, the breastfeeding initiation rate was 76% (Langner & Steckle, 1991).

National initiation rates did not appear to be available again until 1994 following the development and implementation of the National Population Health Survey (NPHS) and the National Longitudinal Survey of Children and Youth (NLSCY) (Statistics Canada, 1995b, 1996). The NPHS was designed to collect information on the health of Canadians using both cross-sectional and longitudinal designs. The NLSCY is a longitudinal survey that followes a sample of Canadian children and was designed to measure child development and well-being (Statistics Canada, 1995b). For reasons not apparent in the literature, neither survey included First Nations communities. Aboriginals living in urban and rural areas were included in the NLSCY but the sample was too small for analysis. It is not clear from the description of the NPHS whether or not urban or rural Aboriginals were included (Statistics Canada, 1995a). Further descriptions of either survey can be found in the literature (Statistics Canada, 1995a, 1995b).

Based on results of these surveys, initiation rates for 1994-95 were 75% (Health Canada, 2003). The NPHS and NLSCY continued to provide data on breastfeeding rates every two years until 1998-99. Currently, The Canadian Community Health Survey (CCHS) is being used to collect similar information on breastfeeding rates (Statistics Canada and Human Resources Development, 2005). The most current CCHS data reported initiation rates of 82% for 2000-01 (M. Sanders, personal communication, January 19, 2005).

Breastfeeding duration rates have also been increasing over the years but not as significantly as initiation rates. In 1963, 14% of women were still breastfeeding at four months and 7% at six months compared to 44% at four months and 31% at six months in 1982 (McNally et al., 1985). In 1988, three and six month figures were 56% and 33% respectively (Langner & Steckle, 1991). Duration data reported for the general population from 1994 through to 2001 generally reflected a duration of greater than or equal to three months (Health Canada, 2003). Duration rates in 1994 were 58.7% (Health Canada, 2003) compared to an increased rate of 65.7% reported in 2000-01 (M. Sanders, personal communication, January 19, 2005). Initiation and duration rates for the years encompassing 1994 to 2001 were highest for older mothers (e.g. 35 years and older) while the lowest rates represented mothers under 20 years old (Health Canada, 2003).

Regional differences across the country have been apparent since the 1980's and appear to continue. Initiation rates have reflected a steady progression from East to West with lowest rates reported in Atlantic Canada (50%) and highest in British Columbia at 86% (McNally et al., 1985). Similar regional differences were reported in 1988 (Langner & Steckle, 1991) and in 2001 (Health Canada, 2003; M. Sanders, personal communication, January 19, 2005). The most recent statistics representing 2000-01, show British Columbia still leading with an initiation rate of 93.5% while the Atlantic provinces still represent the lowest rate at 68.2% (M. Sanders, personal communication, January 19, 2005) .

Regional differences in duration rates have followed a similar gradient as with initiation rates with the most recent data (2000-01) showing that British Columbia has the highest duration rates at 72%. Again, the Atlantic Provinces reported the lowest

duration rates at 55.3%. However, unlike the reports from 1994 through to 1999 which excluded the three territories (Yukon, North West Territories, Nunavut), the most recent data included them. The latest results show the Yukon surpassing British Columbia with a duration rate of 77.5% (M. Sanders, personal communication, January 19, 2005). Through the years (1994-99), the Prairie Provinces as a whole have repeatedly come second to British Columbia for both initiation and duration rates (Health Canada, 2003). With the most recent statistics now available, and with the Prairie Provinces being reported individually, it is possible to identify Saskatchewan rates. Initiation rates of 86.7% and duration rates of 67.9% at three months or longer were reported in 2000-01 (M. Sanders, personal communication, January 19, 2005).

2.3 Past and Current Breastfeeding Rates and Trends in the Aboriginal Population

Past breastfeeding rates and trends in the Aboriginal population were based on data obtained from three National longitudinal surveys conducted in 1962, 1983 and 1988 (Langner & Steckle, 1991; Stewart & Steckle, 1987). The 1983 and 1988 surveys were part of a National Database on Breastfeeding among Inuit and Indian women. The survey began in 1983 to provide baseline information on breastfeeding rates to assist in the planning of breastfeeding promotion programs in this population. In spite of efforts to include Aboriginal women living off reserve, according to Stewart and Steckle (1987), they may not all have been taken into account. Yet, it was felt these studies were reasonably representative of the Canadian Aboriginal population. In the1983 survey however, seven communities in Saskatchewan and Quebec First Nations communities did not participate (Stewart & Steckle, 1987). In addition, Saskatchewan and the Northwest Territories did not participate in the 1988 study (Stewart & Steckle, 1987).

Data used to establish more recent breastfeeding rates are from the First Nations and Inuit Regional Health Survey (FNIRHS) (Macmillan et al., 2001) which was compiled from data collected for National Health Survey of First Nation and Labrador Inuit Communities in 1997. Throughout the report, where appropriate, comparisons were made to the general population using data obtained from the 1994-95 cycle of the NLSCY, based on children in equivalent age groupings. As mentioned previously,

NLSCY did not include First Nations communities and sample sizes of those living off reserve were too small for analysis.

In 1962, breastfeeding rates were 69.4% which were significantly higher than the 38% reported in the general population for that same period. However, rates began to decrease and by the late 1980's initiation rates were 60.7% (Langner & Steckle, 1991; Stewart & Steckle, 1987) which were lower than the 76% initiation rate reported in the general population. By 1997, initiation rates reached 54% which was significantly lower than the 79% which had now been reached in the general population (Macmillan et al., 2001).

In terms of duration rates, although three month data were not available for 1962, in 1983 and 1988, 42% were still breastfeeding. Six month data for all three years (1962, 1983, 1988) reported that 18%, 30.7%, and 30.6% of women respectively were still breastfeeding (Langner & Steckle, 1991; Stewart & Steckle, 1987). In the general population, duration rates for 1983 and 1988 were only slightly higher at 31% and 33% respectively (Langner & Steckle, 1991). However, by 1997, 40% of Aboriginal women were still breastfeeding at six months compared to only 23% in the general population suggesting that although fewer First Nations women initiate breastfeeding, they stay with it longer than other Canadians (Macmillan et al., 2001).

Data to establish past regional trends were based on figures collected in 1983 and 1988. Although similar regional trends were observed as in the general population, rates were lower in all regions (Langner & Steckle, 1991; Stewart & Steckle, 1987). The lack of published data since 1988 makes it difficult to gain insight into current regional trends but they are expected to follow those of the general population but at a lower rate as indicated above (Langner & Steckle, 1991; Stewart & Steckle, 1987).

Apart from the FNIRHS, timelier breastfeeding data for those living on reserve is now collected from the nationally funded Canada Prenatal Nutrition Program (CPNP). In addition to the 277 projects servicing 680 communities across Canada, 400 projects are aimed specifically at assisting Inuit and on reserve Aboriginal populations. The objectives are based on giving children the best start in life. In addition to increasing the numbers of babies born with a healthy birth weight by improving the mother's health and increasing accessibility to services for pregnant teens, the program also promotes

breastfeeding. The program is designed to meet the needs of pregnant women "at risk" (e.g. women experiencing poverty, isolation, substance abuse, physical abuse) and reaches out to teens, Aboriginal or Inuit women as well as new immigrants to Canada (Health Canada, 2000). Rates derived from project statistics however should be interpreted with caution. Initiation rates in CPNP projects tend to be higher than those of their counterparts in the general population (Health Canada, 2000).

In Saskatchewan, between April 2000 and March 31, 2001, there were 1,104 babies born to reserve women registered in the CPNP program. Of those, 67.4% were breastfed at birth, 47.9% for at least three months, and 32.5% for at least six months (Health Canada, 2002).

Although data from the FNIRHS and CPNP projects on reserves are sources of data for breastfeeding rates, they are conducted by government agencies and represent only First Nations people living on reserves. This is a concern considering that in 1995 over 180,000 Aboriginal Canadians were living off reserve, primarily in urban centers (Canadian Council on Social Development, 2000). This means that a large proportion of this population was not represented in this data. In Saskatchewan, there are almost 80,000 Aboriginals living in cities with over 15,000 in Saskatoon (Canadian Council on Social Development, 2000). For breastfeeding data representative of the whole Aboriginal population, those living off reserve must be included.

Canada Prenatal Nutrition projects located off the reserve and in predominantly non-Aboriginal communities appear to be one of the few sources of breastfeeding data for Aboriginal people living off reserve. However, because participation is not restricted to women of Aboriginal identity, the data is likely not representative of this population. Saskatchewan is the exception because 81% of the 1,972 women completing the program between January 31, 1995 and May 15, 2002, identified themselves as Aboriginal (Barrington Research Group, 2002).With such a large representation, the information gathered could perhaps be indicative of breastfeeding rates in this population in Saskatchewan. During this time period, initiation rates were 76% compared to 82% in the general population. Duration data is not considered reliable because the majority of these women were lost to follow-up (Barrington Research Group, 2002).

Of the 14 CPNP sites in Saskatchewan, four are located in Saskatoon and operate under the name Food for Thought. Each year, the program assists over 200 women; approximately 80% are of Aboriginal ancestry. Although these women are encouraged to use the service until their infant is six months old, many of them do not. As a result, breastfeeding initiation data is possible to collect but information on duration is more difficult. Initiation rates have been consistently around 80% for the last few years (P. Woodsworth, Program Facilitator, Food for Thought, personal communication, Oct. 21, 2002).

Recent 2003 information collected from Royal University Hospital in Saskatoon indicated that of the infants born to women assumed to be Aboriginal, 70% were being breastfed at discharge compared to 90% in the general population. These figures were up slightly from 1997 statistics which reported rates of 68% and 88% respectively (W. Stefiuk, Nurse Manager, Postpartum, Healthy and Home and the Saskatoon Breastfeeding Centre, personal communication, November 3, 2004). Ethical concerns on behalf of the health region made it impossible to formally identify and report the feeding choices of mothers who were Aboriginal. Figures used to calculate breastfeeding rates in this group were based largely on visual assessments by postpartum staff. The resulting data is therefore somewhat crude and must be interpreted cautiously (W. Stefiuk, personal communication, November 3, 2004).

Currently in Saskatchewan there are no data collection instruments in place from which duration rates can be determined. However, Saskatchewan Health, in collaboration with the Mother Baby-Friendly Breastfeeding Initiative, is working on a template to facilitate the collection of duration data. The feeding activities of new mothers from birth to discharge and beyond will be documented at set intervals of two weeks, two months, and six months. Optional collection periods include four, eight, 12, 18 , and 24 months. This data will be collected from communities across the country using a single template. The survey will include specific demographic data including a declaration of Aboriginal descent. The first cycle of data collection using this template is expected to be underway in spring of 2005 (W. Stefiuk, personal communication, November 3, 2004).

The available data needed to establish breastfeeding rates and trends in the Aboriginal population is not ideal. Much of the information is based on pockets of information from across the country, collected at various time intervals using inconsistent collection methods. In addition, it is often difficult to determine whether population samples were representative of the people indicated in the report. At most, there appears to be enough data to suggest that overall, breastfeeding rates in Aboriginal populations (particularly those living on reserves) are generally lower than in non-Aboriginal populations across the country. The lack of data reflecting rates among Aboriginal women in urban centers other than those enrolled in CPNP projects is of concern. However, because more comprehensive, consistent data collection methods are being put into place, this situation should improve.

2.4 Determinants of Breastfeeding

2.4.1 A Choice in Infant Feeding

Prior to the 1940's, babies in almost every society/culture worldwide were breastfed. Artificial milk was manufactured and fed to babies in Europe and North America decades before this time but it was a "luxury" to be afforded only by societies' elite (Riordan, 2004). However, coupled with the growing appeal of modern science and women's increasing involvement in society outside of the home (work or otherwise), the use of artificial milk began to grow post-war (Coates, 1998). This time period saw a major change in the way women in the industrialized world were feeding their infants and by 1963 breastfeeding rates in Canada had plummeted to 38% (McNally et al., 1985). Artificial milk, more commonly known as "formula" quickly became a widely accepted alternative to breastfeeding. It is important to note that even though infant formula is recognized as the only acceptable alternative to breastmilk until nine to twelve months of age, breastfeeding is the preferred method (Health Canada, 1998).

2.4.2 Acculturation into Western Society

Traditionally, Aboriginal infants were fed breastmilk *exclusively* (fed only breastmilk) until they were able to take food from other sources (Banks, 2003; Dodgson

& Struthers, 2003; Neander & Morse, 1989). As reported by Schaefer (1975), supplementation increased as the child grew older but breastmilk continued to be the main source of nutrition until approximately two years of age. In communities such as those of the Northern Alberta Woodlands Cree, premasticated protein was traditionally given to infants, starting at the age of two months and continuing until the infant had a full set of teeth. These infants were breastfed from one to four years and weaning occurred when the mother became pregnant or the child had teeth and was able to eat on his or her own (Neander & Morse, 1989).

The late 1800s saw the beginning of attempts to assimilate native people into western society began (Banks, 2003; Dodgson & Struthers, 2003). These efforts brought about dramatic changes to the traditional way of living, including infant feeding practices. Residential schools that were set up in an attempt to "educate" Aboriginal children were largely responsible for these changes (Banks, 2003; Dodgson & Struthers, 2003; Neander & Morse, 1989; M. Smith, 1975). Not only were the schools located far from home communities, this contributed to the breakdown of extended families, but the children were forbidden to speak their own language and were not taught basic life skills such as food preparation. This was critical because traditional skills, including preparation for childbirth and infant feeding were taught by observing the adults (Neander & Morse, 1989; Todd, 1975).

The following quote from a First Nations woman in her early twenties helps to illustrate this point: "Actually, I've never seen anyone on this reserve breastfeeding their babies." Another woman from the same reserve stated "The way I saw it, there wasn't very many people breastfeeding and all out there. And the way I look at it too, it's because of the residential school that it seemed that they had to lose most of their traditional ways" (Martens, 1997, p. 117). It appears that with the loss of traditional teaching methods coupled with the European based "education" the Aboriginal people received, many of the old ways were lost. Ultimately, not only did these children lose track of their traditions but they did not fit into Western culture either (Todd, 1975).

With a "choice" in infant feeding available and the continuing assimilation into Western society, it is not surprising the trend toward bottle-feeding was seen among Aboriginal women. In fact, it appears the impact was far greater than national statistics

would lead us to believe. For example, by the early 1970s, unofficial estimates of breastfeeding rates in communities on the west coast ranged from 0% to 5% (Smith, 1975).

Thirty years ago, in more isolated communities, breastmilk substitutes included powdered and evaporated milk as well as infant formula in more accessible areas (Smith, 1975). Mothers in Aboriginal communities who were not breastfeeding, relied instead on infant formula, evaporated milk, or homogenized cow's milk (Neander & Morse, 1989; Wilson, 2000). Wilson (2000) reports that the preferred choice in some communities was canned milk diluted with water because it was the least expensive and had the longest shelf life. In some cases, women switched their infants from formula to canned milk diluted with water due to concerns of obesity. They felt it has already been "proven" nutritionally through its use with previous children (Neander & Morse, 1989). However, Smith (1975), Coates (1998), and Young (1994) document the potential for problems with any of these artificial feeding methods if sanitary conditions, water supply and storage conditions are not suitable.

The loss of traditional culture also impacted the location where many Aboriginal babies were born, subsequently having a negative impact on breastfeeding. Babies went from being born in their own communities to being born in hospitals which were generally far away. It is felt that some hospital feeding practices interfered with infant feeding choice (M. Smith, 1975). In Cree communities for example, infants were traditionally born at home in the presence of birth attendants, husbands, and mothers and fathers of the pregnant woman. Much of the teaching and preparation for child birth was done by the mother and reinforced at birth by the attendants. These practices quickly changed with Western influence and persist today. Giving birth in hospital meant being alone in an unfamiliar environment that not only disrupted the family dynamic but also the teachings from mother to her daughter (Neander & Morse, 1989; Stewart & Steckle, 1987). Also, according to Schaefer in 1975, due to their shy nature, many of these women agreed to whatever method of infant feeding was presented to them, that in many cases was bottle-feeding.

As well, many hospital procedures and practices are implicated in undermining breastfeeding initiation rates in society (Martens, Phillips, Cheang, & Rosolowich,

2000). These practices include: separating mom and baby at birth, keeping baby in the nursery, the use of pacifiers, supplemental feedings, and the provision of free infant formula starter packages upon discharge (Martens et al., 2000; Newman, 1990).

One of the most damaging of these practices is supplementing the breastfed infant with formula while in hospital. According to Newman (1990), supplementation interferes with the establishment of the milk supply when introduced during the critical postpartum period. This is a concern because insufficient milk, whether actual or perceived, is often associated with supplementation and is reported as one of the main causes of premature weaning (Duckett et al., 1998; Health Canada, 1999; Tully & Dewey, 1985). Also, a recent look at in-hospital feeding practices by Martens et al. (2000) demonstrates that supplementation is associated with doubling the risk of weaning by two weeks. This information helps to appreciate the impact this had in 1983 when a reported 9% of Aboriginal babies who breastfed in hospital were given formula at discharge (Stewart & Steckle, 1987). Currently, worldwide attempts are under way to change these hospital practices but it is a slow process. Details of these changes in Canada are discussed in section 2.5.1.1.

Regardless of the recommended method of infant feeding, a choice between breast and bottle exists, and depending on which is perceived as the cultural norm, the greater the likelihood that method will be chosen.

2.4.3 Demographic Variables

Age, education level, income, race and ethnicity are demographic variables which are considered to be risk factors when associated with decreased breastfeeding initiation and duration. Mothers who are poor, single, younger, less educated, from minority racial and ethnic groups are less likely to breastfeed or to breastfeed for shorter periods of time (Brent, Redd, Dworetz, D'Amico, & Greenberg, 1995; Duckett, Henly, & Garvis, 1993; Grossman, Larsen-Alexander, Fitzsimmons, & Cordero, 1989; Health Canada, 1999; Maehr et al., 1993; Mothers Survey, 2000; Simopoulos & Grave, 1984; Stewart & Steckle, 1987). However, the literature supporting the correlation between lower breastfeeding rates and racial or ethnic background is largely American-based. In Canada, immigrant mothers, especially those who spoke more than one language at

home were found to be more likely to breastfeed than non-immigrant mothers. It is felt that perhaps education and income overrode ethnic differences (Health Canada, 1999). In the Canadian Aboriginal population however, there does appear to be an association with lower breastfeeding rates (Macmillan et al., 2001; Martens, 1997, 2002; Martens & Romphf, 2002; Stewart & Steckle, 1987). In general, because Aboriginal women tend to possess many of the aforementioned risk factors (Status of Women's Office, 1999), it is difficult to singly identify being of Aboriginal identity as a risk factor for lower breastfeeding rates.

Aboriginal mothers tend to become mothers at a younger age than in the general population. In one large national study (N=4000) of Aboriginal and Inuit mothers, over 63% were under the age of 25 and 36% under the age of 20 (Stewart & Steckle, 1987). From January 1, 1995 to July 31, 1999, the average age of CPNP participants in Saskatchewan was 22 years (Health Canada, 2000). Although not directly comparable, National Population Health Survey data (1994-95) reported only 13% of new mothers were under 25 years, 25% between the ages of 25 and 29, and 62% over 29 years (Health Canada, 1999). Similar rates were seen in the corresponding National Longitudinal Survey of Children and Youth survey. Twenty percent of new mothers were less than 25 years, 34% were between 25 and 29, and 46% were over 29 years (Health Canada, 1999). Stewart and Steckle (1987) stated that almost half of the difference in breastfeeding rates seen between Aboriginal women and the general population could be accounted for by their younger age. Recent national data indicate 12% of Aboriginal families are headed by a parent under the age of 25 compared to 3% in the general population (Canadian Council on Social Development, 2002).

Aboriginals represent a large portion of people living in poverty in Canada (Canadian Council on Social Development, 2000). For example, in 1995 there were 181,000 people of Aboriginal identity living in cities across Canada and of those 100,700 were living in poverty. Poverty, based on a city size between 30,000 and 500,000 people was defined as a before tax income of less than $16,000.00 for a one-person family, ranging up to less than $38,000.00 for a six-person family. This represents a poverty rate of 55.6% compared to 24.0% in the non-Aboriginal population (Canadian Council on Social Development, 2000). Provincial data for that same time

period shows Saskatchewan had 70,900 people of Aboriginal identity living in the province which represented 8% to 10% of the population. According to this report, over half of those people (53%) lived in poverty and represented 22% of the poor. Figures for Saskatoon were similar to those documented provincially. In 1995, approximately 15,000 Aboriginals lived in the city and represented 8% of the population. Because 65% were living in poverty they represented 23% of the poor (Canadian Council on Social Development, 2000). In addition, 27% of Aboriginal families were headed by a single parent compared to half that number in the non-Aboriginal population. Of single mothers, 39% earned less than $12,000 a year compared to 13% of non-Aboriginal mothers (Canadian Council on Social Development, 2002). It should be noted however that some single Aboriginal women have been reported to breastfeed longer than their counterparts who are married (Houghton & Graybeal, 2001)

Results of the NPHS 1994/95 survey added to the body of literature indicated a positive correlation between level of education and breastfeeding. Of the women surveyed in this cycle, 62% with less than a high school education breastfed, 76% with some post secondary education breastfed, and 93% with a university education breastfed (Health Canada, 1999). In contrast, among Aboriginal mothers participating in a Women, Infants, and Children Supplemental Food Program in the U.S., mothers who had less than a high school education breastfed longer than those with a high school diploma or more (Houghton & Graybeal, 2001).

In comparison to the general population, Aboriginal women had a lower level of education (Status of Women's Office, 1999). In 1996, 22% of Aboriginal women had less than a grade nine education compared to 11% of non-Aboriginal women. It should be noted however that between 1991 and 1996, there was a dramatic increase in the number of educated Aboriginal women and this increase is expected to continue (Status of Women's Office, 1999).

2.5 Influences on Breastfeeding Initiation and Duration

In addition to the aforementioned demographic factors, there are many other factors that influence breastfeeding initiation and duration. For example, policies and regulations (or lack thereof) created by both governmental and nongovernmental bodies,

and the availability of support programs in communities. Physical and psychosocial factors are also important influences and can include breast discomfort, infant illness, perceptions of insufficient milk, as well as attitudes and beliefs. Whether implicit or explicit, these factors may influence a woman's decision to breastfeed and for how long. Compared with demographic variables, these influences are modifiable, making them important factors in the effort to increase breastfeeding rates.

2.5.1 Federal, Provincial and Community Commitment to Protect, Promote and Support Breastfeeding

Breastfeeding is a basic human right for both babies and their mothers (INFACT Canada, 2000). This is reflected internationally through documents such as the *United Nations Convention on the Rights of the Child,* the *International Covenant on Economic, Social and Cultural Rights,* the *Convention on the Elimination of All Forms of Discrimination Against Women,* and the *International Labour Organization Convention on Maternity Protection* (INFACT Canada, 1997).

To appreciate Canada's more specific commitment to protect, promote and support breastfeeding, it is important to have a basic understanding of this commitment and its complexities.

2.5.1.1 The Baby-Friendly® Initiative (BFI)

In 1991, the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) created a global program known as the Baby-Friendly® Hospital Initiative (BFHI) (World Health Organization & United Nations Children's Fund, 1992). In simple terms, the program recognizes and encourages hospitals and maternity facilities that offer the best possible care for mothers and infants. Institutions are duly recognized for facilitating and promoting breastfeeding initiation and duration by receiving the Baby-Friendly® designation.

As a Health Canada initiative, in response to the BFHI guidelines stating that each country must identify a national authority, the Breastfeeding Committee for Canada (BCC) was established. In 1996 it was declared that the BFHI would be the primary strategy for the protection, promotion and support of breastfeeding (Breastfeeding

Committee for Canada, 2002d). The name of the initiative in Canada has been changed to the Baby-Friendly® Initiative (BFI) to reflect the continuum of care both inside and outside the hospital environment.

The WHO/UNICEF joint statement (World Health Organization & United Nations Children's Fund, 1989), which includes the *Ten Steps to Successful Breastfeeding* and the *International Code of the Marketing of Breastmilk Substitutes* (World Health Organization, 1981) and referred to as The Code, represent the framework for the BFI. To receive a Baby-Friendly® designation, a hospital or maternity facility must comply with the Ten Steps and adhere to The Code. The Ten Steps (Appendix A) were designed to protect, promote and support breastfeeding through their implementation in institutions. The Code (Appendix A) protects breastfeeding through ensuring ethical marketing of breastmilk substitutes (Breastfeeding Committee for Canada, 2002c).

To date, over 15,000 hospitals worldwide have received the Baby-Friendly® designation (Breastfeeding Committee for Canada, 2002b). Perhaps contrary to what one might expect, only 27 of these have been in the United States and two in Canada (Breastfeeding Committee for Canada, 2002b; Merewood & Philipp, 2001). More specifically, it wasn't until June 1999 that the Brome-Missiquoi-Perkins Hospital in Cowansnville Quebec became the first hospital in Canada to receive this designation. In 2003, St. Joseph's in Hamilton Ontario became the second such hospital (J. Bergerman, Breastfeeding Committee for Saskatchewan, personal communication, May 28, 2003).

Before an institution can be considered for assessment by the Baby-Friendly® network, it must first apply for and receive a *certificate of intent*. To be eligible for this certificate, adherence to the Ten Steps and The Code is necessary (Breastfeeding Committee for Canada, 2002b). This is a labor intensive and time consuming process requiring commitment from policy makers and support people at all levels (Merewood & Philipp, 2001).

At Royal University Hospital (RUH) in Saskatoon, the BFI task force, the Mother-Baby-Friendly Breastfeeding Initiative committee (MBBI), has started the process by implementing the necessary changes to fulfill the Ten Steps. To date, they have managed to satisfy steps one, two, three, five and seven to nine. Saskatoon District Health, now known as Saskatoon Health Region (SHR), approved a policy statement in

May, 2000 (Appendix B) which has been incorporated into SHR and other community services. At RUH, there is a visual display of the policy posted throughout the perinatal continuum. In the community it is posted in all public health agencies (W. Stefiuk, personal communication, June 5, 2003).

Step two involves the adoption of a module package already in existence in Edmonton. All nurses at RUH have completed the necessary modules and been subsequently examined. The various perinatal units have completed modules relevant to their practice.

In response to step three, prenatal classes devoted to breastfeeding are now being offered year-round (except during summer months) and not simply as a component of prenatal classes as they once were. Programs such as Aboriginal Head Start, Kids First and Food For Thought (which will be discussed) incorporate breastfeeding education into their program designs. In addition, breastfeeding walk-in clinics were set up in two local malls.

Step five has prompted the development of a pamphlet instructing mothers on how to maintain lactation if they should be separated from their infant. In addition, lactation consultants and/or nurses are readily available for consultation.

Implementation of step seven allows mothers and infants to remain together 24 hours a day (rooming-in). As a result, the size of the nursery has been decreased dramatically and is now called the "newborn observation area" which is reserved for babies who, under exceptional circumstances, are not rooming-in. Fathers can stay in the rooms with mothers and "cuddlers" are available if the mother has no significant other to cuddle the baby when she feels she needs a break. Rooming-in helps to fulfill step eight.

Finally, in reference to step nine, RUH no longer supplies artificial teats or pacifiers. However, the hospital has no control over those being brought in from outside (W. Stefiuk, personal communication, June 5, 2003).

The MBBI has sent documentation to the Minister of Health (Breastfeeding Initiatives Committee, 2003, March), outlining the need for assistance in implementing a policy for Saskatchewan regarding the marketing of breastmilk substitutes by industry. This support is needed if step six is to be fulfilled because only then will the hospital be able to apply for the certificate of intent. This is one of the most difficult steps to fulfill

because, according to The Code, there shall be "No promotion of products in health care facilities, including the distribution of free or low-cost supplies" (Appendix A). Adherence to The Code, would require that a hospital pay fair market price for all formula and infant feeding supplies that it uses and cannot accept free or heavily discounted supplies. This new provincial policy would require that if a mother chooses to formula feed, she in turn would pay market price. However, in the case where the formula is medically indicated, it would be provided free of charge to the patient but at a cost to the hospital. In a time where health care dollars are limited, one can imagine the difficulty involved in convincing hospital administrators that adhering to The Code will cost less over all (W. Stefiuk, personal communication, June 5, 2003). However, past attempts have been successful (Merewood & Philipp, 2001).

Most Canadian hospitals including RUH, have contracts with a formula company for other supplies (e.g. IV equipment, syringes) and formula is accepted as "gifts". When a mother bottle feeds with infant formula, the "savings" are then passed on to the mother by supplying formula used in hospital free of charge. However, when they leave the hospital, many are unable to pay for formula which can amount to almost a third of their income (W. Stefiuk, personal communication, June 5, 2003). As a result, public health nurses in Saskatoon have seen babies being fed Coffeemate®, evaporated milk, or watered down formula.

To further complicate the issue of providing "free formula," with the exception of cases where specialized formula is deemed necessary, the hospital needs access to it when a mother is unwilling or unable to breastfeed her baby. Currently there are no alternatives. From 1972-1980, RUH operated a human milk bank but it was dismantled in response to the fear brought about by AIDS. Currently, Vancouver has the only milk bank in Canada (W. Stefiuk, personal communication, January 26, 2005).

As mentioned earlier, the BFI includes the community to reflect the continuum of care from hospital into the community. A document published by the BCC (Breastfeeding Committee for Canada, 2002a) is considered the primary resource for the Baby-Friendly® Initiative in community health services. The framework is based on *The Seven Point Plan For The Protection, Promotion And Support of Breastfeeding In Community Health Services* (Appendix C).

Community efforts toward implementation of the BFI have already begun in Saskatoon. More recently, provincial efforts included the establishment of the Breast Feeding Initiatives Committee, whose members include representatives from Saskatchewan Health, the Breastfeeding Committee for Saskatchewan, and from each of the health regions. The committee's goal is to increase breastfeeding initiation and duration rates in the province. This goal is reflected in the committee's vision which states "Baby-Friendly® practices are the cultural norm in Saskatchewan to support children in a healthy start and as a means to achieving a healthier population" (Breastfeeding Initiatives Committee, 2003, March).

The preceding discussion helps to illustrate the importance, the complexity and the challenges surrounding the BFI in Canada. It should also demonstrate that creating a baby-friendly environment takes time and requires tremendous effort and commitment from all levels of government and society. In addition, it may help us understand why respected breastfeeding proponents believe the struggle toward Baby-Friendly® is more difficult than it needs to be, in large part due to the continuing corporate hold on infant feeding (Breastfeeding Committee for Canada, 2002c; INFACT Canada, 2002b).

2.5.1.2 Maternity Benefits

Relatively recent changes to federal and provincial legislation surrounding maternity and parental leave and their associated benefits have contributed to a more baby-friendly environment. As of December 31, 2000 combined paid benefits have been extended from 15 weeks up to 50 weeks (Saskatchewan Labour, 2003). Paid benefits reflect 55% of wages previously earned but are capped at $413.00 per week (Saskatchewan Breastfeeding Matters Committee, 1999). In addition, the Canada Labour Code has been amended such that federal jobs are protected for a similar time period. However, to date, Saskatchewan is the only province that has yet to amend relevant labour standards in a similar fashion. Legally, an employer is not obligated to reinstate employees who take greater than 18 weeks maternity leave and 12 weeks parental leave combined (Saskatchewan Labour, 2003).

It is also interesting to note that in contrast to many other countries, Canada subscribes to only two of the four labour standards pertaining to maternity leave set by

the International Labour Organization (ILO). Although Canada meets the standard of providing a 12 week maternity leave and job protection during that leave, it does not require that employers provide breastfeeding breaks totaling at least one hour per day nor does it require that paid benefits reflect a minimum of 66% of previous earnings (Saskatchewan Breastfeeding Matters Committee, 1999).

The above information illustrates how legislation can affect a working woman's choice to breastfeed and for how long. New mothers need adequate time away from work in order to establish a healthy breastfeeding relationship with their babies and a supportive work environment which allows the time and support required to continue breastfeeding upon their return. Legislation is the most effective way to accomplish this goal and although the work environment is not legally required to currently support breastfeeding, the time allowed away from work is increasing.

2.5.1.3 Breastfeeding Policy

One might assume based on the above information that policy supporting a woman's legal right to breastfeed in public to be widespread. However, there does not appear to have been any Canadian court decisions on this issue. Although, certain legal decisions by inference have supported this right (M. Martin-Smith, Director, Health Promotion Unit, Saskatchewan Health, personal communication, June 9, 2003). A good example is the 1997 case of Michelle Poirier, whose employer, the Ministry of Municipal Affairs, refused to accommodate her request to breastfeed her baby at work during her breaks. The case took six years and went to the Supreme Court of British Columbia. The court agreed that this action was a form of discrimination against the female sex (INFACT Canada, 1999). Policy was subsequently created by the British Columbia Human Rights Commission.

The only other provinces in Canada where their respective Human Rights Commissions have created breastfeeding policy are Nova Scotia, Quebec, Ontario, and Manitoba (INFACT Canada, 2002a). In most instances policies were created in response to cases where breastfeeding women were approached because they were breastfeeding in public places (Strange, 2002). However, as in the Peel Region of Ontario, a Breastfeeding Workplace Policy was formed proactively. The Peel group approved this

policy in May 2002 which represents the first of its kind in Ontario (INFACT Canada, 2002a). The approval was in large part in response to public promotional efforts of The Peel Health Breastfeeding Advocacy Group. As stated by Strange (2002), the state of the law appears to be the following:

> Exposure of the breast while breastfeeding provides no ground for criminal charges of any kind; it goes further, however, and states that breastfeeding is a protected activity under human rights legislation. Knowledge of these rights should be disseminated widely by governments, community health services, and other organizations providing services to mothers and young children. (p.35)

Breastfeeding policy at a municipal level appears to be equally as scant. The community of Saskatoon for example does not appear to have a breastfeeding policy in any of its public or private establishments (J. Bergerman, personal communication, December 9, 2004). In communities where policies exist, they appear to be the result of a complaint against a breastfeeding mother. A good example can be taken from the case where several mothers had been treated disrespectfully at a municipal pool in Edmonton. Since 1996, they had been asked repeatedly by pool staff to stop breastfeeding at pool side and had also been told to cover up if another patron complained. The pool had written a formal policy on this issue in May, 2001. The policy was misdirected and written to protect the non-breastfeeding patrons by including comments such as, "In the event a complaint about overt breast feeding occurs, the complainant is not likely having a positive recreational experience due to the actions of another" (Strange, 2002). In response, in August 2001, the Breastfeeding Action Committee of Edmonton (BACE) sent a formal report to the Edmonton Leisure Center Department detailing their concerns. The policy subsequently changed in favor of the breastfeeding mother.

Breastfeeding policy in Saskatoon is slowly becoming more evident. The previous BFI discussion demonstrates that in order to become Baby-Friendly®, written policies, at least in hospitals, maternity facilities and public health facilities, are required.

In summary, it appears that where policies exist, whether formal or informal, they have the capacity to influence breastfeeding decisions. One predictable result of policies that target breastfeeding as "the problem" is that women may simply decide not to breastfeed.

2.5.2 Societal Values

The discussion on breastfeeding policy illustrates that societal values play a role in their formation. These values are particularly evident when reviewing the large number of qualitative and quantitative reports citing the negative influence of embarrassment on breastfeeding (Cernadas, Noceda, Barrera, Martinez, & Garsd, 2003; Dix, 1991; Fooladi, 2001; Forrester, Wheelock, & Warren, 1997; Harris, Nayda, & Summers, 2003; Hoddinott & Pill, 1999; Houghton & Graybeal, 2001; McIntyre, Hiller, & Turnbull, 2001; Murphy, 1999; Scott & Mostyn, 2003; Shaker, Scott, & Reid, 2004; Sheehan, Schmied, & Cooke, 2003; Sheeshka et al., 2001; Tarrant, Dodgson, & Tsang Fei, 2002). This research suggests that not only are mothers embarrassed or uncomfortable about breastfeeding in public but that partners and others around them may not be fully accepting or comfortable with the practice.

A study conducted in Chicago among low-income women with a minimum high school education found that over half the women who chose to bottle-feed cited embarrassment and not feeling comfortable with breastfeeding among the reasons given for not breastfeeding (Dix, 1991). In Australia, of the 2500 people surveyed by telephone, more than 80% agreed that bottle-feeding was more acceptable in public places than breastfeeding (McIntyre et al., 2001). A 1997 survey among students in Alabama concluded that while male and female university students generally felt breastfeeding was better than bottle-feeding, less than half felt it was acceptable to breastfeed in public. In the same report, when asked about public breastfeeding, adolescent high school girls tended to disapprove (Forrester et al., 1997). In Canada, embarrassment to breastfeed in front of others has been associated with decreased breastfeeding rates. The report goes on to state that "such views are hardly surprising in a culture that glorifies and sexualizes the female body, particularly breasts" (Health Canada, 1999, p.18).

If society views breastfeeding in public as inappropriate, this poses a barrier to exclusive breastfeeding for the recommended six months. A Canadian investigation found most mothers who discontinued breastfeeding before four months had "remained housebound or restricted in their movement while breastfeeding" to avoid the social stigma associated with nursing in public (Pollack, Robson, & Evers, 1995). In response

to this finding other authors have commented, "This self-imposed confinement was not feasible for 4 months, however, and contributed to these women's decisions to discontinue exclusive breastfeeding" (Sheeshka et al., 2001, p. 31). In other studies, mothers have resorted to giving formula when going out in public or nursing in public washroom stalls (Leff, Gagne, & Jefferis, 1994; Marchand & Morrow, 1994). The literature also indicates that some women felt there was no place to breastfeed when in public (McIntyre et al., 2001) which would only compound the problem.

Men are reported to be even more embarrassed by their partner's breastfeeding in front of non-family members than the woman herself (Shepherd, Power, & Carter, 2000). A survey of fathers taking childbirth classes in five private hospitals in Houston were questioned as to whether or not they felt it was acceptable to breastfeed in public. Over 70% of the men whose spouses planned to breastfeed exclusively and 78% of the men whose wives were planning to use formula exclusively indicated that it was not acceptable (Freed, Fraley, & Schanler, 1992).This is an important finding considering that in some societies, including some Aboriginal societies, the attitudes and beliefs of a woman's social support network, particularly those of the baby's father are very influential on women's infant feeding decisions (Arora, McJunkin, Wehrer, & Kuhn, 2000; Bentley et al., 1999; Freed et al., 1992; Macaulay et al., 1989; Neander & Morse, 1989; Sharma & Petosa, 1997).

Embarrassment as the greatest barrier to breastfeeding has also been cited in several studies involving adolescents (Forrester et al., 1997; Friel, Hudson, Banoub, & Ross, 1989; Gregg, 1989). The results of a study among Canadian Ojibwa adolescents concurred as demonstrated by their unfavorable response to the statement "It's okay for women to breastfeed in a public place" (Martens, 2001). The author stresses in the discussion that as a result of direct teaching which was part of the study design, students developed more positive attitudes about breastfeeding and felt less embarrassed about breastfeeding in public.

The social stigma associated with breastfeeding also appears to increase with the age of the child (Kendall-Tackett & Sugarman, 1995; Kirkland & Fein, 2003).The percentage of women who cited "social stigma" as the reason for breastfeeding cessation at six months, doubled at 24 months (Kendall-Tackett & Sugarman, 1995). These results

were likely underestimates because the women were members of La Leche League, a breastfeeding peer support group and information service. Similar findings regarding expectations of appropriate breastfeeding age were cited in a recent report by Kirkland and Fein (2003) where mothers weaning practices were followed for a year.

In contrast to the above reports, a recent qualitative report conducted in family-style restaurants and in shopping malls in urban Ontario suggested that breastfeeding in public draws little attention (Sheeshka et al., 2001). One must keep in mind however that the participants were well-educated, well-supported Caucasian mothers with prior breastfeeding experience. Nonetheless, as pointed out by the author, the coping strategies suggested by the study participants such as planning and practicing discreetness as well as "tuning things out" could be adopted by any mother wanting to breastfeed in public.

2.5.3 Programs to Support Breastfeeding

2.5.3.1 General

Within the framework of the recently endorsed *Global Strategy for Infant and Young Child Feeding*, it is recommended that breastfeeding promotion efforts include education and skilled support from the health care system (World Health Organization, 2003). This is in recognition that breastfeeding is both a natural act and a learned behavior.

It is not yet clear which types of breastfeeding support programs are most effective at increasing breastfeeding rates, but reviews of interventions intended to increase breastfeeding initiation (Fairbank et al., 2000) and extend the duration of breastfeeding can serve as a guide for what constitutes a "successful" programs (De Oliveira, Camacho, & Tedstone, 2001; Sikorski, Renfrew, Pindoria, & Wade, 2002).

In a systematic evaluation of randomized and nonrandomized interventions that occurred before the first breastfeed, several types of interventions were related to breastfeeding rates that were significantly greater in experimental groups as compared to control groups (Fairbank et al., 2000). These interventions included prenatal small group training, changes in hospital practices such as "rooming-in" (see section 2.5.1.1), media campaigns, multifaceted interventions (e.g. media campaigns or peer counselor

programs combined with structural changes to the health care sector or health education programs), and peer counselor programs. It should be noted that peer counselor programs were only successful among motivated women. Ineffective programs were those providing only literature, health care provider training, and social support efforts by health care providers.

Strategies that were considered effective in terms of increasing breastfeeding duration included combined information, guidance, and support, and were long term and intensive (De Oliveira et al., 2001; Sikorski et al., 2002). Group education was the only strategy found to be effective when interventions were only provided prenatally (De Oliveira et al., 2001). In terms of support, both reviews suggested both lay and professional support is important. Ineffective strategies included those which provided no face-to-face contact, practices that contradicted educational messages, or small scale interventions (De Oliveira et al., 2001; Sikorski et al., 2002)

2.5.3.2 Local

Programs are available in Saskatoon which offer support to new mothers and their families. Assistance often begins in pregnancy and extends into the postpartum months. Other programs offer continued support into early childhood and beyond. Most are designed to assist at-risk women, their children and families which include those who are poor, socially isolated, and have little education. Many of these people are also of Aboriginal identity. The women tend to be single, may have more than one child and are often victims of sexual, physical, alcohol and drug abuse (P. Woodsworth, personal communication, May 28, 2003; M. Clark, Director, Kids First Saskatoon, personal communication, May 23, 2003).

The collaborative nature of the programs makes referrals between them frequent, helps to avoid duplication of services, increases program awareness, and maximizes their use (W. Stefiuk, personal communication, June 9, 2003; M. Clark, personal communication, June 20, 2003; B. Digout, Parenting Education Saskatchewan, personal communication, June 12, 2003). To reflect the cultural diversity in the city, many programs have incorporated cultural components while others have been designed specifically for and offered only to Aboriginal women and their families (P.

Woodsworth, personal communication, May 28, 2003; M. Clark, personal communication, May 23, 2003).

In many cases special efforts have been made to include breastfeeding advocacy and support with a goal of increasing community breastfeeding initiation and duration rates (W. Stefiuk, personal communication, June 5, 2003). Few programs target breastfeeding as a single component; rather breastfeeding issues are part of a more holistic program design. Although breastfeeding is recognized as an important and essential component of some programs, the women using them often have more immediate concerns that need to be addressed before focusing on infant feeding. For example, immediate danger caused by substance or physical abuse, not having a place to live or not knowing how to cook food and care for themselves (P. Woodsworth, personal communication, May 28, 2003; M. Clark, personal communication, May 23, 2003).

The Saskatoon Breastfeeding Centre is one program that focuses specifically on providing support for breastfeeding mothers. It was established in response to a 1993 evaluation of the city's early maternity discharge program, Healthy and Home. It was found that 85% of calls to the program hotline were related to breastfeeding (Stefiuk, Green, Turnell, & Smith, 2002). Results from a program evaluation indicate that from July 1995 to July 1996, seven hundred new clients accessed the service which represented approximately 29% of breastfeeding women in Saskatoon. The service provides hands-on assistance by appointment, verbal assistance by telephone, and under special circumstances, home visits. The service also provides referrals to lay support programs such as La Leche League when deemed appropriate (W. Stefiuk, personal communication, June 9, 2003).

It was thought the downtown location of the center contributed to the inaccessibility of the service by some women (e.g. those without transportation or telephone) so two drop-in satellite locations were set up in malls. Since then, an increasing number of Aboriginal women are using the service (W. Stefiuk, personal communication, June 9, 2003).

Overall, several support programs in Saskatoon subscribe to the general recommendations put forth in the aforementioned Global Strategy (p. 29), suggesting the foundation for successful breastfeeding promotion and support is beginning to be laid.

2.5.4 Decision-making and Behavior

It is important to understand human behavior in health education and research and its guiding concepts so that health care professionals can devise the most effective ways of promoting health interventions (Nutbeam & Harris, 2004). However, decision-making and behavior change are complex areas as is shown by the numerous theories that have been developed to explain human behavior over the decades (Ajzen & Madden, 1985; Bandura, 1986; Janz, Champion, & Strecher, 2002).

The intent of the following discussion is to illustrate the complexities associated with decision-making and health behavior. Following a discussion on the conceptualization of decision-making, a brief overview of more commonly used behavioral models will be provided to assist the reader in gaining an appreciation for the difficulty associated with predicting health behaviors. More detailed information on the development and applications of these models can be found in the cited literature.

Following a review of the literature on effective decision-making, Janis and Mann (1977) proposed seven "ideal" criteria that would provide the decision-maker with a *high quality decision* or, in other words, a better chance of reaching their goals and maintaining long term commitment. It was noted by the authors that these criteria are to be met within the information processing capabilities of the decision-maker. The criteria are as follows:

1. thoroughly canvases a wide range of alternative courses of action;
2. surveys the full range of objectives to be fulfilled and the values implicated by the choice;
3. carefully weighs whatever he knows about the costs and risks of negative consequences, as well as the positive consequences that could flow from each alternative;
4. intensively searches for new information relevant to further evaluation of the alternatives;
5. correctly assimilates and takes account of any new information or expert judgment to which he is exposed, even when the information or judgment does not support the course of action he initially prefers;
6. reexamines the positive and negative consequences of all known alternatives, including those originally regarded as unacceptable, before making a final choice;
7. makes detailed provisions for implementing or executing the chosen course of action, with special attention to contingency plans that might be required if various known risks were to materialize (Janis & Mann p. 11).

The authors assumed that if one or more of the criteria were not met there is an increasingly proportional chance that unplanned setbacks and decisional regret will be experienced. When all seven criteria are met in arriving at a decision (hence subscribing to a high quality decision), it is described as *vigilant information processing*. However, depending on the circumstances and the importance of the decision, meeting all seven criteria may not be necessary.

Through their discussion on decision-making, Janis and Mann focus on the causes and consequences of patterns of decision-making that interfere with vigilant information processing. Ultimately, they conceptualized decision-making as a "balance sheet" of comparative potential gains and losses where the balance between pros and cons varies in response to new information about alternative courses of action (Janis & Mann, 1977).

Some of the most commonly used behavioral models that explain health behavior include the *Health Belief Model* (Janz et al., 2002); *Social Cognitive Theory* (Bandura, 1986); and the theories of *Reasoned Action* and *Planned Behavior* (Ajzen & Madden, 1985).

The Health Belief Model is one of the most widely used and one of the oldest models dating back to the 1950's (Janz et al., 2002). It focuses on health behaviors' perceived benefits and barriers, the perceived threat of harm, and perceived internal and external cues to actions as determinants. It is felt to be most useful when applied to behaviors for which it was originally developed, particularly traditional preventive health behaviors such as screening and immunization (Janz et al., 2002).

Bandura's contribution to earlier psychosocial research led to the evolution of the *Social Learning Theory* into the Social Cognitive Theory. Social Learning Theory is based on the premise that behavior is shaped by the interaction between the individual and his or her environment (Bandura, 1986). By adding *personal cognitive factors* to the relationship, Social Cognitive Theory was developed. The most important of these personal factors are *observational learning* or role modeling behaviors which involves observing the behavior and rewards that accompany it; *expectations* which refers to the capacity to anticipate and place value on the outcome of the behavior; and *self-efficacy* which refers to the belief in one's own ability to successfully perform a behavior

(Bandura, 1986). The introduction of the concept of self-efficacy was considered important and thus incorporated into the Health Belief Model (Janz et al., 2002).

Today, the Social Cognitive Theory is one of the most widely applied theories in health promotion because it addresses underlying determinants of health behavior and methods of promoting change. In addition, because changes involve modification of knowledge, understanding, beliefs and skills, one requires an understanding of the characteristics of the person or group with whom you are working (Nutbeam & Harris, 2004).

Another highly developed model of behavior that has been applied to health behavior is the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975). It explores relationships between attitudes and health behaviors with behavioral intention as a mediator. The theory proposes that behavioral intentions and behaviors result from a rational process where the behaviors are under full volitional control. It identifies and defines key variables that affect a person's intentions to act- *attitude* and *subjective norm*- and their interrelationships that predict the behavioral intention (Fishbein & Ajzen, 1975).

Ten years later the TRA was modified by adding *perceived behavioral control* as an third antecedent of behavioral intent leading to what is known as the Theory of Planned Behavior (TPB) (Ajzen & Madden, 1985). While the TRA assumes complete volitional control over behavior, it becomes less adequate when trying to predict behavior that is somewhat nonvolitional (e.g. breastfeeding). It is felt that breastfeeding is not completely under volitional control because various infant and maternal factors such as physical problems and skill can alter breastfeeding initiation and continuation (Wambach, 1997). Rather, the TPB assumes that behavior is located along a continuum from complete volitional control to no volitional control. Perceived behavioral control, along with behavioral attitude and subjective norm is posited to influence behavior indirectly through intentions, and also directly if it closely resembles actual control (Ajzen & Madden, 1985).

2.5.4.1 Breastfeeding and the Theory of Planned Behavior

In qualitative research, attitudes and beliefs are not quantified and application of the Theory of Planned Behavior in predicting breastfeeding behavior has generally been quantitative. However, in light of its proposed suitability and frequent application as a model for predicting breastfeeding behavior, it could be argued that in qualitative research, its constructs can be an effective means to help illustrate and understand the interplay and role of factors identified as influencing the infant feeding decision. As a result, although I was not bound by the defined constructs of the Theory of Planned Behavior, I was guided by them.

Based on demographic variables, populations can be identified as being at increased risk for not initiating breastfeeding. However, many of these factors are difficult (e.g. income, education), if not impossible (e.g. age, race) to modify. Over the last decade, more and more research has focused on how attitudes and beliefs determine whether or not a woman will breastfeed and for how long (Duckett et al., 1998; Janke, 1992, 1994; Kloeblen-Tarver et al., 2002; Martens, 1997; Martens & Young, 1997; Wambach, 1997). A review by Losch et al. in (1995), suggests that perhaps attitudes and beliefs are more important than demographic influences.

The Theory of Planned Behavior provides the framework behind many of the investigations concerning associations between psychosocial factors and breastfeeding. Attitude is frequently cited as the most important predictor of infant feeding outcome (Duckett et al., 1998; Kloeblen-Tarver et al., 2002; O'Campo, Faden, Gielen, & Wang, 1992; Wambach, 1997). A study among Ojibwa women by Martens in 1997 cites "prenatal intent" and "breastfeeding confidence" as the best predictors of feeding choice. Although attitude isn't directly implicated, according to the TPB, it influences behavioral intentions. A closer look at factors influencing attitude as suggested by the TPB may help to understand its role in infant feeding decisions.

The three antecedents of the Theory of Planned Behavior- attitude, subjective norm and perceived behavioral control- result from the global evaluation of three corresponding sets of the most prominent beliefs. *Behavioral beliefs,* for example link the behavior to a certain outcome or attribute regarding the outcome of the behavior. Consideration of all salient beliefs (both positive and negative) determines attitude.

Evaluation of the set of *normative beliefs* determines subjective norm which is the individual's perception of social pressure to perform or not perform the behavior. These beliefs are concerned with referent (significant other) approval and the likelihood that important referents would approve or disapprove of the behavior. Perceived behavioral control is predicted by *control beliefs* which are beliefs based on perceptions about the ability to manage specific factors necessary to perform the (Ajzen & Madden, 1985). Undoubtedly, demographic variables will influence the constructs of the TPB and reports such as that by Duckett et al. (1998) have incorporated them into their proposed breastfeeding behavior model.

Significant associations between Theory of Planned Behavior predictor variables and breastfeeding intention and duration have been reported (Dick et al., 2002; Janke, 1992, 1994; Kloeblen-Tarver et al., 2002; O'Campo et al., 1992; Wambach, 1997). O'Campo et al. (1992) assessed multiple variables and found the impact of racial and ethnic background to be weaker than education, occupation and personal factors such as Theory of Planned behavior variables (normative and behavioral beliefs). Similar research among Aboriginal populations using the Theory of Planned Behavior appears to be limited. However, at least one such report was located which demonstrated the relevance of the Theory of Planned Behavior variables in understanding breastfeeding processes and outcomes in a First Nations community in Manitoba (Martens & Young, 1997).

The literature suggests early attitudes have an impact on breastfeeding decisions later in life. Although research evaluating the attitudes of adolescents is scant, positive attitudes toward and increased knowledge about breastfeeding are associated with a greater likelihood that breastfeeding will be considered (Goodine & Fried, 1984; Goulet, Lampron, Marcil, & Ross, 2003; Martens, 2001). The report by Martens (2001) appears to be the first to examine adolescent beliefs and attitudes toward breastfeeding in a Canadian First Nations community. In a high school setting, the study used a randomized pretest-posttest control group design, to evaluate an educational session aimed at affecting breastfeeding beliefs and attitudes. In spite of the brevity of the session (50 minutes), increases in beliefs and attitudes toward breastfeeding as well as decreases in bottle-feeding beliefs were noted among females. One possible confounder

during a session among females was the first hand observation of the instructor breastfeeding her baby.

Positive attitudes also appear to be associated with exposure to breastfeeding mothers (Cadwell, 2002; Meyerink & Marquis, 2002). Throughout history, Aboriginal women learned the art of breastfeeding by observing other women in their communities. In communities such as the Northern Woodland Cree, the pregnant woman is prepared for childbirth by her mother and birth attendants (Neander & Morse, 1989). By the time she gives birth she has considerable knowledge about breastfeeding. However, as a result of acculturation, not only would a typical new mother not have had that exposure, but the removal of childbirth from the house to the hospital separates her geographically from her support system.

Behavioral intent with regard to infant feeding decision is influenced by attitudes of the woman's social support network. Losch et al. (1995) state that research consistently finds a correlation between ethnic background and the most influential support person. The husband or partner was the most influential person for white women, while Hispanic women considered their mothers to be the most important person. For black women, it was their close friends. In Aboriginal communities, the primary referents vary. For example, Mohawk women in Quebec considered their male partners to be the most important referent, followed by their mothers (Macaulay et al., 1989). According to Neander and Morse (1989), Cree women in Northern Alberta valued their mother and male partner equally. In a 1997 study, Martens reported that in Manitoba First Nations communities, mothers, the community health nurse and physician were highly supportive of breastfeeding. In this same study, referents identified as non-supportive included male relatives, friends, sisters, and people at work or school. Navajo women participating in a study conducted in New Mexico, U.S.A, did not single out any particular person but identified "relatives" as the most influential (Wright et al., 1997). With the exception of the report by Martens (1997), there did not appear to be any other reports where Aboriginal women considered the health care professional to be important. Even in the general population, health care professionals are rarely cited as important influences in breastfeeding decisions (Losch et al. , 1995). Simopoulos and Grave (1984) conducted a study specifically designed to determine

whether health care professionals were considered influential. The report found nurses and midwives to be more helpful than physicians.

2.5.5 Smoking

Using the TPB as a guide, if a mother considers smoking while breastfeeding to be bad for her baby, this will influence her attitude and subsequently affect her infant feeding choice. Unhealthy behaviors such as smoking negatively impact the decision to breastfeed (Goodine & Fried, 1984; Health Canada, 1999). Additional data to support this association comes from the NPHS (1994-95) survey (Health Canada, 1999).

Although some tobacco use among Aboriginal Peoples is spiritual in nature (Reading, 2001; Wilson, 2000), its non-traditional use is increasing (Reading, 2001). The reasons for this increase are thought to be complex and multi-factorial but it appears that lower socioeconomic status is one of the main determinants (Reading, 2001). Some Aboriginal women have associated smoking with "bad milk" (Martens & Young, 1997). This could have a negative influence on the decision to breastfeed if they are smokers.

2.5.6 Parity

The TPB posits that prior experience with a particular behavior directly influences perceived behavioral control (Ajzen & Madden, 1985). This would suggest that women who have breastfed previously would be more likely to do so again when compared to those who formula-fed. The lack of literature in this area indicates that little is known about the impact of previous breastfeeding experience on current feeding decisions.

The results of one large study (N=963) conducted by Kloeblen-Tarver et al. (2002), offers some insight into the role of parity as it pertains to infant feeding decisions. Although the results of this study are not generalizable to the Aboriginal population in Canada, the participants shared similar characteristics: low income, on social assistance, a visible minority (African American and Hispanic), and young (mean 23 years). Of the participants, 60% were multiparous with no prior breastfeeding experience, 11% had less than one month experience, 13% had more than or equal to one month experience, and 17% had more than or equal to six months experience. The authors concluded that the decision to breastfeed subsequent children was dependent

primarily on prior infant feeding method, amount of breastfeeding experience, and personal breastfeeding attitudes. Women with more experience were more likely to rely on their own experience and personal beliefs and were less likely to listen to advice from referents. In contrast, women who lacked experience were more likely to heed this advice. Women with less than or equal to one month breastfeeding experience shared the same negative attitudes as did formula-feeders. These attitudes involved feelings of embarrassment and closeness to their babies. Although the number of participants was large, the study had limitations: it was a convenience sample, data were not collected longitudinally, and actual feeding behavior was not measured. Results from a study conducted by Simopoulos and Grave in 1984 concurred with the above findings. They also added that multiparous mothers with previous breastfeeding experience longer than one month generally chose that method again. A Canadian study among 268 (54% multiparae) predominantly white, middle class, well-educated women found no association between parity and infant feeding decision (Goodine & Fried, 1984).

The impact of parity in the Aboriginal population is more controversial. A study to test a "Breastfeeding Decision-Making Model" including both primaparous and multiparous women was conducted in four Ojibwa communities (Martens & Young, 1997). They found previous breastfeeding experience to be the best predictor of infant feeding intent among the multiparae. Results from a recent follow-up study on breastfeeding promotion initiatives by Martens and Romphf (2002), noted that even though more first time mothers initiated breastfeeding than those with a previous child, at three and six months similar numbers of children were at the breast. This indicated a higher rate of weaning with first time mothers. In another study conducted in a Mohawk community, no association was reported (Macaulay et al., 1989).

Only one report was located citing the impact of the number of siblings on breastfeeding (Langner & Steckle, 1991). Initiation rates tended to be lower for mothers of more than four children but those who did breastfeed, did so for longer periods when compared to primaparae mothers.

2.5.7 Sex of the Child

There appears to be little published literature concerning breastfeeding rates as they pertain to the sex of the child. One report by Macaulay et al. (1989) in a Mowhawk community and another by Goodine and Fried (1984) in a predominantly white population in Ottawa, found no association. Tully and Dewey (1985), investigating the "insufficient milk syndrome" (see section 2.5.9) listed the sex of the child as one of the variables. Among the four groups studied (Anglo-Americans, U.S. born Mexican-Americans, Mexican-born women, and Jamaicans), male infants of Mexican-born mothers were most likely to breastfeed longer than six weeks. The authors did not comment on possible reasons for this association.

2.5.8 Timing of the Infant Feeding Decision

The literature supports the notion that once the decision has been made to either breast or bottle-feed, the greater the likelihood the decision will be carried out and the less likely the mother will change her mind (Dix, 1991; Goodine & Fried, 1984; Losch et al., 1995). There also appears to be a positive correlation between the timing of the decision to breastfeed and the duration (Goodine & Fried, 1984).

In general, it appears most women decide how they will feed their infants by the end of the pregnancy. Losch et al. (1995) reported that greater than half and up to three fourths of women decided by this time. A possible exception to this is when mothers are younger. A 1993 study found that 27% of adolescents compared to 48% of adult women decided before pregnancy and twice as many decided after birth (Maehr et al., 1993). In the Aboriginal population, a recent study conducted with volunteers from First Nations communities in Manitoba support these findings (Martens, 1997). The women in this study were very young (mean age of 17) and the report concluded that half of the women decided prenataly and 22% pre-pregnancy. This is important because as discussed earlier, Aboriginal women become mothers at a younger age. In contrast, a study conducted among women in a Mohawk community found that 68% decided on infant feeding method prior to pregnancy. However, 47% of the mothers were between 25 and over 30 years of age with only 12% being 18 or under (Macaulay et al., 1989).

2.5.9 The Perception of Insufficient Milk

When weaning occurs prior to two or three months, it is generally a result of problems associated with the process of breastfeeding. Weaning after this point is most often due to issues of convenience or loss of interest by the infant (Health Canada, 1999).

Women all over the world report "insufficient milk" as the primary reason for breastfeeding termination before three months (Cadwell, 2002; Gussler & Briesmeister, 1980; Houghton & Graybeal, 2001; Kirkland & Fein, 2003; Simopoulos & Grave, 1984; Tully & Dewey, 1985).This phenomenon, often referred to in the literature as "insufficient milk syndrome" or IMS does not appear to have one single cause (Gussler & Briesmeister, 1980). Three explanations are proposed. First, is what is viewed as a more widely accepted reason for weaning than other less "acceptable" reasons such as the inconvenience associated with breastfeeding (Tully & Dewey, 1985). The second is based on misperceptions and/or unfamiliarity regarding "normal" infant behavior including frequent feeding patterns (Greiner, Van Esterik, & Latham, 1981; Gussler & Briesmeister, 1980). Gussler and Breisemeister (1980) concluded that mothers are probably correct when they interpret their babies' fussy behavior as hunger but are incorrect when they assume something is wrong with their milk production. The latter assumption often leads to supplementation. The third explanation which overlaps with the second, is that of true physiologic impairment of lactation, either caused by stress or interference with milk supply due to supplementation (Cadwell, 2002; Simopoulos & Grave, 1984).

Among Aboriginal women, citing "not enough milk" as the reason for weaning prior to three months is equally as widespread (Langner & Steckle, 1991; Macaulay et al., 1989; Martens & Young, 1997; Neander & Morse, 1989). Martens and Young (1997) observed a drop in breastfeeding rates from 57% to 32% with "not enough milk" reported as the main reason. In addition, mothers of over half the babies supplement routinely. Neander and Morse (1989) also reported that many women gave supplemental bottles because they "did not have enough milk". Examples of misconceptions by Aboriginal women as causes of insufficient milk include: too much physical activity,

breasts becoming too cold due to activity, not drinking enough fluids, and not being serious enough about breastfeeding (Martens & Young, 1997).

Other reasons Aboriginal women cited as causes of weaning before three months included: cracked or sore nipples, tiredness, depression, and returning to work or school (Banks, 2003; Houghton & Graybeal, 2001; Langner & Steckle, 1991; Macaulay et al., 1989; Martens & Young, 1997; Wright et al., 1997). Reasons for weaning after three months included: babies' readiness to wean, nipple biting and pregnancy (Macaulay et al., 1989; Neander & Morse, 1989).

2.5.10 Perceived Number of Problems and Satisfaction with Breastfeeding

The literature supports an association between early cessation of breastfeeding and women's satisfaction with breastfeeding as well as their perception of problems (Humenick & Van Steenkiste, 1983; Martens, 2002; Martens & Young, 1997). Humenick and Van Steenkiste (1983) found that two predictors of early weaning (defined as weaning before eight weeks postpartum) were "low satisfaction with breastfeeding" and "the number of problems perceived by the mother". These were measured during a two-week postpartum interview by asking the questions, "Are you satisfied with breastfeeding?" and "How many problems have you had with breastfeeding?". The authors emphasized the importance of recognizing the mothers' perception of a problem and not just the health care providers' assessment of markers such as infant weight gain and feeding frequency.

To gain insight into this association from an Aboriginal perspective, these two questions were incorporated into two studies (Martens, 2002; Martens & Young, 1997). Although the first study, to test a breastfeeding decision-making model asked the two questions, they were not part of the model (Martens & Young, 1997). To be consistent with Humenick and Van Steenkiste's original work, similar questions were asked at the same two weeks post-partum time period. If the woman acknowledged having problems she was asked to verbalize them without prompting from the interviewer. Analysis supported an association between breastfeeding satisfaction and duration. Women who were unsatisfied had 12 times the risk of weaning compared to those who were satisfied with breastfeeding. Also, women who reported more than one breastfeeding problem

were six times more likely to wean prematurely in comparison to those who reported zero to one problem. It is important to note that problems sometimes were not directly related to the process of breastfeeding and included too much noise in the home, interference with house-hold chores, and interruptions by other siblings (P. Martens, Department of Community Health Sciences, University of Manitoba, personal communication, Nov. 15, 2002). There was also a significant correlation between "satisfaction with breastfeeding" and "number of reported breastfeeding problems". In general, the more satisfied women were with breastfeeding, the fewer reported problems.

The second study by Martens (2002) evaluated a community-based program to promote breastfeeding in a Manitoba First Nations community. Based on the predictive validity of the measures used in the aforementioned study, the same questions were asked. Results were consistent with those of previous research and concluded that women who were unsatisfied with breastfeeding are 12.6 times more likely to wean at any given time in comparison to those who were satisfied. Similarly, women citing two or more problems were 7.6 times more likely to wean than those citing zero to one problem.

2.6 Stories of Women's Experiences with Breastfeeding

It is has been suggested that infant feeding decisions are not simply a matter of personal preference as much as they are complex decisions which are practiced within the social milieu in which women live (Dettwyler, 1995a). With this in mind, the importance of context in feeding decisions cannot be ignored. Therefore, without the input of qualitative data, one could argue that the complex nature of the whole breastfeeding experience cannot be captured. The following two sections will illustrate the role of qualitative explorations of women's experiences as they pertain to infant feeding. It should become apparent that not only are these efforts contributing to the growing body of qualitative knowledge in this area but that they are an invaluable accompaniment to quantitative methodologies. This will be accomplished through an exploration of some existing qualitative work among non-Aboriginal and Aboriginal women.

2.6.1 Non-Aboriginal Women's Stories

Reports exploring women's experiences with infant feeding appear to be growing in recent years (Dykes, Moran, Burt, & Edwards, 2003; Harris et al., 2003; Hoddinott & Pill, 1999; Murphy, 1999; Scott & Mostyn, 2003; Sheehan et al., 2003; Sheeshka et al., 2001; S. Smith, 2003a, 2003b; Tarrant et al., 2002). In general, because qualitative reports provide information on *why* people do things rather than information on *what* and *how* many do it (Glesne, 2002), researchers have been able to gain insight into factors quantitatively identified as capable of influencing feeding decisions. These factors include but are not limited to: prior exposure to breastfeeding (Holman & Grimes, 2003); breastfeeding in public (Fooladi, 2001; Forrester et al., 1997) ; other demands on women's time and energy (e.g. work and school) (Health Canada, 1999; Yang et al., 2004); and breastfeeding problems (Yang et al., 2004). The contribution of women's stories to the body of knowledge on infant feeding decisions can be exemplified through a discussion of insights gained into the aforementioned factors.

Prior exposure to breastfeeding has been identified as an important influence on the decision to breastfeed (see section 2.5.4.1). Overall, it is felt that the more a woman is exposed to breastfeeding, the greater the likelihood she will breastfeed. Listening to stories from women who chose to breastfeed in a predominantly bottle-feeding culture has provided insight and context for the role of previous exposure on breastfeeding decisions (Hoddinott & Pill, 1999; Scott & Mostyn, 2003). One woman's comment helps to illustrate this point: "I think when you see that your friends can do it. My friend breastfed her two kids right up till they were a year old. If she can do it then I can do it". (Scott & Mostyn, 2003, p. 272). This example illustrates why exposure to breastfeeding likely influenced this woman's decision to breastfeed as was her commitment to breastfeeding.

Concerns about breastfeeding in public primarily due to embarrassment have also been identified as having a negative influence on the breastfeeding decision (see section 2.5.2). Women's stories revealed not only why they were embarrassed about breastfeeding in public but have provided insight into other concerns affecting the decision to breastfeed in public. Specifically, embarrassment appears to be largely based on concerns of "exposing" themselves (Harris et al., 2003) in addition to being worried

about public reaction (Harris et al., 2003; Murphy, 1999; Sheehan et al., 2003; S. Smith, 2003b). As a result, women have chosen cease breastfeeding (Harris et al., 2003; S. Smith, 2003b) or to breastfeed in seclusion (Sheeshka et al., 2001). Not only do these concerns have a direct impact on the decision to breastfeed but on a larger scale, they reduce other women's exposure to this feeding method.

However, there are women who have breastfed in public (Scott & Mostyn, 2003; Sheehan et al., 2003; Sheeshka et al., 2001; S. Smith, 2003b; Tarrant et al., 2002) and exploring their experiences revealed insights into strategies used to overcome these concerns. A change in her way of thinking helped one woman overcome her fear of breastfeeding in public in a society where women were rarely seen breastfeeding:

> I said "no more!" I spent most of the time sitting in my own home and I thought no, I'm not doing it. Breastfeeding my child, there is absolutely nothing filthy about it. It is everybody else that has the problem with it. I'm not going around flashing it around, it's all done as very discreetly as possible. The more people see it, the more natural it is. I feed absolutely everywhere...my baby is hungry, I'm going to feed him. (Scott & Mostyn, p. 274)

In a Canadian report by Sheeshka et al. (2001), in response to being asked what enabled them to breastfeed in public, participants cited determination, confidence and commitment to breastfeeding as being important.

Interestingly, stories from women who chose to formula-feed suggested that women have used the issue of personal modesty to defend their decision to formula-feed (Murphy, 1999). In doing so, the author suggests these women felt the focus was less about not fulfilling their maternal "duty" and more about what they considered to be "understandable" or acceptable issues. In this same study, with regard to concerns about offending the public, women who chose to breastfeed expressed a responsibility to not make others feel uncomfortable when breastfeeding in public. They felt that in order to avoid "getting breastfeeding a bad name", it was their responsibility for making sure that others would not feel uncomfortable when breastfeeding in public.

Work and school have been identified as barriers to breastfeeding (Health Canada, 1999). Stories of a new mother's demands on her time and energy such as work or school have provided insight into why these are perceived as barriers and possible ways they can be overcome (S. Smith, 2003b; Tarrant et al., 2002). For example, in Hong

Kong, one woman indicated her biggest barrier to continuing breastfeeding after returning to work was based on embarrassment and fear for how others might react if breastmilk was in the fridge (Tarrant et al., 2002). Not surprisingly, none of these women knew of anyone who continued to breastfeed after returning to work.

Similar stories of women's experiences with breastfeeding and returning to work revealed strategies of how women juggled returning to work and breastfeeding (S. Smith, 2003b). For example, one mother described expressing breastmilk which was fed by bottle to her seven month old by daycare workers. Another woman who was self employed returned to work two weeks after her son was born, took her baby with her and fed him in her office.

Women's stories with infant feeding have revealed interesting and possibly important insight into how morality issues have influenced feeding decisions (Murphy, 1999; Sheehan et al., 2003). Results from these studies have cast doubt on results reported from data collection methods that do not allow a woman to express herself fully. For example, it appears that some women may hide their decision about bottle-feeding (Sheehan et al., 2003). Just because a woman indicates she intends to breastfeed, may not reflect her true feeding intentions. The literature suggests women have given what they perceive to be socially acceptable responses when asked about feeding decisions. Even when they have every intention to formula-feed, women have felt that because of the intense pressure to breastfeed from family, friends and health care professionals, they cannot state their true intentions (Murphy, 1999; Sheehan et al., 2003). Both reports suggested this choice becomes a moral issue in that if a woman chooses not to breastfeed, she may not be viewed by others as a good mother.

As suggested by Murphy, the feeding decision becomes an issue of morality as much as it is about feeding an infant. As stated by Murphy: "Breastfeeding was treated not only as compatible with, but indeed, indicative of, maternal morality" (p. 201). The author goes on to report that even women who decided to breastfeed were faced with other moral dilemmas. When they chose to breastfeed exclusively, these women felt they were responsible for interfering with the fathers' chance to help with the infant.

The literature cites many reasons why women cease breastfeeding, such as concerns of insufficient milk, concerns of embarrassment and "acceptable"

breastfeeding age (see 2.5.2, 2.5.9). Breastfeeding problems, for example, have been cited as one of the main reasons for ceasing breastfeeding (Health Canada, 1999; Yang et al., 2004) but many who women continue to breastfeed have similar problems (Sheehan et al., 2003; S. Smith, 2003a, 2003b). Qualitative methods revealed reasons why some women are able to overcome these problems.

The literature has frequently illustrated that support and knowledge (often gained through educational measures) are associated with increased breastfeeding rates (see 2.5.3). Stories of experiences involving the presence or absence of factors such as support and ways to obtain correct knowledge (Harris et al., 2003; Scott & Mostyn, 2003; S. Smith, 2003a; Tarrant et al., 2002) have provided insight into why some women are able to persevere through breastfeeding problems while others are not. The influence of support on feeding decisions is illustrated through a comment made by a woman during the early postpartum period:

> I got to where I just hated him. I didn't want to see him (the baby). My husband all of a sudden got called back to work and my sisters left.....I'm stuck with this kid I can't stand. I love him but I don't want to be in the same room as him. (Harris et al., 2003 p. 26)

With regard to lack of knowledge influencing the feeding decision, women have expressed concern over the lack of information to prepare them for and to manage lactation problems (Harris et al., 2003; Tarrant et al., 2002). Although they had received extensive prenatal education on the benefits of breastfeeding, without knowing how to solve lactation problems they felt unable to continue breastfeeding.

A report by Smith (2003a) revealed strategies women have used to educate themselves when faced with breastfeeding problems. These included; asking friends, family members and health professionals for advice or reading books. However, the information received was often incorrect and had a negative affect on breastfeeding. For example, women expressed concerns of having insufficient milk and addressed these concerns by introducing formula feeds at the suggestion of their pediatrician. As discussed in section 2.5.9, this approach can lead to a true milk insufficiency thus having a negative impact on breastfeeding.

2.6.2 Aboriginal Women's Stories

Aboriginal women's stories of their experiences with infant feeding have been equally fruitful and are thought to be responsible for the success of promotional and educational efforts in some Aboriginal communities (Banks, 2003; Martens, 2002; Martens & Romphf, 2002; Wright et al., 1997). These reports highlighted the importance of collecting and incorporating culturally sensitive information to create services and programs designed in such a way that they would be consistent with traditional values.

In-depth interviews revealed beliefs and perceived barriers that affected infant feeding practices (Banks, 2003; Dodgson & Struthers, 2003; Martens, 2002; Martens & Romphf, 2002; Wright et al., 1997). For example, beliefs such as breastfeeding leads to weight gain in the mother had a negative influence on breastfeeding. Researchers were able to gain further insight into this and other beliefs through focus groups and to gauge how widespread this belief was using survey methods (Wright et al., 1997).

Perceived barriers to breastfeeding included an association between breastfeeding and poverty (Dodgson & Struthers, 2003). On the reserve, breastfeeding was perceived as a necessity not a choice such that some women chose formula-feeding when they moved to the city as a way to distance themselves from the poverty. In reference to her life on the reserve, the authors quoted a 65 year old woman who moved to the city as saying "Breastfeeding was what poor people did". Since these beliefs informed breastfeeding behavior, they needed to be addressed before the behavior could be affected.

Stories also revealed the role of significant others with regard to feeding decisions. In a Canadian Mohawk community, the infant's grandmother was considered the most influential person in terms of influence on the feeding decision (Banks, 2003). This finding was important because in this matriarchal society, the grandmother generally considered breastfeeding impractical because she could not help with feeding the infant. However, in an Ojibwe community in Minnesota, the infant's great grandmother held the most influential position (Dodgson & Struthers, 2003). Subsequently it was recognized that to increase breastfeeding rates in these communities, grandmothers and great grandmothers had to be included in all efforts. Interestingly, contrary to what has

been found in many non-Aboriginal populations, the infant's father was generally found to be among the least influential people with regard to feeding decisions (Banks, 2003; Dodgson & Struthers, 2003; Houghton & Graybeal, 2001; Losch et al., 1995).

Although the preceding discussion illustrating the important role of women's stories in increasing breastfeeding rates, all but one report reflects the infant feeding experiences of women living on the reserve (Dodgson & Struthers, 2003). The lack of similar studies among Aboriginal women living in urban centers suggests that researchers may be missing valuable information and knowledge needed to increase breastfeeding rates in this growing population.

2.7 Future Research Needs

Future research recommendations from many reports cited in the literature review emphasize that more information is needed to understand how to influence breastfeeding rates. Areas vary widely and include but are not limited to education, support, attitude and experiential research.

Educational research needs included identification of effective ways to educate women on the benefits of breastfeeding both in Aboriginal (Houghton & Graybeal, 2001) and non-Aboriginal populations (S. Smith, 2003a), as well as ways to enhance the breastfeeding experience (S. Smith, 2003a). Aside from the "how to" and benefits of breastfeeding, ways to encourage women to explore and challenge their feelings and assumptions of breastfeeding should also be identified (Sheehan et al., 2003).

Proposed research on breastfeeding support included finding ways to improve breastfeeding counseling by professional caregivers (Ekstrom, Widstrom, & Nissen, 2003a) and to improve maternity services to meet the needs of adolescent mothers who are breastfeeding (Dykes et al., 2003). Weighting the relative strengths of people who influence the feeding decision has also been suggested (Dix, 1991) to help identify those who may be most supportive. Other means of support from the partner, apart from involving the use of infant formula were also indicated (Dykes et al., 2003; Scott & Mostyn, 2003). Hoddinott and Pill (1999) recommended a randomized study to evaluate the effectiveness of postnatal support versus antenatal "apprenticeship" among women hoping to breastfeed but have had little or no exposure.

Further research on attitudes toward breastfeeding is also suggested and includes investigations of society's attitude toward breastfeeding (Ekstrom et al., 2003b; McIntyre et al., 2001). A closely related suggestion was to evaluate the impact of television on the social acceptance of breastfeeding in a non breastfeeding culture (Scott & Mostyn, 2003)

A need for more experiential research among breastfeeding mothers was also apparent. Sheeshka (2001) proposed an exploration of public breastfeeding experiences among mothers of sociocultural groups besides well-educated, well-supported Caucasian women. Other suggestions included an exploration of why Aboriginal women on the reserve breastfed for a shorter duration compared to those living in urban centers (Houghton & Graybeal, 2001), and comparing feeding experiences of primiparous and multiparous mothers to evaluate different factors that affect feeding decisions (Dix, 1991). More research into satisfaction with breastfeeding and how satisfaction can be improved regardless of problems experienced by the mother was also thought to be important (Cooke, Sheehan, & Schmied, 2003).

2.8 Cross-Cultural Research: The Aboriginal Population

An underlying concept needed in order to grasp an understanding of Aboriginal culture is that of "world views" (Dodgson & Struthers, 2003). World views are "assumptions about the world and how we find out about it (G. Aikenhead, Department of Education, University of Saskatchewan, personal communication, October, 3, 2002). "Our world view defines those elements of the world which are important and worthy of our attention. Our world view defines our relationship to the world around us" (Svenson & Lafontaine, 2001, p.188). For example, the Ojibwe believe their culture has a collective based focus where humans have responsibility toward all other living creatures and nature (Dodgson & Struthers, 2003).

Like the Ojibwe, many Prairie First Nations people subscribe to a holistic world view. Each person has a physical part and a spiritual part with each capable of mental and emotional capacities. "If a person is to be 'healthy' or achieve wellness then each of the four aspects of their lives must be in balance...the physical, mental, spiritual and emotional (Svenson & Lafontaine, 2001, p. 190).

In contrast, the world view of Western societies has been described as formistic (e.g. What form do things take?) or mechanistic (e.g. How do things cause, link with, influence, or correlate with, other things?) (Roberts, 1982). From an Aboriginal perspective, the world view of Western society is described as a society focusing on the individual, power over nature, competition, and materialism (Dodgson & Struthers, 2003).

Among scientists, the Aboriginal world view is apparent in the basic assumptions of this emerging research paradigm (G. Aikenhead, personal communication, November, 2004). Examples include: reality is first and foremost spiritual and personal; empirical knowledge is related to the context of the observation and to the observer of that evidence; research must benefit the community; and values are how you live, not what you say (Dodgson & Struthers, 2003). Although the Aboriginal research paradigm may be more easily understood and adopted by those who subscribe to a similar world view, it could also provide guidance to others who wish to conduct research among these people. For example, a researcher should: pay attention to verb tense as verbs expressed in the past can give the unintended impression that this knowledge is out of date and has been replaced by western knowledge; clarify what "traditional" means based on your participants understanding and not your own textbook definition (G. Aikenhead, personal communication, October, 3, 2002). Other examples include avoidance of eye contact, having an appreciation for the value of eye contact and allowing others to go first and being less assertive (Dodgson & Struthers, 2003).

Some researchers interested in breastfeeding behaviors among Aboriginals have incorporated culturally sensitive techniques into their methodology. A study conducted among Navajo Indians in the United States found that reinforcement of traditional understandings about infant feeding were much more effective in facilitating behavior change than reinforcement of the Western understanding. Ethnographic methods were used to determine that "insufficient milk", a major cause of breastfeeding cessation (see 2.5.9), was interpreted by the majority of these women as "the baby not wanting the breast" which suggested "the cultural value placed on individual autonomy created a culturally specific interpretation of nipple confusion, in which the infant "chose" the artificial nipple over the real nipple" (Wright et al., 1997, p. 630). Very few of the

women knew that milk supply could be increased by more frequent feeding but they did subscribe to the traditional belief that they should eat "strong" traditional foods to increase energy and milk production. Through the reinforcement of these traditional beliefs, the babies were subsequently being fed more frequently.

Other examples can be drawn from the work of Patricia Martens. Although not always possible or feasible for all researchers working among Aboriginals, she has for example, consistently recruited Aboriginal women (often from the respective communities) to conduct interviews with First Nations women in their own language (Martens, 2002; Martens & Romphf, 2002; Martens & Young, 1997; Young et al., 2002). It has been her experience that the richness of the data and the enthusiasm demonstrated by the participants is enhanced when compared to interviews conducted by herself or one of her Caucasian assistants (P. Martens, personal communication, November 15, 2002).

Locating published literature reflecting the importance of traditional beliefs and culture in the lives of Aboriginal people living in urban settings was difficult. However, a publication on the role of Elder's in an urban community setting provides some insight. In his report, Stiegelbauer (1996) states:

> Life on Reserves or other places in the Native world is not the same, however, as it might have been many years ago. The combination of residential schools, poverty, movement to cities, pressures from political and religious groups and the like meant that many people, especially those in cities, have limited, if any, involvement with a traditional culture. (p.49)

Although this report took place in Toronto, a similar view appears to be shared in the Aboriginal community in Saskatoon (S. Cameron, Manager, Saskatoon Tribal Council, personal communication, June 11, 2003). Having said that, it is not unusual for Aboriginals living in Saskatoon to be raised by their grandparent(s), in which case they will likely have had a more traditional upbringing which usually leads to a greater appreciation and respect for the culture (S. Cameron, personal communication, June 11, 2003).

The above discussion suggests that to achieve valuable information when conducting research among Aboriginal peoples, it is important to demonstrate cognizance pertinent to their traditional culture and beliefs. In doing so, a researcher will

possibly be in a better position to share resulting information in a fashion that is more likely to reflect its true and intended meaning.

2.9 Summary

There appear to be many factors capable of influencing the decision to breastfeed. With this in mind, one can perhaps begin to appreciate the challenges inherent in creating, fine-tuning or evaluating promotional, educational and support efforts aimed at increasing breastfeeding and duration rates.

CHAPTER 3: METHODS

3.1 Introduction

An exploratory descriptive study using primarily in-depth interviews combined with qualitative observation methods was employed to gain a better understanding of what it is like to be an Aboriginal mother faced with an infant feeding decision. Qualitative methods were selected because little is known about the experience of making infant feeding decisions among Aboriginal populations living in urban centers. In an exploratory descriptive study "the parameters or dynamics of a social setting are not really known, so heavy initial instrumentation or closed-ended devices are inappropriate" (Miles & Huberman, 1993).

A phenomenologically-based interview process modeled around Irving Seidman's three step interview series (Seidman, 1998) allowed this topic to be explored from an emic perspective, that is, the perspective of the person experiencing it (Morse & Field, 1995). Full participation as a means for observation and establishing rapport with participants supplemented the interviews.

3.2 Researcher's Story

It is important in qualitative research that the researcher's biases (or position), values and judgments are clearly stated because of the interpretive nature of the research (Creswell, 1998).

In February of 1999, my son Ethan was born and thinking back to that time, I do not recall what my reasons were for wanting to breastfeed (at least early on). It was just a given. Perhaps this assumption was based in part on my background as a health care practitioner and subsequent exposure to literature describing the benefits of breastfeeding, or because it was the "in thing" at the time. Then, months before Ethan was born, while working as a drug information consultant, I was asked to be the pharmacy representative on a multi-disciplinary task force for the Baby-Friendly®

Initiative. It was through my involvement with this committee, the Mother-Baby-Friendly Initiative committee (MBBI), that I first recall having definite thoughts and opinions on breastfeeding. The decision to breastfeed became intellectual and evidence based rather than "feeling like the right thing to do". However, what I didn't know but quickly came to realize was that this "natural" process is actually an art that both Ethan and I had to learn. Although some women and baby pairs (or dyads as referred to in the literature) have the good fortune of quickly learning, we were not so fortunate. Together we experienced (what I then called) the wrath of breastfeeding which I believe many secretly endure. To compound the problem was the enormous societal pressure to fulfill the role of loving new mother with no cares in the world.

Following a difficult, long and painful labor, Ethan was born at 11:45 pm and within 20 minutes he was at the breast. Things seemed to go well and in fact I could hardly tell he was latched on (the correct term for positioning baby on the breast). "Well Maya, within a day or two your milk will come in and breastfeeding may become more difficult" said the nurse. "Hum, what does she mean by that?" Well, the following morning I woke up in two pools of what I was quickly able to identify as milk but before I had a chance to comprehend what had happened, I was suddenly painfully aware of my breasts. I looked down and hardly recognized my chest as being my own. Each breast had grown appreciably in size and felt as though they were filled with tiny pebbles! This was the beginning of the most trying, and emotionally bittersweet experience of my life. At that point, Ethan may as well have been trying to latch onto a wall.

With the exception of those who have shared the breastfeeding experience, it may be difficult to truly understand it. The closest one may come to appreciating the potential difficulties and hardships of breastfeeding could perhaps be accomplished through a descriptive account of the experience.

When I look back on that time of my life, what I remember most is my physician (a breastfeeding proponent and lactation consultant) describing breastfeeding as "exquisitely painful". I wasn't sure what she meant at the time but I find myself using the same term when asked about breastfeeding.

If there are no complications associated with a pregnancy, thanks to the Early Maternity Discharge Program, hospital stays are generally very short and for me I was

out within 16 hours of giving birth. Oh, the thought of being home with my family- the peace, the rest, and oh, I almost forgot; the unknown, the isolation, the pain. If not for the darkening of the sky at night and the sun shining during the day, I was no longer able to distinguish night from day (but nor did I need to). I was caught in a nightmare that wouldn't end.

After three months of countless calls and many visits to the Saskatoon Breastfeeding Center, we were finally getting the hang of it. Ethan was gaining weight and things were good. All the while it seemed so easy for my friends who were breastfeeding. However, years later they shared details of their own trouble with cracked, sore nipples and endless tears. In one of our many discussions on the topic, we all agreed how unfortunate it was that none of us had been breastfed. As a result our mothers were unable to offer practical support and guidance (although they were helpful in many other ways).

A few weeks later I developed mastitis, followed by a yeast infection in my breast tissue. During both events I was faced with the decision of whether or not to take medication and continue breastfeeding. This marked my wits end. If it had not been for my commitment to breastfeeding, a good social network, a caring and knowledgeable doctor, and many lactation consultants, I would have quit. Instead, I am proud to say that Ethan was breastfed until he was two years old.

After returning to work as a drug information consultant and my continued involvement with the MBBI, questions pertaining breastfeeding took on a whole new meaning. I was able to feel the uncertainty and difficulty in the voices of these women. I knew that for some of these women, if their experience was as traumatic as my own, it would only take one misinformed piece of advice to push these women into a decision to quit. For example, from my experience as a drug information consultant, I know that many pharmacists suggest that mothers pump and discard milk while they are taking medication "to be on the safe side" and to feed the baby formula in the meantime. What these practitioners don't realize is that pumping can be extremely difficult not to mention impractical for many women and being told to pump could represent the "last straw" and thereby influence a woman's decision to discontinue breastfeeding. It should be noted here that there are many medications deemed by the AAP as being compatible

with breastfeeding and that for obvious reasons providing this type of misinformed advice is inappropriate.

Through my consultant work and the MBBI, I came to the realization that breastfeeding was much more than providing information on the benefits of breastfeeding in order to influence women's infant feeding decisions. It was equally important for women to be provided with a supportive environment to facilitate the process. In addition, I have become conscious of the many reasons why perhaps some groups of women initiate breastfeeding at a higher rate than others and why breastfeeding promotional efforts can be challenging.

Once my research was under way, as a Caucasian, well educated woman with a strong socioeconomic background, a partner, many informational resources and a strong support system, I represented a woman most likely to breastfeed. As such, I came from a very different background, filled with different values and experiences than the participants in my study. If this was my breastfeeding experience, what was the experience like for a woman considered least likely to breastfeed? This woman is likely to be poor, young, single, and less educated (Brent et al., 1995; Duckett et al., 1993; Grossman et al., 1989; Health Canada, 1999; Maehr et al., 1993; Simopoulos & Grave, 1984). In Saskatoon, many of these women are also Aboriginal (Status of Women's Office, 1999).

It is critical that I recognized myself as a strong breastfeeding proponent with many opinions and values, because as the research instrument I undoubtedly brought these with me to my research. In an effort not to minimize my influence on participants, I had to "bracket" my own thoughts and experiences. As described in Cresswell (1998), bracketing is phenomenology's approach "to suspend all judgments about what is real-the "natural attitude"-until they are founded on a more certain basis" (p.52). This bracketing was important because the objective was to understand the meaning of my participants' experiences in the contexts of their lives and not to make judgments by imposing my own. Documentation of these "bracketed" thoughts and experiences in a reflexive journal (see section 3.5) as well as member checking (see section 3.5.3.1) were two ways in which personal opinions and positions were kept to a minimum.

It should also be noted that there was no conscious assumption on my part that participants should either breast or formula feed their babies. The experiences shared by participants were not motivated by blatant challenges but as described by Murphy (1999) "are best understood as responses to the kind of unstated questions which are around whenever infant feeding is discussed" (p.206).

3.3 Sampling Procedures

A number of qualitative authors agree that the number of participants required is dependant on the purpose of the study and the richness of the data (Creswell, 1998; Denzin & Lincoln, 1994; Kvale, 1996; Seidman, 1998). Kvale states that "if the purpose of the study is to understand the world as experienced by one specific person, this one subject is sufficient" (p.102). Seidman supports this idea by agreeing that when employing phenomenological in-depth interviewing, depending on the richness of data, more or less participants may be interviewed. Although Seidman doesn't suggest what would be considered the most suitable number of participants, six participants have routinely been used and are suggested by experts in the field of this type of interviewing (Morse & Richards, 2002). In addition, Creswell (1998) cautions that when long interview protocols are being used, there should be no more than 10 participants. Based on these suggestions coupled with the transient nature of this population, it was reasonable to recruit additional women. I invited 15 women to participate of which eight took part beyond the first contact interview.

Purposeful sampling is a strategy in which particular settings, persons, or events are selected deliberately in order to provide important information in relation to the research questions at hand (Maxwell, 1996). With regards to participant selection, Patton (2002) argues that "the logic and power of purposeful sampling lie in selecting *information rich cases* for study in depth" (p.230). He goes on to describe these cases as being those which can provide the necessary information critical to fulfilling the purpose of the interview. It is important to select participants who have experienced the phenomenon of interest and are willing as well as able to articulate it (Creswell, 1998).

Choosing my setting purposively allowed me to witness the phenomenon of interest (Morse & Richards, 2002), which in this case was Aboriginal women faced with

an infant feeding decision. The literature suggests the research setting should have a sense of boundaries, provide a variety of relevant interconnected data, have sufficient richness, and be sufficiently small and accessible (Holliday, 2002).

3.3.1 Food For Thought Program

Based on the likelihood of observing the phenomenon of interest and its adherence to the above setting criteria, the Food For Thought (FFT) program in Saskatoon was selected as the setting.

Food for Thought is a national program funded through Health Canada's Prenatal Nutrition Program (CPNP) and administered through the Saskatoon Health Region. Of the 14 sites in Saskatchewan, four are located in Saskatoon and have been in operation since 1995. The program was designed to meet the needs of pregnant women "at risk" (e.g. women experiencing poverty, isolation, substance abuse, physical abuse) and reaches out to teens, Aboriginal or Inuit women as well as new immigrants to Canada (Health Canada, 2000). These needs are addressed by adopting a holistic approach to health care. For example, the program provides an opportunity for hands on experience with food preparation and safety as well as general health and nutrition education, including a pre and postnatal component. It also assists these women to access medical services, who historically have not done so very effectively (P. Woodsworth, personal communication, Oct. 21, 2002). A registered nurse and dietitian are on staff to assist with questions or concerns and to connect them with other programs and services where needed (e.g. parenting and school programs, counseling). The goal of the program is to help these women develop the skills necessary to make better choices for themselves and their children (P. Woodsworth, personal communication, Oct. 21, 2002)

The program was free, voluntary and ran every week-day except Fridays. Sessions were from 1:30 pm to 3:30 pm beginning in September and ending the following May. Monday sessions were geared toward new immigrants to Canada while the others were open to all other women in need. It should be noted that in 2002-2003, the Wednesday session was a pilot and its future was uncertain at the time data collection began.

Tuesday sessions were held at the Family Support Center, Wednesdays at White Buffalo Youth Lodge and Thursdays at Westside Medical Clinic. Although the sessions

were held at different locations, they followed a similar protocol and were staffed by a program facilitator and assistant, a dietitian, and a peer leader. Peer leaders were women who had completed the program and gone on to receive formal program training resulting in a paid position in the group. Tuesday and Thursday sessions were led by the program facilitator and the same dietitian. The program facilitator was a registered nurse.

In general, each session was designed to assist eight to 12 women but often accommodated more due to the program's popularity. Attendance has been consistent and the women ranged in age from 14 to 40 years with the majority in their teens. Women can join the program at any point during their pregnancy and can participate until their infant is six months of age (P. Woodsworth, personal communication, Oct. 21, 2002).

Each year 150 to 200 women took part in the program with some of them going on to become peer leaders. Data collected on comprehensive "Individual Client Questionnaires", which were filled out by each participant with the assistance of the program facilitator or dietitian, indicated that each year approximately 80% of the women self-disclosed as being of Aboriginal identity. In addition to demographic data, the questionnaire recorded breastfeeding initiation. Breastfeeding duration was also recorded but was of limited usefulness statistically because many of the women did not complete the full six months (P. Woodsworth, personal communication, Oct. 21, 2002). Initiation rates both in Saskatoon and across the country were 79% (Barrington Research Group, 2002) which as mentioned previously were higher than initiation rates seen among their counterparts in the general population.

The program's director and facilitator were interested in cooperating with my research. Ethics approval was granted by the Advisory Committee on Ethics in Behavioral Science Research at the University of Saskatchewan and access to the Food for Thought Program was granted by the Saskatoon Health Region.

3.4 Recruiting Procedures

Individuals are selected to participate in qualitative studies based on their firsthand experience with the phenomenon of interest (Morse & Field, 1995). In addition, they must have the time and willingness to participate. In this study, a large majority of the women were of Aboriginal identity and between the ages of 16 and 32. These women were pregnant when they entered the FFT program.

The program facilitator and I developed a set of selection criteria which enabled us to invite only those women most likely to meet the needs of the study. In anticipation of willingness from many of the women to participate, we felt this approach would minimize any feelings of rejection from those not invited to participate. Criteria included: being of Aboriginal identity; having the ability to speak and understand English well enough to participate in an interview; and being pregnant. A total of 15 women were invited to participate of which eight completed the study beyond the first contact interview.

3.5 Data Collection Procedures

Although interviews were the main source for data collection, participant observation, field notes and a reflexive journal were also used. Lincoln and Guba (1985) suggest that a reflexive journal is a means of establishing trustworthiness of the study. It is used by the auditor to assess how much the researcher's biases (position) have influenced the results and can be used as a "diary" by the researcher to record information about themselves as well as decisions pertaining to methodology and the reasons for making them. The journal can be separated into three parts, the daily schedule and logistics, a personal diary for researcher catharsis, insight and reflection, and a methodological log for decisions made and the rationale behind them (Lincoln & Guba, 1985).

Field notes were used to document my experiences as participant observer. To establish and maintain my role of participant observer, I did not record observations during sessions. Rather, skeleton notes were recorded immediately after each session and included information gathered during discussions with the program facilitator and/or dietitian which occurred after all participants left. At the first available opportunity

(generally within one hour of session) all notes were completed during the entry into my word processor in a file labeled *observation notes.* It was during this time that I found myself closest to the experience of that day and subsequently it was the most appropriate time to document any reflexive thoughts. Because reflexive thoughts and many observations were often closely associated and seemingly meaningless when documented separately, it was reasonable to combine these notes in the same document but on a separate page labeled *reflections.* This decision simplified data entry and helped to avoid repetitiveness. For this same reason, there were days when no reflexive thoughts were documented in their assigned section because they were captured in the observation notes of that particular day.

Documentation of methodological decisions was recorded into a separate note book and was often recorded as observation notes when appropriate. Because several meetings with my supervisor took place over the data collection period in response to methodological and other concerns, notes from these meetings frequently appeared in this notebook.

3.5.1 Prelude

As a prelude to data collection, it was felt it would be beneficial to have an understanding of the program. This was accomplished by incorporating preliminary discussions with the program facilitator and dietitian from the Tuesday and Thursday sessions. Preliminary discussions began with the program facilitator in the fall of 2002 with the majority of discussions taking place between May and October, 2003 just prior to data collection. Details on the program's history, its organization and delivery were discussed. These discussions were necessary to aid in defining my role as researcher in this setting and to address logistical concerns such as interview locations and times.

3.5.2 Participation and Observation in Sessions

Participants are usually those who have established a relationship of trust with the researcher (Morse & Field, 1995). Glesne (2002) adds that observation aids in the development of these relationships and informs the researcher about appropriate areas of investigation. Observation is described as being on a continuum, ranging from

unobtrusive observer to full participant (Glesne, 2002). As introduced in section 3.1, my role was that of "participant observer" (p.54). Participant observation was used as a supplement to interviews and was recorded as field notes (Morse & Richards, 2002).

Seidman (1998) refers to the person who controls access to those whom the researcher wishes to interview as the "formal gatekeeper". In this case, the program facilitator was the gatekeeper. As a participant observer, Creswell (1998) suggests speaking with the gatekeeper on where to look or not to look and for how long. He also suggests that early on the role should begin as that of an observer with limited objectives and to gradually evolve into a participant role. By doing this, one will be allowed to become more of an insider. To facilitate becoming an insider, Creswell (1998) suggests that the researcher should be introduced before any observation begins (see section 3.5.3.1). Information collected by participation and observation were recorded as observation notes in my journal.

Although my role of participant observer had not been clearly defined by me or the program facilitator, we had agreed that it would likely begin as purely observatory in nature and gradually progress to that of a helper or assistant. However, beginning with the first session, it seemed as though my presence was unobtrusive and did not disturb the dynamic of the groups. Perhaps it was for this reason that my role of full participant observer was assumed immediately and without discussion. Even following my introduction to the groups by the program facilitator, the women continued about their activities and I felt like one of the group. Although attempts were made to explain my presence in the program, I often wondered if they really understood why I was there or if they just didn't care.

I began attending sessions in October 2003 and continued attending until May 2004. I attended the Family Support Centre location on Tuesdays and the Westside Clinic location on Thursdays, both from 1:00 until 3:30 pm.

3.5.3 Participant Interviews

Kvale discloses that one purpose of his book on interviews is to remind us that employing interviews as a method of data collection may or may not be suitable, depending on the purpose of the research. He states that "interviews are particularly

suited for studying people's understanding of the meanings in their lived world, describing their experiences and self-understanding, and clarifying and elaborating their own perspective on their lived world" (Kvale, 1996, p.105). The following quote by Robert Weiss (1994) helps to illustrate the suitability of interviews for my research:

> Interviewing gives us access to the observations of others. Through interviewing we can learn about places we have not been and could not go and about settings in which we have not lived....We can learn also, through interviewing, about people's interior experiences. We can learn what people perceived and how they interpreted their perceptions.....We can learn about all the experiences, from joy through grief, that together constitute the human condition. (p.8-9).

In reference to his own approach to interviewing, Seidman (1998) takes a similar view by simply stating "Interviewing provides access to the context of people's behavior and thereby provides a way for researchers to understand the meaning of that behavior....Interviewing allows us to put behavior in context and provides access to understanding their action" (p.4).

The framework for Seidman's three interview series is based on a combination of phenomenologically- based, in-depth interviews and life-history interviews. The underlying assumption is that "people's behavior becomes meaningful and understandable when placed in the context of their lives and the lives of those around them" (p.20). The purpose is to understand the experience of the person being interviewed in their own context. Seidman (1998) feels an effective way to accomplish this is to first share experiences relevant to the topic of interest, followed by reflection on these experiences and an opportunity for researcher and participant, together, to understand the meaning the experience had for the participant.

The objective of the first interview, which is referred to as the *focused life history*, is to have the participants put the experience in context by having them give details of their lives relevant to the experience. The second interview, which should ideally be conducted within three to seven days of the first interview, is for sharing current experiences relevant to the topic. The objective of the third and final interview, also to take place three to seven days later, is to allow participants to reflect on the experience with the objective of understanding what it means in their lives. It is during this interview when the interviewer and participant make meaning of the participants

experiences together (Seidman, 1998). Each interview generally takes 60 to 90 minutes to conduct.

Seidman warns that it can be difficult to keep interviews one and two separate primarily because participants keep introducing current experiences. To avoid this, he suggests interviews one and two be collapsed as long as it is planned in advance. In addition, although three to seven days between interviews is considered optimal, less or more time has also produced satisfactory results. He suggests that as long as the participant has the opportunity to share and reflect on their experiences, deviations are acceptable. Largely due to efforts to minimize participant burden and concerns for a greater chance of having incomplete interview series, I adopted this modified Seidman approach.

To capture the most current infant feeding experiences with the new infant, the in-depth interviews had to be conducted postnatally. Prior to conducting the in-depth interviews, demographic and baseline data including infant feeding intent was collected. This was accomplished by conducting a semi-structured interview in the prenatal period. This information was necessary to conduct postnatal interviews and to address the research questions. The study design will be discussed in more detail (see 3.5.3.3).

3.5.3.1 Interview Considerations

It is important for the interviewer to remember who he or she is interviewing and take the necessary steps to account for differences that may exist between them. For example, in my research I was fully aware of "status differences" (Glesne, 2002). I recognized that although I am a mother and have been faced with infant feeding decisions, I come from a White, middle to upper class family. I am also educated, older, with a partner and come with a very strong pro-breastfeeding position along with accompanying opinions and values. Equally as important, I recognized that these women were younger, less educated, and poor. In addition, they have not had similar life experiences and therefore may not share the same values and opinions. Glesne (2002) suggests that these differences should be born in mind and minimized.

Interviewing people from different cultural and racial backgrounds also required special attention. It was possible for elements of distrust to be present which may have

been amplified due to differences in social status. However, it has been the experience of those familiar with interviewing in these situations that by treating people with respect and demonstrating a genuine interest in their stories, these barriers can disappear (Seidman, 1998).

With the primary goal of this type of interview research being one of understanding, establishing rapport is essential (Fontana & Frey, 2000). Seidman (1998) feels that building rapport begins as soon as potential participants begin hearing about the study. He suggests that no matter how much simpler it seems for a third party to explain the project initially, anyone other than the researcher would not be familiar enough with the inner workings of the project to be able to answer all questions and to address comments that will undoubtedly arise. For this reason he suggests that the *initial contact* with potential participants be with the researcher in person. Contrary to this suggestion, the program facilitator felt it would be best for her to introduce potential participants to the study through an informal discussion in my absence. This was to occur shortly after sessions began so that they were prepared for me to come and outline the study, go over details, and answer questions. However, although we hadn't formally decided to forgo this approach, together we decided I should introduce myself and my study to potential participants. This decision appeared to be based on nothing more than simplicity, and what "felt" right.

Subsequent to this initial contact, Seidman suggests making a *contact visit* with each person (preferably) or as a group, for three reasons. First, it serves as a means of establishing rapport through conveying the importance of the research and the importance of their involvement. It also allows the researcher to become more familiar with the setting and its appropriateness as an interview site. Second, it provides an opportunity to determine whether or not potential participants are interested. Finally, it allows the researcher to introduce details pertaining to consent for the study so that when it comes time to sign the consent form, much of the information will have already been heard and clarified (Seidman, 1998).

In addition, Seidman suggests keeping a record of the characteristics of potential participants. By *building a participant pool* in this way, whether potential participants are invited at this time or not, this reference will be in place to keep the researcher aware

of the pool's character. This record can also contain information such as preferred times and locations and special needs (e.g. child care) surrounding interviews.

My role as participant observer and the flexibility offered through program delivery allowed me to work alongside each woman in a discreet and uncalculated manner. This provided me with the opportunity to maximize the benefits offered through contact visits with potential participants described above. As a result, I was able to assess both their interest level and suitability for the research project.

Seidman also raises the point that by conducting a series of interviews, one is given three opportunities to demonstrate respect, thoughtfulness and genuine interest. Coupled with having had the opportunity to observe and participate for a minimum of one month prior to conducting the first interview and for the duration of the program, I had time to alleviate skepticism and to allow rapport to establish and relationships to grow.

Although little information about my personal life, thoughts or opinions was neither offered nor asked for, potential participants freely discussed intimate stories about themselves and their families, occasionally asking for advice and guidance. Perhaps in part because the women came to know I was a single mother, I felt they sometimes perceived me as an equal. However, at other times I did not feel regarded as an equal but at no time did I feel perceived as being in a position of power over them. Mutual respect and a level of comfort and familiarity seemed to develop between me and the women who attended regularly, making invitations to participate and subsequent interviews relaxed and flow with ease.

3.5.3.2 Interview Guides and Question Types

As alluded to in section 3.5.3, a semi-structured interview was conducted prenatally. Given the nature of the information sought (demographic, feeding intent), the interview guide was composed primarily of closed and some open-ended questions (Appendix D).

When conducting in-depth interviews, guides should be used cautiously (Kvale, 1996; Seidman, 1998). Because the researcher is asking the participant to share experiences and to explore meaning, the participant should determine the direction of

the questioning. It is important not to impose your own views as a researcher on the experiences of the participant. Ultimately, one must be aware that what is of interest to the researcher may differ dramatically from what is of interest to the participant (Seidman, 1998). If an interview guide is to be used, Gubrium and Holstein (2002) suggest this rule of thumb: "let the respondent's responses determine whether particular questions are necessary or appropriate as leading frames of reference for the interview conversation" (p.77). Based on the information above and Seidman's suggestion that open-ended questions are best suited to this type of interview, flexible interview guides were employed using primarily open-ended questions (Appendix D).

As anticipated, the in-depth interview guides and/or question continued to evolve during the data collection period based on emerging data. The guides served primarily as a check list to ensure that topic areas previously identified in the literature review were being covered. Other questions were added or modified depending on responses given during the prenatal interviews. For example, if a participant's prenatal feeding intent was to formula-feed, questions posed would differ from those asked of a participant whose intent was to breastfeed. Ultimately, although topic areas to be covered were similar, each participant had an individualized guide. A sample interview guide reflecting breast and formula-feeding intent can be found in Appendix D. The second postnatal interview was directed by responses given during the first and sometimes from the prenatal interview if necessary for clarification. This guide varied greatly depending on each participant's experiences. For this reason, examples of guides for this interview were not provided. Each in-depth interview took 60-90 minutes to complete.

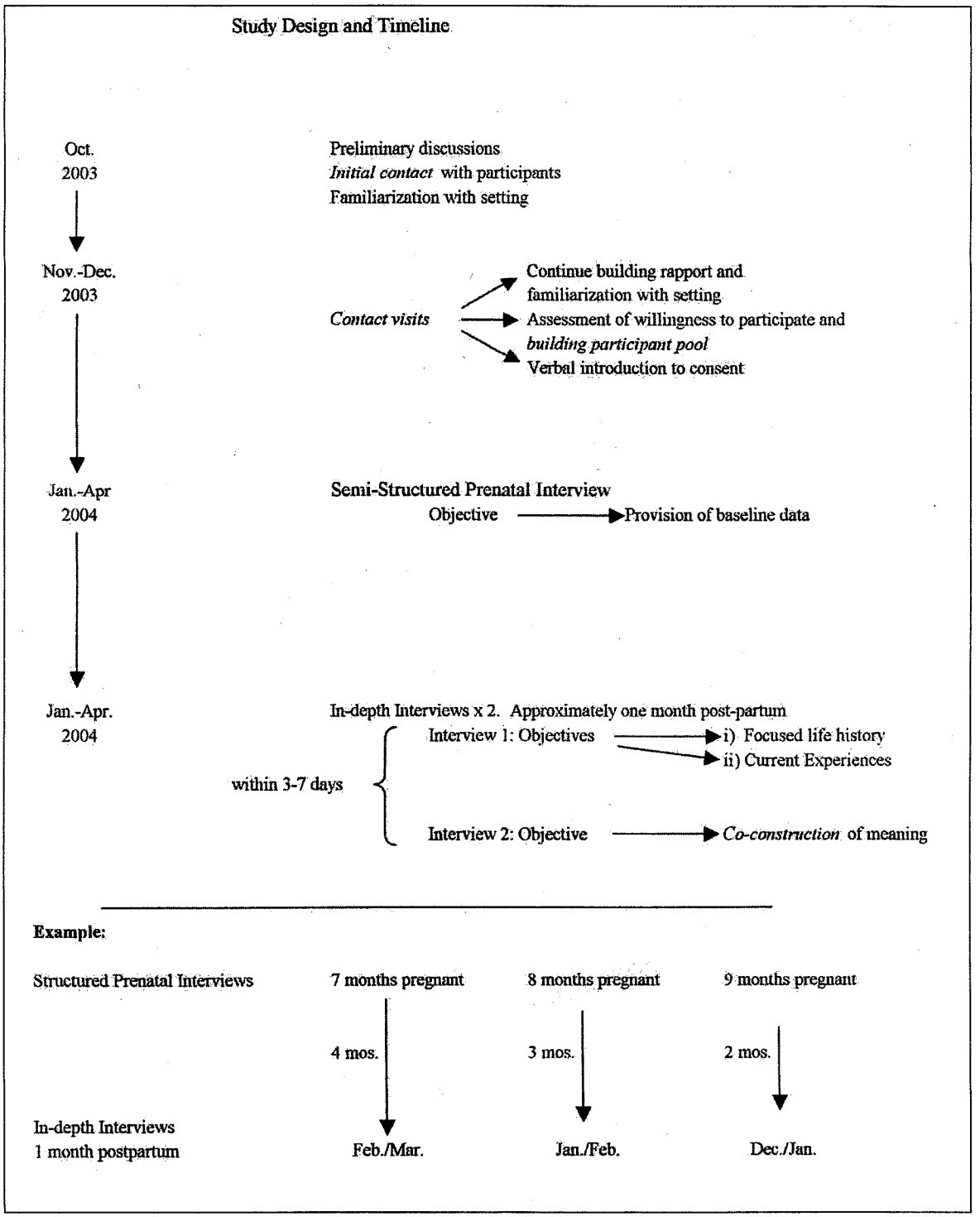
The interview guides and questions that were prepared were tested for clarity. Due to the unpredictable and complex nature of the interview relationship, it is possible to encounter roadblocks and many unforeseen problems (Seidman, 1998). Although a true pilot test was not employed, it was felt that testing questions for clarity and suitability should minimize any complications (Morse & Richards, 2002). This was accomplished by practicing interview questions with my supervisor, followed by practice with a pregnant woman in her third trimester and again with the same woman at one month postpartum.

3.5.3.3 Study Design and Interview Process

As illustrated in Figure 1, observations began in October, 2003. Shortly after, *initial contact* (see 3.5.3.1) was made with potential participants and the study was discussed. Following one month of attending sessions, c*ontact visits* (see 3.5.3.1) began and continued into November, 2003 to build the *participant pool* (see 3.5.3.1) and provide an opportunity to verbally go over consent particulars.

The prenatal interview was conducted with each participant between November, 2003 and January, 2004. The two in-depth interviews were conducted postnatally between January and April 2004. Because of the availability of interview space and on-site child care, interviews most often took place at the session location. Dates and times varied from interview to interview to accommodate participants' schedules.

Figure 1:


Study Design and Timeline
Oct. 2003
Preliminary discussions
Initial contact with participants
Familiarization with setting
Nov.-Dec. 2003
Contact visits
Continue building rapport and familiarization with setting
Assessment of willingness to participate and building participant pool
Verbal introduction to consent
Jan.-Apr 2004
Semi-Structured Prenatal Interview
Objective
Provision of baseline data
Jan.-Apr. 2004
In-depth Interviews x 2. Approximately one month post-partum
within 3-7 days
Interview 1: Objectives
i) Focused life history
ii) Current Experiences
Interview 2: Objective
Co-construction of meaning
Example:
Structured Prenatal Interviews
7 months pregnant
8 months pregnant
9 months pregnant
4 mos.
3 mos.
2 mos.
In-depth Interviews 1 month postpartum
Feb./Mar.
Jan./Feb.
Dec./Jan.

The first postnatal interview was conducted at approximately one month postpartum (Table 3.1). One month was chosen for three reasons. First, it allowed me to identify the chosen infant feeding method. Secondly, in case there were complications, the mother would likely have had an opportunity to settle at home. Thirdly, problems with the process of breastfeeding usually begin at approximately two weeks postpartum (Riordan, 2004) thereby allowing me the opportunity to capture such experiences. However, due to uncontrollable circumstances (e.g. interruption over Christmas holidays and repeated absence on the scheduled interview day), two women (1,8) were interviewed at later stages.

Table 3.1

Participant Interview Schedule *

	Prenatal	**Postpartum**	
Participant	**Month of pregnancy**	**In-depth #1 (weeks)**	**In-depth #2 (days elapsed since In-depth #1)**
1	9	8	7
2	7	3	7
3	7	3	1
4	7	4	5
5	9	4	2
6	6	3	–
7	5	3	–
8	9	20	–
9♦	9	–	–
10♦	7	–	–
11♦	5	–	–
12♦	8	–	–
13♦	5	–	–
14♦	4	–	–
15♦	7	–	–

*Note: ♦= lost to follow-up after prenatal interview; (–) data not obtained

The second postnatal interview was conducted one to seven days after the first postnatal interview (Table 3.1). All interviews were audio-taped with the exception of two prenatal interviews that were recorded using skeleton notes. One of these participants requested skeleton notes to replace the tape recorder because interview space was not available and she felt taking notes would be more discreet. Notes were taken with the second of these two participants because the interview was not planned for that day and I had no recorder with me.

Fifteen women were invited to participate and subsequently completed the prenatal interview (Table 3.1). Of these, seven did not complete the postnatal interviews. Reasons included moving to another city, dropping out of the Food for Thought program, and sporadic program attendance (following a period of regular attendance) which led to several no shows for scheduled interviews. Efforts were made to contact these participants at the contact numbers given during the prenatal interview but were unsuccessful. Of the eight remaining participants, five completed all interviews and three completed the first postnatal interview. Reasons for not completing the second interview were primarily due to extended absenteeism from the program making scheduling difficult.

In spite of the number of women who were lost to follow up and those who did not complete all three interviews, thematic exhaustion was reached. This was defined as the point where no new experiences were being shared and others had become repetitive.

3.6 Analytical Process

In-depth interviewing produces large volumes of material that must be reduced to what is important and of interest. Critical to this process is that the reduction be done inductively versus deductively (Seidman, 1998). In the analysis of phenomenological data, following reduction, analysis of specific statements leads to the formation of categories and themes and ends with a search for all possible meanings (Creswell, 1998).

Data collected from all interviews, with the exception of the seven prenatal interviews of participants who dropped out of the study were used to answer the research questions. Analysis began following observation of the first Food For Thought

session. Interviews were generally conducted during program time but never interfered with the educational component. Immediately following each interview or observation I reviewed and expanded my observation notes and reflexive journal if necessary. Interesting thoughts or ideas were documented for possible development if relevant.

To prepare the data for analysis, it was necessary for each interview to be transcribed verbatim. During the transcription process I began to form ideas about categories and themes. Lists were made of these possible categories and I continued to document ideas and interpretations in my reflexive journal. When transcription was complete, each transcript was read and presented to the participant at the first available opportunity. This first read provided another opportunity to develop tentative ideas about what I might do with the different parts of the data.

Content analysis using Seidman's method of thematic analysis and interpretation (Seidman, 1998) was used for more detailed analysis of the transcripts. This was accomplished through the identification, coding, and categorization of data segments. The coded segment could be a single word, a phrase or a paragraph or more. I coded almost everything that was discussed during the interviews. These codes took the form of category labels and were clearly written beside the relevant data segment directly onto the original hard copy transcript. From the beginning, I kept the categories as broad as possible but quickly found the need to develop several sub-categories. As coding continued and more data accumulated, new categories were added while others were further sub-divided or refined in some way.

To code, I read through each transcript in hard copy and coded each segment by hand. Coded segments were then filed and saved under their respective categories using Microsoft® Word. A copy of the original transcript in its entirety was kept on computer and in hard copy. Each segment that was transferred was labeled such that its origin could readily be traced back to its place in the original transcript. My peer debriefer, who is also my research supervisor, reviewed the evolving codes and categories at regular intervals as a method of checking my interpretation of the data.

As I worked with the data, I continued to differentiate categories, to reorganize and to re-label as necessary. Beginning with the more dominant categories, I examined, compared and summarized the material within it. The number of categories diminished

as this process continued and comparisons were made across categories for possible linkages. Eventually this led to the development of overarching themes that explained the research findings.

In addition, what makes Seidman's approach somewhat different than the more conventional approach described above is the "crafting of profiles or vignettes". He finds profiles as effective ways of "sharing" interview data. While not all interviews lend themselves to creation of a profile, most lend themselves to a vignette. The profile is a narrative presentation of the interview in the participant's own words with a beginning, a middle, and an end. A vignette is created when there is not enough information to craft a profile. It is essentially the same idea but it covers a smaller section of an experience (Seidman, 1998). Seidman finds this an effective way to "find and display coherence in the constitutive events of a participant's experience, to share the coherence the participant has expressed, and to link the individual's experience to the social and organizational context within which he or she operates" (p.103).

Profiles and vignettes were created for all participants. In an effort to maintain their anonymity, a composite vignette was prepared. This vignette (see 4.2.2) represents the most salient aspects of their lives as they pertain to infant feeding.

3.7 Trustworthiness

Traditionally, the most commonly cited criteria by which the trustworthiness of qualitative research is judged are credibility, transferability, dependability and confirmability (Creswell, 1998; Lincoln & Guba, 1985).

Lincoln and Guba (1985) suggest various techniques to "operationalize" these criteria. The first means by which researchers can increase credibility of their findings is through the incorporation of three activities. The first two, prolonged engagement and persistent observation, allow one to learn the "culture" through first hand experiences of what is true and what is not, and to add depth to activities which may appear mindless to others. Ultimately they allow the researcher to learn context and minimize distortion. My study design lent itself to both of these activities. The third activity, triangulation, involves judging the accuracy of particular pieces of data using one or a combination of four methods. The most commonly used method of triangulation used in qualitative

inquiry is through different "sources", or in other words, looking at different sources of the same information (Lincoln & Guba, 1985) . Due to the nature of the data collected through interviews (e.g. personal experiences), true triangulation was not possible. At best, the combination of my role as participant observer and corresponding observation notes, interview notes, and notes from the reflexive journal provided some confirmatory data.

Peer debriefing as a means of providing an external check on the inquiry process is a second technique which was used to lend credibility to the study. This was accomplished through critique of my ideas and interpretations by my supervisor and another researcher experienced in thematic analysis in addition to my constant review of my data and observation notes.

Transferability was achieved through thick description (Lincoln & Guba, 1985). Because words are being used (as opposed to numbers) as the means to inform the reader of what has been found in the research, this may include "rich" descriptions of people, places, and contexts. This applies to data as well and is accomplished through heavy documentation through quotes from transcripts, field note and journals (Merriam, 2002).

A study can be judged dependable if the reader can follow the decision trail of the research process (Lincoln & Guba, 1985). These authors propose an "inquiry audit" which requires the researcher to do two things: the first is to have a "process" in place by which accounts are kept. To this end I kept accurate and complete records documenting the process of data collection, interpretation and analysis. This information serves as a data collection trail. The second task is regarding the "hard copy" product or records. In this study, it included all forms of data (e.g. audiotapes, interview questions, field notes, reflexive journal, other notes, letters and receipts) that corroborate any actions, interpretations, conclusions, and recommendations I have made. The "process" by which records are kept and the meticulous collection and reporting of data must be done to such a degree that it will satisfy an independent auditor (Lincoln & Guba, 1985). With the necessary prerequisites in place, an independent auditor would be able to perform such an audit.

It is felt however that because qualitative inquiry continues to evolve and be defined, so must the criteria used to judge its quality (Lincoln, 1995). Lincoln (1995), does not propose that earlier criteria (presented above) be abandoned but that they be viewed as fundamental and should be built upon. Thus, new "emerging criteria" were published in 1995 and have been taken into consideration in this study along with the older criteria.

The first criterion, *positionality or standpoint judgment* is perhaps best explained by the following quote:

> texts are always incomplete; socially, culturally, historically, racially, and sexually located....texts that claim whole and complete truth or that claim to present universal, grand, metanarrative, or generalizable knowledge (or knowledge that applies to all similar individuals or groups across time and across context) are themselves specious, inauthentic, and misleading.... only texts that display their own contextual grounds for argumentation would be eligible for appellations of quality and rigor. (p. 280)

The second criterion is that of *community* which recognizes that when research takes place in a community, it is clear to all involved that it is to serve the community and not just to serve "the community knowledge producers or policy makers" (p. 280). This study conducted research with members of the Aboriginal community. Exploring feeding decisions of Food for Thought clientele was to understand why particular decisions about infant feeding were made in an attempt to gain information to increase breastfeeding rates within the surrounding Aboriginal community. In partial fulfillment of this consideration, the findings have been presented to the community and will also be presented to the participants.

The third criterion, *voice*, emphasizes the importance of representing the voices of those who are speaking and not only the researcher's voice. Especially when working with individuals or groups who are often not heard, this is essential. It is felt that: "the extent to which alternative voices are heard is a criterion by which we can judge the openness, engagement, and problematic nature of any text" (p. 283). This study is filled with quotes and thick description enabling the reader to agree, disagree or make his or her own comparisons using the information provided.

The fourth criterion, *critical subjectivity,* also referred to as *reflexivity,* stresses that the research process from beginning to end must always takes into consideration the

psychological and emotional state of the researcher and those being researched. Engaging in continuous reflexivity enables the researcher to foresee and address possible challenges, thereby minimizing discomfort to themselves and the participants. In this study, taking steps to minimize participant and researcher burden reflect consideration of this criterion. For example, interview #1 and #2 were collapsed and interviews were most often conducted at the session location. In doing so, participants were involved in less interview time, and had on-site child care. From my perspective, I did not have to make arrangements to interview at different locations where safety issues may have been a concern. In addition, I did not have to incur unnecessary transport or child care expenses.

The fifth, *reciprocity* emphasizes that relationships between those involved in the research be based on mutual trust and caring. Reciprocity in this study was made possible through prolonged engagement. Rapport was established which eventually led to development of relationships which were further solidified with the amount of time spent together.

The sixth criterion, *sharing*, highlights the importance of sharing and being honest about benefits of the research, not only with those we are conducting the research but to the researcher. I recognize that the primary intent of my research was to fulfill an academic requirement and this was made known to my participants. However, I was also honest with my participants about what I expected to gain on their behalf.

As noted by Lincoln (1995), the criteria presented above are also viewed as ethical considerations in qualitative research. Therefore, even if these criteria continue to develop and evolve away from what is presented herein, they will remain relevant.

3.8 Ethics

An ethics application was submitted to the Advisory Committee on Ethics in Behavioral Science Research at the University of Saskatchewan. Subsequent to that approval, an "Application For Approval To Conduct A Research Project" to Saskatoon Health Region (SHR) was submitted. Before approval could be granted by SHR, I had to obtain the signature of the Manager of Healthy Lifestyles, Public Health, whose

department oversees Food For Thought. Ethics approval was granted on October 28, 2003.

CHAPTER 4: RESULTS AND DISCUSSION

4.1 Introduction

The purpose of this study was to investigate Aboriginal women's' decision-making influences as they pertain to infant feeding. This was accomplished through an exploration of physical, social and emotional experiences into the past and present lives of eight participants, with a focus on infant feeding. Results will be presented and discussed in a thematic format.

4.2 Participant Background

4.2.1 Participant Demographics

Demographic details provided information illustrating similarities and differences among participants (Table 4.1). As described in section 3.5.3.3, of the fifteen women enrolled in the Food for Thought Program who accepted invitations to participate, eight completed the study. Because some of this information was gathered during postnatal interviews or during sessions, some details remained unknown.

The eleven participants who had more than one child had breastfeeding experience. The data used to answer the research questions included the infant feeding experiences with the 26 children belonging to the eight participants who completed the study. Most participants were with a partner. All participants resided in Saskatoon and at least four had previously lived on a reserve. Of the women who indicated their level of education (9), most had some high school while one completed grade 12. Although not indicated in the table, all participants were teenagers when their first child was born. It should also be noted that participants' age and number of children were presented in such a way as to further protect their anonymity.

Table 4.1

Participant Demographics*

Participant	Age in years at prenatal interview	Number of children including newborn	Previous Breastfeeding experience	With a partner	Highest level education	Previously lived on a reserve
1	Ranged between one of three groups: 18-20 x 6 21-25 x 4 26-30 x 5	Ranged from 1 to 7 children, with the majority having more than one child; average number of children 3.	y	y	11	y
2			y	y	10	n
3			y	y	9	n
4			y	n	11	n
5			n	n	11	n
6			y	y	12	y
7			y	n	–	n
8			y	y	–	n
9♦			y	y	9	–
10♦			y	y	10	–
11♦			n	y	10	y
12♦			n	n	–	–
13♦			y	y	–	–
14♦			n	y	–	–
15♦			y	y	–	y

*Note: ♦= lost to follow up after prenatal interview; y=yes; n=no; (–) data not obtained

4.2.2 Participant Composite Vignette

The composite vignette introduced in section 3.6 was crafted using key pieces of information extracted from each participant's previously constructed narrative of her life. The information is presented through the voice of one "composed" woman such that it represents the most salient aspects of the lives of the participants with a focus on infant feeding. The vignette was included to provide the reader with additional information and the context necessary to achieve a deeper, more comprehensive understanding of the results and discussion to be presented.

> In my family, everyone prefers breastfeeding. The first time I saw someone breastfeeding was when I was about 11. It was my auntie breastfeeding her three year old and I thought it was gross. My attitude changed when I was

about 15 when I saw my oldest cousin's girlfriend feed her baby. It looked so peaceful. I said that if I ever had a baby I would breastfeed and I know that it is healthier and safer.

When I was pregnant with my first son, I decided I would breastfeed but I didn't like the thought of breastfeeding. Maybe it's because I was 16 but I did it because I knew it was good for him. It was really hard at first too because my milk didn't come in for two weeks so I had to supplement him with a bottle. In the beginning it hurt to feed her from my breasts. The nurses tried to help me but it hurt every time he latched on. Some nurses were very helpful and patient but another one was very rude and she made me want to quit but the nice nurses kept me with it. Even after I got home it still hurt, so much so I wanted to quit but my grandma said it would get better so I kept with it. He was such a good baby though. I would breastfeed him before he would go to bed and he wouldn't wake up till the next morning at six. My grandma wanted me to breastfeed till he was a year but I stayed in for six months and watched this kid grow. I switched him right over to the bottle and within two weeks I was back in school to finish my grade 12. Breastfeeding can make you feel really tied down and not let you do the things you want to do.

I wanted to breastfeed my second son too but I had the same problem with my milk coming. Then I got sick right after I had her and my friend told me I shouldn't breastfeed because it will go through the milk and make the baby sick. My doctor said that couldn't happen but that it was up to me if I wanted to keep breastfeeding her. To tell you the truth, I didn't feel like feeding her from me. I was so sick and tired and I wasn't eating anything so I wasn't producing very much milk and I didn't feel like being around either of my kids. I just put her on the bottle after two weeks but when my grandma would come over I would have no choice because she'd get mad if I didn't breastfeed. I would just make it look like I was feeding her when she was over then at night I would give her a bottle so he'd sleep all night. I felt like I was doing something wrong at first by switching her over to the bottle but I'm sure I'm not.

4.3 Participants' Infant Feeding Decisions

Table 4.2 documents participants' infant feeding decisions beginning with the prenatal feeding intent and ending at approximately one month postpartum. Apart from the method chosen at initiation, time frames reflect when the majority of changes in feeding method occurred.

Of the 15 participants, 13 stated a prenatal intent to breastfeed. Of the remaining two participants, one was undecided and the other intended to formula-feed. Through postnatal interviews with all eight participants who completed the study, all initiated

breastfeeding at birth. By day seven, three had introduced some formula-feeds on the advice of the postpartum nurse and one participant had decided to do so without being advised. While half stated they were still feeding only breastmilk to their infant, by day 14, of those who were supplementing, two switched completely to formula-feeding (3,7). At less than one month, one breastfeeding participant (8) had switched to formula-feeding while another (2) introduced combination feeding leaving two participants (5,6) feeding only breastmilk at greater than one month postpartum.

Table 4.2

Infant Feeding Decision Trail*

Participant	Prenatal feeding intent	Method at birth	Method at < 7 days	Method at < 14 days	Method at < 1 month	Method at > 1 month
1	BF	BF	BF/B	BF/B	BF/B	BF/B
2	BF	BF	BF	BF	BF/B	BF/B
3	FF	BF	BF-supp	FF	FF	FF
4	BF	BF	BF-supp	BF/B	FF	FF
5	BF	BF	BF	BF	BF	BF
6	BF	BF	BF	BF	BF	BF
7	U	BF	BF-supp	FF	FF	FF
8	FF	BF	BF	BF	FF	FF
9♦	BF	–	–	–	–	–
10♦	BF	–	–	–	–	–
11♦	BF	–	–	–	–	–
12♦	BF	–	–	–	–	–
13♦	BF	–	–	–	–	–
14♦	BF	–	–	–	–	–
15♦	BF	–	–	–	–	–

*Note: ♦=lost to follow-up; (–) data not obtained

BF breastfeeding
FF formula-feeding
BF/B combination feeding
BF-supp breastfeeding with medically advised supplementation with infant formula
U undecided

4.4 Themes and Sub-Themes

Six major themes emerged from the data (Table 4.3) some of which have sub-themes. All themes and sub-themes depicted factors affecting the decision-making process as it pertained to infant feeding.

Table 4.3

Themes and Sub-Themes

Themes	**Sub-Themes**

1. Sociocultural and Environmental Influences	• Life Experiences
	• Culture
	• Support
	  o Support network
	  o Support programs
	  o Hospital support
	• Outside Influences
	• Poverty
	• Breastfeeding Climate
	  o View on infant feeding in society
	  o View on breastfeeding in public
	  o View on acceptable breastfeeding age
	  o Awareness of others feeding experiences

2. Attitude Toward Feeding Method	

3. Knowledge, Information and Beliefs	• Sources of Information/Knowledge
	• Infant Feeding Beliefs
	  o Health
	  o Bonding
	  o Economical
	  o Infant weight
	  o Freedom and convenience
	  o Infant behavior
	  o The "good mother"

4. Infant Feeding Experiences	• Previous Breastfeeding Experience
	• Lactation Problems
	  o Latch problems
	  o Milk supply issues

5. Psychological Influences	
6. Other Issue	Timing of the Initial Breastfeeding Attempt

4.5 Discussion of Themes

4.5.1 Theme 1: Sociocultural and Environmental Influences

The importance of context in qualitative research has been discussed in Chapter 3. The two main contextual influences in this study were sociocultural and environmental in nature. Examination of these areas exposed the more dominant commonalities among participants allowing for a more global assessment of their lives.

4.5.1.1 Life Experiences

An exploration of experiences from childhood through to adulthood provided insight into common struggles and challenges faced by these participants.

Half of the participants were not raised by their mothers. Grandparents were the most frequently mentioned caregivers and took part in raising almost all participants for at least a portion of their lives. Other caregivers included foster parents and older siblings. Some women were raised by several caregivers at different times:

> Well I was basically back and forth with my foster parents. I've only been with my grandparents for four years...but I can't remember my youngerhood.... I know in my childhood, in my younger days when I was real tiny, they were raising us. I think from kindergarten I started realizing that we were going to foster homes. Before I was going to school I remember one foster parent taking care of us on the farm and they were my favorite foster parents. I was very close to them. We stayed there for about two years then got out.... I think I was raised by my grandfather for about a year maybe, until I was in kindergarten. Then I went back to my mom...they gave me back to my mom. My oldest sister called [social services] because she [mother] went out drinking.... My grandpa had to hire the best lawyers so he could get custody of all of us instead of my mom. They gave him custody and I stayed with him until I was about 12... on the reserve. After that I came out here and my oldest sister raised us.... I was back and forth with [her] and my mom because [she] was very strict ....

One participant was raised by her father while the majority of participants had very limited relationships with their fathers. Relations varied from not knowing their fathers at all to getting to know them when they were much older, to fading relations.

> My dad...he was with my mom for about six years and then after...when I was six years old he was gone and...there was just mother. She was a very loving and caring mother. She was always there for me and supported me

> through everything and I just want to do that with my kids...because that's how I remember her.... I rarely remember my dad coming around after that but ...my step-dad, he came about a year after my mom and dad split up and he was with my mom for quite a few years before she passed away. I haven't heard from him in a few years though. I kind of lost track of him.

These findings may help explain why participants' fathers were rarely referred to and why grandparents (especially grandmothers) were referred to frequently.

Participants were mobile during their childhood. Over half the participants lived in more than one geographical location including different cities, towns, and provinces:

> I was born in [out of province] and was raised in [another province].... I've been living...all over [chuckle].... We have been moving back and forth from [province to province] pretty much all my childhood life.

Two of the eight participants had previously lived on a reserve.

Although some of the movement was with their own family unit, the findings suggest participants' mobility was the result of having different caregivers.

As they grew up, over half the participants had been exposed to family members who abused alcohol. Although a brother, father of previous child, and step-mother were mentioned, in the majority of cases, participants witnessed their mothers drinking:

> But at that time, my mom used to drink.... I remember she would be passed out and [my brother] would go stand there and breastfeed.... I remember that...yeh...she used to drink.

> The kids are under my name because...my mom had a drinking problem...a very bad drinking problem...in the summertime. So we made an agreement that I would keep the kids and I'd have no problem keeping the kids...until their school is done...until she's done her treatment. So she finished her treatment...whatever....

As teenagers and adults, participants began their families. Half of them had children with at least two different men. Two of these participants were in stable relationships while the other two were among the three women not currently with a partner.

In addition, life experiences involving alcohol and drug use or abuse, and smoking were described. Over half the participants described experiences indicating past or

current alcohol use/abuse. While most of these participants referred to occasional alcohol use, two described alcohol abuse:

> ...It was like...I would drink up until two and a half months before I had him and then...during that time it made me think that maybe I wanted to quit...you know.... I thought I should breastfeed because I wanted to quit...so I could have something to help me quit. Then I only lasted for a month after because there was just too much stress...things happening in my life that I just couldn't deal with so I started drinking again and just...one day I just took him off the milk and never breastfeed him again. There was nothing wrong with my milk coming in... at that time.

And drug abuse:

> ...I really needed a break from the kids but I took it a little too far and he [my previous partner] was into his intravenous drugs and he begged [emphasis] me to do some with him so that kind of got me into it. And then...I just...I don't know...I could only handle a month with that and that was it. I couldn't do any more and I told him.... I just didn't want it any more.

Although only two participants discussed their addiction to alcohol and or drugs, it is possible that other participants shared similar experiences:

> ...Well, to tell you the truth... a lot of women won't tell you things like this. The reason why I am telling you is because I am used to telling people. Before I wouldn't tell anybody how I was really feeling...I could have just told you I didn't breastfeed because I didn't want to and you wouldn't know the real reason why (cause I was drinking and this and that). A lot of women are scared to tell people that. But you know, from them telling me things, I share experiences with them...that [drinking] is the reason why you didn't breastfeed.

Two others stopped using alcohol when they became mothers:

> ...I already had my teen years when I was young and I had my fun years and ever since I became a mother, I just quite smoking and did everything at once.

Over half the participants smoked or had smoked. Even though several of these participants were smokers at the time of the interview, they were aware that this behavior was less than ideal, especially while breastfeeding:

> ...I smoke...I try and not do it.... I have slowed down quite a bit since she came home from the hospital and...I don't like the way I smell or my breath, my fingers stink and.... I always have to go wash up before I even handle her...so...I really

want to quit...yes, totally. I think it would be better for everybody with infants to quit smoking.

Smoking is common among Aboriginal women and as mentioned in Chapter 2 low socioeconomic status is one of the main determinants of this behavior (Health Canada, 1999; Reading, 2001). Although one report suggests that smoking can negatively influence the decision to breastfeed among Aboriginals (Martens & Young, 1997), these findings do not support such an association.

The data suggests that lifestyles involving substance use and abuse are often associated with difficult life circumstances. The decision of whether to breastfeed or formula feed may become secondary to substance abuse or use issues rather than the result of a well thought out interplay of pros and cons. The following quote exemplifies this notion:

> ...I haven't felt free to make my own decision...just based on how things are going now. Now that this is a big change from making a decision based on how my lifestyle was [drinking and physical abuse]...I am not making that decision based on my lifestyle...it could be part of that feeling guilty [about deciding to FF].

Several participants suffered from emotional and/or physical abuse at some point in their lives:

> ...I went through a lot of abuse with [my ex-husband].... It was so bad, he hit me with a car and cut me with a knife and stuff like that so it was pretty bad....

For at least two of these participants, physical abuse had a negative impact on breastfeeding.

> ...I was scared most of the time and to be hiding in a room with your baby and, don't know whether he's going to wake up in a good mood or not and chase me around, you know like with a fuckin machete one time you know like...come on...I wouldn't be able to have milk in my breasts!

Although it was not the intent of this study to explore the impact of physical abuse on breastfeeding, as illustrated above, it can be negative and is worthy of further research.

In summary, inconsistent caregivers and lack of stability typified many participant's childhoods. Mothers were infrequently involved in raising participants and

relationships with their fathers were very limited. Grandparents played a large role in participants' upbringing.

Exposure to alcohol abuse at a young age, particularly by their mothers was not uncommon. As teens and adults, alcohol and substance use/abuse were lifestyle issues faced by participants and sometimes had a negative impact on breastfeeding. Smoking is another lifestyle choice for some of participants but it did not appear to have a negative impact on breastfeeding decisions. Having children with more than one man was not uncommon but did not preclude a stable relationship. It was not unusual for participants to suffer from physical abuse which sometimes had a negative impact on breastfeeding.

4.5.1.2. Culture.

As discussed in Chapter 2, identification of traditional or cultural beliefs surrounding infant feeding has provided insight into more effective ways of promoting breastfeeding in First Nations communities. However, it was also suggested that there is little involvement with traditional ways or practices among urban Aboriginals. This section provides insight into possible reasons for this perceived disassociation with Native culture.

When asked about traditional or cultural beliefs, almost all participants had at least some knowledge of such practices:

> Some I do follow…my grandma…my mom…they speak a lot of their [language]…always speaking Salteaux. I can understand a little bit of it but I don't really speak it…I wasn't raised with that language. My auntie [step mom], the one that my dad stayed with, she never wanted to teach us Indian ways. My mom, when she'd come around, she'd tell us this and that.
> Q. What would she tell you?
> A. … stuff when you're growing up, what you can and can't do.
> Q. What's one thing that sticks out in your mind?
> A. …when you get your…when you get your period. The first year you can't hold babies, you can't eat berries, you're not allowed to step over…over boys or over things…lots of things like that.
> Q. Did you practice a lot of the things she said?
> A. Yes, I always listened to my mom…my grandma too, she'd get mad "man you little F'ing kids don't understand now a'days" … she'd tell us and tell us in Salteaux and so then we'd "huh? huh?" [laughter] . She'd get to the point where she would get mad and yell at us in English.
> Q. Do you think that you'll pass those things to her [your daughter]?

A. My mom is teaching her Salteaux. Every time she comes around they talk to her like that. We're going to be moving down there soon...so yes

As illustrated above, most of the participants could not speak their Native language but could understand it to varying degrees.

The data suggests there were efforts being made to keep some traditional beliefs/practices alive in their families. At least half the participants were making efforts which ranged from having their children learn to speak Cree to moving closer to relatives with strong "cultural ways".

Several participants found it difficult and had been largely unsuccessful at locating Salteaux Elders. This was particularly important when an Elder was needed for a religious ceremony for the dead.

...it is hard for us to find an elder...we had to look for an elder for our grandparents [after they died] because we are supposed to put on a feast for them so they can eat. It took us at least two to three years to find an elder....

Most of the participants were Salteaux. In Saskatchewan, Cree populations dominate and Cree Elders are accessible (S. Cameron, personal communication, June 11, 2003). Because of this population base, it is not surprising that Salteaux Elders were difficult to locate. It is possible that if Salteaux Elders were available, participants of Salteaux heritage may have expressed a closer association with traditional ways.

Only two participants made reference to breastfeeding as the traditional way of feeding an infant. It is possible however that others shared this belief but it was not stated during the interviews. In the literature, breastfeeding has been identified as the "proper" way of feeding an infant among Aboriginals (Dodgson & Struthers, 2003; Wilson, 2000; Wright et al., 1997).

Even though the data suggests a superficial understanding and/or incorporation of traditional ways or practices, including infant feeding practices, it is difficult to judge its impact on the lives of these participants and their feeding decisions. It has been suggested by other researchers that this type of finding is not unexpected because "culture is largely an unconscious phenomenon, making it difficult to identify its impact on one's life decisions" (Houghton & Graybeal, 2001 p.246). In addition, statistical

descriptions in the report by Wright et al. (1997) showed no association between self reported degree of traditionality and how a woman chose to feed her infant.

In summary, although most participants had some knowledge of traditional ways and practices, it was difficult to assess cultural impact on infant feeding decisions. Most were making attempts to carry on cultural ways but one barrier may have been the absence of Salteaux elders in a primarily Cree territory.

4.5.1.3 Support

The importance of the role of support on breastfeeding duration of both exclusive (feeding only breastmilk to an infant) and any breastfeeding has been well-documented (Morrow et al., 1999; Scott & Mostyn, 2003; Sikorski et al., 2002). This includes professional and lay support. Equally important is support received from family and other members of the social network (Cernadas et al., 2003; Dykes et al., 2003; Ekstrom et al., 2003a; Harris et al., 2003; S. Smith, 2003a). This documentation extends to reports among Aboriginal woman (Banks, 2003; Houghton & Graybeal, 2001; Martens, 1997, 2002; Martens & Young, 1997). In addition, breastfeeding attrition has been associated with lack of support (Scott & Mostyn, 2003; Tarrant et al., 2002).

4.5.1.3.1 Support network.

People are more likely to perform a behavior if the behavior is considered worthwhile by significant others (referents) whom the individual wishes to please (Ajzen & Madden, 1985). Data indicative of relationships between participants and other people allows for identification of members of the support network and an indication of their potential influence on feeding decisions.

People identified as members of the participant's support network included the participants' mother (baby's grandmother), partner (baby's father), grandparents (baby's great grandparents), siblings, extended family, in-laws, and friends. Members outside the social network included general practitioners and community health nurses.

Compared to other members of the support network, participants' mothers were most frequently cited. All but two participants described themselves as being close to

their mothers. Of these two, one was raised by her father while the other was raised by grandparents.

Situations illustrating the supportive role of their mothers were described. For example, their mothers were either present or had every intention of being present at the birth of their infant:

> She came right...we phoned her right after I got to the doctor...we went and phoned her...left a message and told her that I was going to have the baby and she automatically caught a ride to the city.... It's three hours away where she lives. My uncle came and dropped her off and she took care of my kids after I was in the hospital...

Support continued into the early postpartum period. Half the participants' described experiences where their mothers accompanied them home after discharge to help. Various kinds of support were described including: help with infant feeding and daily household chores; comfort, encouragement and advice on breastfeeding.

> ...I had problems and I was tired so I would call my mom or my dad and they would come and get him and they would bottle feed him if I wasn't up to breastfeeding him that night.... Sometimes I would be sitting there and I would be falling asleep and I would just about drop him so I had to call one of them to come and get him. They would bottle feed him so I could sleep.

For the only primaparous woman, support from her mother, who was with her for the first few days postpartum may have been critical in her decision to continue with breastfeeding.

> She helped me out the first two days I was home...when I would get up she would get up with me or she would hear the baby cry and she would get up and come and get me.
> Q. Did she ever tell you that some of the problems you were experiencing, like leaking into your shirt was normal?
> A. Yes...and that it was normal to have really really sore nipples and that it hurts at first. She said the baby might even have blood coming from his mouth because your nipples are so chapped...cause my sister made her bleed when she was breastfeeding.
> Q Did you find it helpful to hear that from her?
> A. Yes...I would have been worried if there would have been blood coming out of my baby's mouth.

With participants expressing close, supportive relations with their mothers, it is not surprising that their mothers influenced their feeding decisions. Almost all

participants described experiences illustrating their mothers influence in favor of breastfeeding:

> Q. ... did anyone ever say that you should breastfeed or that you should bottle feed or offer their opinions in that way?
> A. Well...I was told by mom that it's better for them to be breastfed because that's how it's supposed to be...traditionally all women are supposed to feed their babies from their breasts...

These findings mirror those of previous reports among Aboriginal women citing the mother's mother as being the most influential (Banks, 2003; Houghton & Graybeal, 2001; Martens & Young, 1997) or among the most influential people in the infant feeding decision (Dodgson & Struthers, 2003; Wright et al., 1997).

Partners were also frequently identified as members of the support network. Over half the participants were with a partner and had close relations with them. Long-term relationships (e.g. over five years) and sharing more than one child helped to illustrate their closeness. In addition, although no couples were legally married at the time of the interview, half shared the same residence.

Several participants described experiences depicting their partner's central role in the family. These experiences illustrated good family relations and dynamics, providing further evidence for the depth of the relationship:

> He is pretty supportive about that...even when I first met him there was no smoking in my house...so he would smoke outside.... He understood my rules and he knew that I breastfed the kids and I didn't like second hand smoke around the kids and me.... I would say to him "do you want me to start smoking?", when he would smoke around me and he would say "no, I will butt it out" [laugh].... Sometimes he would light up in front of me and I would say "you might as well just pass me a smoke".... He would say "no that is alright" and then butt it out.

In addition to close relationships, these participants also described their partners as supportive which ranged from financial to emotional in nature. Partners were described as being helpful around the house as well as with the children. As was illustrated by participants' mothers, with the exception of one partner who was at home caring for the other children, partners were present for the birth of the infant.

Partners' support for a particular feeding method was also evident. Half the participants described experiences reflecting equal support for both feeding methods.

This was noted implicitly and explicitly. Ultimately, the feeding method preferred by the partner was adopted:

> Q. Do you know what he [the father] thinks [about infant feeding]?
> A. He likes the bottle-feeding thing because it makes him feel close too...he wants to be a part of it...because.... I nursed [our daughter] for a month and he wanted me to go on the bottle with her because he...he really...he wanted to help out and he even said that "I want to help out and feed my baby". He's always been really good with his kids.
>
> Q. What about [your partner]?
> A. He was always supportive...always supportive.... He told me that it was better for them and to try...keep trying [to breastfeed] and don't give up. I never did.

Partner's influence on the feeding decision is not surprising in light of their close, supportive relationships with participants.

The findings suggestive of close, supportive relations between participants and their partner are not reflected in the available statistical data. The current literature does not appear to offer any more information other than demographic details, describing Aboriginal mothers primarily as single parents (Canadian Council on Social Development, 2000). One possible explanation for this inconsistency is that the literature may not be truly representative of "single parents". For example, the tool used to gather information may only reflect marital status thereby not including those who live common law or those with close relations who do not share the same residence. The converse could also be true; the literature is accurate and it is the women in Food for Thought who are not representative of the Aboriginal population.

It is important to note that although the data suggested the partner's influence can have a negative impact on breastfeeding, it does not suggest he was unsupportive of this feeding method. It is possible that he was not aware that his desire to "help" feed the infant would undermine a healthier feeding choice. Whether intentional or otherwise, this finding provides further evidence of partners' negative influence on breastfeeding (Murphy, 1999; Tarrant et al., 2002). In addition, according to Murphy (1999), the baby's mother unknowingly perpetuates this negative influence when she tries to find ways to promote paternal involvement during the infancy stage.

In non-Aboriginal societies all over the world, the woman's partner has been cited as the most or among the most influential people with regard to the infant feeding

decision (Ekstrom et al., 2003a; S. Smith, 2003a; Tarrant et al., 2002). Although the partner's importance has also been documented in Aboriginal societies (Houghton & Graybeal, 2001; Wright et al., 1997), it appears that the baby's father is more often not mentioned (Banks, 2003; Dodgson & Struthers, 2003) or ranked among the least influential people (Martens, 1997). In the report by Wright (1997), partners were found to have the most influence on the decision to breastfeed if they were known breastfeeding advocates and lived with the mother.

Further evidence of the partner's role in breastfeeding success is found in a report by Gugliani in (1994) in which the partner's opinion was found to be the most important factor related to breastfeeding success regardless of various demographic factors including ethnic group. Although the aforementioned study did not include Aboriginal participants, it emphasized the partner's role in feeding decisions across various cultures thereby providing support for the findings herein. Because the findings in this thesis study suggest there was influence from the partner, his opinion toward a specific feeding behavior became important.

Grandparents were also identified as members of the support network. Possibly as a result of being raised by grandparents for some or all of their childhood, at least half the participants had close relationships with grandparents. References were made primarily to the grandmother:

> My mom couldn't raise me...and my grandparents raised me...they had me from when I was three months.
>
> Q. Were you raised by your mom?
> A. Yes...umm no...I was for...the first six years of my life...and then I moved in with my grandma.
>
> Basically they [grandparents] took us as their kids because our mom wasn't considered as our mother back then...and because she wasn't so close to us.

Grandparents provided financial and moral support which included caring for grandchildren and providing encouragement:

> Q. When you say you had a lot of help [with your son] what do you mean?
> A. ...financial...everything. I had my grandma, my grandpa, my uncles... my uncles work and everything
> Q. Why did you have that help with [your first son and not your youngest]?
> A. Because I lived with them...and now I live on my own

Close relationships with grandparents, especially grandmothers, helps to explain their influence on the infant feeding decision. This influence was described as frequently as it was with participants' partners. Half the participants described experiences illustrating their grandmothers' positive influence on the decision to breastfeed as well as their preference for this feeding method:

Q. Can you describe to me what was going on and how you were supplementing him?
A. ...well, to tell you the truth, I really didn't feel like feeding him from me... the way I felt...I didn't feel like feeding him. I would feed him...my grandma...my grandma would come over and then I had no choice but to feed him because she'd get mad at me if I didn't...so I just made it look like I was feeding him when she was over. Then at night time I'd give him a bottle so he'd sleep all night.

Q. Then what did she say when she found out [you stopped breastfeeding?
A. She told me that I was doing good and that it would be healthier to breastfeed him until he is one...

While most experiences were supportive of breastfeeding, others were unsupportive:

Q. What about your grandparents [influence on breastfeeding]?
A. They are always telling me to put him on the bottle...with all of them
Q. With him [your newborn]?
A. Yes
Q. Do you have any thought s on why that might be?
A. They see how much he is feeding and all that...so when I get money I am going to buy two cases of milk and put him on the bottle...not for good though...I just want to see how it is.

Literature documenting the influence of an infant's great grandparents is limited. In a report among First Nations women in Manitoba, the mothers' grandparents are not included as referents (Martens, 1997). However, a report from Minnesota (Dodgson & Struthers, 2003) found the grandmother as the most influential person with regard to the feeding decision. This report may be important because it includes Aboriginal women living in an urban setting.

With regard to the findings in this research, one possible explanation for grandparents' close relations with participants and their influence on feeding decisions is the result of having been raised (at least in part) by their grandparents. In addition,

especially when participants were raised entirely by grandparents, one could argue that the grandmother would have as much influence on the feeding decision as a mother.

Participants' siblings were also identified as members of the support network. Over half the participants felt they had close relations with their sisters and brothers. Participants appeared to be closest to their sisters:

> ...real close...I feel real close to her and I can tell her everything and anything and I know she'll keep it hush-hush if she needs to.... I can talk to her about everything...she's just an awesome sister.

Experiences involving brothers and sisters in a supportive capacity were described by these participants. Experiences took place during the peri-natal period and demonstrated various types of support including moral and active support such as helping out with the participants' other children.

Sibling influence on breastfeeding was positive and negative. Half the participants' described experiences which primarily involved their sisters:

> ...All my sisters like it [breastfeeding] they agree to it...it's best for the baby and all and it's healthy...

Negative influence was inferred when a participant's sister described breastfeeding as "too time consuming" while another expressed the perception that men in the family preferred their boys to be formula feed:

> Well, the boys in our family do not like their sons to be breastfed...only their daughters because ...well I don't know why...it's stupid.... Especially my brother-in-law...if he had a boy, he wouldn't want him breastfed. I think it's because they want to bottle feed their boy and be close to their boy...

Although the opinion that male infants should not be breastfed was only mentioned once, it could be important depending on which member of the support network holds the opinion and the nature of their relationship to the baby's mother. In addition, this belief has been reported in the literature (Scott & Mostyn, 2003) suggesting it may not be uncommon.

Other members of the support network included the extended family. Several participants referred to close relationships with aunts, uncles, and cousins:

> ...if not with their dad, [my two other children] are with their cousin's because my auntie lives right above me.... We are real close...both

boyfriends [have the same name], our first two kids were girls and the third was a boy. We have a lot in common.

In light of the close relationships with extended family members, it is not surprising several women described their influence on feeding decisions:

Q. Is there anyone in your family that made a comment on your infant feeding choice?
A. Yes, my aunt, she asked me if I was going to breastfeed...and I said yes and she agreed and said it is better for the baby.

Although other participants had large extended families, one cannot assume that relations were close or that they influenced feeding decisions. To determine whether or not these family members would have influence on feeding decisions, one would need to know more about the mothers' connection to that member.

Several participants identified their friends as referents or members of the social support network. The word "close" or "good" was used in their descriptions:

Q. Did you ever attend the class with anyone?
A. Yes, a good friend.... Our babies are the same...well she's got three but both of our babies are less than two weeks apart.
Q. Do you talk a lot?
A. Yep.

Descriptions of friends acting in a supportive capacity were given by several participants. In terms of breastfeeding support, friends of at least two participants had previous breastfeeding experience and offered support both by being present and by having the capacity to provide encouragement and advice:

...my friend, my best friend who was supposed to be my coach at the time she came in with me and she was with me for most of the time in the hospital but it was also her adoption day so she went to go have a quick meal and come right back. I knew she was coming back...I just went...and she was born...so she was trying...I was trying to hold off for her but [giggle]...she thought she'd make it because it was...seemed like it was long...

In-laws were also identified as referents who provided support. Several participants made reference to a mother-in-law, brother-in-law and sister-in-law in situations depicting support.

> When I was trying to feed [my son], my mother-in-law was there because she came to visit.... She knew I was breastfeeding and just gave me some privacy.... She took her [my daughter] and the kids downstairs to eat and get gifts.... She was taking care of them while I breastfed and thought it was best to give me privacy. I was alright with that because she had the two kids.

Although the data does not illustrate the influence friends and in-laws had on feeding decisions, one can assume that if close relations existed, they were likely influential referents.

Among Aboriginal women, one report indicates that mother-in-laws and friends can influence feeding decisions but not as much as the mother's mother (Martens, 1997).

Outside the social network, health care professionals, specifically general practitioners (GP) and community health nurses were identified as members of the support network. Experiences describing relations with their GP were more frequently described which was not surprising because the majority of participants received regular prenatal care. On the contrary, relationships with nurses were not described which can be explained by their comparatively limited interactions with participants during the shorter peri-natal period. However, as will be discussed below and in the proceding section on *hospital support*, nurses demonstrated a supportive role in infant feeding. They were thus capable of impacting feeding decisions.

Over half the participants felt they had good relationships with their GP. Most of these participants had known their GP for years and in the majority of cases he/she delivered more than one of their children:

> ...he's very friendly...he's very friendly.... He jokes and he fools around.... He is a very happy doctor and at times when he needs to be serious he is serious about things like our...he's concerned about our well-being.

> Oh awesome, I love my doctor! He's just like a big brother to me because I've known him since I was 16. He delivered all my kids. He just knows me really well. I see him all the time.

This finding suggests the majority of participants had regular prenatal care which is contrary to what has been previously reported in the literature (Sokoloski, 1995).

Several women had relationships opposite those described above indicating they were not close to their GPs. They either did not have a GP for a large part of their pregnancy or hardly knew them. One participant did not recognize her GP at the delivery:

> ...I don't see my doctor because I don't know what kind of doctor's they are.... Well the one that came in when I was delivering my baby...I didn't know who he was and when he came in he said "I haven't seen you in a long time". I have never seen him, not even once and I am thinking "who is he", they called the wrong doctor.... He kind of looked at me like he didn't know who I was too.... It sounded like he was going along with it.

Experiences illustrating support (or lack thereof) from medical doctors (both general practitioners and specialists) were infrequent and described by only a few participants. These experiences were supportive and unsupportive of breastfeeding. In the example below, the doctor's interest in the participant's feeding decision comes across as mechanical and not supportive:

> Q. Did your family doctor ever ask how you were planning on feeding your baby?
> A. No
> Q. Did yours [obstetrician]?
> A. Yes, she just said "how are you going to feed your baby?". I said breastfeed and she just said "okay, I just need to know...to let the hospital know you are going to breastfeed".

Even though the findings do not suggest GPs influenced participants' infant feeding decisions, in light of the positive, long-term relationships with many participants, such influence would not be surprising. This notion is supported by documentation among First Nations women living on reserve who considered their physician to be the most influential person with regard to breastfeeding (Martens, 1997).

Outside the hospital environment, even though participants had closer relations with their general practitioner than with health nurses, nurses had a more supportive role. Over half the participants described experiences involving a nurse. Visits from home care nurses were important sources of support. The nurse was physically present to observe infant growth and behavior and to address any related concerns including those involving breastfeeding.

> The home care nurse came for about a week and [the baby] wouldn't gain weight.... She wasn't gaining any weight...and then when the milk was supplemented she started gaining weight.

In addition to GPs and nurses, participants also received support from other professionals and specially trained persons. For example, participants sought help from addiction counselors and social workers.

> Q. Did you check yourself in [drug addiction centre]?
> A. Yes, I checked myself in and I checked him out of my life and told him that I just didn't want it no more and then I found out I was pregnant when I was in there.

Participants' willingness to seek help from health care professionals and other trained personnel illustrates they are aware of existing services and will ask for support if they feel the need.

4.5.1.3.2 Support programs.

Over half the participants have attended or were part of support programs/classes other than Food for Thought. These included parenting classes, Healthy Mother Healthy Baby (HM HB), Kids First, E Gadz, and classes for abused mothers.

Ways in which participants became aware of the aforementioned support programs varied. Several participants learned of other programs through word of mouth (e.g. friend, relative) or through other programs with which they were involved such as HM HB or through social services. For example, participants of the HM HB program received home visits during which time they received information about other programs. Health care professionals also provided information on support programs. Awareness through print media was infrequent; one participant referred to a flyer.

When asked specifically about Food for Thought and their reasons for attending, almost all participants' responded that it was primarily because of the food related activities. Although food security related issues were not specifically mentioned, participants expressed the desire to learn how to cook, "eat healthy", and to be able to bring food home.

Over half the participants expressed reasons for attending the program which were not food related. These included "needing to get out of the house" and a desire for social interaction:

> Q. How had you heard about this [Food for Thought]?
> A. Actually through my Healthy Mother Healthy Baby nurse.... I heard it through her. She brought me a pamphlet on it and said it's a really good place to go. You can meet new moms and you get to make good food and bring it home. I thought it would be a good idea to get out and meet new people.

Other reasons for attending Food for Thought varied and included: getting a break from their children; allowing their children the opportunity to interact with other children; to learn about babies and for support. Aside from being a client enrolled in the program, one participant attended the program to fulfill her peer leading commitment.

With regard to the aforementioned social interactions at Food for Thought, half the participants described positive experiences which included interactions with other women and staff. Some participants felt they had close relationships with particular staff members.

Participants felt they learned from the program. Specifically, on the topic of infant feeding, participants learned it is healthier to breastfeed and were shown the basics of breastfeeding using dolls. They learned about how to formula-feed safely as well as other parenting information. Participants learned about healthy eating, how to make food, and about food security. They also learned it was possible to become a peer leader for the program and be paid for it.

Prolonged observation of Food for Thought sessions revealed a relaxed atmosphere which appeared to create an environment conducive to formal and informal learning. For example, many women breastfed their infants during group time likely because they felt comfortable in doing so. This would be supportive of continued breastfeeding as well as breastfeeding initiation among the expectant mothers. Apart from questions relating to breastfeeding that frequently arose in this situation, participants learned through observation. This is important because it has been suggested that behaviors are learned through observation and that it is possible that observation of behaviors is more important than formal education (Hoddinott & Pill, 1999; Holman & Grimes, 2003). Therefore, an environment conducive to breastfeeding

where others can observe the behavior would have a positive influence on breastfeeding. Particularly when the majority of participants perceived formula-feeding to be the norm in society (see 4.5.1.6.1), observation of breastfeeding is important.

4.5.1.3.3 Hospital support.

The hospital environment was primarily supportive of breastfeeding and support originated mainly from postpartum nurses. Support was both offered by nursing staff and asked for by participants. Efforts primarily involved assistance with problems related to latch or milk supply.

All participants were offered support for latch and milk supply problems. Experiences involving latch were in reference to first time breastfeeding experiences:

> ...I thought he was latching good...but then he wasn't.... You could still hear him sucking air at the same time that he was sucking...but I didn't know because I had never breastfed before [laugh] so was it was just...okay...he's latched on, he's good, he's eating...and then the nurse came in while I was feeding him and she heard that and she was said "that doesn't sound right, take him off for a second.... You see your nipples, the way they are shaped, they are kind of triangular and flat" and then she said "your nipples shouldn't look like that if he's latched on properly". I said "well how are they supposed to look?" She said "fully rounded... they should still be round when he comes off.... Can you try again?".... I tried again and it took a couple more times to get him actually latched fully [emphasis] on...and then after he was latched on, he came on he came off perfectly...

Even for the only participant who did not want to breastfeed and therefore "did not want to learn", all experiences involving support for latching difficulties were positive.

Support offered for milk related issues were also described. For several participants, the efforts included initiation of tube feeding while waiting for the milk to come in:

> Q. Was she supportive?
> A. I think so, I don't know...I mean because I did try eventually and after she went off, another nurse came on and she was really, really nice and she really helped me out. She helped get my milk going a little bit but also used to substitute.... She showed me another way to substitute formula to her [tube feed].

In addition to being offered support by postpartum nurses, over half of the participants described experiences where they *asked for support*. Latch problems precipitated most requests for support. Only one participant was primiparous and the others had previous breastfeeding experience with at least one child.

Although the findings suggest postpartum nurses were supportive of breastfeeding, depending on whether the experience was perceived as positive or negative, it had a corresponding impact on that feeding decision. For example, in addition to the positive experiences which were supportive of breastfeeding, half of the participants also described positive experiences that were perceived as encouraging. This encouragement was instrumental in keeping two women breastfeeding:

> ... when I decided that I wasn't going to breastfeed I was so upset and I was just crying and crying before the nurse came in. I told her I couldn't do this anymore.... I just can't do it and she just said "no it's okay, its okay, you tried".... She said some of the other nurses would probably say differently than what she was saying but she said "no, its okay, it's alright... you know a lot of women go through this".... Then she said "you can go home and keep trying at home...you can keep trying" and that nobody is going to say anything bad to me because of my decision. She made me feel a lot better...

In the case of the primiparous mother, positive interaction may have been key to the successful initiation of breastfeeding, especially in light of the latch problems she experienced early on.

Conversely, perceived negative experiences were unsupportive of breastfeeding and were described by several participants. Negative perceptions were primarily the result of the manner in which the support was delivered. Each experience involved latch or milk supply problems which would have likely benefited from encouragement:

> Well the one time I latched him on but he wasn't on right and I knew how to get him off but it hurt and I didn't want to just pull him off.... The one nurse said "you know how to breastfeed. I shouldn't have to show you this...you should know since you have breastfed before."

> And the [postpartum nurse] says "well maybe you're just not doing it right because your nipples are sore". And I said "well no...well I don't know, that's why I'm asking for help to see if you can help me put her on...latch her on". "Well I showed you!" she said.
> Q. Did she show you? Did she try to show you?
> A. Yes, she tried to show me and then...and I thought...I thought we were doing it right and that's what I said, that I thought I was doing it right. Then she

> [postpartum nurse] said "Well obviously you're not if you're....". My baby's losing weight and everything and I'm tired...and you're asking me not in a very nice way about these questions and I...I just don't even want to nurse".

Regardless of whether the nurse was supportive of breastfeeding, it was the participants' perception of the experience as being positive or negative which determined the impact on breastfeeding. Positive experiences would be associated with continued breastfeeding while negatives experiences would have the opposite effect.

While in hospital, half of the participants described experiences reflecting general support not directly related to infant feeding. This included; being made aware of postpartum resources; assistance with general infant care; assistance with the infant while mother cares for herself; providing a cheerful environment:

> Q. How did you feel about your overall experience in the hospital, how was it...if you think back to the staff and all?
> A. Yes it was good...it was...because they were always so helpful and all so cheery and happy which made me feel better because baby blues were starting to set in and because my kids came to visit and...it kind of made me feel lonely when they left.... The nurses actually helped keep me happy in there.

This type of support can influence feeding decisions by alleviating concerns in other areas (childcare) and therefore giving the mother more time and perhaps confidence to concentrate on breastfeeding. By increasing awareness of postpartum breastfeeding support, there would likely be a positive impact on breastfeeding duration. Researchers have commented that although promotional efforts are succeeding in increasing initiation rates, support for continued breastfeeding is often lacking and may be largely responsible for the dramatic drop off in breastfeeding rates shortly after discharge and beyond (Cernadas et al., 2003; Tarrant et al., 2002).

In summary, participants' support systems were extensive. Referents included members of the social network and health care professionals (in and out of the hospital environemt), and support programs. Key members of the support network included participants' mothers, partners, and grandmothers who had mostly positive influences on breastfeeding. General practitioners and community nurses were also important but community nurses offered more breastfeeding support and had more influence on feeding decisions. In the hospital environment, postpartum nurses were sources of

support for lactation problems. All participants experienced lactation problems and most hospital experiences were positive and supportive of breastfeeding. Some were perceived as negative and were unsupportive of breastfeeding. Word of mouth and networking were important avenues to increase support program awareness. Participants attended Food for Thought primarily to learn about food related topics and for social interaction. Food for Thought also provided an opportunity to learn about infant feeding through education and observation among peers.

4.5.1.4 Outside Influences

Work and school are among the top factors affecting breastfeeding initiation and duration among the general Canadian population (Health Canada, 1999), and in other countries (Murphy, 1999; Tarrant et al., 2002). These influences are equally as prominent among Aboriginal women (Banks, 2003; Houghton & Graybeal, 2001; Wright et al., 1997). Women who are of school age when they begin having children (such as the participants in this study) would be even more susceptible to this influence. The same holds true for women with young children who wish to go to work. Almost all participants were faced with both or one of these factors.

With the exception of two participants who did not mention school or work during their interviews, all participants expressed a desire to return to high school:

> He'll be about five months [when school begins]...I'm thinking by about four months I will probably stick him on a bottle for...I don't know...

> Well, I have to finish my grade 12...I only have my grade 11 right now so I'm going to have a full year in high school still.

Over half the participants attended school or held a job while having young children at home. Almost all these participants were breastfeeding and while most of them switched to formula-feeding when they returned to work or school, two continued to breastfeed.

> Q. How did you decide at six months or at seven months that you were going to put them on the bottle?
> A. Well it was school...I had to go back to school and...I had to get up and do something cause I was tired of staying home and had to get out and do something so...I couldn't breastfeed her from her being at the daycare so she had to be on the bottle.

> It was hard starting...learning how to get him to latch on...and the cracked nipples...that was hard...then getting full...because I was going to school...going in the morning, coming home at lunch time, breastfeeding him and then going back...

The data suggests school and work influenced infant feeding decisions. Although breastfeeding initiation was not affected (see table 4.2), duration was. When formula was introduced, because it replaced some breastmilk received by the infant, there was a negative impact on breastfeeding. Among the Navajo, although work outside the home was perceived to be a major barrier to breastfeeding, it was not associated with lower rates of initiation or duration (Wright et al., 1997).

Because these participants were having children while at school and continued to have children, when the desire to finish school was present, it influenced their breastfeeding decision in a negative way. This finding suggests that breastfeeding decisions for future children may also be negatively affected. According to the report by Houghton and Graybeal (2001), only the women who understood how to manually express milk could see continued breastfeeding as a feasible option.

In addition to the impact of outside influences on breastfeeding, intentions to return to school and/or go to work suggest that, at least for Food for Thought clients, having children at a young age and living in poverty does not preclude them from having ambition.

In summary, work and school were important influences on the infant feeding decision. There was express desire to either return to school or to gain employment after child birth. Accompanying this desire is the belief they should switch to formula-feeding in order to help them accomplish their goals. This belief influenced the decision to switch from breastfeeding to formula-feeding or not to initiate breastfeeding at all.

4.5.1.5 Poverty

Living in poverty was one of the dominant characteristics shared by participants. Many Aboriginal women living in urban centers live in poverty (Status of Women's Office, 1999).

Over half the participants expressed concern over running out of "milk" (infant formula) for their infants due to the financial burden:

Q. How are you managing now?
A. Right now I'm...not doing that good right now. Not this month because I'm not getting any...any kind of income...anything.... I don't know if my milk [formula] is going to last me until my income comes in...not until the 19th.
Q. What would you do if it doesn't?
A. I have no idea. I haven't been out of milk before. With [my first son] I had a lot of help but with this baby I don't have any help. I'm on my own with this one

This concern extended beyond infant feeding:

...sometimes I do run out of food and I'm not proud of that...of course not but it is hard trying to make it through...through one month on social services. It isn't very much money to live with five kids. She [Food for Thought nurse] helps me out.... Together we found all these different organizations where they give out food hampers and stuff like that.

Several participants explicitly referred to relying on social services and family allowance as sources of income:

Q. Then, [your son's dad] is trying to help you as much as he can?
A. Yes. He buys me... he bought me a big box of diapers and a big box of milk [formula] for the month so I didn't have to buy any milk.... I'm not getting an income right now, just welfare... that's it.

In the discussion on *Beliefs*, the economic advantage of breastfeeding was cited by all participants (see 4.5.3.2.3). This was not surprising considering they were living in poverty. Although poverty's influence on the decision to initiate breastfeeding was likely positive, the impact on duration is unclear. As illustrated in table 4.2, all participants initiated breastfeeding but by one month postpartum only two had not introduced any formula-feeds. Data from several participants suggested that knowledge of where to obtain infant formula when money is not available could have a negative impact on breastfeeding.

Q. Are you ever worried that you can't afford formula for the next month?
A. We always find a way to get food.... The [kids] haven't really had...they haven't really ever received all their family allowance. I just get half of it and that's not much with three kids, bottles and Pampers®. But we always...our home worker...she even goes to White Buffalo. They helped us out with milk & Pampers®.... We have places to get it if we run out.

In addition to knowing where and how to get infant formula that does not require purchasing, participants may be aware of recipes to prepare breastmilk substitutes using evaporated milk (J. Veregin, Dietitian, Food for Thought, personal communication, October 23, 2003). However, this knowledge was not expressed during the interviews nor did the data suggest that infants were fed anything other than breastmilk or infant formula.

In summary, poverty impacted the lives of these women, raising awareness that infant formula is expensive and that breastfeeding is less expensive. Although the financial burden associated with formula-feeding was a deterrent to choosing this method, it did not preclude full or partial supplementation later on. Community resources were possibly one factor that lessened poverty's impact on breastfeeding duration.

4.5.1.6. The Breastfeeding Climate

In this study, breastfeeding climate refered to what is perceived by the participant to be happening in her environment as it pertains to infant feeding. This included perceptions or views on infant feeding in society, on public breastfeeding and on acceptable breastfeeding age. Perceptions of infant feeding in the more immediate social environment were also included. These views may or may not be reflective of what is actually happening but are representative of what is happening in the participant's social world.

4.5.1.6.1 View on infant feeding in society.

Over half the participants perceived most people living in the city of Saskatoon to be formula-feeding. In addition, comments were made directly or indirectly stating that Caucasian women breastfeed more than Aboriginal women:

> Most people bottle feed I think... In the Native population I suspect most bottle feed. I see a lot of white ladies breastfeeding their babies. I do see that and I do see a lot of Native women bottle feed. I see a few breastfeeding here and there but not as much as you would think or would like them to.

If formula-feeding is observed to be the primary mode of infant feeding, it can have a negative impact on breastfeeding by hampering the formation of positive

attitudes. The literature suggests exposure to breastfeeding has a positive influence by creating a positive attitude (Cernadas et al., 2003; Dykes et al., 2003; Goulet et al., 2003; Holman & Grimes, 2003).

4.5.1.6.2 View on breastfeeding in public.

When asked about their opinion on breastfeeding in public, the majority of participants agreed it was acceptable as long as the mother wasn't "exposing herself". However, only two of these participants had themselves breastfed in public.

There appeared to be two main reasons why participants preferred not to breastfed in public. The first involved concerns of "exposing" themselves and related feelings of being uncomfortable. These participants felt more comfortable breastfeeding in private:

> ...I don't think I would be able to do it in a public place, especially a mall.... I just wouldn't be comfortable with it I guess...sure you are feeding your child but I would prefer to do it in private...for myself.... I would go do it in the bathroom.... It's kind of exposing yourself...in public.

A second, related concern that appeared to deter participants from breastfeeding in public was based on perceptions of how the public felt about it. The majority of participants, including the two with public breastfeeding experience appeared to share the perception that the public was not accepting of this practice. These perceptions were illustrated through concerns for public reaction or making others uncomfortable:

> I feel scared for the person [breastfeeding in public]. What if somebody goes and says something to her. That's how I feel now.... I hope she says something back if somebody says something to her...
>
> .... I started breastfeeding in public and I didn't care who was there ...because I was doing this for my kid. Who cares if you guys are going to be watching or looking like you're grossed out or...it's for the kid.
>
> Q. Why did you use the blanket?
> A. I didn't want other people to feel uncomfortable.... It didn't bother me to show anyone that I am breastfeeding.... I am pretty sure that once in their life they have seen a tit [laugh]. I covered him because I knew how a lot of people felt...this was back in 1990...

Although it was only two participants, what appeared to help enable them to breastfeed in public was their perception that they were showing minimal skin:

> I wouldn't cover up, I would just hide myself with my sweater or shirt or whatever, but you know I would still be breastfeeding where people could see me and I would just cover up that part where I would show my skin you know...just because people look at you weird and wonder why you are doing that and all that stuff.

> A couple of times people would be talking amongst themselves but would be looking over at me. Nobody really came up to me and said anything or did anything.... I knew what they were thinking but I would just ignore them...and I would think "if they can't see me breastfeeding then they shouldn't have a problem."

Fear of others reactions toward breastfeeding, including making others uncomfortable while breastfeeding in public, echoes findings from other qualitative reports (Cernadas et al., 2003; Dykes et al., 2003; Goulet et al., 2003; Murphy, 1999; S. Smith, 2003b). In addition, the notion that breastfeeding is something that should be done "discreetly" (Murphy, 1999) and in private (Tarrant et al., 2002) has also been described. However, at least one report suggests the fears associated with public breastfeeding may be unfounded based on a finding that people appeared to be ambivalent to women breastfeeding in public (Sheeshka et al., 2001). Regardless of whether participants' perceptions of the publics' opinion of public breastfeeding are accurate or not, they are important because of their potential negative impact on breastfeeding.

On the contrary to experiences with the public's reaction to breastfeeding described above, two participants had positive public breastfeeding experiences:

> Oh Yes!... Some strangers...they would be like telling me "you are doing such a good job breastfeeding".... I breastfed her for over one year and a half...a lot of people are just like "Wow, how can you do that...you are such a good mom breastfeeding her that long ". So yes, I had a lot of people coming up to me and saying I was doing such a good job breastfeeding for so long.

Although described by only two participants, because positive experiences could influence feeding decisions in favor of breastfeeding, they were important.

4.5.1.6.3 View on acceptable breastfeeding age.

Perceptions of what is considered an acceptable age at which to continue to breastfeed have been reported to have a negative influence on breastfeeding duration (Kendall-Tackett & Sugarman, 1995; Kirkland & Fein, 2003; Murphy, 1999). One of the main reasons given by women for weaning their children by their first birthday or later was based on the perceived "social acceptability" of breastfeeding an older child (Kendall-Tackett & Sugarman, 1995; Kirkland & Fein, 2003). Women in the report by Murphy (1999) stated they avoided "prolonged" breastfeeding for fear of others' reaction.

As a potential negative influence on breastfeeding duration, participants' perception of acceptable breastfeeding age was of interest. Although a few participants felt that two to three years of age was appropriate, the majority felt the child should be under two years:

> ...Well under two, but maybe about a year and a half as long as you can still make the milk I guess.

Being able to walk and having teeth were described by participants as indicators of a child's readiness to wean.

4.5.1.6.4 Awareness of others feeding experiences.

An awareness of how members of the social network (referents) feed their infants and perceptions of why particular feeding decisions were made are an important part of the breastfeeding climate. As referents, decisions made by members of the social network represent the *subjective norm,* a direct antecedent of behavioral intention (Ajzen & Madden, 1985). Feeding decisions made by referents reflect what was considered acceptable among the social network.

All participants were aware of feeding practices among various members of their social network including mothers, friends, siblings, extended family (aunts, cousins, grandmother), and other Food for Thought members.

Most participants were aware of more than one referent who breastfed. Over half the participants expressed an awareness that many of their relatives either breastfed or

preferred breastfeeding. The majority were also aware that they themselves and/or at least one of their siblings had been breastfed.

Over half the participants had at least one friend who breastfed while several others stated that their friends' formula-fed. Several participants expressed they had friends who initiated breastfeeding but discontinued before the recommended six months or initiated combination feeding for various reasons:

> Because they just couldn't do it any more...couldn't handle it any more. My friend, she breastfed her first born but he couldn't get enough off her so she just bottle fed.
> Q. What about other friends. What was their experience?
> A. Well [one friend], she breastfed for a while but that was the fourth one she breastfed. She had three other ones and just couldn't do it.

Participants speculated on the reasons referents chose to formula-feed. Half the participants felt lifestyles which included "partying" and a desire for increased freedom influenced referent's decisions:

> Q. Do you have any idea why [your sister didn't breastfeed either of her two children]?
> A. I guess...she didn't want to [laugh]...I don't know. Her attitude was "I carried them for nine months...I don't want to".... She had to try and stay away from the drugs and alcohol and stuff like that.... She did all that for nine months so she didn't want to do it anymore so she just stuck them on formula. She wanted a little bit more freedom after.

Several participants felt school was the influencing factor:

> Most friends are bottle-feeding.... I know a few that aren't ...a lot of my friends are bottle-feeding nowadays because they are interested...some of them are younger than I am so they are interested in going back to school.... They would rather bottle feed than breastfeed...

Other reasons participants felt referents switched to formula-feeding included demands from having too many children and lactation problems. Although it was only described by one participant, having too many other children has been documented as having a negative influence on breastfeeding (Langner & Steckle, 1991). Considering that many Aboriginal women on average have more children than their non-Aboriginal counterparts (Status of Women's Office, 1999), this could be an important influence.

In summary, key components of breastfeeding climate included society and the participants' social network. Participants perceived that they live primarily in a bottle-feeding society but they considered breastfeeding to be "normal" while growing up and the norm within their immediate social environment. Participants tended to agree that public breastfeeding is acceptable but most were uncomfortable with the practice. Participants' perception of the public's opinion on breastfeeding in public was a deterrent to breastfeeding in public. Their comfort level, based largely on exposed skin, was also a factor in public breastfeeding. The majority of participants considered it acceptable to continue to breastfeed a child until he or she is approximately two years old.

4.5.2 Theme 2: Attitude Toward Feeding Method

> Attitudes are positive or negative dispositions toward stimuli, whether these be objects, situations, actions or ideas. Three components are involved: cognition, affect, and action. That is every attitude is based on some kind of information and the person's evaluation of it, an emotional or feeling component, and a resultant positive or negative tendency toward action (Gift, Washbon, & Harrison, 1972, p.281).

The construct of attitude and its role in predicting behavioral intent has been discussed in Chapter 2. Although participants' attitudes were not measured in this study, statements were made illustrating feelings or opinions toward feeding methods. As an antecedent to behavioral intent, exploring attitude is key in helping to understand feeding decisions. Participants' attitudes toward infant feeding from childhood through to the time of the interview will be discussed.

Early positive attitudes toward breastfeeding are thought to be an important influence on the decision to breastfeed. These early attitudes appear to be closely linked to breastfeeding exposure at a young age and the knowledge that one was breastfed as a child (Dykes et al., 2003; Goulet et al., 2003; Holman & Grimes, 2003; Meyerink & Marquis, 2002; Wright et al., 1997)

With some memories reaching as far back as four years old, all participants recalled breastfeeding as the most common method of infant feeding within their families. These early experiences involved their mothers, aunts and sisters:

> I only breastfed my son for a month but he will still come to me and put his hand down my shirt just to feel that comfortness...just to be close to me. I remember when my brother used to do that to my mom too...three years old. I watched my brother breastfeed till he was three years old.

Most of these participants expressed the awareness that they were breastfed as infants. As mentioned above, having been breastfed as a child is associated with positive attitudes toward this feeding method (Goulet et al., 2003; Meyerink & Marquis, 2002; Wright et al., 1997). Meyerink and Marquis (2002) noted an association between duration of breastfeeding beyond one month and knowledge of having been breastfed. The authors go on to report that familial breastfeeding experiences eliminated the effect of some demographic factors such as income or education. This may help explain why participants in this thesis project, who from a demographic perspective would be considered less likely to breastfeed, initiated breastfeeding at birth.

The literature suggests that breastfeeding behaviors are learned through observation and are possibly more important in shaping a mother's behavior for her first child than formal training or written material (Hoddinott & Pill, 1999; Holman & Grimes, 2003; Meyerink & Marquis, 2002). In addition, it is felt that previous exposure to breastfeeding, especially familial, is linked to positive attitudes (Dykes et al., 2003; Goulet et al., 2003; Holman & Grimes, 2003; Meyerink & Marquis, 2002). Dykes et al. describes this as "a degree of normalization within the micro culture of the family". A negative association has also been reported in a 2003 report by Scott et al., suggesting that low level of exposure to breastfeeding is largely responsible for low initiation and early cessation of breastfeeding among women in a "bottle-feeding" culture (Scott & Mostyn, 2003).

Participants' description of these *early experiences* suggests half had positive feelings toward breastfeeding at a young age. Positive feelings were captured through descriptors such as "cool and interesting". Words describing breastfeeding as "normal" were interpreted as positive based on the aforementioned "degree of normalization" which would positively influence the decision to breastfeed:

> ...I used to watch my brother and he used to come and put his hand down [our mother's] shirt or he would come and stand underneath her shirt and breastfeed while she was sitting there visiting with people.... I was around

13...I don't know...I just thought it was normal I guess...seeing him do that. To me it was normal...

Evidence of words depicting *early negative attitudes* toward breastfeeding were infrequent:

I thought it was gross.... I was staying with my auntie for the weekend and her baby was actually old...quite old...two...maybe two...just about three...and I just see this kid sucking on his mom's you know...and I thought... "That's gross.... I'm never doing that!" I used to tell my mom that "I'm not letting anybody suck on my...."

Positive and negative attitudes were also described by participants when they grew *older* and became mothers. Over half the participants expressed positive feelings toward breastfeeding. Breastfeeding was referred to as being "a good mother", an "enjoyable bonding time", and "the right thing to do". It was also thought of as a small price to pay for a healthy child:

Well for me... breastfeeding [my son]...it's just...it means that I'm providing a healthy lifestyle for him right off the bat.... I just want him to stay healthy and be healthy so if it takes me giving up my time...my spare time for him to have...for him to be healthy and for him to be not sick or anything I'll do that ...

Positive attitudes toward breastfeeding have been significantly associated with longer duration of exclusive breastfeeding (Cernadas et al., 2003).

Several participants also described experiences suggestive of negative attitudes toward breastfeeding but in spite of this they breastfed at least one infant. None of these participants felt the experience was enjoyable. For example, one participant thought of breastfeeding as an extension of her pregnancy, making her feel trapped while others expressed they just did not like it:

...I was only 16 and I didn't like...like the thought of breastfeeding...but you know, at the same time I wanted to because it was good for him...

Feeling repulsed or uncomfortable at the thought of breastfeeding has been reported in the literature (Sheehan et al., 2003) suggesting this finding is not uncommon.

Attitudes toward formula-feeding were unclear. The majority of participants made comments that represented neither positive nor negative attitudes when asked about formula-feeding. For example, one participant felt that a mother who bottle feeds is "still

a good mom" and "she must have her reasons". When asked about formula-feeding a one month old, another participant commented:

> ... I think right away "oh she should be breastfeeding...she should be breastfeeding...the baby is too small to be bottle fed."

Others had no comment in particular.

Positive attitudes toward formula-feeding were only expressed by one participant. She felt that formula-feeding allowed others to enjoy feeding the baby:

> ...that way everybody can enjoy the feeding of the...feeding of the baby. Don't tell me...it has to...it doesn't have to be only me.... It means his dad can help feed him and do that too...the enjoyment of sharing your baby when he's eating.

Being the only participant who expressed a positive attitude toward formula-feeding, she would be considered an outlier. However, as the participant with the most formula-feeding experience, in addition to her expressed intent to formula feed, her feelings provided insight into factors that might influence this decision. In addition, "sharing the enjoyment of feeding your infant" has been cited among the main reasons women stop breastfeeding in the first five months postpartum (Kirkland & Fein, 2003). It has also been reported as a reason why Aboriginal women (Banks, 2003; Houghton & Graybeal, 2001; Kirkland & Fein, 2003) and non-Aboriginals (Murphy, 1999) choose to formula feed.

In summary, while growing up, breastfeeding was the norm within the "micro-culture" of the family and most participants had knowledge of having been breastfed. From an early age participants expressed primarily positive attitudes toward breastfeeding. Positive attitudes continued into motherhood and even those who expressed negative attitudes initiated breastfeeding with subsequent children. Attitudes toward formula-feeding were unclear but the belief that it allowed one to "share the enjoyment of feeding the infant" may have had a negative influence on breastfeeding.

4.5.3. Theme 3: Knowledge, Information and Beliefs

Unlike attitudes which are evaluative in nature, beliefs are by definition cognitively loaded. They represent the information or knowledge an individual has with regard to a particular object and are formed when associated or linked with particular

attributes of the object. Beliefs resulting from this cognitive process may or may not be correct, likely or unlikely (Sheperd, 1987). Beliefs are considered fundamental in understanding behavior because they largely determine an individual's attitudes, intentions, and ultimately their behaviors (Fishbein & Ajzen, 1975).

It has been suggested that the skill of breastfeeding requires two kinds of knowledge; cognitive knowledge and *embodied* knowledge. While cognitive knowledge is theoretical, embodied knowledge, gained through personal experiences with breastfeeding, is described as "both the conscious and unconscious physical and emotional sensations and perceptions of the body"(Hoddinott & Pill, 1999, p. 264). The possession of embodied knowledge has been used to explain why women with either previous breastfeeding experience or who have been exposed to friends or family who breastfeed are more likely to make the decision to breastfeed or express the intent to breastfeed (Hoddinott & Pill, 1999; Sheehan et al., 2003). With this in mind, along with cognitive knowledge, the concept of embodied knowledge would be an equally important influence on breastfeeding decisions.

4.5.3.1. Sources of Information and Knowledge

Information or knowledge used to form beliefs can originate from numerous sources including formal education, written materials (i.e., pamphlets, books), the media and personal experience (Fishbein & Ajzen, 1975). Participants received breastfeeding information and knowledge primarily through personal experience, members of the support network, and support programs:

> Q. You had also mentioned to me that the program [FFT] had taught you a lot about breastfeeding? In what ways did they teach you about it? How did they do that? What did you find was really good information?
> A. Actually showing [emphasis] you how to do it...you know like those baby dolls.... Showing you how to do it and talking about it and what's healthy about it...

In general, regardless of the source, the information was perceived to be correct even in cases where the information provided would be considered inaccurate. The imminent danger is the formation of beliefs which are inaccurate and thus detrimental to breastfeeding. For example, some information received from referents, including general practitioners, was inaccurate:

Q. Had someone told you to stop [breastfeeding youngest child]?
A. My doctor said "you are still breastfeeding!... You should stop"...freaking out on me about that. "The other baby needs all the nutrition" and stuff like that.... I just didn't like that doctor.

As it did in the example above, this type of inaccurate information led to discontinuation of breastfeeding, illustrating the impact of such information. It should be noted here that in most cases continuing to breastfeed while pregnant is not harmful to the fetus. Even following the birth of the infant, a sibling can continue to breastfeed as long as the newborn is given first feeding priority (Riordan, 2004).

The literature supports the finding that breastfeeding women receive breastfeeding information from various sources including written materials and members of the support network (S. Smith, 2003a). However, contrary to the findings herein, the same report states that although the women relied on referents for support, they did not heed their infant feeding advice.

4.5.3.2 Infant Feeding Beliefs

Participants shared many beliefs about breastfeeding. Identifying common beliefs provided insight into areas needing further investigation in terms of educational, promotional and support efforts for breastfeeding. Several infant feeding beliefs were expressed by participants encompassing the topics of health, bonding, economics, infant weight, freedom and convenience, infant behavior, and being a "good mother". Beliefs concerning milk supply were also described by the majority of participants. However, because it was also identified as a key finding under the theme *Infant feeding Experiences*, the reader is referred to this section for a detailed discussion on beliefs concerning milk supply (see 4.5.4.2.2).

4.5.3.2.1 Health.

Participants believed unanimously that breastfeeding is healthier than formula-feeding. This belief was illustrated through descriptions of experiences indicative of varying degrees of knowledge regarding the health benefits of breastfeeding. While participants' knowledge was not measured by means of a knowledge test, the majority of women demonstrated a basic understanding through the use of general descriptors such as "healthier" or "better nutrition":

> ... All that I know is that it is healthier for the baby...than to be formula fed so...that's the reason why.... I want my baby to be healthy so I'd rather breastfeeding than formula feed.

Others demonstrated possession of more specific knowledge such as infants being "less sick" and having "a lower risk of SIDS". One participant was aware of specific developmental information associated with breastfeeding:

> ...I am trying to convince her [my sister]...she is pregnant and I am trying to convince her to breastfeed...I said "even a couple of weeks" I said "that couple of weeks...that first breastmilk is really good for the baby...having to do with allergies and brain development..."

In addition to expressing knowledge about breastfeeding, half the participants with both breastfeeding and formula-feeding experience observed their breastfed babies to be healthier. Specifically, reference was made to cough, constipation, ear ache, and weight loss issues:

> Q. What about [the best things] with breastfeeding?
> A. They are less sick that is for sure. [My daughter] never got sick when I breastfed her. [My other, bottle fed daughter] used to get ear aches and cough worse than [her sister] did. I see a difference between that.

> They were pretty healthy...they gained a lot of weight within that six months...then when I got them onto the bottle that is when they started to loose a little weight...especially with my youngest daughter.

This finding concurs with numerous previous reports suggesting Aboriginal (Houghton & Graybeal, 2001; Macaulay et al., 1989; Wright et al., 1997) and non-Aboriginal women (Hoddinott & Pill, 1999; Murphy, 1999; Shaker et al., 2004) are aware of the health benefits associated with breastfeeding.

The majority of participants identified "health" as a reason to breastfeed. One would expect that this awareness coupled with first hand observation of this phenomenon would be an even stronger influence on the decision to breastfeed. However, for these participants, although "health" appears to have influenced breastfeeding intention and initiation, it was not enough to influence continued breastfeeding. One possible explanation is that other factors came into play, which alone or combined had more influence on feeding decisions than health beliefs. Another

explanation proposed in a report by Murphy (1999) is that some women may verbalize the health benefits of breastfeeding and the intent to breastfeed as a way to take the pressure off themselves when they really have every intention to formula-feed.

4.5.3.2.2 Bonding.

In an exploration of the benefits or best aspects of breastfeeding, all participants believed breastfeeding to be associated with bonding or closeness. Half of participants described experiences of feeling close to their infant. One participant referred to this closeness as the "breastfeeding bond." Bonding was a mysterious and enduring phenomenon, especially for several participants with both breastfeeding and formula-feeding experience:

> I guess the bond you know…I did get very close to my son…. I still am… very close to him. I don't know how that happens…it was a little much at times cause he would scream and cry for me...and then he would fall asleep…. Even when after he was put on the bottle, he would have to have his hand on my breast…until he was four years old.

> …being close to him and I wanted to be close to him and it feels like I can't even though… even though I hold him and I bottle feed him it just…it… there's no… that closeness isn't there as when your breastfeeding. You know where you can **feel** him.

This finding suggests bonding is an important influence when making feeding decisions. The literature concurs by citing bonding not only as a reason to breastfeed (Houghton & Graybeal, 2001) but as a factor associated with increased duration of exclusive breastfeeding (Cernadas et al., 2003). Similarly, among Navajo women, breastfeeding is believed to make the child feel loved and secure (Wright et al., 1997).

The concept of embodied knowledge described previously (see 4.5.3), provides one possible explanation for why *all* participants believed bonding to be important in terms of the decision to breastfeed. Each participant possessed embodied knowledge. All but one participant had personal experience with breastfeeding and all participants had previously been exposed to it.

4.5.3.2.3 Economical.

The belief that breastfeeding is economically advantageous was expressed by almost all participants, suggesting its importance when making feeding decisions:

> Q. So what about [your baby daughter], when did you decide you wanted to breastfeed her?
> A. When I was pregnant with her [no hesitation]. Just for the fact that I didn't have to buy formula...
> Q. So that was the biggest thing.
> A. Yes

However, in spite of the stated economic advantage of breastfeeding, by one month postpartum, most participants had introduced partial or full formula-feeding. This finding is interesting because these participants lived in poverty and have expressed the financial difficulties associated with day-to-day living:

> ...I am having a hard time right now...deciding to put him on the bottle at the last minute.... I had to buy two boxes which cost $72.00 and that is only 24 cans. He is on his 3rd week and I went through three boxes already plus I had to buy a couple more...it is very expensive and you don't get very much money from social services. A lot of women out there don't really know how to budget their money when they are on social services.

As alluded to in the discussion under *Poverty* (see 4.5.1.5), it is possible that knowing where to obtain formula when money is a problem could facilitate the decision to formula feed.

Researchers have found other associations between breastfeeding and financial status. Dodgson and Stuthers (2003) reported that some Aboriginal women associated breastfeeding with poverty. Breastfeeding was not a choice when living in poverty on the reserve, it was a necessity. Subsequently when the women moved to the city, formula-feeding was chosen as a way to distance themselves from the poverty. Among a group of breastfeeding women in Australia, saving money was not cited as an incentive for their decision to breastfeed (S. Smith, 2003b). However, they were much more affluent than the participants in this study, perhaps providing further support that the economic advantage associated with breastfeeding is a factor capable of influencing feeding decisions.

4.5.3.2.4 Infant weight.

Almost all participants referred to infant weight in some capacity. Comments ranged from infants losing weight while being breastfed to losing weight when switched from breastfeeding to formula-feeding. They also described infants gaining weight on formula and when breastfeeding. References were also made to infants being "skinny" or "fat". Overall, the data suggests participants believed infant weight and/or weight gain is an indicator of health:

> Q. You said you did that for about a month and then when she started gaining you just breastfed and your milk was fine and everything was working well?
> A. Yes, she was a skinny baby though...real skinny...
>
> He gained lots of weight [first of seven children who was breastfed]...there wasn't any problems physically or anything like that.
>
> ...seeing my kids grow and being able to see them get chubby, stronger.

The data does not appear to suggest that this belief supports the decision to formula-feeding or to breastfeed but it does indicate that participants were aware that infant weight is an indicator of health. However, use of terms such as fat/thin could suggest they are judging their infants' weight on what they believe to be normal or healthy.

Participants' emphasis on fat or thin could be explained at least in part by the use of infant growth charts. Charts which are currently being used are based on formula fed infants (J. Bergerman, personal communication, December, 9, 2004). Formula-fed infants tend to be heavier than their breastfed counterparts and as a result, the "healthy weight" for a breastfed baby becomes skewed (Riordan, 2004). The end result could be the assumption that a breastfed baby who is not following the weight curve of a growth chart must not be getting enough milk from breast (P. Stalker, General Practitioner, member of Mother-Baby-Friendly Breastfeeding Initiative Committee Saskatoon, personal communication, January 26, 2005). Considering the negative impact the perception of insufficient milk can have on breastfeeding (see sections 2.5.9 and 4.5.4.2.2), this could inadvertently perpetuate the belief of having insufficient milk.

4.5.3.2.5 Freedom and convenience.

Over half the participants believed that breastfeeding limits freedom. References were made to having to stay at home, "being stuck in a room," having to be physically present to feed the baby and being "tied down". In essence, it was felt the decision to formula-feed would give them more freedom than if they were breastfeeding:

> ...because I had these kids you know and I felt like everything was so unfair because...why do they get to go out and have this fun and then we can't.... I don't know.... I think I'm just feeling sorry for myself.

> ...I was younger then and I always wanted to go out so I didn't have the time to breastfeed. I put her on a bottle so I could do things...go out more and stuff.

In many instances, freedom to "go out and party" or to do other things that involved drinking were specifically mentioned suggesting that lifestyles involving alcohol can impact the decision to breastfeed. The previous discussion under *Life Experiences* (see 4.5.1.1) illustrated that many participants have used and at times abused alcohol or drugs. The perception of increased freedom coupled with lifestyle influences could be more potent influences when in combination compared to each on its own.

Participants felt their immaturity largely contributed to the belief that breastfeeding limits freedom. In comparison to previous experiences with their children when they were teenagers, half the participants described themselves to be more mature and capable of making decisions based on their families' wellbeing as opposed to their own:

> Q. Tell me a bit more about that.
>
> A. ...I was immature for one thing. I wasn't really thinking about my baby. I was always think about myself...at first...but then I had to change it...make it revolve around my baby because I have always wanted to leave the baby at home...and go do what I wanted to do. But now that's changed...I want to stay home more and do things with my kids and...like I don't revolve around me anymore, it's just around my family and my kids.

In spite of their young age, these participants had noticed a change in their maturity level which had a positive impact on the decision to breastfeed. Although only

two participants were teenagers at the time of the study, similar comments were made by others in reference to their previous experiences when they were teenagers. This finding provides some insight into why young mothers feel breastfeeding infringes upon their freedom.

The belief that breastfeeding limits freedom has been reported in the literature (Kirkland & Fein, 2003; Murphy, 1999). Murphy refers to a teenage mother who defended her decision to bottle feed for the sake of freedom by suggesting that while it's okay for a "regular" mother to be "tied down" at home, for someone her age, this [formula-feeding] should be a "reasonable compromise between the demands of motherhood and youth" (p. 199).

Closely related to the belief that formula-feeding allows for increased freedom is the notion of convenience. However, whether a particular feeding method is considered convenient depends on how convenience is defined. For example, a woman may or may not believe breastfeeding is more convenient than formula-feeding and vice versa. Several participants in this study believed breastfeeding was convenient which was stated both explicitly:

> You don't have to prepare all the...all the things, just pull it out and there you go...you don't have to listen to your baby crying.

And implicitly:

> Q. Can you tell me what the benefits of breastfeeding are?
> A. Don't have to buy formula or make bottles. Better nutrition...

Authors of a recent report evaluating infant feeding attitudes of expectant parents were not surprised to find that the method considered most convenient was the chosen method (Shaker et al., 2004). They suggest that formula-feeding is considered more convenient because it gives the parents more freedom to be away for extended periods of time. Therefore, depending on how participants define convenience, it may or may not be indicative of having the "freedom" to be away from their infant.

4.5.3.2.6 Infant behavior.

Many participants also believed formula-fed babies "behaved" in a more acceptable manner than their breastfed counterparts. Specifically, it was believed that formula-fed babies slept longer, didn't need to be fed as frequently during the night, and cried less:

> The best thing about bottle-feeding is that they don't cry so much...with a bottle, I used to feed them once and they would be out the whole night...

However, these beliefs do not appear to be supported by participants' actual experiences with formula fed and breastfed infants. For example, at least two of these participants described having one breastfed child who slept long stretches through the night (e.g. five hours). In addition, these participants described experiences where formula fed infants awakened to feed more than once during the night. Overall, this suggests there may have been a perception that formula-fed babies slept longer and fed less frequently than breastfed babies. Whether accurate or inaccurate, this perception was important because it may have had a direct impact on the decision to choose formula-feeding in place of breastfeeding.

4.5.3.2.7 The "good mother."

The belief that breastfeeding is part of being a good mother was also noted by half the participants. Breastfeeding was described as "being a good mom" and "making the right decision". To one participant, breastfeeding meant "doing everything perfect":

> ...I was young and I was...I always said that I wanted to be a mom and to do everything all perfect...all right, so all I wanted to do was breastfeed.

The belief that being a good mother included breastfeeding was a positive influence on this decision. As illustrated by the participants referred to above, those who held this belief intended to adopt this feeding method.

The notion that good mothers breastfeed is not novel. In addition, the literature suggests this could be an even more important influence than what this study's findings support. In a sociological report among breastfeeding women (Murphy, 1999), the infant feeding decision is referred to as a "moral minefield" stating: "Breast feeding was treated as not only compatible with, but indeed indicative of, maternal morality" (p.

201). Murphy goes on to say that deciding to formula-feed can portray the woman as a "poor mother"; putting her own needs before her child's whereas if she decides to breastfeed she is portrayed as a "good mother"; one who puts her infants' needs ahead of her own. With this in mind it is difficult to know whether participants truly equate breastfeeding with being a good mother or if they are unknowingly afraid of being seen as a "poor mother".

In summary, information and knowledge originated primarily from personal experience, members of the support network, and support programs. In general, regardless of the source, participants perceived the information to be correct. Beliefs considered supportive and unsupportive of breastfeeding were identified. The belief that breastfeeding is healthier, economical, convenient, part of being a good mother, and important for bonding were positive influences on breastfeeding. The belief that breastfeeding limits freedom and that formula-fed babies behaved better than those who were breastfed likely had a negative influence on breastfeeding decisions.

4.5.4 Theme 4: Infant Feeding Experiences

4.5.4.1. Previous Breastfeeding Experiences

The literature suggests that previous feeding behavior is a strong predictor of future feeding behavior (Hoddinott & Pill, 1999; Kloeblen-Tarver et al., 2002). The role of previous breastfeeding experience in terms of influencing feeding decisions is emphasized through the previously introduced concept of embodied knowledge (see 4.5.3). In this study, all but one participant possessed embodied knowledge through previous breastfeeding experience. Therefore, exploring their experiences was important in providing insight to help understand and give meaning to feeding decisions. Participants' previous experience with breastfeeding may help explain why all multiparous mothers not only expressed the intent to breastfeed but initiated breastfeeding. In addition, although these experiences were important influences on decisions with their youngest infants, it is likely they would shape decisions with future children in the same manner.

The majority of participants described equal numbers of positive and negative breastfeeding experiences with previous children. Of the negative experiences, some had a negative impact on the current decision to breastfeed:

> I don't know...I just...I just wanted to [formula feed].... I didn't want to breastfeed.... I don't know...just...I did. It was too painful with [my daughter] when I first tried and I didn't want to go through it ever again...walking around with sore nipples...she hurt me more than...

As illustrated in the example above, most negative experiences involved latch problems. As will be discussed under *Lactation Problems* (see 4.5.4.2), problems with latch were common among participants and were important influences on breastfeeding.

Other negative experiences expressed by participants were illustrated through descriptions of breastfeeding as stressful and associations with "clingy" infants. For example, two participants felt their infants were too dependent on them, making it difficult to do anything without them.

Experiences illustrating a positive influence on breastfeeding were also described:

> ... I really wanted to breastfeed him because I know it's a lot healthier and because my second one...she wasn't breastfed and I didn't have that experience with her. I really wanted to breastfeed this one because I breastfed my first one too...so she was the only one who wasn't breastfed....

Other experiences influenced the decision to breastfeed including observations that breastfed children were healthier when compared to formula-fed siblings, and experiences involving closeness and bonding.

Among Aboriginal women, previous maternal breastfeeding experience has been positively associated with the intention to breastfeed (Martens & Young, 1997) and longer breastfeeding duration (Martens & Romphf, 2002). These associations have also been reported among non-Aboriginal women (Bentley et al., 1999; Kloeblen-Tarver et al., 2002; Meyerink & Marquis, 2002). The report by Meyerink and Marquis also found that previous breastfeeding experience can have more influence on the decision to breastfeed than demographic factors such as education and income.

In summary, depending on whether previous breastfeeding experiences were perceived as positive or negative there was a corresponding influence on breastfeeding.

The majority of negative experiences involved latch problems while others included perceptions of stress and "clingy" infants. Experiences that influenced the decision to breastfeed primarily involved mother infant bonding and observations of healthy infants.

4.5.4.2 Lactation Problems

Latch and milk supply problems are among the top two negative influences on breastfeeding duration in the first three months postpartum. Reports describing their negative impact on breastfeeding as well as the relationship between number of "problems" and breastfeeding cessation have been described in Chapter 2. As "problems", milk and latch issues have the potential of influencing the feeding decision.

4.5.4.2.1 Latch problems.

In general, a good latch is essential to successful breastfeeding (Riordan, 2004). However, even with a good latch, some discomfort is generally experienced within the first days. Ideally, within this time frame, as the infant becomes more adept at extracting milk from the breast and the mother becomes accustomed to the manipulation of her nipples, breastfeeding will be comfortable (Riordan, 2004). However, for many women, this learning period can be extended in large part due to a poor latch. Improper positioning of the baby's mouth on the nipple eventually causes mechanical damage which is usually accompanied by pain. If uncorrected, a poor latch often leads to supplementation or breastfeeding cessation. Successful attempts to correct poor latch usually requires intervention from trained personnel (Riordan, 2004).

Latch problems were common among participants. All but one described latching difficulties with at least one child. Most of these experiences were associated with pain or discomfort:

> The first time I was breastfeeding him I kind of felt uncomfortable because he wasn't latching on properly.... It was very painful and it was hurting me...

> The first week was really hard because I was just getting into breastfeeding plus I wasn't fully aware...well his latch-on was really poor so I got really, really sore nipples plus my nipples were really chapped and it was painful...

Latching problems occurred in an unpredictable manner from sibling to sibling. For example, one participant who described problem-free breastfeeding for 23 months with her first child experienced latching difficulties with two subsequent children. Similar situations were experienced by several other women suggesting that each breastfeeding experience is unique, making past experience a poor predictor of future problems. The finding supporting the uniqueness of each breastfeeding experience is supported in another qualitative report (S. Smith, 2003b).

The frequency with which latch problems were stated by participants in this study was not surprising. Similar findings have been reported in populations around the world (Cernadas et al., 2003; Dykes et al., 2003; Health Canada, 1999) including in North American Aboriginals (Banks, 2003; Houghton & Graybeal, 2001).

Latching problems occurred very early in the postpartum period while participants were still in hospital. As mentioned under *Hospital Support* (see 4.5.1.3.3), postpartum nurses were available to help with latch problems. However, in spite of this assistance, latching difficulties continued after discharge for half the participants with at least one of their children (youngest or an older sibling):

> It was hard at first from what I remember.... I didn't know how to latch him on right...after I came out of the hospital.... The nurses usually came in and helped me latch him on and...I couldn't get the hang of it right away and it kind of hurt after I got home because my breasts used to blister. My nipples...they used to crack and they'd bleed and.... I had a hard time with [my first child] but then after about a month I got used to it...it became easier.

For several participants, latch problems led to either supplementation while still in hospital:

> The first time I was breastfeeding him I kind of felt uncomfortable because he wasn't latching on properly.... I let it heal for about a day...then the next day it was a lot better and he was latching in properly....

Or breastfeeding cessation after discharge:

> I think it [decision to stop breastfeeding second of three children] might have been on the second day...third day.... It was when she was hurting me and I couldn't take it anymore and I just couldn't breastfeed her.

However, at least one participant felt that previous latching problems helped her latch her youngest infant.

Q. Overall, how would you describe your breastfeeding experience with her up until now?
A. Easier...a lot easier.
Q. What do you mean by easier?
A. she latches on better...like I know what I'm doing now.
Q. Better than before?
A. Yep...from my previous daughter...yep...cause I had difficulties with her latching at first but with [my newborn] I knew what to do and...you know made it a lot easier for me...and her so...

Overall, these findings concur with current literature suggesting that latch problems often lead to supplementation and/or discontinuation of breastfeeding early in the postpartum period (Blyth et al., 2004; Cernadas et al., 2003). In addition, proper sucking technique and the absence of nipple problems has been reported to be significantly associated with a longer duration of exclusive breastfeeding (Cernadas et al., 2003).

4.5.4.2.2 Milk supply issues.

Complaints of insufficient milk is the most common reason or among the most common reasons given by women for discontinuing breastfeeding within the first three months post partum (Banks, 2003; Bentley et al., 1999; Health Canada, 1999; Houghton & Graybeal, 2001; Martens & Young, 1997; Wright et al., 1997). Chapter 2 (see section 2.5.9) described three possible explanations leading to this "diagnosis" and their corresponding negative impact on breastfeeding. However, regardless of whether the milk supply problem is actual or perceived or whether the mother considers it a socially acceptable reason for breastfeeding cessation, all three explanations lead to supplementation and/or breastfeeding cessation.

Considering the frequency with which insufficient milk complaints are reported in the literature, it was not an unexpected finding in this study. Both in hospital and following discharge, over half the participants expressed concern over milk supply problems. This conclusion was often based on participants' interpretations of infant behavior (e.g. crying, feeding frequency):

...but I am thinking of putting him on the bottle...it's kind of hard...breastfeeding and having my other kids...then I am trying to go out .... I want to go somewhere and I have to take him along...and he cries lots.... I don't think he gets enough.

Or because their breasts were not as full as they remembered with previous children:

Q. You mentioned about trying to breastfeed and your milk not coming in, can you tell me about that?
A. ...I just assumed .... I used to have a lot of milk for her [first of two previous children]...and...with him I wasn't getting that much milk and that's was when I was getting concerned about how come my milk wasn't flowing through and then on the third day it came through. He is very hungry all the time and then he just drinks up the breastmilk but it is not enough...he needs more milk.

...I have been pregnant and have had full breasts a few days after and that's what I was waiting for and it just wasn't happening.... I knew what was happening by the way he was feeding...I knew he wasn't getting enough.... They didn't get full at all...and usually after I have a baby, they get really full and get rock hard...just full and sore...and it just didn't happen this time.... I am getting old.

Regardless of the cause, the result was supplementation or the intent to do so.

The first example suggests that a misinterpretation of infant behavior (crying and feeding pattern) led to doubts about milk supply. This finding is supported in the literature as one of the three explanations described in Chapter 2 leading women to *believe* they have insufficient milk to feed their infant (Greiner et al., 1981). Supplementation, which is often the response to this concern, causes breastfeeds to be postponed, leading to less stimulation and a decrease in milk. In addition, bottles may interfere with the sucking mechanism of the neonate, making breastfeeding less effective (Newman, 1990).

As discussed in Chapter 2, complaints of insufficient milk among Aboriginal women are as frequent as in non-Aboriginal populations. Interestingly however, a 2001 report among Aboriginal women revealed "too much milk" among the most frequent complaints associated with breastfeeding (Houghton & Graybeal, 2001).

The misconception or *belief* that breasts must be "full" can also have a negative influence on breastfeeding. Following a vaginal delivery, the milk does not come in for one to three days. However, it is important that infants begin breastfeeding within the

first hour postpartum for two reasons. First, it is easier to teach an infant how to latch properly when the breast is still supple (W. Stefiuk, personal communication, November 3, 2004) and second, it is the first "milk" or colostrum which is high in calories and antibodies that the infant needs (Riordan, 2004).

While in hospital, all but one participant's milk related concerns were addressed by postpartum nurses and involved supplementation with infant formula. Almost all instances involved the use of feeding tubes:

> ...in the hospital they taught me how to supplement with him...like to trick him...you know...like if I still wanted to feed him. They had little tiny tube...and I would put on...my breast part.... I would let him eat from my breast and plus I would be pressing something...for him to be getting milk...to make him think that he's eating from me so he won't...get mixed up.

The data does not suggest that participants with milk supply concerns fully understood why supplementation was indicated when in hospital. It was difficult to distinguish whether or not they were aware it was a temporary precaution against infant weight loss or because they had insufficient milk. One possible explanation for this ambiguity is that participants were not aware of the former reason and that supplementation simply meant they had insufficient milk. This explanation was supported by participants' unanimous concerns of insufficient milk post-discharge which would have been inadvertently condoned by postpartum staff by providing either no explanation or ineffective explanations for supplementation:

> Q. Is that right?
> A. Yes...and I wasn't as full...it was just a little you know...and I was still doing the tube and everything. And so when my milk did come in...yes it did...I had a day or two of good feeding...for her...but I don't think it was satisfying her because she was still hun...she was still...she still kept going every two hours or whatever and...and then I was...and then I had [my older daughter] being demanding too and then that's when [my oldest son] he came back and...finally after that whole week and everything...no, I can't do this any more.

True physiological milk supply problems at birth are rare (Riordan, 2004) and postpartum staff at Royal University Hospital in keeping with the Baby Friendly Initiative would not likely suggest a mother had insufficient milk (W Stefiuk, personal

communication, November 3, 2004). As eluded to above, supplementation with a tube is a temporary measure primarily used to address milk delays which are often the result of latching difficulties (i.e. inadequate sucking technique creating insufficient prolactin release). In general, tube feeds are initiated when the infant has lost 10% of its body weight and are not starting to gain. However, if it is suspected that infant weight gain may be a concern after discharge, a tube may be initiated as a preventative measure. Depending on her wishes, because a woman's hospital stay can be short (less than 48 hours), feeding tubes are often initiated (W. Stefiuk, personal communication, November 3, 2004). It should also be noted that short postpartum stays (less than 48 hours) have been linked to shorter breastfeeding duration (Heck, Schoendorf, Chavez, & Braveman, 2003).

The data also suggests there is confusion surrounding the reasons for milk supply problems. Participants described several explanations offered by postpartum staff including: not drinking enough fluid; being sick during pregnancy; and having a tubal ligation:

> They [nurses in hospital] were saying that my tubal could be a possibility [for my milk not coming in]...but I didn't think it was.

However, an inefficient latch was not given as a reason. This finding provides further support that postpartum staff did not explain why the tube was being initiated. It is possible that some of the above explanations may have been correct but because there was no general consensus, it likely added to the vagueness and confusion surrounding milk supply concerns.

Other possible reasons for milk supply problems expressed by participants originating from members of the support network (not including health professionals) included genetics, not eating enough, and physical abuse.

Regardless of the cause of the milk supply concern, because physiological problems are rare at birth, the majority of such experiences may not have been actual but perceived. In the context of infant feeding decisions however, whether real or perceived, it is what the mother believes that is important. If supplementation results from this perception, it interferes with milk production which leads to a physiological milk supply problem which can end in breastfeeding cessation (Riordan, 2004).

Overall, the discussion under *Infant Feeding Beliefs* (see section 4.5.3.2) suggests participants possessed important knowledge about the benefits of breastfeeding. The preceding discussion however suggests they had little knowledge on the process of breastfeeding and solving lactation problems. Similar reports of women receiving prenatal education on the benefits of breastfeeding but lacking information on managing nursing problems have been reported in the literature (Tarrant et al., 2002; Wright et al., 1997).

In summary, lactation problems involving latch and milk supply concerns were common. Latch problems usually involved pain or discomfort and initially presented while in hospital. Although they were addressed by postpartum staff latching difficulties often continued after discharge. Ultimately, latch problems sometimes led to supplementation or breastfeeding cessation. Milk supply concerns were expressed before and after discharge which often resulted from misinterpretations of infant behavior or lack of knowledge of the process of lactation. Medically advised supplementation generally followed these concerns which may have exacerbated and/or created concerns of insufficient milk both in hospital and after discharge.

4.5.5 Theme 5: Psychological Influences

Exploring psychological influences such as emotions and their association with breastfeeding provides insight into the breastfeeding experience from a psychological perspective. A better understanding of how women *feel* in various breastfeeding situations may help to explain/understand the reasons behind certain feeding decisions. Breastfeeding experiences evoked several emotions including determination, guilt, and disappointment.

In their desire to breastfeed their newborn infants, a feeling of determination was evident. This was illustrated by several participants who were struggling to latch their infants:

> Q. Did you find that having breastfed before helped you at all?
> A. Yes…I thought it was going to be the same but it was different…it was the same thing as [my second child]…she wasn't latching on and he wasn't latching on…and I just…I was determined to breastfeed.

Determination and commitment were reported among the factors enabling women to breastfeed in public (Sheeshka et al., 2001). Although determination was not specifically mentioned in a report by Hoddinott and Pill (1999), commitment to breastfeeding was found to be important in the decision to breastfeed. It could be argued that determination to breastfeed is a reflection of one's commitment. In this thesis project, participants' commitment to breastfeeding was expressed through the prenatal feeding intent in combination with the context in which this declaration was made. The subsequent postnatal effort to continue breastfeeding supports this commitment.

Several participants expressed a sense of guilt when they were not "able" to breastfeed at all or as much, or for as long as planned:

> The first time I was breastfeeding him I kind of felt uncomfortable because he wasn't latching on properly...and it was very painful and it was hurting me. I didn't want to breastfeed him and then I felt so bad because I couldn't breastfeed him and then I felt so guilty...

Similar findings of women feeling guilty when they were unable to breastfeed have been reported in the literature (Murphy, 1999; Sheehan et al., 2003). The women in these reports felt this was the result of pressure from health care professionals that they should breastfeed because it is healthiest for the baby.

The report by Murphy highlights various pressures a mother may be exposed to when deciding how to feed her infant. For example, there is self imposed pressure to be good mothers and pressure from others to be good partners and women. The author concludes by suggesting that feeding decisions are as much about morality as they are about nutrition. With this in mind it is possible to understand how emotions such as guilt may be common but underreported.

Feelings of disappointment were also expressed by several participants. These participants were the same ones who felt guilty about not meeting their expectations:

> So she [supportive nurse in the hospital] made me feel a lot better [re: the in hospital decision to discontinue breastfeeding]...cause I thought I was a disappointment not to myself and my baby but disappointing the staff at the Royal University Hospital.

Previous reports have condemned media portrayal of breastfeeding (Harris et al., 2003; Scott & Mostyn, 2003). Because breastfeeding is portrayed as easy and negative experiences are rarely heard about, the media leads to an inaccurate portrayal of the

breastfeeding experience. Furthermore, many women remain immune to the realities of breastfeeding because they are not exposed to it (Hoddinott & Pill, 1999). Even when women are exposed to breastfeeding within their social network, the "conspiracy of silence" can keep significant others from sharing their breastfeeding problems (Harris, 2004). Overall, the idealization of breastfeeding and lack of exposure and awareness of its problems help explain feelings of disappointment and failure when women feel unable to continue breastfeeding.

Other feelings associated with breastfeeding that were expressed by some participants included feeling angry, scared, stressed, upset, proud, trapped and feeling sorry for oneself. Although only one participant expressed feelings of repulsion, it has been reported in the literature as having a negative impact on breastfeeding (Sheehan et al., 2003).

In summary, feelings of determination with regard to the breastfeeding decision were a positive influence. Feelings of guilt and disappointment resulted when breastfeeding was perceived as unsuccessful but their impact on the breastfeeding decision was unclear. Other feelings such as feeling trapped or sorry for oneself could have had a negative influence on the decision to breastfeed.

4.5.6 Theme 6: Other Issue

4.5.6.1. Timing of the Initial Breastfeeding Attempt

Riordan (2004) suggests the initial breastfeeding attempt should take place within one half hour of birth. If initiation is delayed, milk supply could be affected and if milk supply is affected this could ultimately influence a woman's decision to continue to breastfeed exclusively or introduce infant formula (Riordan, 2004).

Reflecting on experiences with all their children, over half the participants indicated that most initial feeding attempts took place within the recommended half hour after birth. The timing of this initial attempt was important as it has been associated with breastfeeding success (Riordan, 2004).

4.6 Complexity and Integration of Themes

Many factors have been identified in this study as having the potential to influence feeding decisions. With factors being contextual, attitudinal, cognitive, experiential, and psychological in nature, it becomes apparent that influence from several or all areas would impact any one decision. Although the findings suggest that some factors may have a greater degree of influence than others, they do not suggest that any factor is solely capable of influencing a decision.

Aside from the complexity associated with the process of decision-making, as discussed in Chapter 2, assuming the above is true and given that most factors are not static, it would be seemingly impossible to predict feeding behavior. At best, one could make an educated "guess" but its accuracy would depend on how well one is able to judge which factors are at play at that given point in time and their relative importance to that woman. In addition, Bottorf (1990) explains that a mother will not know the reality of breastfeeding until she begins to breastfeed and it is "only in the execution of the action that our inner strength and intentions are put to the test" (p. 203). Consequently, the infant feeding decision is not simply a matter of personal choice. Breastfeeding decisions and experiences are complex and rather than being an individual act, they are constructed and practiced within the social milieu in which women live (Dettwyler, 1995b).

The resulting insights into key influencing factors are important. In addition to providing a deeper understanding of the complexity associated with infant feeding decisions, it provides health promotion workers with some basic knowledge required to design or fine tune promotional, educational, and support efforts and to fuel further investigations in this population.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the research findings are summarized by answering the research questions followed by a presentation of major research findings. Based on the findings, recommendations for the promotion, protection and support of breastfeeding are made. Key strengths and challenges with the study and future research needs are also presented. The chapter concludes with a summary which takes into account the implications for health professionals.

5.2 Summary of Research Findings by Research Question

The following section will present the research questions and their answers based on the findings.

1. What are the experiences of Aboriginal women that influence their decision to either breastfeed or feed a breastmilk substitute to their infant?

Many experiences have been identified which are capable of influencing participants' prenatal feeding intent. These experiences are contextual, attitudinal, cognitive, experiential, and psychological in nature.

Contextual experiences include those from participants' lives before having children, the degree of connection to their culture, and those associated with their support network. In addition, experiences based on economic and education status are apparent as are those associated with perceptions of infant feeding in society and in the immediate social environment. Experiences associated with the formation of attitudes and beliefs as well as maternal infant feeding experiences that include emotions are also evident.

1.1 How do these women make meaning of these experiences when deciding how to feed their infant?

Feeding decisions are context bound and context is dynamic and constantly changing making each prenatal feeding decision complex and unique. With each new circumstance, experiences take on different meanings and corresponding degrees of influence. The feeding decision appears to become less of a conscious decision and more of a product of life experiences (and desires) and an individual's surroundings at any given point in time.

1.2 In what ways, if at all, are these decisions influenced late in pregnancy and in the first weeks postpartum?

Prenatal feeding decisions for the most part were declared at various times during the third trimester and the data do not suggest there were any changes to this decision late in the pregnancy. Deviations from the initial feeding intent began as early as birth and sometimes continued into the first weeks. Decisions made at birth included changing from the prenatal intent to formula feed or being undecided, to the decision to initiate breastfeeding. Subsequent decisions that deviated from the decision to initiate breastfeeding included the introduction of infant formula to supplement or replace some breastfeeds, and the decision to feed infant formula exclusively.

2. What are the infant feeding experiences of Aboriginal women in the first weeks postpartum?

After birth, current experiences directly associated with infant feeding take the forefront, taking on a more central role than those which are less tangible or part of the past. The experiences are mostly physical and emotional in nature, dealing primarily with acute situations that accompany the feeding of a newborn infant. Interactions with members of the support network are intensified and more frequent.

2.1 What meaning do they give to these experiences in light of the infant feeding decisions they have made?

Each birth is accompanied by experiences which are impossible to predict. As part of a novel set of circumstances, each postpartum experience takes on its own meaning. The meaning given to these experiences depends on the woman's ability to cope with each new situation. In turn, her ability to cope hinges largely on involvement with her support network as well as her emotional and physical status.

2.2 In what ways might these experiences influence infant feeding decisions with their future children?

The ways in which these feeding experiences influence future feeding decisions are unique and multidimensional. Cognitive and attitudinal influences are refined and intensified and support systems become more familiar. In addition, depending on the nature of the experiences a woman may be more or less committed to choosing a particular feeding method.

5.3 Major Research Findings

1. **Infant feeding decisions are not static and are the result of a complex interplay among various influencing factors:** Participants feeding decisions deviated from the original prenatal intention, with changes apparent beginning from the moment of birth and continuing through to one month postpartum. Factors which influenced any particular decision as well as their potential impact were dictated by each new circumstance.
2. **Life experiences apart from those directly related to infant feeding are important considerations:** From an early age, participants' lives were tumultuous and frequently involved substance and other types of abuse. In some cases, the impact on infant feeding was directly observed. Because circumstances largely dictate feeding decisions, such situations should be taken into consideration on an individual basis when deciding how aggressive promotional, protection and support should be.

3. **Support systems for breastfeeding are extensive:** Support systems extended from participants' social network, into the community and the hospital. Family members were important members of the social support network and included mothers, grandmothers, and partners. Community support came from the health nurse and the Food for Thought program while hospital support originated primarily from postpartum nurses.
4. **General practitioners are not good sources of breastfeeding support:** Contrary to what one might expect, close, long-term relationships with general practitioners did not involve promotion, protection and support of breastfeeding.
5. **School and work are perceived barriers to continued breastfeeding:** Desires to return to school or go to work after having children did not appear to impact breastfeeding intention or initiation. However, it impacted the duration of *previous* breastfeeding experiences with older children as well as the *intended* duration of breastfeeding the youngest infant.
6. **Breastfeeding in public is generally avoided:** Participants agreed with the idea of other women breastfeeding in public as long as it was done "discreetly". However, concerns for public reaction and their personal comfort level led most participants to breastfeed in private.
7. **Attitudes toward breastfeeding are positive:** Participants grew up in an environment where breastfeeding was perceived as the norm. They were exposed to breastfeeding either directly through observation and/or had knowledge of family members, including themselves, being breastfed. As mothers, they gained personal experience with breastfeeding and continued to observe it within their social network.
8. **Beliefs about breastfeeding can be supportive and unsupportive of breastfeeding and their role changes throughout the prenatal and postnatal period:** For example, beliefs supportive of breastfeeding (e.g. health, financial, bonding, being a good mother) are most likely to influence breastfeeding intention and initiation. Beliefs unsupportive of breastfeeding (e.g. convenience and freedom, milk supply concerns) are more likely to influence breastfeeding duration.

9. **Each breastfeeding experience is unique:** A challenging or difficult breastfeeding experience with one child is not predictive of the difficulty or ease of a future breastfeeding experience. Each new breastfeeding experience is as unique as each infant. This is important not only from the perspective of the first time or multiparous mother, but also from the perspective of the health care professional who may make assumptions based on knowledge of previous breastfeeding experience.
10. **Lactation problems are common and occur early in the postpartum period:** Problems with latch and milk supply concerns occurred while still in hospital where professional support was available.
11. **Milk supply concerns are common and multifaceted:** Participants frequently expressed concerns of having insufficient milk which led to supplementation with infant formula. These doubts originated and were perpetuated in several ways. The use of feeding tubes may have led participants to believe they had insufficient milk to feed their infants as did misconceptions of infant's behavior and breast fullness after birth.
12. **There is a lack of understanding of the process of lactation:** A poor understanding of the concept of milk supply and demand led to infant feeding practices (e.g. early introduction of supplemental formula feeds) which were unsupportive of breastfeeding. This lack of understanding also appeared to have formed the basis for and fueled the belief of having insufficient milk.

5.4 Recommendations

Several recommendations are being made based on the results of this study.

1. **Assist women to make an informed decision both preconceptually and during the prenatal period.**

The prenatal intent to breastfeed has been associated with initiation and increased duration of breastfeeding. Therefore, providing women with the knowledge needed to make informed decisions preconceptually and prenatally is important. Teachers can be involved in the introduction of this knowledge to young girls in school before they

become pregnant. Education can continue in the community through interactions with health care providers both preconceptually and prenatally. This effort should include identifying the woman's current knowledge level and beliefs about infant feeding. Once determined, knowledge and beliefs which are supportive of breastfeeding can be built upon and those which are unsupportive can be investigated further and addressed appropriately whenever possible.

2. Protect and support the decision to breastfeed.

Although a prenatal declaration to breastfeed is indicative of a commitment to initiate and continue breastfeeding, it does not preclude a change. Because the decision is not static and can be influenced at any time, this decision must be protected. Continued support from professional members of the support network could help to accomplish this goal before admission to hospital, while in hospital and after discharge.

Before admission to hospital and during postnatal visits, doctors are in a position to be important sources of support and must maximize their role. Provision of information on the benefits of breastfeeding and directing women to community support programs would be invaluable. While in hospital, maternity nursing staff should periodically review the feeding decision from the time of admission through to discharge. The decision to breastfeed should be reinforced through positive feedback while decisions to formula-feed should be reviewed and addressed where appropriate. In the early postpartum period, lactation problems are common and should therefore be anticipated and addressed immediately in a timely, sensitive manner.

After discharge, the community health nurse and physician become more important. Again, lactation problems should be anticipated and addressed. In particular, a continuum should be in place that identifies an individual who is having problems while in hospital such that they may be followed closely. In addition, when health care visits cease, a women with unsolved lactation problems should be followed. This could be done by extending the home visitation period as well as providing information on other support resources including programs like Food for Thought. For example, because a woman can continue to attend this program or join as long as infants are less

than six months, not only does she have access to professional help, but peer support is also available.

3. Provide information on solving lactation problems.

The benefits associated with breastfeeding are well known and are associated with the decision to initiate breastfeeding. However, participants appeared to lack knowledge on how to address lactation problems which can affect breastfeeding duration. For example, beginning in the early postpartum period, pain is often associated with breastfeeding which often continues after discharge. Alerting expectant and new mothers to the likelihood of this occurring, its possible causes, and how to address it would help to mentally prepare them for the experience. In addition, this information would encourage self-reliance and help build the confidence needed to address such problems. This effort could begin with community health care workers (e.g. doctors and nurses) at any time during the prenatal period and extend beyond hospital discharge. Information could be provided during pre and postnatal doctor's visits, at pre and postnatal breastfeeding classes, in support programs, in hospital, and by community nurses during home visits after discharge.

4. Address fundamental knowledge deficits regarding:

a. The Process of Lactation.

Protecting the commitment to breastfeed following initiation necessitates a basic level of knowledge and understanding of the process of lactation. It should be expected that individuals who are uninformed or misinformed may engage in breastfeeding practices that are unsupportive of continued breastfeeding. For example, a working knowledge of the concept of milk supply and demand is essential to understand the implications of supplementation with infant formula. Introduction of infant formula especially during the time the milk supply is being established could lead to breastfeeding cessation. Following this critical period, a woman should know that interference with milk supply is increasingly more likely as increasing numbers of breastfeeds are replaced by formula-feeds. In addition, there should be an awareness that

supplementation using a bottle can interfere with the newborn's ability to learn how to suck from the breast.

There also needs to be an understanding of breastfeeding initiation as it relates to breast fullness. Women should be educated on the basic physiology of when milk comes in following birth (as well as the importance of early initiation). It should be emphasized that breasts do not need to be full to initiate breastfeeding and that it is most beneficial to initiate breastfeeding within the first hour when breasts are most often still supple. Not only should mothers be aware that early initiation will help to prevent mechanical damage while the infant is learning to breastfeed but that it is easier for the infant to learn at this time. Just as importantly, knowledge of the role of colostrum and its importance with regard to initial feeds is paramount.

Both of these areas can be addressed in hospital by postpartum nurses and can begin by establishing a baseline understanding of current knowledge levels and beliefs. This exercise would not only direct the level at which educational efforts should begin but would allow an opportunity to address related beliefs which are both supportive and unsupportive of breastfeeding.

b. Milk Supply Issues.

With supplementation being implicated as one of the main causes of true milk supply problems, a basic understanding of the process of lactation is necessary before this issue can be addressed. Once this knowledge base has been established by the involved health care professionals, educating a woman on the realities of insufficient milk can begin. Several key areas must be addressed to reduce the negative impact of milk supply concerns on breastfeeding duration. First, it should be known that true physiological milk supply problems are rare and supplementation can quickly lead to insufficient milk. Second, a woman should be taught how to address fussy infant behavior which is often misinterpreted as hunger thus often leading to supplementation. Third, when an infant accepts a bottle after the breast, it is not indicative of insufficient milk.

For health care professionals to address this issue properly and place it high on educational priority lists, the professionals must have a solid understanding of the

concept and be familiar with its widespread devastating effect on breastfeeding duration. Therefore, promotional efforts must include assessing current knowledge levels regarding milk supply issues among relevant health care practitioners. Detected knowledge deficiencies or misinterpretations should be addressed.

As the number one reason reported for discontinuation of breastfeeding during the first three months, the significance of milk supply issues cannot be underestimated. Educational efforts should begin preconceptually where possible and otherwise as soon as there is knowledge of a pregnancy and beyond. The effort should be continuous, extending from the community to the hospital and back to into the community.

In addition, the ambiguity surrounding the reasons for supervised supplementation may be fueling this belief. For this reason it is of utmost importance that new mothers fully understand why tube feeding may be indicated while in hospital.

5. Involve members of the lay social support network.

Members of the lay support network can influence the decision to initiate breastfeeding as well as its duration. These people should be identified and included in promotional efforts whenever possible. Identification of these people can be achieved during prenatal dialogue at the doctor's office and during information collection sessions of support programs. For example, at Food for Thought, identification of key members of the lay support network could be accomplished by adding specific questions to the Individual Client Questionnaires, asking the woman to identify key members of her support network. Inclusion of the identified individuals in promotional and support efforts could include an invitation to future prenatal visits while program settings could offer educational components that include important referents.

Promotional efforts with members could include: the provision of information on the benefits of breastfeeding and the realities of insufficient milk concerns; how to involve the baby's father in feeding and care of the breastfed infant; emphasizing/reaffirming the important role the mother's mother and grandmother; an awareness of the more common difficulties that accompany breastfeeding and how to be supportive in these situations. Members should also be informed about the process of lactation and problems caused by supplementation.

6. Recognize that each breastfeeding experience is unique.

Health care professionals and new mothers alike should be aware that previous breastfeeding experience is not predictive of the success or failure of current or future experience. A successful breastfeeding experience does not preclude a challenging experience with a new infant nor does it necessarily make that mother any more capable than a woman with no experience. Each infant is a unique individual and with each birth come new circumstances and related concerns.

From the perspective of a health care professional for example, a woman with previous breastfeeding experience should not be expected to need less support than someone embarking on her first experience. Postpartum staff should be aware of the negative impact this assumption can have on breastfeeding. From the new mother's perspective, health professionals should reinforce this notion to help avoid unrealistic expectations when more difficult experiences do arise.

7. Help to cope with outside influences such as work and school.

School and work can be unsupportive of breastfeeding, primarily by affecting duration. This is due in part to a lack of information on how to successfully manage breastfeeding while going to school or work.

Two possible ways to address this concern include; providing information on how to continue providing breastmilk when separated from baby; and providing information on available resources and possibly creating new ones that support continued breastfeeding (e.g. on site child care for breastfed infants). The challenge of helping women return to school or work must also take into consideration the likelihood that other young children may be at home. With this in mind, care for older children must also be available and accessible.

8. Provide support for breastfeeding in public.

To successfully promote breastfeeding as the norm in any population, it must be observed in society. To observe breastfeeding in society, women must breastfeed in

public. However, if concerns about breastfeeding in public exist, this will not happen. Efforts to promote breastfeeding in society must strive to make breastfeeding less about "exposed skin" and more about feeding an infant. This should be addressed from the public perspective as well as that of the new or expectant mother.

Attitudes toward breastfeeding are formed at a young age. If children are exposed to breastfeeding and it is perceived as "normal", positive attitudes are likely to result. These attitudes are important as they likely influence attitudes toward breastfeeding as adults and more importantly as parents. With this in mind, promotional efforts could begin with children at the preschool level. Child care givers, including preschool workers, should pay careful attention to the settings in which children spend much of their time to ensure they are not inadvertently idealizing formula-feeding. For example, dolls that have baby bottles as props or picture books of baby's with bottles in their mouths should be avoided. To portray breastfeeding as normal, story time could include picture books that show how babies from all over the world feed from their mothers breasts. As children grow older and move into upper years, the concept of breastfeeding and breastfeeding in public could be introduced and built upon. This could be done in health and biology classes. More and more emphasis can be placed on the issue of infant feeding as high school years are reached and early parenthood is a possibility.

At the pre and post-natal stage, efforts to promote public breastfeeding could include questioning a woman on her thoughts about breastfeeding in public. This could take place in a group setting (e.g. prenatal classes) where women may be more receptive to such discussions. Answers supportive of breastfeeding could be reinforced and possibly investigated further to determine what makes these women different from those who feel uncomfortable. Answers unsupportive of breastfeeding could be opened for discussion with attempts to promote public breastfeeding. It may also be helpful to share research results or experiences supportive of public breastfeeding. For example, a study involving public's reaction to breastfeeding in several settings concluded that onlookers don't even notice that women are breastfeeding (Sheeshka et al., 2001). Women could also be informed of instances where other Aboriginal women have had strangers commend them for their decision to breastfeeding as was reported in this thesis project.

Portraying breastfeeding as the norm on a larger scale would work toward increasing public awareness and thereby increasing the comfort zone associated with public breastfeeding. This effort is already underway through The Seven Point Plan previously introduced (see Appendix C) which involves promoting and supporting breastfeeding in the community. Other efforts could include media portrayal of breastfeeding in communities.

5.5 Strengths and Challenges

This study has given a voice to eight Aboriginal women enrolled in the Food for Thought program in Saskatoon and their collective experiences with infant feeding decisions. Even though the findings are not transferable to all Aboriginal women living in urban centers, they add to the body of knowledge of factors that influence feeding decisions. As a novice researcher, it was only when I reflected on the theoretical basis of the methodology chosen and on the physical process of data collection that I appreciated the strengths of the study which enabled me to capture the depth and richness of information which may otherwise not have been possible. At the same time I recognized that inherent in its very strengths were challenges that brought me face-to-face with the realities of conducting this type of research. The purpose of the following discussion is to focus on what I perceived to be the greatest strengths of my study and the challenges brought forth as a result.

Chapter 3 describes the importance of establishing rapport when conducting interview research, recognizing it as perhaps the most important factor needed to enable researchers to capture the richest information. Qualitative researchers interested in breastfeeding behaviors have described various attempts to establish rapport (Dodgson & Struthers, 2003; Martens, 2002; Martens & Romphf, 2002; Martens & Young, 1997; Murphy, 1999; Scott & Mostyn, 2003; Sheehan et al., 2003; S. Smith, 2003a, 2003b; Tarrant et al., 2002; Wright et al., 1997) but my study appears to be unique with regard to the time and effort taken to establish rapport. I spent eight months as a participant observer in addition to hours of face-to-face interview time. Eventually friendships developed and more information was shared. As a result, interviews were not solely fueled by what I had come to know from the literature but from what participants told

me outside the interviews, first as strangers and then as friends. It was as though I had been "given permission" to bring into each interview, personal, detailed information to be either confirmed, denied, or built upon; information that I would otherwise never have been privy to. It didn't end there. After the first postnatal interview, participants often engaged me in conversation about things that had been said during the interview providing further insight into the meaning behind their decisions. Then during the second postnatal interview, it was possible to bring forth these new seeds for discussion. Even now that the research is finished and interviews are completed, I cannot have imagined a more fruitful way to collect the data I sought.

As indispensable as the process was, my persistent observation of the group had many challenges, some of which I could not have predicted as a budding researcher. It was very tiring attending sessions twice a week along with my other academic requirements and my own demands as a mother and wife. Attending sessions was particularly stressful when an interview was pending. I had no discomfort with the interview process itself; it was the anticipation of the participant not showing up that concerned me. On several occasions, after much time and effort had been spent preparing for and scheduling the interview (including a telephone call reminder the evening before), without warning I would be left with no interview. Especially early-on in the data collection process, I would often wonder if I would ever see that participant again and sometimes I never did. Even something that seemed simple, such as deciding how to handle the absence was stressful. How many times do I contact the participant before she would feel harassed? Nonetheless, I would carry all interview materials with me to each session "just in case" she appeared. Sometimes she would come to the next session that same week when another interview was planned and for fear of losing that interview I would conduct two interviews in a three hour session. No one prepared me for how exhausting this process would be.

Excitement soon led to increasing stress when my participant numbers dropped from 15 to eight. The fear that more may drop out became my constant companion for the remainder of the data collection period and what was worse is that it was out of my control. Even more stressful was the increasing difficulty of recruiting new participants. Many of the newcomers attended sporadically or only on that one occasion. I tried

several attempts to invite other women but some were not interested while those who were often did not return. I quickly became discouraged but then realized that even if I managed to recruit new participants at this later date, the richness of the data would suffer because the same rapport would not have had time to develop. However, as the weeks passed, I intuitively felt that because of the relationships which had developed between me and the remaining participants, they were committed to continuing.

Looking back, as I complete my writing, I feel satisfied with the depth of information captured with the eight participants who were in the end my friends. The findings that came from the study were rich and important contributions to the existing body of knowledge on breastfeeding research. But, with this richness came sacrifice. Some topics identified in the literature as factors capable of influencing infant feeding decisions were not exposed in this study. For example, breasts being viewed as sexual objects (Harris et al., 2003; Hoddinott & Pill, 1999; Murphy, 1999; Scott & Mostyn, 2003) and the impact of sexual abuse on the decision to breastfeed (Health Canada, 1999). It is possible that had I interviewed more women, other influences may have been shared.

5.6 Future Research

Numerous influences have been identified as capable of influencing the infant feeding decision. Research providing deeper insight into any of these influences would be useful. For example, the findings suggest women who use feeding tubes while in hospital may inadvertently be led to believe they have insufficient milk which can have a negative influence on breastfeeding duration. Quantitative investigations looking at the frequency with which feeding tubes are used and their effects on breastfeeding duration could be conducted. If results suggest there is a problem then qualitative methods can be employed to understand *why* it happens. Due to its modifiable nature, insight into this area could provide important information that could be incorporated into educational and support efforts for health care professionals, the mothers, and members of their social support network. Conducting focus groups among women who share this experience would be a useful way to accomplish this goal. The Food for Thought program would provide a suitable venue for this type of research. Depending on what

this exploration reveals, researchers may wish to identify how feeding tubes influence a mother's perception of her milk supply. This could be accomplished by having all Aboriginal women complete a brief questionnaire while in the maternity ward.

The impact of "culture" on feeding decisions was not clear in this study. However, as described in Chapter 1, understanding cultural influences is important if breastfeeding promotion efforts are to be successful. In addition, as described in Chapter 4, because the role of culture in decision-making is often difficult to elucidate, conducting a study focusing on cultural influences would be important. One possible way of attempting to capture cultural nuances (if they exist) in an urban Aboriginal population would be to follow a similar study design but to include a second group of women who possess similar demographic characteristics but who are not of Aboriginal identity.

The research project in this thesis explored factors influencing breastfeeding both prenatally and into the first month postpartum. Considering the recommended duration of exclusive breastfeeding is six months, efforts aimed at identifying and understanding influencing factors which encompass this six month period would be important. This could be accomplished by conducting a similar study but extending the postpartum time frame to six months or more if possible.

Health care professionals involved with breastfeeding should be aware that the goal is to not only increase both initiation rates and duration rates but to focus on increasing exclusive breastfeeding for a minimum of six months. Again, a similar study to the one presented herein could be conducted but with focus groups aimed at identifying and understanding factors influencing exclusive breastfeeding and combination feeding. This could be done using the same one month time frame or preferably longer time frames (e.g. six months).

Providing information forms the basis of many of the recommendations put forth in section 5.4. The challenge however, is to determine the best ways to provide the information, or in other words, to educate the women in all these areas. Perhaps one of the best ways to do this would be to ask the women themselves. Research using a similar study design but conducting focus groups could provide valuable insight into this area.

Members of the participants' social support network have been identified as important influences on feeding decisions. Including these people in support efforts is

listed among the recommendations. However, to do this successfully it would be important to determine the most effective ways to accomplish this. Feedback from those the women involved would be a logical approach. As mentioned above, researchers could begin with a similar venue to that employed herein and conduct focus groups to provide insight into the best ways to include significant others in educational, promotional and support efforts.

Breastfeeding initiation rates are higher among members of Canada Prenatal Nutrition Project participants including those in Food for Thought. What strategies, if any, are being employed that have a positive influence on breastfeeding? Conducting an "inventory assessment" of programs like Food for Thought could provide insight into this area. Strategies identified could then be further investigated and incorporated into promotional, support and educational efforts in other programs.

Concerns of breastfeeding in public appear to have a negative influence on breastfeeding. In addition, exposure to breastfeeding appears to be a positive influence on breastfeeding. However, it may be important to know whether there is more influence on the decision to breastfeed and to breastfeed in public if other Aboriginal women are seen breastfeeding versus non-Aboriginal women. Insight into this area would help guide where the emphasis should be placed on promoting public breastfeeding. For example, should efforts to increase public breastfeeding focus primarily on Aboriginal women or should both populations be included? This research could be accomplished using two approaches. First, questions capable of capturing insight into this topic could be incorporated into questionnaires conducted during the maternity stay. Second, more in-depth information could be obtained through focus groups among women in similar settings to this study and/or among groups who are more representative of the urban population.

Finally, without data truly representative of Aboriginal women's breastfeeding rates living off reserve, there is no means in place to assess baseline rates or to capture increases or decreases as a result of promotional and support efforts or otherwise. Research needs would include designing and conducting quantitative measures to capture this data.

5.7 Conclusion

There is very little information documenting the infant feeding experiences of Aboriginal women living in urban centers. As previously mentioned, much of the information currently available is largely demographic and statistical in nature. My research has complemented existing knowledge by introducing a personal perspective, allowing all those who are interested to gain a deeper understanding of the phenomenon of infant feeding in the Aboriginal population in Saskatoon.

Considering this was possibly the first study of its kind in Saskatchewan and that the outcome of qualitative research is often hypothesis generating (Holliday, 2002), such a study could encourage and has contributed to research in the area of Aboriginals and breastfeeding.

The principle implication of this study for health care professionals involved in the promotion, protection and support of breastfeeding in this population is that there are many factors capable of influencing infant feeding decisions. It is important to understand that there is complex interplay among these factors and that their significance changes as circumstances change. Experiences unique to women in this population must be explored to provide the context needed to help understand the meaning of decisions that are made.

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Appendix A

Ten Steps to Successful Breastfeeding and Summary of the International Code of Marketing Breast Milk Substitutes

Ten Steps to Successful Breastfeeding
From: Protecting, Promoting and Supporting Breastfeeding: The special role of maternity services. (A Joint WHO/UNICEF Statement, Geneva, Switzerland, 1989)

Every facility providing maternity services and care for newborn infants should:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. * Help mothers initiate breastfeeding within a half-hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation even if they should be separated from their infants.
6. * Give newborn infants no food or drink other than breast milk, unless medically indicated.
7. * Practice rooming-in — allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. * Give no artificial teats or pacifier (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

The ten steps were written to support breastfeeding for health, full-term infants. Statements #4, 6, 7, 9* do not fully reflect the medical needs of infants who are premature, low birth weight or medically ill at birth. These infants may be too ill to feed at the breast during the first few hours of life. Breastfeeding for these infants may include using mothers expressed breast milk, feedings by breast, tube or bottle and supplementation and fortification of breast milk as medically indicated. Research findings support the benefits of non-nutritive sucking (soother/pacifier) for premature or clinically ill infants in hospital. This option is provided to promote positive outcomes with these infants.

Summary of the International Code of Marketing Breast Milk Substitutes
(World Health organizations, 1981, Geneva, Switzerland)

The Code includes these 10 important provisions:

1. No advertising of these products to the public.
2. No free samples to mothers.
3. No promotion of products in health care facilities.
4. No company representatives to advise mothers.
5. No gifts or personal samples to health workers.
6. No words or pictures idealizing artificial feeding, including pictures of infants, on the labels of the products.
7. Information to health workers should be scientific and factual.
8. All information on artificial feeding, including the labels, should explain the benefits of breastfeeding and the costs and hazards associated with artificial feeding.
9. Unsuitable products such as sweetened condensed milk should not be promoted for babies.
10. All products should be of a high quality and take account of the climatic and storage conditions of the country where they are used.

Appendix B

Saskatoon District Health Position Statement

SDH POSITION STATEMENT

Breastfeeding and the Use of Human Milk: Promotion, Protection and Support

The Saskatoon District Health (SDH) in accord with the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), the Pediatric Societies in North America and the Breastfeeding Committee for Canada, recognizes breastfeeding as the normal and optimal method of infant nutrition. It also recognizes that exclusive breastfeeding for healthy term infants adequately supports growth and development for the first six months of life, that breastfeeding should continue for at least twelve months and may continue for as long as two years or more.

SDH strives to endorse and support the Ten Steps to Successful Breastfeeding and the International Code of Marketing Breast Milk Substitutes as the minimum standard to promotion, protection and support of breastfeeding and the use of human milk.

SDH recognizes breastfeeding as the preferred method of feeding and nurturing infants, and is primary in achieving optimal infant and child health, growth and development. When breastfeeding is not possible, expressed human milk should be used.

SDH believes the Ten steps should enhance care for all mothers, whether or not they are breastfeeding. Properly implemented, the Ten steps favor informed decision making about infant feeding, individualized advice about infant feeding, supportive care during labor and delivery, support for mothers after discharge and independence from commercial influences. SDH believes promoting the autonomy of mothers is crucial for enhancing maternal competence and confidence after discharge. (Refer to Appendix A)

SDH recognizes the need for resource allocation, for ongoing staff breastfeeding education and policy implementation.

SDH, therefore, supports health care providers on their vital roles and responsibility to:

- Base their practice, including direct care, education, administration and research on the most current evidence about breastfeeding/us of human milk.
- Ensure that mothers, fathers and families receive consistent and accurate information about the benefits of breastfeeding/use of human milk and the implications of not breastfeeding/use of human milk in order to make informed choice(s).
- Support parents in their choice(s) and provide the care, teaching and support necessary for them to implement their choice(s).
- Advocate for and support initiatives to increase educational opportunities for consumers about breastfeeding/use of human milk. This includes taking advantage of opportunities to positively orient children and adolescents to breastfeeding, and ensuring that pregnant women, prospective fathers and families have access to prenatal breastfeeding education.
- Share information about strategies which support initiation and maintenance of breastfeeding and work towards effectively supporting breastfeeding women in the hospital, in the workplace and in the communities.
- Develop and maintain effective communications and collaborations with other health care providers to ensure optimal breastfeeding education, support and counsel for mother and infant.
- Work to establish hospital, family and community support for women to continue breastfeeding and promote the development of work place policies that support extended breastfeeding.

Appendix C

The Seven Point Plan

The Seven Point Plan

The Seven Point Plan For The Protection, Promotion And Support Of Breastfeeding In Community Health Services

1. Have a written breastfeeding policy that is routinely communicated to all staff and volunteers.
2. Train all health care providers in the knowledge and skills necessary to implement the breastfeeding policy.
3. Inform pregnant women and their families about the benefits and management of breastfeeding.
4. Support mothers to establish and maintain exclusive breastfeeding to six months.
5. Encourage sustained breastfeeding beyond six months with appropriate introduction of complementary foods.
6. Provide a welcoming atmosphere for breastfeeding families.
7. Promote collaboration between health care providers, breastfeeding support groups and the local community.

Adapted with permission from: UNICEF UK Baby Friendly Initiative, 1999

Appendix D

Interview Guides

Prenatal Interview Guide

1. When is your baby due?

2. How old are you?

3. a) Is this your first baby?
   b) How many other children do you have?
   c) How old were you when each child was born?

4. Have you decided how you will feed this baby?

5. How did you feed your other child(ren)?

6. a) Can you tell me what the benefits of breastfeeding are to your baby?
   b) Can you tell me what the benefits of breastfeeding are to you?

7. Where did you learn this information about breastfeeding? (e.g. personal experience, relatives, friends, school, HCP, media, FFT).

8. What was the best thing about breastfeeding?

9. What is/was one of the hardest things about breastfeeding?

Postnatal, In-Depth Interview Guide Sample
Based on a Stated Prenatal Intent to Breastfeed

Preliminary information:

1. Actual date of birth?

2. Current infant feeding method?

3. Formula/bottle since birth? Frequency of each?

4. Timing of the original feeding decision?

---

1. Current breastfeeding experiences.
   Describe a recent experience (e.g. 24 hour period) that stands out in your mind.

   Referents: Emotional relationship
   Attitude toward BF
   Comfort in BF in front of them
   Impact of other children in the home
   Problems with BF (list)
   Overall feelings about the BF experience (ie. Satisfaction with BF)

2. Pre/postnatal hospital experience. Describe the experience (focusing on BF) from the time you were admitted until discharge.

   Who was with you?
   Timing of infant feeding decision (pre/post-pregnancy) (pre/postnatal)

   Referents: Emotional relationship
   Attitude toward BF
   Relationship with your doctor
   Attitude/treatment by hospital staff
   Awareness of BF support programs (SBC)

3. Infant feeding decision. Describe any experiences that influenced this decision.

   Timing
   Referent influence
   HCP influence
   Previous experience
   Health benefits (where did you learn this)
   Bonding
   Convenience/expense
   Lack of information
   Work/school
   Other children
   Cultural norm

Attitude toward BF (personal and referents)
Perception of the ability to BF

Attitude toward: smoking, drugs, alcohol while BF

4. Cultural influences. Do you feel your culture has influenced you in any way? Describe any culturally related experiences.

   Where were you born and raised? By who were you raised?
   Grandmother/elders thoughts on infant feeding
   Cultural teachings

5. Previous BF experience. Describe highlights/lowlights of that/those experiences.

   Timing of previous infant feeding decisions (pre/postnatal)
   (pre/postpregnancy)
   Previous children-problems/satisfaction with BF
   Most supportive referents
   Public experiences
   Use of supportive programs
   Comparison to current experience

6. Breastfeeding in public.
   How do you feel about it? Do you do it? Have you ever done it?
   Describe an experience that stands out in your mind.
   Who was with you? How did you feel?

   Referents: Emotional relationship
   Attitude toward BF in public
   Embarrassment issues
   Age of BF infant

7. Previous exposure to BF mothers. Describe your first experience with breastfeeding. Describe subsequent experiences (family, friends, school, FFT)

   Referents: Emotional relationship to you
   Attitude
   Personal attitude-how did you initially feel about BF as a young girl?

8. Experiences with BF support programs. Current/past. FFT, Parenting classes, SBC, School?
   Have you seen other women BF at these venues?
   Did anyone attend any of these classes with you?

   Awareness-how did you hear about these groups
   Cultural sensitivity
   Accessibility issues

Postnatal, In-Depth Interview Guide Sample
Based on a Stated Prenatal Intent to Formula Feed

The following guide was individualized for a woman with previous breastfeeding experience.

Preliminary information:

1. Actual date of birth?

2. Current infant feeding method?

3. Formula/bottle since birth?

4. Timing of the original infant feeding decision?

---

1. Current infant feeding experiences.

   Describe a recent experience (e.g. 24 hour period-frequency of feeds-night time awaking etc) that stands out in your mind.
   What is your daily routine? Who is usually with you?

   *Referents: Emotional relationship
   Attitude toward infant feeding

   *Impact of other children in the home
   Which children are currently living with you?

   *Problems with bottle-feeding

   *Satisfaction with infant feeding decision

2. Pre/postnatal hospital experience. Describe the experience from the time you were admitted until discharge. Who was with you?

   *Timing of infant feeding decision (pre/post-pregnancy) (pre/postnatal)

   *Referents: Emotional relationship
   Attitude toward infant feeding

   *Relationship with your doctor
   Reaction to chosen method of infant feeding

   *Attitude/treatment by hospital staff
   Reaction to chosen method of infant feeding

3. Has anyone offered their advice/opinion on how you should feed your infant? How do you feel about it?

4. Experiences with any prenatal support programs. FFT, Parenting classes, SBC, School?

    Awareness-how did you hear about these groups
    Cultural sensitivity
    Accessibility issues

5. How did you hear about FFT?
    When did you start attending?
    Why do you keep going? What do you get out of it?
    Why a peer leader?
    How would you describe your relationship with the other women? With staff?

6. Infant feeding decision and the experiences that influenced it.
    Based on what you told me in the prenatal interview, would it be fair to say that the main reason you chose to bottle feed was because you were wanting to return to work? Can you expand on that?

    Can you think of any other factors in your life that may have influenced this decision?
    Referent influence
    HCP influence
    Previous experience BF Joseph (e.g. negative aspects)
    Convenience
    Lack of information
    Work/school
    Other children
    Cultural norm
    Attitude toward BF (personal and referents)
    Perception of the ability to BF

    Attitude toward: smoking, drugs, alcohol while BF

7. Cultural influences. Do you feel your cultural has influenced you in any way? Describe any culturally related experiences. For example, when you made the decision to BF your first child.

    Where were you born and raised? Who raised you?
    Grandmother/elders thoughts on infant feeding
    Cultural teachings

8. Previous personal BF experience. Describe highlights/lowlights of that/those experiences.

a) Timing of previous infant feeding decisions (pre/postnatal) (pre/postpregnancy)
b) What influenced this decision? Culture, personal BF beliefs/knowledge, referents, HCP?
c) Who were the most supportive people around you? What was your relationship with them?
d) Problems with BF
e) Satisfaction with BF
f) Breastfeeding in public. How did you feel about it? Have you ever done it? Is there any incident that stands out in your mind (positive or negative)?
    * Referents attitude
    * embarrassment issues
    * age of the BF infant

Use of supportive programs?
Comparison to present experience

9. Previous bottle-feeding experience.
Thinking back to your feeding experiences with your other children;

For each child, can you remember approximately when you decided how you would feed them?

During the prenatal interview you stated that there were certain things happening in your life at the time these children were born which may have affected your decision of how to feed them, can you expand on that?

10. Previous exposure to BF mothers. Describe your first experience with breastfeeding. Describe subsequent experiences (family, friends, school, FFT)

Referents: Emotional relationship to you
Attitude
Personal attitude-how did you initially feel about BF as a young girl

*Grandmother, aunts, sisters, extended family, friends: How did they feed their infants?

11. When you see a woman breastfeeding, what do you think of?
When you see a woman bottle-feeding her infant, what do you think of?

12. Based on what you have told me today and what you see everyday, would you say that we live in a bottle-feeding or breastfeeding culture?

13. Since you have had experience with both breast and bottle-feeding, can you tell me in your own opinion the best things about each and the least desirable things about each?

Appendix E

Consent Form for the Interview Participants

Consent Form for the Interview Participants

You are invited to participate in a study entitled "The Infant Feeding Experiences and Decision-Making Influences of Young, Aboriginal Women in Saskatoon". Please read this form carefully, and feel free to ask questions you might have.

Researchers:

Dr. Shawna Berenbaum, Professor, College of Pharmacy and Nutrition, University of Saskatchewan- Supervisor
Phone 966-5836
Maya Wagner, M.Sc. candidate, College of Pharmacy and Nutrition, University of Saskatchewan
966-6346 or 244-4226

Purpose and Procedure:

The purpose of this study is to explore and understand the infant feeding experiences of young Aboriginal women living in Saskatoon who are about to become mothers.

You will take part in three interviews. The first interview will take about 15 minutes and will take place shortly after you join the program whenever you are about 26 weeks pregnant or over. The next two interviews will be longer (about 60 minutes each) and will take place when your baby is about one month old. There will be three to seven days between the last two interviews.

In the first interview which will occur before you have your baby, I will ask you a few questions about yourself that will give me basic information about yourself and information on your thoughts on feeding a baby. In the second interview, when your baby is about one month old, I will ask different questions that will help me to find out more about your experiences with feeding a baby (now that you are feeding a new baby). These experiences can be your own personal, hands-on experiences, something you saw, heard or read about. They can also be something you were taught in school, by a family member or in a program like Food For Thought. In the last interview, I will ask you to think back on what you have told already told me and then together we will try and understand what your experiences meant for you. With your permission, the interview will be taped and you have the right to turn off the tape recorder at any time during the interview. Should you not wish the interview be taped, I will take skeleton notes during the interview.

I will do my best to choose a time and location which are most suitable for you and will provide money for transportation and child care if needed.

Potential Risks:
This form describes the full extent of the study and there should be no risk to you. If you decide not to participate, or to drop out, it will not affect the services you receive from the Food For Thought Program or any other services.

(Potential Benefits):
You will receive a $15.00 gift certificate for Wal-Mart after each set of interviews.
If requested by you, I will provide you with information about the results of the study.
Your experiences may be able to help other young mothers.

(Storage of Data):
Data will be securely stored under lock and key in the research supervisor's office for a minimum of five years after completion of the study. At that time hard copies of manuscripts will be destroyed and tapes erased.

Confidentiality:
You can be assured that your identity will only be known by the student-researcher, project coordinator, and program staff. Information will not be shared with others.

All responses will be confidential and the project coordinator and program staff will not have access to them.

Your name will not be used for purposes related to the study nor will any other piece of information that may identify you.

The results of this study will be presented in the form of a written report. The study may also be prepared as a journal article and/or presented at a conference.

Results may be grouped together and/or presented as direct quotations when they are reported. If anything you say is used directly, your name will be omitted or you will be assigned a pretend name. In addition, you should know that I will personally copy out what is said on the tapes. Any other notes including the copied tapes will be seen only by the research team.

Right to Withdraw:
You may withdraw from the study for any reason, at any time, without penalty of any sort and without affecting your participation in the program or any services you receive from Food For Thought or any other programs. If you withdraw from the study at any time, your data will be destroyed.

If you finish all the interviews, the information will be transferred from the tapes onto paper for you to read over. You will have the opportunity to review the information gathered during the interviews (the transcript) and can add, alter, or delete any comments that you choose. If you decide to give me permission to use the information, I will have you sign a form called a transcript release form.

Questions:
If you have any questions concerning the study, please feel free to ask at any point; you are also free to contact the researchers at the numbers provided above if you have questions at a later time. This study has been approved on ethical grounds by the University of Saskatchewan Behavioural Sciences Research Ethics Board on (insert date). It has also received permission from the Saskatoon Health Region and the Food For Thought Program. Any questions regarding your rights as a participant may be addressed to the University of Saskatchewan committee through the Office of Research Services (966-2084).

Debriefing and Feedback:
A summary of study results will be made available to you if so requested.

Consent to Participate:
I _____, have read and understood the description provided above; I have been provided with an opportunity to ask questions and my questions have been answered satisfactorily. I consent to participate in the study described above, understanding that I may withdraw this consent at any time. A copy of this consent form has been given to me for my records.

_____
(Signature of Participant) (Date)

_____
(Signature of Researcher) (Date)

Appendix F

Confirmation of Ethical Approval