AN EXPLORATION OF FACTORS INFLUENCING THE INITIATION OF BREASTFEEDING AMONG SOUTH ASIAN IMMIGRANT WOMEN

by

MANVINDER TUNG MANN

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Abstract

There is some evidence suggesting that the rate of breastfeeding initiation is lower among particular ethnic or cultural groups who have immigrated to Canada and South Asian women comprise one of these groups. Given the evidence that breastfeeding is important in promoting infant health and maternal health, it is important to understand factors that influence breastfeeding initiation among South Asian immigrant women. This descriptive exploratory study investigated the following research question: What are South Asian women's perceptions about the social, socio-economic, personal and acculturation factors that influence their initiation of breastfeeding? The study explored factors that could influence the initiation of breastfeeding among primiparous South Asian immigrant women who have immigrated to Canada. It was informed in part by the conceptual framework used by Kong and Lee (2004), whose study investigated factors that influenced 252 first-time mothers in their decision-making about whether or not to breastfeed.

A convenience sample of 15 subjects was interviewed using a semi-structured interview guide with 10 questions. Data were transcribed and analyzed using inductive constant comparative analysis. The following themes emerged: the representation of breastfeeding, vicarious learning about breastfeeding, family influences, spiritual connection, breaking with tradition, resisting the moral mandate, deferring to medical authority, transition to work and cultural mores. With respect to the findings, implications are discussed for nursing research, theory and education.

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Acknowledgements

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Chapter One: Introduction

Background to the Problem

Breastfeeding, as Stuart-Macadam and Dettwyler (1995) have noted, "is the ultimate bio-cultural phenomenon: in humans, breastfeeding is not only a biological process, but also a culturally determined behavior" (p. 5). In a recent position paper by the Canadian Paediatric Society (2006) it is stated that "Breastfeeding encompasses nutritional, immunological psychological, development and emotional components that contribute to normal growth and maternal-child relationship" (489). There are numerous health benefits associated with breastfeeding for both mothers and infants, in both developed and developing nations, according to a meta-analysis of studies conducted in the developed world by Ip et al., 2007. For infants, breastfeeding for at least six months was associated with a significant reduced reduction of acute lymphocytic and myelogenous leukemia in childhood. Breastfeeding in infants was shown to significantly reduce the risk of having acute otitis media infections in childhood. Breastfeeding exclusively for at least three months was also associated with a reduction in risk of atopic dermatitis, a common skin problem, in families with history of atopy. During the first year of life, breastfeeding was associated with a reduction in risk of gastrointestinal infections in infants in developed countries (Ip et al., 2007). Infants who were breastfed were also shown to have significantly reduced risk of sudden infant death syndrome (SIDS) compared to formula-fed infants. As for maternal health outcomes, consistent evidence has shown an association between breastfeeding and risk reduction for breast cancer and ovarian cancer: the evidence is a dose-response relationship; the cumulative duration of breastfeeding is estimated as 12 months (Ip et al.). Thus, the longer women breastfeed, the greater the risk reduction in ovarian cancer. With respect to the long-term effects of breastfeeding, a review by Horta, Bahl, Martines and Victora

(2007) showed that breastfeeding is significantly associated with such long-term benefits as lower systolic and diastolic blood pressure; as well, adults who had been breastfed as infants had lower cholesterol levels later in life compared with adults who had not been breastfed. The benefits of breastfeeding included a reduced incidence of type 2 diabetes in breastfed subjects. Breastfeeding was also associated with increased cognitive development in childhood and positively associated with continued school performance in young adulthood (Horta et al.).

Although development and marketing of infant formula together with shifts in parenting cultures had contributed to a decline in the number of women choosing to breastfeed in the decades following World War II, this trend began to be reversed in the last quarter of the twentieth century, with the development of the natural childbirth movement (Schanler & Wright, 2001). Breastfeeding has continued to increase since the 1980s, when about two-thirds of women breastfed their babies: a Statistics Canada report (2003) indicates that, in 1996-1997, 79% of all pregnant women had breastfed their most recent child.

Rates of breastfeeding vary by geographical region in Canada. Breastfeeding rates were estimated using data from the National Longitudinal Survey of Children and Youth; in 1998-1999, rates ranged from a low of 64.5% in the Atlantic Provinces to a high of 95.2% in British Columbia. Mothers in regions with higher breastfeeding initiation rates tended to breastfeed longer than in the regions with lower rates (Public Health Agency of Canada, 2003).

The late 20th century has been characterized as the "age of migration" and a time of increased migration for women in particular (Castles & Miller, 1996, p. 40). In 2005, a total of 262,236 new immigrants landed in Canada, an 11% increase over 2004: for the eighth consecutive year, China and India were, respectively, the first and second leading countries of origin for new immigrants to Canada. Also in 2005, India accounted for 13% (33,146) of new

immigrants to Canada (Citizenship and Immigration Canada, 2006). The result of this influx of immigrants is that Canada's population is becoming increasingly multicultural. It is therefore important that Canadian nurses, whatever their own ethnic or cultural background, are sensitive to the traditions, values and beliefs that immigrant women bring. In addition, nurses must also understand the contextual factors affecting the lives of immigrants in Canada, in order to provide culturally sensitive health care services in general, and better support during pregnancy and the perinatal period in particular (Choudhry, 1997).

The Canadian Perinatal Health Report (1998) includes descriptions of the beliefs and practices underlying infant feeding in various cultures. The report, which notes that rates of breastfeeding initiation are dropping among South Asian immigrant women, states, "Breastfeeding was dominant in the country of origin; however, upon immigration to North America, a unidirectional change from breastfeeding to bottle-feeding occurs" (Public Health Agency of Canada, 1998, p. 6). About 98% of South Asian women have initiated breastfeeding in India (La Leche League International, 2003). Findings from several other studies also report that breastfeeding rates among immigrant women declined following immigration when compared to breastfeeding rates in their countries of origin (Celi et al. 2005; Harley, Stamm & Eskenazi, 2007). In a study of South East Asian immigrant women in California, results showed that 94% of women reported they exclusively breastfed their infants in their home countries, while only 22.4% of these same women had breastfed once they relocated to the United States. Furthermore, in that study only 3.8% of pregnant mothers were planning to breastfeed at all (Romero-Gwynn & Carias, 1989). This pattern was observed among Asian immigrants from Viet Nam following migration to the United Kingdom. The women lived in communities with only a few other Vietnamese families and therefore found a dearth of women who had experience with

breastfeeding to turn to for support. This lack of support was the reason these women gave for their lack of confidence in initiating and maintaining breastfeeding (Carballo, Divino & Zeric, 1998).

Given the number of South Asian immigrants to Canada, the reduction in breastfeeding rates among women in this group is an important consideration. Recent census results indicate that more immigrants from Asia arrived in Greater Vancouver between 1996 and 2001 than from any other area. Of Vancouver's new foreign-born residents arriving over a five-year period, the People's of Republic of China contributed 20% (34,400 persons), followed by Taiwan (13%), India (9%), Hong Kong (9%) and the Philippines (8%). Since 1996, immigrants originating in these five countries accounted for 60% of Greater Vancouver's arrivals (GVRD Policy Planning Department, 2003).

The few studies specifically addressing immigrant women's rate and duration of breastfeeding have yielded mixed results. Some researchers have found the rate and duration of breastfeeding to decrease after immigration, and to be inversely related to the number of years in the country of resettlement (Ghaemi-Ahmadi, 1992; Meftuh, Tapsoba, & Lamounier, 1991; Perez-Escamilla et al., 1998; Rossiter, 1992; Tuttle & Dewey, 1994). Ever-Hadani et al. (1994) reported similar findings, and related maternal education level, caesarean delivery and infants' birth-weight to the decision to breastfeed, in addition to the mother's age and country of birth.

During the 1980s, a number of reviews and feminist critiques led many nursing researchers to conclude that nursing research about the health and health care needs of immigrant women had been neglected (Anderson, 1985; Boyd, 1984; Kulig, 1990; Lynam, 1985; Meleis & Rogers, 1987). This area of women's health is now investigated more thoroughly than in the past, but research in this area is still in the early stages of development. One recent study of

immigrant women's health has suggested that immigrant women tend to under-utilize health care services (Aroian, 2001). If this is the case, immigrant women will not have access to educational or health-promoting information relating to breastfeeding, infant feeding and childbearing.

Researchers have shown that there are various factors associated with initiation of breastfeeding in immigrant populations, including length of immigration, maternal attitudes and social factors such as the support of a spouse or guidance and encouragement on the part of a health care professional.

Results of studies that have examined breastfeeding in Finnish immigrant women suggest that they are more likely to breastfeed if they have a positive attitude toward breastfeeding (Tarkka, Paunonen, & Laippala, 1999) and believe it to be healthy, easy, convenient and conducive to freedom (Libbus & Kolostov, 1994). Similar studies have not been undertaken with South Asian women living Canada. The increase in number of South Asian mothers and a possible trend away from breastfeeding make this an important population to study.

Significance of the Problem

Some research has suggested that breastfeeding rates among immigrant women are reduced following migration to North America (Ghaemi-Ahmadi, 1992; Tuttle, 2000); however, the experience of South Asian immigrant women in British Columbia who are pregnant and facing a decision about breastfeeding has not been studied.

By examining the factors that have affected immigrant women's decisions about breastfeeding, the present study addresses the dearth of nursing knowledge in this area. The findings may also provide the basis for a conceptual framework from which to develop a clearer understanding of the factors that influence the feeding practices of immigrant women in general

and South Asian women in particular. Results of this study may also assist nurses to design and implement services that are specific to the South Asian immigrant population.

Research Problem

Despite the body of scientific evidence about the many benefits of breastfeeding, in some populations this practice seems to be declining. In particular, South Asian immigrant women who have immigrated to Canada may be influenced by social, economic, cultural and personal factors when making decisions about initiating breastfeeding. If these factors were to affect their breastfeeding choices negatively, there would be detrimental consequences for the health of women and their infants.

In Canada, concerns have been raised over the declining rate of breastfeeding among immigrant women, particularly those who have arrived from South Asia (Health Canada, 1997). Although immigrants from South Asia constitute a substantial and growing proportion of Canada's ethnic minorities, there have been no studies specifically examining the factors that influence the initiation of breastfeeding among South Asian immigrant women in Canada. Little is known about the factors that influence initiation and duration of breastfeeding among this population. Thus, there is a need for research to identify and better understand the factors that influence breastfeeding practices among South Asian women.

Purpose of the Study

The purpose of this study is to explore the factors that could influence the initiation of breastfeeding among primiparous South Asian immigrant women who have immigrated to Canada.

Research Question

The following research question will be investigated: What are South Asian Women's perceptions about the social, socio-economic, personal and cultural factors that influence their initiation of breastfeeding?

Definition of Terms

Immigrant: A term used to indicate people who move from one country to another with the intent of permanent residence (Aroian, 2001, p. 179).

Exclusive Breastfeeding: The practice of feeding only breastmilk (including expressed breastmilk), which allows the baby to receive vitamins, minerals or medicine). Water, breastmilk substitutes, or liquids and solid foods are excluded (Health Canada, 2004; WHO 2003)

Social Factors: Support or lack of support towards breastfeeding that is provided through significant others, such as husband, family and friends.

Personal Factors: The sense of self-worth associated with breastfeeding and maternal confidence or lack of confidence about choices of infant feeding practice.

Socio-economic factors: Factors such as social status and work environment that may be associated with initiating breastfeeding.

Acculturation period: Length of an immigrant's residence in a new country.

Conceptual Framework

This study is informed by the conceptual framework used by Kong and Lee (2004) in their research investigating factors that influenced 252 local, first-time Hong Kong mothers with normal deliveries in their decision-making about whether to breastfeed. Complicated deliveries such as caesarian section and forceps or vacuum deliveries were excluded because of their potential negative effects on infant feeding decisions. The age of the participants varied from 18 to 35 years with 98% of the participants married and 79% of participants having achieved secondary education. The specific objectives of Kong and Lee's research were (a) to identify the personal, social, cultural, structural and other factors contributing to Hong Kong women's decisions to breastfeed; and (b) to describe first time mothers' knowledge of breastfeeding and its influence on their breastfeeding intention.

Data for Kong and Lee's study were collected through completion of questionnaires and informal interviews. A four-part questionnaire was developed based on an extensive literature search and was reviewed by three experts to ensure content validity. Additional in-depth interviews were conducted to gain further information on attitudes and reasons for breastfeeding.

These scholars developed the conceptual framework shown in Figure 1 (p. 10) to provide guidance for their study, noting that the literature clearly indicates the substantial benefits of breastfeeding for both mothers and infants, yet the low prevalence of breastfeeding remains a world-wide public health concern. Kong and Lee identified and incorporated into their framework the personal, social, cultural, facilities and environmental factors that influenced the breastfeeding decision. Other influences included mass media and friends. Personal factors were identified as important in women's own decision to breastfeed and social factors (for example,

husband support) were identified as determinants of breastfeeding. Facilities and environmental factors were identified as those factors permitting or limiting breastfeeding.

Figure 2 (p. 10) represents changes made to Kong and Lee's conceptual framework to guide this study. Selected for investigation were the following areas which have the potential to influence South Asian women's breastfeeding decisions: acculturation (length of residence in Canada), and personal, social and socioeconomic factors. Kong and Lee had included in their framework such factors as facilities, environments and mass media; however, these factors were excluded for the current study because this investigation reflects an interest in women's perceptions of the immediate day-to-day factors that affect their decision-making, rather than contextual and structural features. In addition, the study is designed to encourage the participants to identify relevant factors that Kong and Lee may not have identified from their population and incorporated into their conceptual framework.

Figure 1: Conceptual Framework used by Kong and Lee (2004)

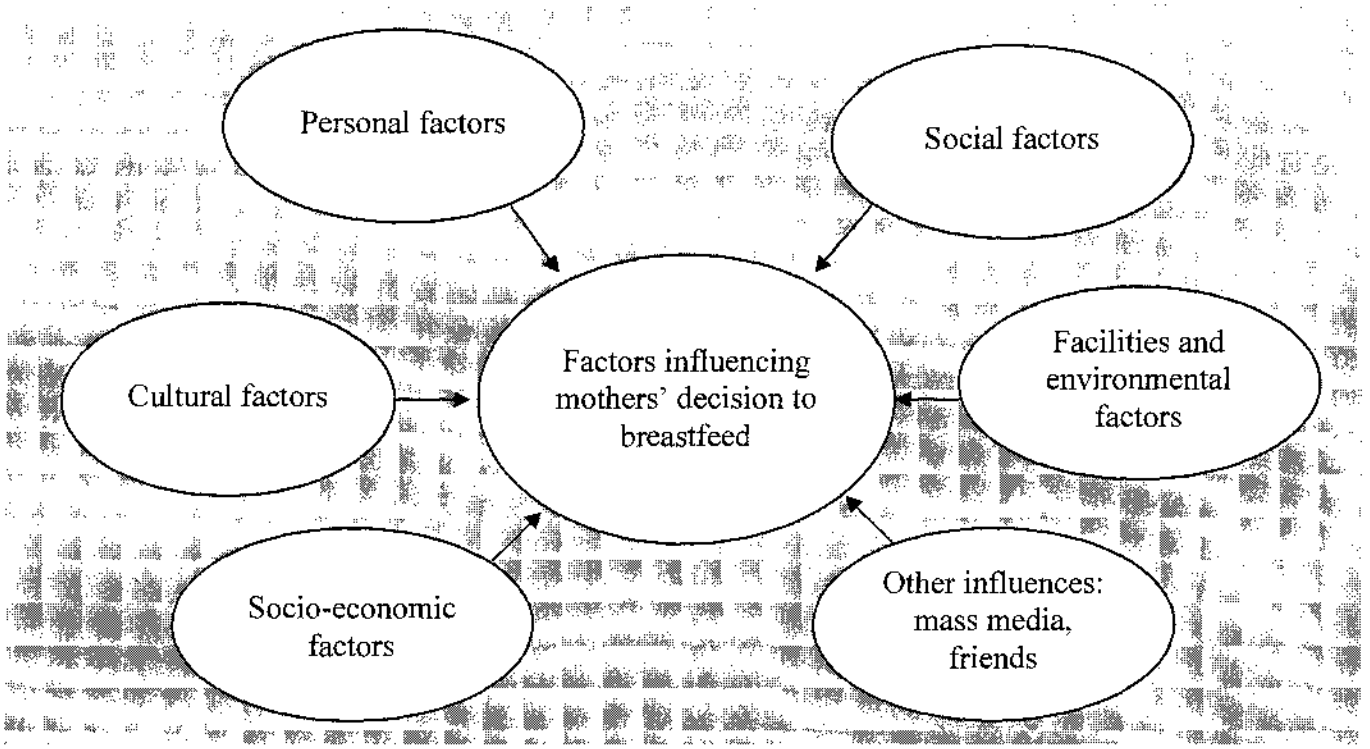
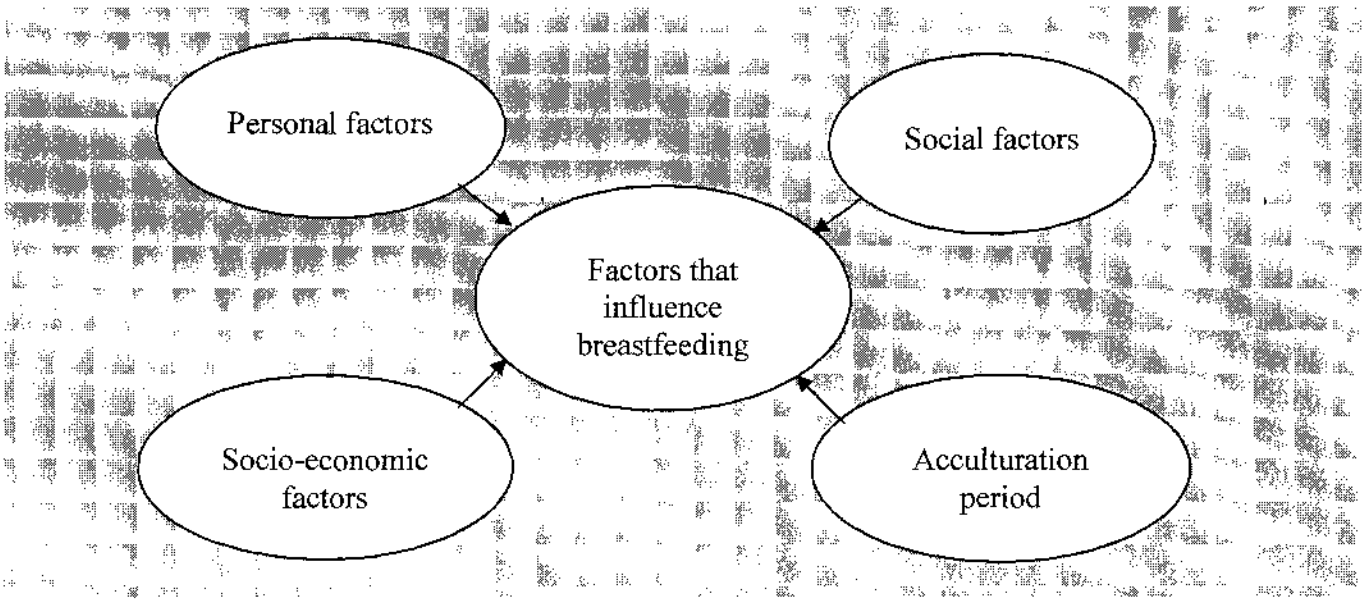


Figure 2: Conceptual Framework for this Study



Thesis Outline

Following this introductory chapter, the remaining chapters include a review of the literature, the study design and method, findings and discussion of the findings, and implications and conclusions together with recommendations. Chapter Two consists of a review of the literature relevant to this study, primarily the studies that have investigated socioeconomic, social, cultural and personal factors that affect immigrant women's breastfeeding practices. The gaps in the literature are also described. Chapter Three explains the qualitative descriptive method used to study the problem, and describes the sampling, interview guide, data collection and analysis. Chapter Four begins with the characteristics of the sample, then present's the findings of the study organized around the following themes: representation of breastfeeding, vicarious learning, breaking with tradition, deferring to medical authority, family influences, cultural mores, spiritual connection, resisting the moral mandate and transition to work. Discussion of the findings is interwoven with the presentation of the findings. Finally, Chapter Five sets out the implications of the research for nursing education, research and practice and the conclusions.

Summary

Some evidence suggests that women who have immigrated to Canada have lower rates of breastfeeding compared with rates for both non-immigrant Canadian mothers and mothers in their country of origin. Despite the importance of breastfeeding to infant health, there has been little investigation of this phenomenon among specific groups of immigrant women. Thus, the purpose of the study and its research question relate to South Asian women's perceptions of the social, socio-economic, personal and acculturation factors that influence breastfeeding. The

conceptual framework used by Kong and Lee (2004) informed the examination of the factors affecting the breastfeeding choices of immigrant South Asian women in British Columbia's Greater Vancouver region.

Chapter Two: Review of the Literature

The following analysis and synthesis of the literature relevant to immigrant women's breastfeeding practices is organized into four sections: acculturation period, socio-economic factors, social factors and personal factors. The literature reviewed herein was located through on-line computer searches and the citation indexes, Cumulative Index to Nursing, CINAHL and PUBMED. Key search terms were "breastfeeding" or "initiation" or "duration" and "influencing factors".

Acculturation Period

Acculturation may play an important role in modifying South Asian immigrant women's values, norms, attitudes and behaviors. Henderson and Brown (1987) have described acculturation as:

> ... the process by which members of one group adopt the cultural traits of another group with whom they are in contact. It is both a group and an individual phenomenon ...acculturation is never automatic, wholesale, or equal across groups, but is first, selective and piecemeal, second, more likely under some circumstances, and third, more prevalent among some groups than others (p. 155).

Aroian (2001) conducted a review of immigrant women's health issues and described a key finding as the significant role acculturation plays in women's use of health care services and choice of infant feeding practices. Acculturation has been highlighted as an important factor in studies that have specifically investigated breastfeeding. For example, several studies using multivariate analyses (Perez-Escamilla et al., 1998; Rassin et al., 1994; Serdula, Cairns,

Williamson, Fuller, & Brown, 1991) have positively associated shorter length of maternal residence in the United States with breastfeeding initiation among low-income Latino and South Asian women. This study's finding indicate that initiation of breastfeeding varied dramatically in the United States across ethnic groups and within the Southeast Asian group by place of birth, and that for Southeast Asian children, breastfeeding was strongly associated with foreign birth: 93% of those born in foreign countries and only 10% of those born in the United States had been breastfed.

Another study examined 132 Hispanic mothers' breast-feeding intentions, breast-feeding in the hospital, and breast-feeding at home. The findings suggested the likelihood of intending to breastfeed was greater for mothers who migrated from Mexico than for mothers born in the United States (Romero-Gwynn & Carias, 1989).

In another study, breastfeeding initiation was lowest among women who were the most acculturated in a Vietnamese immigrant population that had lived in Australia for two to seven years. The reasons reported by the women for decreasing their breastfeeding behavior included transition from extended to nuclear families, a move from rural to urban environments, interest in Western lifestyles, maternal employment and the availability of infant formula (Dennis, 2002).

Evan, Walpole, Quareshi, Memon and Jones (1976) report that the 50 Asian immigrant mothers they studied, all from rural settings, expected they would have breastfed their infants had they remained in their country of origin. Those immigrant women were less likely to breastfeed in the United States and had weaned their infants earlier than the traditional age of weaning in their place of origin (Evan et al.). Agnew and Gilmore (1997), in their review of infant feeding patterns both pre- and post-immigration, suggest that immigrant and refugee women perceive formula to be the dominant and preferred form of infant feeding in North

America. Such a perception might lead women to adapt to the new culture by seeking formula-feeding. Khan (2005) notes that – although breastfeeding-feeding is still almost universal in India, particularly in rural areas – the initiation of breastfeeding among educated and urban elites is declining. If this is the case in their country of origin, recent South Asian women immigrants may be tempted to leave behind what they perceive to be traditional ways of feeding when they immigrate by emulating more "westernized" and affluent South Asian women encountered in their former settings.

Rossiter (1992) notes that when women from developing regions immigrated to western countries they altered their traditional infant feeding practices significantly; both the prevalence and duration of breastfeeding declined. Rossiter concludes that the "change to bottle feeding occurs because of women's misconceptions that bottle feeding is perceived as the norm for western infant feeding and that formula milk has the same nutritional values as their breastmilk" (Rossiter, 1998, p. 599).

Breastfeeding initiation and duration rates have also been found to drop sharply among Hispanic and Latino American women, following immigration to the United States (Gibson, Diaz, Mainous & Geesey, 2005). The women appeared to be influenced by what they perceived to be cultural norms and either initiated formula-feeding or weaned their babies to formula.

Socio-economic Factors

Dennis (2002) reviewed the literature to identify factors affecting breastfeeding initiation and duration as well as to develop effective strategies for promoting positive breastfeeding behaviors. She found that higher socio-economic status has been associated with declining breastfeeding initiation and duration among immigrant women in developed countries, including

Canada. Dennis has shown that higher-income immigrant women in Canada may perceive breastfeeding as old-fashioned and a sign of lesser social status; such women may bottle-feed to be modern and "westernized."

Watt and Kelly (2005) conducted research examining breastfeeding initiation, rates of exclusive breastfeeding and social class differences in work environments, relative to breastfeeding rates among immigrant low-income women in the United Kingdom. Their subjects were mothers of 18,125 singletons born over a 12-month period spanning 2000-2001. They report that among the women in their study:

> Overall breast-feeding was initiated for 71% of babies, and by 1, 4, and 6 months of age the proportions being exclusively breast-fed were 34%, 3%, and 0.3%, respectively. There were clear social class differences and mothers with routine jobs with the least favorable working conditions were more than four times less likely to initiate breast-feeding compared with women in higher managerial and professional occupations. [...] Women in routine jobs were less likely to exclusively breast-feed their infants at 1 month and 4 months compared with women in higher managerial and professional occupations. Clear social class differences in breast-feeding initiation and exclusivity for the first 4 months were apparent in this large U.K. sample. By 6 months, less than 1% of babies were being exclusively breast-fed (Watt & Kelly, 2005, p. 417).

Watt and Kelly concluded that in comparison to women in higher-paid, managerial and professional positions with job security, promotion opportunities and a measure of autonomy,

low-income immigrant women in occupations with less favorable working conditions were four times less likely to initiate breastfeeding than the professional women.

In a study conducted in the United States by Kimbro (2006), data were collected from a sample of 2,466 racially, ethnically and socio-economically diverse women to examine three hypotheses: 1) Mothers who expect to return to work after the birth of their baby will be less likely to initiate breastfeeding; 2) The timing of the return to work and quitting breastfeeding will coincide; 3) Mothers in professional jobs and stay-at-home mothers will breastfeed for longer durations than mothers with other types of jobs. It was found that expecting to work in the year after the baby's birth did not impact breastfeeding initiation. The study findings demonstrated that while professional and stay-at-home mothers had the same breastfeeding duration, mothers with administrative or manual jobs had 34% and 35% higher odds of weaning than stay-at-home mothers, perhaps because of job inflexibility.

Social Factors

Dykes and Griffiths (1998) have found a strong correlation between the infant feeding practices mothers choose and the methods of feeding used by family members and close friends; the advice of family and friends has also been associated with infant feeding choices. Studies that have investigated breastfeeding in Hispanic and Finnish immigrant populations have consistently shown that family support is critical for breastfeeding success (Humphrey, Thompson & Miner, 1998; Tarkka et al., 1999). In the United States, the likelihood of breastfeeding was found to increase with more social support from friends and family, according to a study by Buckner and Matsubara (1993) of sixty Asian, African-American and Caucasian breastfeeding women in Birmingham, Alabama. The women completed the Utilization of Support Network Questionnaire

(USNQ), which allowed them to describe sources of support, encouraging and discouraging influences of support people and sources and frequency of support received. The USNQ assesses both professional and personal support for breastfeeding. Women who had larger total support scores as measured by the USNQ were more likely than those with lower scores to be breastfeeding at two weeks postpartum.

In Canada, the effect of peer support has been found to influence mothers' breastfeeding durations, according to a study by Dennis, Hodnett, Gallop and Chalmers (2002) of 256 mothers from two semi-urban community hospitals near Toronto. A randomized controlled trial was conducted to evaluate the effect of peer (mother-to-mother) support on breastfeeding duration among first-time breastfeeding mothers. Participants were randomly assigned to a control group, given conventional care only, and a peer support group, given conventional care plus telephone-based support from a woman experienced in breastfeeding (within 48 hours of discharge). Dennis et al. found that mothers who received telephone support from an experienced mother were twice as likely to continue to breastfed exclusively until three months postpartum than mothers who did not receive this support. Breastfeeding rates at 4, 8 and 12 weeks postpartum were 93%, 85% and 81% among the mothers in the peer support group compared to 84%, 75% and 67% among those in the control group. Of the 130 mothers who evaluated the peer support intervention, 81% were satisfied with their peer volunteer experience and 100% felt all new mothers should be offered a peer volunteer.

Personal Factors

Tarkka et al. (1999), in a sample of 271 first-time, non-immigrant Finnish mothers, found the women were more likely to breastfeed if they had positive attitudes toward breastfeeding.

Positive attitudes included believing breastfeeding was healthier, easier and more convenient. Women who viewed breastfeeding as restrictive, embarrassing or rigid were less likely to initiate breastfeeding.

Breastfeeding self-efficacy refers to a mothers' confidence in her ability to breastfeed her infant (Dennis and Faux, 1999). It predicts: (a) whether a mother chooses to breastfeed, (b) how much effort she will expend, (c) whether she will have self-enhancing or self-defeating thought patterns and (d) how she will respond emotionally to breastfeeding difficulties (Dennis, 2006). If a mother has high self-efficacy, she will have the confidence to continue breastfeeding her infant. Maternal breastfeeding self-efficacy is significantly related to breastfeeding duration and levels of breastfeeding confidence in studies of Polish, Australian and Canadian women. (Blyth et al. 2002; Dennis & McQueen, 2007; Wutke & Dennis, 2007). In a Canadian study of 130 hospitalized new mothers, Dennis and Faux used the Breastfeeding Self-Efficacy Scale to measure the mothers' confidence prior to discharge. Dennis and Faux found maternal breastfeeding confidence to be significantly related to breastfeeding behaviors at six weeks postpartum ($F = 9.89$, $p < 001$).

Papinczak and Turner (2000) studied 159 Australian mothers in Brisbane to determine the degree to which certain personal and social factors, measured in the immediate postpartum period and during the next six months, were associated with the length of the breastfeeding experience. This Australian study found that 91% of new mothers had breastfed their infants at least once, but only 50% of those were breast-feeding by the time their infants were six months of age and many were supplementing their infants with formula; the personal and social factors associated with these results were breastfeeding self-confidence, anxiety, depression, self-esteem, coping capacity, and social health.

None of the research undertaken to investigate personal and social factors included immigrant women. Of the various factors discussed in the extant research into social and personal influences on breastfeeding behavior, few personal factors have been identified

Summary of the Literature

A review of the literature relevant to the topic of interest in this study reveals gaps in the literature that relate to the topic of breastfeeding initiation for South Asian immigrant women. While the literature reflects an increasing interest on the part of researchers in studying immigrant women's health, limited research effort has been directed toward the study of factors that affect breastfeeding practices among specific groups of immigrant women in Canada. Thus, a study that explores South-Asian mothers' perceptions of factors affecting their decisions to initiate breastfeeding is timely and can make an important contribution to the literature.

Chapter Three: Method

Research Design

The study design is qualitative and descriptive. With the qualitative descriptive method, the phenomenon of interest is explored with participants in a particular situation and from a particular conceptual framework (Parse, 2001). This type of study design is well suited to describe or explain phenomena or culture and to convey the full meaning and richness of the phenomena or culture being studied (LoBinodo-Wood & Haber, 2002). The design also offers opportunities to explore areas that have not been suggested by the adapted conceptual framework by Kong and Lee (2004)

In the study, open-ended semi-structured interviews were conducted to explore social, personal, socio-economic and acculturation factors that could potentially influence breastfeeding among South Asian immigrant women who have immigrated to Canada. According to Pope, Ziebland and Mays (2000), in most qualitative analyses the data are preserved in their textual form and "indexed" to generate or develop analytical categories and theoretical explanations. These categories may be derived inductively; that is, obtained gradually from the data.

Sample and Sampling Method

The study used a convenience sampling method. The types of convenience sampling used were snowball and purposive sampling. Purposive sampling is based on a researcher's judgment about which participants are most prepared to answer the research question (Polit & Hungler, 1999). For snowball sampling, the "process begins with a few eligible study participants and then continues on the basis of referrals from those participants until the desired sample size has been

obtained" (Polit and Hungler, p. 281). South Asian women who were seeking prenatal care for their pregnancies and had immigrated to Canada were the population of interest.

For the purpose of data collection, one half the sample were to be recent immigrants who have lived in Canada for less than four years and the second half of the sample were to have lived in Canada for more than six years. The different lengths of residence in the country were specified to determine whether exposure to the new culture might create differences in women's perceptions. The participants met the following criteria: (1) they had emigrated from the Indian sub-continent, (2) they spoke Punjabi or English, (3) they read Punjabi or English, (4) they were nulliparas and (5) they were at least eight months pregnant at recruitment. Only nulliparous mothers were selected for the study in order to exclude previous infant feeding experiences that might affect their decisions. Mothers with identified risk factors such as gestational diabetes, hypertension, or fetal anomalies were excluded. The exclusion criteria were incorporated so that factors that might negatively influence breastfeeding decisions and were unrelated to the factors associated with culture and immigration were excluded from the study design.

The desired sample size was estimated to be between 10 and 20 participants. The rationale for using a small sample size is to ensure the investigator is able to obtain rich information about the phenomenon of interest without seeking to generalize the findings (Polit & Hungler, 2001).

Ethical Considerations

The ethical considerations of this study were designed to protect the rights of the subjects. The following criteria supported this aim:

1. Written approval to conduct this study was obtained through the University of British Columbia Behavioral Sciences Ethics Board.
2. Participants' physicians gave approval to recruit patients from their offices.
3. Participants were provided with a consent form explaining the study and identifying the principal investigator, purpose, study procedures, and processes to maintain confidentiality.
4. Telephone contact was made before participants signed the consent form, to further explain the study so they could make an informed decision.
5. Participants had a choice to withdraw at any time without any effects on the care they received from the care providers.
6. Participants were informed that any part of the audio-tape could be erased during their interviews and they had the right to refuse to answer any questions.
7. Numbers were assigned to protect the identities of the participants throughout the research
8. The participants were offered a summary of the study findings after the completion of the study.

Confidentiality

Confidentiality of participants has been addressed in several ways:

1. The data were available only to the researcher and thesis committee.
2. The consent forms and the names of the subjects were kept separate from the data.
3. Names of the participants were not identified in the study or in the findings.
4. Any records or audio-tapes are to be destroyed after five years.

Recruitment and Selection

The investigator contacted physicians to explain the purpose of the study. The participants were recruited from the offices of general practitioners, with the help of staff at the physician's offices. Their staff distributed an information letter (in Punjabi and English) explaining the study to South Asian women in each physician's practice (See Appendix A). The women who were interested in participating in the study left their contact information with the staff at the physicians' offices and picked up a self-addressed, stamped envelope containing the consent form (See Appendix B), also in Punjabi and English. The staff at the physicians' offices provided the investigator with contact information for women interested in the study. The investigator was then able to contact the women to explain the study further and set up an interview time. Subjects were informed that they could contact the investigator by telephone or email. About 30 to 50 information letters were distributed to recruit 15 mothers over a three-month period.

Data Collection

Data were collected using a semi-structured interview guide (See Appendix C). A researcher using qualitative methods engages in a series of activities in the process of collecting data (Creswell, 1998). First, in order to collect data, 10 semi-structured interview questions were developed. Questions that addressed the areas explored by Kong and Lee's (2004) study were incorporated in the guide. For questions 1, 2, 3, 4, 7 and 8, personal and social factors were the concepts in the circle that were incorporated in developing these questions. The questions were focused on the mothers' personal beliefs about breastfeeding and family's influence on her decision to breastfeed. To develop questions 2, 5 and 9, socio-economic concepts in the circle

were used. These questions focused more on the husbands' belief systems and the couple's financial situation. For question 6, the acculturation concept from the circle was used to develop the question. The question focused more on those aspects that would influence mothers' to change their mind about method of infant feeding. An open-ended question was added to the guide to invite mothers to comment on any areas they felt were important that had not been explored.

In addition to mothers' perception of factors that influence breastfeeding, demographic data collected were: marital status, level of education, age and years living in Canada (See Appendix D).

The sites where the interviews were conducted were selected by the investigator and the participants. The participants signed the consent form. Each interview started by discussing the purpose of the interview, obtaining consent and then proceeding with the questions. The participants were curious to learn about the discussions the researcher had with other women participants as well as the results of the study.

The 10 interview questions took approximately 45 to 60 minutes to complete, but some of the subjects found the questions easier to comprehend than others. The questions were read out to the subjects first in English and then in Punjabi. Some subjects had difficulty expressing themselves in English or could not find a certain word to answer a question, and asked for translation into Punjabi during the interviews. Hence, the interviews requiring translation took longer than an hour to complete. The data collected during the interviews were audio-taped and transcribed verbatim after each interview, then checked for accuracy. The data collection and analysis were completed within a six-month period.

Assumptions

1. The use of semi-structured interviews is a credible strategy for collecting data for this study.
2. The demographic questions asked are appropriate to obtain the necessary demographic information from the participants.
3. The participants honestly shared their perceptions about breastfeeding with the investigator.
4. The factors identified from the conceptual framework provided useful direction to collect data relevant to this cultural group.

Data Analysis

The method of analysis for the study was inductive analysis, "a research method that uses a set of procedures to make valid inferences from text" (Weber, 1990, p. 146). As Pope, Ziebland and Mays (2000) note:

> ...qualitative research uses analytical categories or themes to describe and explain social phenomena. These categories may be derived inductively, that is obtained by breaking apart the data and using the data segments to construct categories or used deductively, either at the beginning or part way through the analysis as a way of approaching data (p. 114).

The method used for inductively analyzing these interview data involved several stages by which the "aim is to produce a detailed and systematic recording of the themes addressed in the interviews and to link the themes together under a reasonably exhaustive system" (Burnard, 1991, p. 461). The units of analysis were interview texts, which were given rigorous and

systematic reading of the transcripts to get a sense of the whole. After reading through the interview text, codes were identified from the data with the guidance of the thesis supervisor. The process of open coding made it possible to create categories and abstract the data. Open coding required notes to be written in the text while reading it (Burnard, 1991). The written material was read again and headings were written in the margins of the transcript to describe the content. Next, the headings were coded and categories were generated from the coded material. The codes were clumped together to identify themes with sub-categories. These categories were then grouped under emerging themes and sub-themes.

One of the main themes found in the analysis of the data was representation of breastfeeding. In order to induce this particular theme, the transcripts were each read and coded, then, codes were clustered under a category. For example, under the theme breastfeeding representation, codes related to the theme include nutritional benefits, allows closeness to baby, breastfeeding makes children healthier and believe natural thing to do. This was done for each and every theme that emerged from the data. Finally, the emerging themes were organized and supported with quotations from the participants.

For rigor, the trustworthiness of the qualitative data and analysis was addressed according to the criteria outlined by Polit and Hungler (2001) for qualitative research. The concepts of credibility, dependability and transferability were used to approach various aspects of trustworthiness. Credibility deals with the focus of the research and refers to confidence in how well data and processes of analysis address the intended focus (Polit & Hungler, 1999). Credibility was addressed by confirming the findings of the analyzed data with 10 of the 15 participants.

Trustworthiness also includes the question of transferability, which refers to "the extent to which the findings can be transferred to other settings or groups" (Polit & Hungler, 1999). Clear and distinct descriptions of culture and context, selection and characteristics of participants, data collection and process of analysis are provided, which facilitates transferability because the level of detail obtained allows readers to select aspects of the study that are applicable to other situations. A rich and vigorous presentation of the findings together with appropriate quotations also helps to enhance transferability to other groups (Graneheim & Lundman, 2003). Although the researcher may give suggestions about transferability, it is the readers' decision whether or not the findings are transferable to another context.

Dependability of qualitative data refers to data stability over time and over conditions (Pilot, Beck & Hungler, 2001). To ensure this, the data collection strategy was kept flexible and adapted as circumstances dictated. For example, during the one of the interviews, spiritual connection was mentioned as one of the factors influencing mothers' decisions to breastfeed. The researcher asked additional women whether spirituality was applicable to their decisions to learn more about the effects of spirituality during the course of data collection.

Summary

This research design addresses the gap identified in the literature review: a lack of research on South Asian immigrant women with regard to breastfeeding practices. In particular, the qualitative, descriptive design explored factors influencing breastfeeding initiation and duration among South Asian immigrant women.

Snowball and purposive sampling were used to obtain the study sample of 15 subjects from the population of South Asian women immigrants to Canada. The study was approved by

the University of British Columbia Behavioral Sciences Ethics Board. Confidentiality issues protecting the study's informants were followed in accordance with the rigorous standards and practices considered appropriate for research of this type.

Data were collected using a semi-structured open-ended interview guide and analyzed using inductive analysis to form codes and further develop the codes in the emergent themes. Factors affecting scientific rigor for the study such as credibility, transferability and dependability have been addressed according to established criteria for qualitative research. Quotations from the interview provide support for the description and discussion of these themes in Chapter Four.

Chapter Four: Presentation and Discussion of the Findings

The research findings are arranged in two sections. In the first section, the characteristics of the sample are reported. In the second section, the findings are presented and discussed within categories organized according to the main themes found in analysis of the data: representation of breastfeeding, vicarious learning about breastfeeding, breaking with tradition, deferring to medical authority, family influences, cultural mores, spiritual connection, resisting the moral mandate and transition to work. Although the adapted Kong and Lee (2004) framework gave direction for the questions asked of the participants, the themes derived from the inductive content analysis were more comprehensive than the initial framework. Nonetheless, relevant concepts from the framework are included in the brackets next to the themes. The findings are compared and contrasted with relevant literature as they are presented.

Characteristics of the Sample

Fifteen nulliparous mothers with normal pregnancies participated in the research study. Participants' level of education varied. One of the subjects had completed a grade 12 education, while the remainder of the participants held baccalaureate and graduate level degrees. Total family income ranged between $30,000 and $50,000 per year. The women ranged in age from 24 to 35 years. Seven of the subjects were newly-arrived immigrants, having lived in Canada fewer than four years, while eight had been in Canada for more than six years. Because eight subjects, had been in Canada for an extended period, they were able to provide detailed responses to the questions in fluent English. The information provided in their responses was not different than that given by the newly-arrived women. Eleven of the participants reported living in extended families with their in-laws, while four of the women had no extended family in their households.

One of the original 16 participants was reluctant to talk about breastfeeding and unable to respond to questions; she withdrew her participation. Her rationale for withdrawal was that she considered breastfeeding a personal matter and was hesitant to open up and express herself in response to the interview questions. Initially, she had consented to the study but during the interview she stopped and commented on the nature of the questions being personal and stated that she was not willing to continue with the interview.

Research Findings and Discussion

In this section, the findings are organized by the nine themes that emerged from the inductive analytic process. The conceptual framework sensitized the researcher to ask the participants about particular areas, but did it did not drive the data analysis. The analysis was driven by data as the categories were induced. The themes that fit with social concept included: the representation of breastfeeding, vicarious learning about breastfeeding, family influences, deferring to medical authority and cultural mores. Breaking with tradition fit with both social and personal concept. Transition to work fit with socio-economic concept. Both spiritual connection and resisting the moral mandate were new concepts. Discussions of the findings are woven into the descriptions of the themes.

Representation of breastfeeding (personal).

The participants' representation of breastfeeding was a central theme. Each of the subjects had decided to breastfeed her infant after birth. Most of the subjects expressed how they felt about breastfeeding in relation to their personal experiences and their beliefs about the health of their babies. Breastfeeding was seen as normal for most of the study participants, because they were aware of the physiological and psychological benefits of breastfeeding to the mother and

the future health of their infants. These women planned to initiate breastfeeding to provide the best nutrition for their infants and described the benefits they associated with mother's milk. For example, one mother said:

> I think [...] the feeding, what consequences it is going to have on my baby, that is the most important method. It [is] said that breastfeeding is the best method. It is the best nutrition you can provide your child; that is why I prefer this method.

Rossiter (1998) reported similar findings in a study that included 124 postnatal Vietnamese women. These women indicated that they wanted to initiate breastfeeding because they believed that breastmilk enhanced optimal growth and development of their infants.

Most of the participants in this study identified the physiological and psychological benefits of breastmilk. They all knew the effects of breastfeeding for their children's digestion and growth and disease prevention. One of the women stated,

> From my perspective, I think breastfeeding is important just because [it is better] nutrition-wise. Breast milk – what you see [in] kids that are formula-fed or have breastmilk – there is a big difference. I find I have noticed that, between the kids, health-wise and how they look; and, what you hear about breastmilk, how important it is to breastfeed and the nutrients it provides.

The women indicated that their awareness of the benefits of breastfeeding was often acquired through reading books. One participant explained: "I have read books in the library ... I have read that breastfeeding is really good, that's why I am interested in that". Initially, all the women decided to breastfeed because they knew of or had learned about the benefits to the child but some of them were also hesitant to commit to breastfeeding in case the baby was not able to

breastfeed. Some of the women lacked confidence. They expressed anxiety about not having enough milk or the possibility their baby would be unable to latch on the breast. This finding was consistent with those of Hall and Hauck (2007). They examined Australian women's perspectives of breastfeeding experiences during the first 12 weeks postpartum and found that mothers' confidence could be decreased by factors such as their milk not coming in.

The mothers saw breastfeeding as an important component of the feeding needed when their babies were small. The women saw breastmilk as having everything the baby needs to grow. One of the women indicated, "Because of what we are going to eat, he will get [...] all the nutrition, the vitamins; whatever we eat, the good food [...] he's going to get, because he cannot eat right away. I think the best is breastmilk".

It was interesting that a majority of the women in the study expressed the desire to breastfeed as long as they were able to do so. This finding supports research conducted by Brodribb, Fallon, Hegney and O'Brien (2007), in which 562 Australian women identified reasons for choosing to breastfeed. In this Australian study group, the most common reasons mothers gave for deciding to breastfeed were that breastmilk was better for the baby and that breastmilk enhances the baby's immunity.

Breastfeeding was also seen as a natural thing to do by some of the subjects. They talked about the importance of doing things naturally, especially when it came to feeding their babies. Doing things naturally meant providing their infants with milk that had no additives or artificial components. One of the women said, "It is healthy and I do not want to give anything artificial, I want to give my own self and be all natural." Another woman said, "It is better for the child to get natural milk than that which is not specifically made for them." None of the literature

included comments such as these, therefore, the study provides new understanding about the way women represent breastfeeding.

Almost all the participants felt there would be a sense of closeness to their babies if they were to breastfed, which would result in increased feelings of love towards their babies. "My mother used to say that you feel love for the baby and if you are able to feed your baby, why not feed it, if you have it." The participants also felt that a mother's breastfeeding promoted bonding between the mother and the child:

> My friends and my mother tell me – and actually I was not [going to] breastfeed – but my brother was breastfed, and he is very close to her as opposed to my other siblings. So it is quite convincing for me that it really promotes bonding between the mother and the child.

One of the mothers described her closeness with her mother because she had been breastfed and how she wants the same closeness and love with her baby as well.

> My mother told [me] that it is good for the kid [...] When I was little I got my mother's milk till I was two, three years. So, I want to be like that because I too am close to my parents. So I think it matters a lot; I was the youngest child and she breastfed me. Because I was [close to her] like that, and I think if I do [breastfeed], I will get that [closeness]. Most probably I want to give all [my] time to my kid, and I feed [him or her] my own self. I want to be very close to my kid.

Others talked about the bond that is developed between the mother and the baby during breastfeeding. "Baby being so close to me ... there would be more attachment between myself and the baby and there would be a special bond between us." Similar findings have been reported by Kavanaugh, Meier, Zimmermann and Mead (1997) in a study of 20 American mothers of preterm infants. Using a semi-structured interview guide, the researchers obtained data from the

mothers describing the following rewards of breastfeeding: knowing they were providing the healthiest nutrition for the infant, enhancing closeness between the mother and infant, and perceiving infant contentment and tranquility during breastfeeding.

Almost all the mothers in this study were aware of the benefits to themselves of breastfeeding during the postpartum period. Mothers said they were confident that by breastfeeding, they would they would enhance their children's health as well as their own. Mothers described reduced health problems for women who breastfeed and stated that they also felt breastfeeding contributed to postpartum weight loss. One woman reported: "There must be new research in reduction of cancer due to breastfeeding as well as ovarian cancer and osteoporosis, which is a big thing for women; big problem. I am petite women so it will be helpful." These findings support those in a review conducted by Labbok (2001), which examined the effects of breastfeeding on the mother. Breastfeeding sometimes referred to as the final stage of labor, reduces the risk for (1) postpartum blood loss by increasing the rate of uterine contraction, (2) pre-menopausal breast cancer and (3) ovarian cancer. Ip et al. (2007) studied the effects of breastfeeding on long- and short-term infant and maternal health outcomes in developed countries but did not find sufficient evidence for an association between breastfeeding and osteoporosis.

In general, the participants' comments reflected their sense that breastfeeding would be good for their own health as well as that of the baby. Thus, the participants's perceptions about the benefits of breastfeeding were in keeping with the findings of Ip at al. (2007) with respect to maternal and infant health outcomes.

Many mothers also spoke about the practicality and convenience of breastfeeding. This finding concurs with research conducted by Brodribb et al (2007) in a study of Australian

women who identified the convenience of breastfeeding as one of the reasons for choosing to breastfeed.

Vicarious learning about breastfeeding (social).

Vicarious learning about breastfeeding was another theme supported by the data. Vicarious learning can occur not only through participation in dialogue but also through observing others enacting the skills to be learned (Stenning et al., 1999). The women in the study described increasing their knowledge about breastfeeding by watching their family members breastfeed. Their learning influenced them to acknowledge and model breastfeeding as part of life as a way to provide the best nutrition for their children. One of the women stated, "...I have seen it as [a] life example; that's why I believe in those customs ... otherwise, it's not that because my mother used to do it, so I will do it. It's because I have actually seen that it is beneficial." Scott, Landers, Hughes and Binns (2001) reported similar findings among women in two Australian populations during maternal efforts to establish breastfeeding. These researchers found that the women's infant feeding behaviours were strongly influenced by the way in which family members and close friends fed their babies, as well as by the advice of family and friends.

Women in this study who were successful in and confident about breastfeeding felt that exposure to women who had been successful with breastfeeding helped them to become familiar with breastfeeding and a breastfeeding culture even before pregnancy. One of the women indicated that "even before I got pregnant, I [knew] I wanted to breastfeed, because of what I have seen around me when I was a child and what my mother used to tell me." From watching others, the women had learned about the frequency and timing of breastfeeding so they had familiarity with the method. One particular woman stated,

> My cousins, they had kids, right, and I watched them [breastfeed] in [the] proper way … like a good mother, after every two hours, in a good way, so I like that. When I got married, I was thinking about that and wanted to do that.

Another woman indicated that she was influenced not only by her mother but her sisters and sisters-in-law as well. "I have seen my family, what they do… My eldest sisters, they feed their babies too, and it's good, the kids are more close to mom, too."

The women in this study learned about the importance of breastfeeding by observing the improvements in the health of other children who have been breastfed. One woman reported: "My belief is I think that breastfed babies are much healthier. You notice that overall there is a difference in their appearance, they are healthier." Another of the women stated that her other siblings were not breastfed "…due to some medical problems my mother had; in my family one sibling was breastfeed and others were formula-fed. The breastfed sibling got sick less…" Breastfed babies have fewer colds, ear infections, digestive upsets and respiratory problems, in addition, if they do get sick, their illness is less severe. The protection breastfeeding offers lasts a lifetime; babies who are breastfed are healthier throughout childhood and adulthood (Department of Health and Senior Services, 2005).

On the other hand, some of the women had experienced vicarious learning by observing family members who were unable to breastfeed. They saw the difficulties due to latching problems or milk supply, but had observed family members who were able to resolve the problems. Those observations were learning experiences for the women, because they saw how determined and dedicated some mothers were about breastfeeding their children. One mother stated:

> My mother told me when I was small I got sick and was crying and she took [a] spoon to feed me and small dropper, she did that. Your child is hungry you need to get it in them. Living here there [are] so many things you can get … pump, from [the] store – you find ways.

Another woman described how she saw her sister overcome her feeding problems, saying,

> My two sisters they had kids two, three months difference. My one sister [did] not get enough milk, my other sister [had] lots of milk […] every day she always pumped milk and every day and evening time my brother-in-law [went] to her house and [got the] milk. I really like it. Moms, sisters, it's all the same thing.

The finding that family members may supply breastmilk for a woman experiencing difficulties with breastfeeding suggest that the alternative to breastfeeding in the country of origin was wet-nursing, and that such a tradition may persist to some extent after immigration even though formula is available as alternative method of feeding. These findings add to the dearth of research on family members who act as wet-nurses for other family members. These participants described being empowered by their own mothers' decisions and influenced by the sisters' determination to feed their children the best nutrition possible.

Breaking with tradition (acculturation).

Most of the women in this study intended to breastfeed their babies, just as their mothers and grandmothers had; however, a few of the women were trying to break with the tradition of breastfeeding. Breaking with tradition meant that, although some women continued with their intention to breastfeed, they set the rules. These women described wanting to make their own decisions about feeding rather being pressured by the traditional expectation of breastfeeding

their babies. They also felt it was no longer just a mother's job to feed the baby and wanted to include their husbands and family members in the process.

Other women were concerned about the notion of breastfeeding the baby in front of their family members and the public and planned to supplement with formula instead. "I think [about] comfort: I feel uncomfortable [at] the thought of breastfeeding in front of people so, this is one thing I will have to feel out." A few women described the issue of preserving modesty and the breastfeeding tradition. They explained that they had grown up in a conservative way, covering their bodies and they have shifted toward being liberal in their notions about feeding. Once they became mothers and were breastfeeding, they felt, there might be a conflict for them in the sense that their modesty would no longer hold the cultural value it had when they were single women, yet in their culture's tradition, a woman's modesty must not be undermined. That is, some of the participants expressed some confusion about how to combine breastfeeding, particularly in public, with traditional values about womanly modesty. One of the women expressed how she felt about this:

> Let me point out one important thing: in our culture, we are taught to cover up, to be conservative, to hide ourselves, from [a] young age, so at our young age we are taught not to be comfortable with our bodies. I think so. All of a sudden I am becoming a mother…exposing your breasts and feed[ing] your baby at the same time: you are taught all these values, and now what – I am supposed to change? Never mind the western culture; I have adapted to some degree. [In] the Punjabi culture you cannot go to the temple and whip out your breast and start feeding.

On the one hand, the women considered the importance of breastfeeding their children, but on the other hand, they also worried they would be viewed negatively (i.e. considered somewhat immodest) if they breastfed their infants in public. Some expressed the view that they needed to break with the tradition of exclusive breastfeeding, and they wanted the option of supplementing their infants so they would not have to breastfeed in public. For example, one mother said:

> Maybe this is part of the culture. We have been taught to do one thing, they are expected to do something entirely different, but there is no transition, what to expect. They [would] rather supplement instead than go through the mockery of facing the public.

Choosing not to breastfeed because of feeling vulnerable in public places fits with studies suggesting cultural and social factors that may interfere with successful breastfeeding if women themselves feel embarrassed or if they worry about others being embarrassed by breastfeeding in public (Sheeshka et al., 2001). These findings are extended by the findings from this study linking women's embarrassment to perceptions of breaking with tradition in terms of their feeding methods and how far to push the boundaries.

The women also described being empowered by education rather than the tradition. They did not want to be influenced by tradition at home. They wanted their decision to be based on their reading. One woman explained that "back home" everyone breastfeeds, and also went on to say, "I am not influenced by that. I love to read books and all [along], from six months I have been reading books on pregnancy."

Another break with tradition among the study participants was that they described their husbands asking their wives about the feeding methods they preferred. The women acknowledged that traditionally their husbands had not been involved because it was a woman's domain, but now their husbands were getting involved: "He asked me if I would breastfeed

because nowadays the girls do not want to feed the baby." Another woman explained her husband's involvement by saying, "We are both going to prenatal classes, and we have prenatal breastfeeding class as well." This finding supports research conducted in Canada, the United States and the United Kingdom by Bar-Yam and Darby (1997), in which researchers included women and men from diverse income and educational backgrounds as well as racial and ethnic origins. They identified fathers as important source of support in the decision to breastfeed and its implementation. These researchers found fathers to influence four aspects in particular: the breastfeeding decision, assistance at first feeding, duration of breastfeeding and risk factors for bottle-feeding. Reasons for selecting assistance at first feeding and duration of breastfeeding by the researchers was because these two factors were considered to be influenced by the father being present and it was the time when most of the learning occurred about breastfeeding. In a recent article, Pavill (2002) discusses ways to get fathers involved in breastfeeding, suggesting fathers not only influence the decision to breastfeed but also that they play an instrumental role in whether the mother continues with breastfeeding or stops prematurely.

Some women in the study described husbands who were brought up in a breastfeeding culture and expected that the wives would breastfeed. A few mothers declared that they were not part of the tradition their husbands had experienced, because the wives had been bottle-fed, whereas "...his [family has] always been breastfeeding, without a doubt. In my family, myself and my sister, and my brother, we have actually all been bottle-fed." Another woman said she would continue with the tradition of breastfeeding unless it did not go well, in which case she would break from tradition: "Well, I will breastfeed, and continue my family way but if [there is] a problem ... in [my health and I am] not ... able to give milk to my baby. I will see, you know." Some of the women described breaking with tradition by imposing their own time limits on

breastfeeding rather than breastfeeding their children for the first few years of life as they described had been the case in previous generations. For example, one mother commented: "Let's see, I think I have already made up my mind that I will breastfeed for six months and after probably switch to formula."

Deferring to medical authority.

Deferring to medical authority was represented by the women as a significant factor in their decision-making. They felt it was important to consult a doctor because they regarded the expert opinion of their doctors as a way to reduce their anxieties. Most of the women in the study sought a physician's advice. Some of the new immigrant women respected doctors and followed their advice very diligently. The findings concur with those of Humenick, Hill and Spiegelberg (1998), who noted that primiparous women in their study were more likely to decrease breastfeeding if a health professional encouraged weaning or supplementation. Instead of placing the greatest value on their traditional practices of feeding, some of the women in the study seemed to elevate their doctor's opinions over their families' ways of infant feeding. For example, one woman indicated her decision would ultimately be based on her doctor's opinion. She stated, "If the doctor says that you cannot breastfeed, I am not sure. I have to talk to my doctor. [If a] doctor says you cannot give milk... I will try something else, because I will not have any other choice..."

Some women also explained that their own mothers had found it hard to resist expert opinion in a new country. Feeling under pressure, some members of the previous generation had given up their traditions of breastfeeding. For example, one woman commented on her mother's experience:

> …in our case, our mom, [although she had used] bottle-feeding, she is still very supportive of us breastfeeding. Because coming from India, and having just breastfeeding, so she always [knew] that is what to do. [But then women were] seeing doctors here and doctors [were] telling [them], "use formula"… That is kind of what confused her and she gave up her beliefs about breastfeeding.

The women reported that they equated the medical profession with information on good health. They felt their doctors could be trusted to help them through their pregnancies and they were inclined to listen to their doctors. One of the women emphasized that some people are not able to breastfeed or their doctors will not allow them to do so. "For some people, they have no other way, or doctor has refused, they only give formula. If someone is having difficulty in feeding or problems with feeding, the doctor will say to feed formula." These findings with respect to the influence of physicians on breastfeeding rate and duration concur with research conducted by Stolzer, Hossain and Sayed Afzal (2006). Those researchers asked 500 American women about the type of breastfeeding advice they had received from the attending physician and whether their physician's advice affected their decisions to breastfeed. A majority of the women did not receive succinct breastfeeding advice. The type of advice received was related only to the specialty of the physician and the patients' age and education. The women that did receive advice on maternal and pediatric benefits associated with breastfeeding were significantly more likely to practice exclusive breastfeeding. Similar findings are reported by Labarere et al. (2005), who studied 231 French women to determine whether attending an early, routine, preventive, outpatient visit delivered in a primary care physician's office would improve breastfeeding outcomes. The women that visited the physicians' offices and received

encouragement to breastfeed two weeks after birth were more likely to report exclusive breastfeeding and longer breastfeeding duration.

Family influences (social).

The women in this study believed breastfeeding was important, because almost all of the women around them seemed to be breastfeeding or to have breastfed. One of the women described what she observed around her, saying, "[for a] long time, my parents, my grandmother all have been breastfeeding their children and everyone has been healthy and good and I am quite confident about my choice. It really affects you, what your elders have been doing."

Most of the mothers described needing the support of their family members when experiencing their first pregnancy. That was especially the case in their decisions about what an appropriate method of infant feeding would be. The women described family members or relatives as having their own views of how one should feed a baby. For these first-time mothers, communications with family and relatives could have positive or negative effects on feeding decisions. This is illustrated by the following comment, in which a participant described a cousin undermining her confidence that all women can breastfeed: "…I am just confused because my cousin, she had a baby seven months back, he is quite healthy now; […] my cousin is my first experience and she [is not breastfeeding]…"

Some of the women also indicated that their husbands were ambivalent about breastfeeding or not convinced of the benefits and had called into question whether breastfeeding was healthy for the baby. Some husbands had seen evidence that babies getting formula are healthy, so the women did not know what to think. One of the women said of her husband,

> …he want[s] me [to breastfeed], but sometimes he says whatever problems you have the baby will get them through breastfeeding, he thinks like that, …but I still want to breastfeed. That is why my husband is confused. He says that [my cousin's] baby is so healthy, never goes to the doctor, and she has infant formula milk… After seeing this baby, [my husband] is thinking all this.

This finding supports research conducted by Rempel and Rempel (2004), which examined how male partners affect the breastfeeding reasons, intentions and behaviours of 317 Canadian first-time mothers. The male partners were given the Men's Breastfeeding Reasons Questionnaire, which was developed using reasons for and against breastfeeding. The men's prescriptive breastfeeding beliefs were predicated on the strength of their partner's breastfeeding intentions, over and above the women's own breastfeeding reasons, and they predicted breastfeeding behaviour over and above the women's intentions.

On the other hand, some mothers commented that their husbands supported breastfeeding and were aware of the bond breastfeeding creates between mother and baby. They were supportive of this special bond, which is apparent in the following comment: "He definitely supports breastfeeding [for] basically the same reason, the bonding with the mother and the baby." Some of the women described their own husbands as supporting breastfeeding, because they were breastfed for number of years and had grown up in a breastfeeding culture. One mother reported,

> Actually, for him, he prefers breastfeeding. He was breastfed till two years. I think that he has grown up with family and his sisters had babies and they have all

breastfed. So I think it makes a difference, so if you are influenced by that, that is your only way of think[ing], right? He does not know what formula babies are.

In one case, a woman described her husband undermining her preferences, because he preferred breastfeeding to bottle-feeding:

I was always open-minded to bottle-feeding, and I have a sister who had premature baby and could not breastfeed, so she bottle fed, but you know, it was fine and stuff. I was always like, bottle-feeding is okay, here and there type of thing, but my husband is like, you know – totally naturally – no, we are going to breastfeed him (baby) for as long as you can.

The findings of the study suggest that fathers' knowledge about the benefits of breastfeeding over bottle feeding is instrumental in promoting breastfeeding in mothers. This finding supports research conducted in the United States by French (2005), in which 59 men attended a two-hour class about infant care. In the intervention group (n = 27), fathers were encouraged to advocate for breastfeeding as the best nutrition for their children. The control group (n = 32) attended a class on infant care without being given information about breastfeeding. Breastfeeding was initiated by 74% of women whose partner had attended the intervention class versus 41% of those in the control group (P = .02). The results of French's study suggest that teaching fathers about the benefits of breastfeeding is important. Another United States study showed that teaching fathers about preventing and managing most common lactation difficulties was associated with higher rates of full breastfeeding at six months (Piscane, Continisio, Aldinucce, D'Amora & Continisio, 2005).

By planning to breastfeed, some of the women felt they were respecting their family ways. They were showing that they, too, would invest time and attention in their babies, like their family members had. One of the women talked about her mother's influence on her ideas regarding breastfeeding:

> My mom's done it; she has fed me and my sister and brother. My grandma is here; she is going to be helping me out; she also went through all this. My aunt that has done it for a year has encouraged me. She said, 'If I can do it, why can't you do it?'

Study findings in many populations have consistently shown that family support is critical for breastfeeding women (Humphrey et al., 1998; Schafer et al., 1998; Tarkka et al., 1999). The participants in this study indicated that their mothers played a key role in influencing them to choose breastfeeding. Comments from parents, grandmother, aunts and cousins such as, "we breastfed, so you should too" seemed to influence the mother's decision to breastfeed.

One mother remarked, "my mother used to say that you feel love for the baby and if you are able to feed your baby, why not feed it, if you have it"; the grandmother in this family also supported a decision to breastfeed. The elders seemed especially important to the pregnant women's plans for breastfeeding initiation. One participant said:

> I think it depends on the family, some mothers do not tell … their kids, and some kids do not listen to what mothers are saying. [I believe] mothers and mother-in-law – whatever old people say – [there is] something good in there.

This finding is in agreement with research conducted by Bezner, Dakishoni, Shumba, Msachi and Chirwa (2007) in the Ekwendeni Hospital catchment area, a region in Malawi with a

population of approximately 70,000 people. Interviews and focus groups provided evidence that the paternal grandmother is actively involved in care of the pregnant mother and in early childcare. The grandmother is present soon after the birth of the child, providing clothes and helping the mother to establish breastfeeding. Women in focus groups and interviews indicated that grandmothers are also key decision-makers in deciding when to introduce foods other than breastmilk to infants.

The women in the current study indicated that elders in the South Asian culture linked breastfeeding to more attachment with the mother, as illustrated by the following comment: "When the elderly women talk about breastfeeding, they say… 'mothers should breastfeed because the baby develops a greater attachment to mother.'" Other research supports grandmothers' attitudes and experiences as being an important influence on their daughters' decisions to initiate and continue breastfeeding (Barton, 2001; Bentley et al., 1999). In contrast, however, a study conducted by Susin, Giugliani and Kummer (2005), in which 601 Portuguese mothers of normal babies were interviewed to assess grandmothers' influence on breastfeeding practices, found that grandmothers had a negative influence both on participating mothers' breastfeeding duration and its exclusivity. Abandonment of exclusive breastfeeding within the first month was significantly associated with maternal or paternal grandmothers who advised that water or tea, respectively, as well as other kinds of milk, should be given.

Cultural mores (acculturation).

Culture is an important component of many South Asian immigrant women's infant feeding decisions and experiences. The women in this study described adapting their lives in the new culture while continuing to try to fit with their traditional culture. There is also an historical

importance of breastfeeding rooted in a sense of tradition in the South Asian immigrant population, and this influenced some of these mothers to breastfeed. Breastfeeding has been the practice they were used to seeing and is therefore what they know. A majority of the mothers came from breastfeeding cultures and they resisted going against those cultural mores. This finding is in keeping with those of a study conducted by Kannan, Ruth and Skinner (1999), in which aspects of the culture, such as the values of people close to the mother along with traditions and customs, are found to influence breastfeeding. Women in this study also expressed concern that it could be challenging to follow their South Asian cultural roots when it comes to breastfeeding, partly because of the influences of the new culture and partly because of perceptions that there are individual variations in women's ability to breastfeed: they believed some women are able to breastfeed and others may face difficulties.

Interestingly, a few of the mothers wanted to hold with the tradition, but would change their feeding methods if any complications with feeding were to arise: "I heard from my friends about the physical problems you could have... infection or milk reduction problems, that would be the only thing that would make me change my mind ... only medical problems, otherwise [I'm] definitely for it." Similarly, Kannan, Ruth and Skinner (1999) note that many aspects of culture such as the values of people close to the mother, along with traditions and customs, are found to influence breastfeeding in other groups.

Once the women in the study became pregnant, they recognized views about mothers from their culture of origin, including the notion that it is a duty or a mother's job to breastfeed. Mothers in their culture were represented as major figures in the household and the person who provides the glue to hold the culture system together. They wanted to preserve those elements of their culture when they became mothers' themselves. As one participant indicated:

> In our culture, we are a close-knit family and extended family. So the mother is a really big figure in the house and is a very nurturing individual; in that sense, it definitely promotes breastfeeding. No one else can do this but a mother, in terms of our duty, and moral sense, it is my right, which no one else can have, which is to breastfeed. This is how I look at it in a cultural sense. It is my job, it's my duty, my right to breastfeed.

This finding suggests a strong correlation between perceptions of breastfeeding and status of the mother in South Asian families.

None of the participants in this study described elders having a negative influence on the decision to breastfeed. On the contrary, they described criticism from elders in the community if mothers did not undertake breastfeeding, citing strong cultural beliefs in the tradition of breastfeeding and assisting mothers to resist acculturation. One of the mothers commented on such a criticism of her sister-in law, who was not breastfeeding:

> We do get some elderly women – not only elderly women, but elderly men too. I was with my sister, and she was bottle feeding… at a gathering or something, and if one of the ladies or men saw her feeding [with] the bottle, it was constantly, "well, you should be breastfeeding, you should not [be] bottle feeding." It is the way that older men and women see it, that breastfeeding is the way to go. They kind of give you that feeling, that if you do not breastfeed your baby, oh, your baby is not going to be healthy.

Another of the participants similarly described her experience hearing members of her community criticizing mothers who were bottle-feeding, saying, "'Oh, why do you not feed?'

From the next person you will hear, 'Why do you not feed, it's good for you' – they say you have to give, in our culture you will have to hear, 'what is the problem, what is wrong?'"

This finding reflects the community's strong cultural commitment to breastfeeding as the natural and healthy choice, and in bottle-feeding as indicative of a problem. Participants noted that these beliefs are reflected in many aspects of South Asian popular culture such as cinema and folk songs and that these had influenced their decision to breastfeed. Indian mothers in movies and songs are represented as giving their children the strength and ability to grow strong and healthy by breastfeeding. The women in the study indicated that South Asian arts, especially the movies that are popular in the community, played an influential role in their lives. South Asian movies as well as cultural folk songs promote breastfeeding and never formula. Having access to movies and cultural songs help the mothers to resist acculturation and to understand the cultural significance of breastfeeding. One of the mothers described how the songs about mothers and feeding have made her realize the importance of this cultural value of nurturing through breastfeeding:

> Lots of … folk songs and modern songs about the mother [describe] how nurturing a mother is to her child. It will mention … she is [breast] feeding her child. [There] is a lot of art about it… in terms of music and poetry writing. All that has influenced me – and movies as well – the Indian movies are very much family-oriented and I have never seen in any movie [a] child ever being fed formula; [in] most movies … the babies [are breastfed].

The women indicated that Punjabi music and Punjabi poetry often portray as their subjects the relationship between a mother and child and, for some mothers, listening to these

songs evoked feelings of motherhood. The mothers felt they also wanted to be a part of this relationship. One of the mothers described the themes of some of the songs, saying, "There is a lot of poetry out there that says mother is so close to God. …when [you] drink [milk from your] mom, you develop a relationship. The child becomes stronger and smarter, the focus is different, the bond."

The women described words in Punjabi and Indian movies that glorified children that have had their own mother's milk. One of the mothers expressed the way she has been influenced by her culture and by the movies about her culture:

> There is a saying in Punjabi [about whether] you have drunk your mother's milk. For example, in a movie there are two men about to fight and standing over a man on the floor and saying, "I have drunk my mother's milk, look at me, I am tougher than you, I am stronger than you, I can beat you to [a] pulp – I can get rid of you." It is very much [a firm belief] in our culture. It is in our songs and basically [they] say that you are stronger if you have had this [breastmilk] from your mother. You have power, it is a very much masculine-dominated culture but I think it is pervasive in our culture, that if your mother has fed you, you have an advantage.

This finding adds to literature by identifying that certain strongly-held beliefs about the benefits of breastfeeding are culturally transmitted thorough, elders, movies, songs and stories; they tend to persist and thus are not readily subject to acculturation processes.

Spiritual connection.

Spiritual connection through breastfeeding was an important and unanticipated theme. Some of the mothers in the study believed they were sharing a strong and powerful spiritual bond

with their children through breastfeeding. This view of spiritual connection influenced some of the mothers to decide to breastfeed. Sharing a spiritual connection with a child, creating a bond and giving back to the child, was a very fulfilling thought for some of the mothers. The mothers associated breastfeeding with spirituality. They believed that although they could not see God, they could feel him and that it was a gift from God to give life through breastfeeding. One mother's comment, in particular, highlights the importance of this spiritual connection:

> We are sharing, also because it is so natural and I feel like almost a "godly feeling." It's because of that bond you know, you cannot see it, spirituality is something that you cannot see, right, and you cannot see the bonding and the attachment, but that is how I see it – next to God. Some of us pray and [although] we cannot see God... I am giving so much to the baby and it is really like a spiritual connection. It is like God giving to us and a mother giving to [her] baby.

Other mothers also indicated that they believed a mother is an enlightened figure who passes spiritual connection through her breastfeeding. This was illustrated in the following comment:

> Your child is so innocent, your child depends on you for everything. You are God-like to them. You are an enlightened figure that is helping them. And it is amazing what you are to them at that moment – you can give them so much – not just milk, but the feelings that go with them, the spirit you are passing to them. It is a reaction like no other.

Many of the women associated giving life through breastfeeding. In addition to their motivation to give birth, they were also determined to continue to give life by breastfeeding. The

non-visible spiritual connection created between the mother and her infant was explained to be very intense in nature. The spiritual connection to breastfeeding was seen as a continuation of life for the mother. This type of finding does not appear in literature in relation this population. No literature could be found connecting breastfeeding to spirituality, but the findings of this study suggest a connection exists for these mothers. Spiritual beliefs were found to strongly motivate some mothers to breastfeed their children; the spiritual connection created between the mother and her infant was not perceived by some other participants.

Resisting the moral mandate.

The moral mandate is a based on cultural beliefs that give rise to specific "rule" that is set by a community. For example, the moral mandate for the South Asian community in regards to breastfeeding is: Mothers will breastfeed their children. There were some mothers who were not influenced in any way by the moral mandate. These women not only resisted the moral mandate to breastfed, but also questioned the whole notion of what a mother is "supposed to do." In particular, some young mothers relied on their own decisions rather than seeing the question as a moral issue.

Some of the participants indicated that while women in their place of origin had no choice about breastfeeding, immigrant women have choices and can resist the moral mandate associated with traditional feeding methods if they wish to do so. As one mother pointed out, "Basically, the women in the villages we are from … had no other choice, except to breastfeed. Formula is not available for them. If the choice was there, it would matter but … that is the only way to go." According to this finding, resisting the moral mandate in terms of breastfeeding initiation and duration can occur because of the availability of formula. This finding is similar to

research conducted by Rosenberg and colleagues (2008), which surveyed about 3,900 Oregon women who had babies in 2000 and 2001. Among those who were breastfeeding when they left the hospital, more than two-thirds said they had received hospital care packages containing formula. Women who received the packages were more likely to stop breastfeeding 10 weeks or sooner than those who did not receive the packages. This suggests, as some of the participants in this study noted, that the existence of formula represents the notion of "choice" for some mothers.

The mothers in the study indicated that difficulties in adjusting to being a mother meant that they had a tendency to resist the whole notion of a "mother's job." They suggested that they would change their method of feeding if they were not comfortable and thereby resist the moral mandate to breastfeed:

> I know I am becoming a mother and my breast is [the baby's] food supply, but at the same time it is hard to imagine all of sudden switching and knowing I am vessel for milk. [At] one point I was an attractive young lady, using my body to attract my husband and [to] know your breasts are not sexual [any longer] but there to feed ... I do not feel comfortable.

The finding supports research conducted by Avery, Duckett and Frantzich (2000), in which they surveyed 576 white American women who were breastfeeding their first child and followed them up to twelve months postpartum. The researchers reported that social attitudes and physical changes impact breastfeeding women's sexuality. When the breasts change in function and size, some women will experience a change in social attitudes as they breastfeed, particularly when they breastfeed in public, and these attitudes can also have an impact on the way a woman feels about herself sexually.

Some mothers expressed the idea that they would want the option of "time out" from baby by using a mix of breastmilk and formula from the outset so that feeding could happen when the mother was not present. For one mother, even though breastfeeding was very prominent in her area of origin, she was happy to breastfeed only at her convenience: "From the very beginning I wanted to breastfed plus [give] formula milk… For example, if I had to go somewhere at least the baby is comfortable with the infant milk also." This feeling was also expressed in the following comment: "Some women breastfeed right there, which is a good thing, you know. But that is why, [although] I will be breastfeeding… [at] the same time I do want the option of at least the baby being on the formula." Some of the mothers were also influenced by their mothers who had resisted the moral mandate back home by not breastfeeding their infants.

Other mothers indicated that their initial efforts to conform to the moral mandate to breastfeed would be changed if it was not working for them. They based that view on how stressed they might feel:

> I have to look at myself and how I feel. This is the most important thing and I [will] try my best to breastfeed but I think if it is not coming or happening I am not going to stress out about it.

Although some of the mothers felt that feeding was part of their duty (moral mandate), they also indicated that every situation is different and their own well-being was just as important as that of their children:

> I think a child can only be taken care of if a mother is happy doing it and I think it is my duty to take care of the child but at the same time I have to look at my well-

> being. Every mother is not the same. I have to look at my situation and see what is happening in my life at the time and adapt to it in a certain degree, I think it is not very [realistic] to think that my only job is to breastfeed. There [are] a lot of emotional things involved.

The literature does not explicitly discuss this finding but it does extend our thinking to recognize mothers' feelings of well-being as a critical predicator of breastfeeding initiation. Some women in Hall and Huck's (2007) study wrote about the sense that health care professionals, in particular, regard breastfeeding as a moral mandate and contributed to the women's feeling of guilt and shame if their breastfeeding efforts were unsuccessful.

Transition to work (socio-economic).

Many of the participants had emigrated from environments where career women were showing resistance to breastfeeding, believing that if they had money, they should be able to formula-feed. Some of these gave a high priority to their jobs and carreers, as one participant noted: "like in the big cities or towns, the girls, they want to see careers, sometimes they have babies; they fight, rebel and do not want to breastfeed."

This was a theme that concerned a majority of the mothers. Transition to work was anticipated as a negative factor that influenced their breastfeeding decisions. Most mothers saw working as a necessity for economic reasons and also thought returning to work was one of the major disruptions to infant feeding. One participant described her thoughts about women who might be forced to go back to work sooner than they would prefer, because of financial responsibilities to family in their country of origin or because of their limited personal finances resources, saying, "Who knows what hardship they may have to face so they may have applied

for their mom and dad to come from India, so she has to work, so she has to give formula." This finding, with respect to participants' perceptions of the transition to work, extends our thinking about the impact of employment on mothers' decision to breastfeed. This finding supports the research conducted by Hawkins, Griffiths, Dezateux and Law (2007). They studied 14,830 white mothers from Britain and Ireland (6,917 employed) with singleton babies born between 2000 and 2002 and determined whether a mother's employment status (full-time, part-time, self-employed, on leave, not employed, student) and employment characteristics were related to breastfeeding initiation. The researchers found that women employed full-time were less likely to initiate breastfeeding than mothers who were not employed or students, and mothers returning for financial reasons were also less likely to initiate breast feeding.

Many mothers felt the need to return to work may lead to challenges for breastfeeding. For example, one participant expressed the opinion that she viewed breastfeeding and employment outside the home as simultaneously manageable only by pumping milk and leaving it at home, which she anticipated might be difficult:

> I know over here you have to work. I will try my best when I [have] to work: before I go to work I will [breast]feed my baby and [also] when I come back; in the meantime [while] I …work, my baby [will have breastmilk in a] bottle.

Another mother expressed concern that she might lack time for the baby when working and have to actually give up breastfeeding: "That would only be if work comes up. If I have to give time to my work then it is going to be difficult, so I have to change to formula and supplement foods." Some of the women also anticipated that fatigue from work would interfere with breastfeeding. "Yes, because you have lots of time, right, you spend time, every two hours

you know your kid is hungry, you know you can breastfeed the baby, but when you are working, you come home, you are tired". This finding is supported by research conducted by Yimyam (1998), in which 313 Taiwanese employed women were interviewed to explore their experiences as mothers, particularly their attempts to balance the demands of work and breastfeeding. The research findings demonstrated the stresses and conflicts in combining breastfeeding with work that can affect both physical and emotional health. Some women developed negative feelings. Exhaustion or fatigue, lack of self care and not eating properly were the common physical problems reported by women in the Yimyam study.

Summary

In this qualitative descriptive study, data were collected through interviews with the 15 well-educated subjects in a purposeful sample. Inductive analysis of the data produced the following themes: representation of breastfeeding, vicarious learning about breastfeeding, breaking with tradition, deferring to medical authority, family influences, cultural mores, spiritual connection, resisting the moral mandate and transition to work. The themes were described and supported with quotations, as well as being compared and contrasted with the extant literature. The implications of these findings, recommendations and conclusions are described in the subsequent chapter.

Chapter Five: Implications, Conclusions and Recommendations

Although the findings of this particular study may not be generalizable, they do provide significant information that has the potential to improve breastfeeding initiation among South Asian immigrant women. This chapter includes implications for nursing practice, education and research. Conclusions from the findings are also presented.

Implications for Nursing Practice

We are living in a multicultural society and nursing practice needs to reflect the different perspectives of breastfeeding that influence members of migrant communities in their decisions about initiating breastfeeding. The findings suggest that a mother's representation of breastfeeding can provide nurses with insight into cultural beliefs and values regarding breastfeeding, without stereotyping mothers around their decisions to breastfeed. The ways in which breastfeeding is represented by individual mothers and their decisions to embrace the influence of family members and cultural mores, or to resist moral mandates to breastfeed, will do much to influence their choices about breastfeeding and their confidence about those choices. Nurses can gain access to information about the above issues by conducting comprehensive, prenatal and postnatal breastfeeding assessment of mothers, babies and families. For example, during a prenatal assessment, nurses can assess mothers' attitudes about breastfeeding as well as the attitudes of their significant others. Postnatally, nurses can assess maternal breastfeeding self-efficacy, infants' contribution to breastfeeding success and the mothers' abilities to identify their available support for their breastfeeding decisions.

Numerous studies have reported that between 50% and 75% of expectant mothers decide how they will feed their infants before or very early in pregnancy (Losch, Dungy, Russell, & Dusdieker, 1995). Nurses can use the findings in this study to assess the nuances that South Asian immigrant mothers might bring to their decisions to breastfeed. At the same time nurses can clarify any misunderstanding about breastfeeding the mothers' may face. Nurses can represent themselves to pregnant women and new mothers as experts in the field of breastfeeding because they have training in breastfeeding and are in contact with the mothers on a regular basis.

The mothers indicated that their husbands and other family members generally influenced their decisions to breastfeed. Therefore, nurses can reach out to expectant fathers by including them in classes promoting breastfeeding. Fathers can be educated to be part of the breastfeeding process. They can be encouraged to be present during breastfeeding and to provide an environment for mothers' that is conducive to breastfeeding. Because fathers' preferences can influence their wives' decisions and the men may not always be adequately informed, nurses can provide information that is appropriate to the father's knowledge level or gaps in his knowledge about breastfeeding and their expectations around breastfeeding. This might assist fathers to become better informed and to play an advocacy role in positively encouraging a mother's decision to initiate breastfeeding.

As indicated in the findings of this study, mothers anticipated returning to work and not being able to maintain breastfeeding during this transition. For immigrants who are living in a new country, work may be a necessity for mothers and as a result many anticipated a disruption and premature termination of breastfeeding due to their work. If women wish to continue breastfeeding while working outside the home, nurses can educate them about how breastfeeding

can be successfully maintained under these circumstances, for example, by pumping, storing and transporting breastmilk. Nurses can take a leading role in lobbying and educating the community, employers and the government to undertake initiatives to provide breastfeeding facilities. If workplaces are not particularly supportive about storing breastmilk, nurses can play a vital role in providing knowledge to employers about the benefits of breastfeeding and the positive effects of breastfeeding on the employed mother.

It was also apparent in the findings that some mothers resisted the whole notion of breastfeeding and of their traditional feeding practices "back home." Therefore, nurses can use these findings to further explore reasons why these women are resisting breastfeeding and take the opportunity to discuss the benefits of breastfeeding to the mother and infant, before making a final decision.

It was also apparent in the findings that family influences' mothers' observations and learning. Therefore, nurses can use this finding to approach the family and encourage them to provide an environment for the mother that is supportive of breastfeeding. They can find ways to incorporate family members in their teaching so that they can be well informed about the benefits of breastfeeding. Nurses can also advise family members that their negative or positive believe about breastfeeding can have an impact on a mother's decision to breastfeed.

The issue of sexuality and the dual role of breasts was also raised in the study. One mother had a hard time accepting the use of her breasts as feeding vessels. Nurses encountering the issue of sexuality in breastfeeding mothers need to recognize the range of responses to sexuality that mothers may encounter during breastfeeding and appropriately advise them about what is normal and what the expectation are during breastfeeding. Some mothers may need reassurance that breastfeeding need not preclude perceptions of a woman's breasts as an

important element of her sexuality, in addition to emphasizing the benefits of breastfeeding for both mother and baby.

The findings also suggested that some mothers rely heavily on the advice and opinion of their family physician regarding infant feeding, to the extent that some consider disregarding their family opinions or traditions of infant feeding if given conflicting advice. Therefore, it is also important that nurses work with family physicians together to increase their confidence in providing accurate breastfeeding information and counselling. Many physicians have reported counselling in situations in which they admitted they were not prepared (Goldstein, & Freed, 1993). Nurses can identify opportunities to collaborate with physicians and mothers around initiating breastfeeding and instilling in a mother the confidence needed to initiate and continue breastfeeding. It is important for nurses to recognize the type of support a new mother requires so the advice given to the mothers is consistent, accurate and adequate in breastfeeding information.

Three mothers in the study expressed their feelings about wanting to feel a spiritual connection between themselves and their baby. Having a spiritual connection was given by some of the mothers as a reason for initiating breastfeeding. It is important therefore that nurses take a holistic approach to understanding how spirituality can be incorporated into prenatal care and how breastfeeding represents a spiritual connection.

Implications and Recommendations for Nursing Education

The study has implications for nursing education. The findings suggest that advice and opinions offered by health care professionals regarding breastfeeding can affect a mother's decision to breastfeed. Therefore it is important for nurses, specifically public health nurses who

are in close contact with mothers in different ethnic communities, to develop culturally sensitive education modules with which to educate their graduate nurses. Public health nurses should be educated in ways to offer convincing evidence for pregnant mothers of the importance of breastfeeding; they must have the ability and knowledge to help mothers conquer ethnic, family or social prejudice against breastfeeding. As for mothers that do not want to breastfeed and are confronted with moral sanctions that do not support their decisions, should be given the information about breastfeeding and what they choose to do with that information is their choice. Nurses need to update their knowledge of breastfeeding with the most current evidence-based research on breastfeeding in order to help the women in culturally sensitive ways.

Nursing students in colleges and universities need to have a greater focus on receiving breastfeeding knowledge that is culturally relevant in their lectures as well as being supported to work with variety of cultural groups during their clinical rotations. Nursing students should be given opportunities to teach breastfeeding techniques as well to as counsel women facing problems with breastfeeding. Their expertise can be used to encourage mother's decision to breastfeed.

This view of a spiritual connection influenced some of the mothers to decide to breastfeed. The spiritual dimension needs to be included in student nurses' learning and training process, allowing them to attend more fully to the whole person.

Implications for Nursing Research

Further qualitative research investigating the effects of spirituality on breastfeeding decisions among immigrant women is recommended to shed additional light on this important subject. It is recommended that such research ensure quality data, as this study has done, by

enlisting the aid of experts in the field to subject semi-structured interview guides to rigorous quality checks. Findings from this study may provide a basis for questionnaires that may be used to survey a much larger but similar population to produce results that, although they may not necessarily be generalizable, would represent a larger and broader population.

The subjects in the study were not typical of South Asian immigrant women. They were an older and well-educated group. It is recommended that future studies be conducted in which the immigrants' education level and age are accounted for, in order to examine the effect of education and age on breastfeeding decisions in this population.

In the study, spiritual connection through breastfeeding was a new and unanticipated theme but was important to three of the women who believed that breastfeeding would mean they were sharing a strong and powerful spiritual bond with their children. This theme needs to be further explored through qualitative research in order to understand the connection of spirituality to breastfeeding and to a mother's decision to initiate and maintain breastfeeding.

Study Limitations

Although the current study has provided important information in the understanding of factors that influence breastfeeding in this group of South Asian immigrant women, there are some limitations to the findings. The transferability of the study is limited by the small convenience sample drawn from a population of South Asian women attending various antenatal physicians' offices. The educational level of the sample indicated that this group may not be typical of South Asian immigrant women. The education and income levels for the participants in this study suggest that they shared the tendency of middle-class, highly-educated women to volunteer for research. The conclusions that were reached may be applicable only to groups

sharing the women's characteristics, such as using similar kinds of facilities and living in similar geographic areas (Marshall, 1996).

Limitations may also have occurred during the interviews. Because the writer is a South Asian woman, the relationship that she developed with the participants may have influenced how they disclosed information. The women may only have told the writer what they thought she would like to hear or they might not always have disclosed all the information needed to answer the questions, because she is connected to the community. They might also assume that she knows all about South Asian cultural beliefs and values. Being a novice researcher, her lack of experience in interviewing may have limited the depth of data collected for the analysis. In order to achieve quality data, semi-structured interviews should go through rigorous quality checks by experts in the field before being used.

Summary

Research investigating breastfeeding initiation among certain ethnic and cultural groups, indicates that rates of breastfeeding may decrease following immigration. This study has illuminated social, personal, socio-economic and cultural influences on breastfeeding initiation among South Asian women who immigrated to Canada. The study sample consisted of 15 primiparous South Asian women. The study was informed in part by a conceptual framework used by Kong and Lee (2004). Data were collected through interviews conducted with a semi-structured guide consisting of 10 questions. An inductive constant comparative process was used to analyze the data; from this analysis, nine themes emerged: the representation of breastfeeding, vicarious learning about breastfeeding, breaking with tradition, deferring to medical authority

family influences, cultural mores, spiritual connection, resisting the moral mandate and transition to work.

In light of the findings of the study, recommendations were made that have implications for nursing practice. These include the need for nurses to incorporate culturally sensitive strategies for addressing beliefs and values regarding breastfeeding and to understand the influence of family members (particularly fathers) and cultural mores on infant feeding choices, to ensure support for new mothers in the South Asian immigrant community to initiate breastfeeding. Nurses can also play a vital advocacy role for new fathers, and in imparting knowledge to employers about the importance of breastfeeding for maternal and infant health. Because the findings highlight the importance of the physician's advice with respect to breastfeeding, it is recommended that nurses work closely with physicians to ensure mothers have accurate and adequate information to support the decision to initiate and maintain breastfeeding. Nurses must also be aware of the importance of spiritual beliefs and perceptions that may influence a mother's decision to breastfeed.

The current qualitative study, because of the inductive data analysis method used, offers a rich and nuanced source of information about factors that influence breastfeeding among South Asian immigrant women. However, transferability of the study is limited. Further qualitative and descriptive research investigating the phenomenon of breastfeeding decisions among immigrant women is recommended, to shed additional light on this important subject. It is recommended that such research ensure quality data, as this study has done, by enlisting the aid of experts in the field to subject semi-structured interview guides to rigorous quality checks.

Conclusion

The rich, complex and detailed data obtained in this descriptive qualitative research approach offer insight into the essence of the experience of immigrant women contemplating the important breastfeeding decision, and into the subtleties of the cultural context in which this decision must be made. The participants expressed both conviction and confusion as they felt themselves immersed in the pull of family and cultural tradition against the tide of acculturation. The study findings contribute to current understanding about some factors that affect decision-making with regard to breastfeeding that were not incorporated in the Kong and Lee's (2007) framework. The current study pointed to the importance of spirituality to breastfeeding and also indicates the notion of either embracing or breaking away from tradition, a which was not mentioned in Kong and Lee's framework. On the one hand, the women described the value they placed on their culture's tradition of breastfeeding, and on the other hand, they were also expressing their desire to resist their cultural traditions when these conflicted with other strongly-held values.

Even as the participants were expressing their trepidation and enthusiasm, their concerns and hopes, they were also revealing to the researcher the broad range of influences on their decisions, both from within their culture and from the mainstream culture. Such influences affecting contemporary South Asian immigrant women's breastfeeding decisions need to be further investigated and understood so that nurses can support and facilitate the best breastfeeding choices.

The results of this study thus contribute to our understanding of the factors that influence infant feeding practices of South Asian women who have immigrated to Canada; as well, the findings herein may provide direction for developing additional recommendations for nurses

wishing to design and implement services that are appropriate for this particular group, and may point to directions for further qualitative research investigating the many complex and compelling factors that influence immigrant women in their important decisions about breastfeeding. The findings may also suggest important avenues for further research to address nursing's theoretical and practical questions about the factors influencing South Asian immigrant women's decision to breastfeed.

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Appendix A: Questions

I would like to ask you some questions about your experience in deciding what infant feeding method is appropriate for your baby. I am interested in whatever feeding method you have selected and your reasons for the selection.

1). What factors did you consider when thinking about your infant feeding method?

Probes: work demands?

2). Can you describe your husband's preference for infant feeding?

3). How are you feeling about your feeding decision?

Probes: your beliefs, your past experiences with people who breastfed.

4). What are your traditional feeding practices in your country of origin?

5). Where do you see yourself fitting in terms of those traditional practices?

6). If you changed your mind about feeding methods, what influenced your change in method of infant feeding?

7). Can you describe any cultural factors that influenced your decision to breastfeed?

Probes: cultural beliefs about what mothers should do?

Cultural beliefs about what is best for babies?

8). How do you think that your family and friends might have influenced your feeding decision?

9). Does your financial situation have any effect on your feeding decision and if so what is it?

10). Can you tell me about any other factors that have influenced your feeding decision?

Appendix B: Demographic Sheet

Study: An Exploration of Factors Influencing The Initiation Of Breastfeeding Among South Asian Immigrant Women

What is your Age: _____, Married: _____, Divorced:_____, Not Married:_____, Widowed:_____

Date of Birth (Year): _____, Place of Birth: _____.

Migrated from which country: _____,

Length of residency in Canada, British Columbia:_____.

Ethnicity: _____

Educational Background:_____

Current Occupation Level:_____, Working Full Time Or Part Time:_____,

Total Family income:_____.

Appendix C: Informed Consent Form

The University of British Columbia

School of Nursing

T201-221 Westbrook Mall

Vancouver, B.C. Canada V6T 2B5

INFORMED CONSENT FORM

STUDY TITLE: EXPLORATIONS OF FACTORS INFLUENCING THE INITIATION OF BREASTFEEDING AMONG SOUTH ASIAN IMMIGRANT WOMEN

Principal Investigator: Dr. Wendy Hall, Associate Professor, School of Nursing, University of British Columbia (BC). Contact number: XXXXXXX

Co-investigator: Manvinder Mann, MSN (Student), School of Nursing, University of British Columbia (BC). Contact number XXXXXXX. This study is part of a student thesis for a Master of Science in Nursing degree at the University of British Columbia. Only the principal investigator and co-investigator will have access to the information you provide.

Purpose: You are invited to take part in this research study because you will have the experience in infant feeding practice. This study explores the factors that could influence the initiation of breastfeeding among primiparous South Asian immigrant women who immigrated to Canada.

Study Procedure: If you agree to participate in this research study, you will be asked to respond to 10 questions that will take you approximately 45 to 60 minutes to complete. The interviews will be conducted in English or Punjabi at a mutually agreed upon location. These interviews will be tape-recorded.

Confidentiality: Your identity will be kept in strict confidence and will be protected by code numbering. All the tapes will be identified only by code number and kept in a locked filling cabinet at the investigators.

Contact: If you have any questions about this study and want further information about this study, please contact, Dr Wendy Hall (XXXXX) or Manvinder Mann (XXXX). If you have any concerns about your treatment or rights as a research subject, you may contact the research subject information line in the UBC office of research services at XXX.

Consent: Your participation in this study is entirely voluntary, so you can at any time during the process withdraw or refuse to answer specific questions without any jeopardy to your employment. No reasons are required to be given for you decision.

Your signature indicates below that you give permission to take part in this study and have received a copy of this consent form for your own records.

---	---	---
Signature of Participant	Printed Name	Date
---	---	---
Signature of Principal Investigator	Printed Name	Date

Appendix D: Information Letter

The University of British Columbia

School of Nursing

T201-221 Westbrook Mall

Vancouver, B.C. Canada V6T 2B5

Tel: (604) 822-7417

Fax: (604) 822-7446

Project Title: EXPLORATION OF FACTORS INFLUENCING THE INITIATION OF BREASTFEEDING AMONG SOUTH ASIAN IMMIGRANT WOMEN

Principal Investigator: Dr. Wendy Hall, Associate Professor, School of Nursing, University of British Columbia (BC). Contact number: XXXX.

Co-investigator: Manvinder Mann, MSN (Student), School of Nursing, University of British Columbia (BC). Contact Number XX XX. This study is part of a student thesis for a Master of Science in Nursing degree at the University of British Columbia.

Dear Mother-to-be:

I am writing to invite you to take part in this research study because you are currently pregnant with your first child and will have views about your intentions around feeding your infant. You will be eligible to participate if you have been in Canada for more than one year. This study explores the factors that could influence the initiation of breastfeeding among first-time South Asian immigrant mothers who immigrated to Canada.

If you agree to participate in this research study, you will be asked to engage in an interview that will take from 45 to 60 minutes. Your interview will be conducted in English or Punjabi at a mutually agreed upon location. Your interview will be tape-recorded.

You identity will be kept strictly confidential. Your typed interviews will be protected by a code. You will not be identified only by code number and kept in a locked filling cabinet at the investigator's office. The computer hard drive with data will be protected by a password know only to the investigator. Although you will not receive and payment of participating in this study, I believe that the information you provide could be helpful for other South Asian mothers.

Contact: If you have any questions about this study and want further information about this study, please contact, Dr Wendy hall (XXXX) or Manvinder Mann (XXXX). If you have any concerns about your treatment or rights as a researcher subject, you may contact the research subject information line in the UBC office of research services at XXX. Your participation in this study is entirely voluntary, so you can at any time during the process withdraw or refuse to answer specific questions without any jeopardy to your employment. No reasons are required to be given for your decision.

If you are interested in participating, please call me at XXXXX

Thank You.

Sincerely,

Manvinder Mann, RN, MSN.

The University of British Columbia
Office of Research Services
Behavioural Research Ethics Board
Suite 102, 6190 Agronomy Road, Vancouver, B.C. V6T 1Z3

CERTIFICATE OF APPROVAL - MINIMAL RISK

PRINCIPAL INVESTIGATOR:	INSTITUTION / DEPARTMENT:	UBC BREB NUMBER:
Wendy Hall	UBC/Applied Science/Nursing	H07-00441

INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT:

Institution	Site
N/A	N/A

Other locations where the research will be conducted:
private phyician's office

CO-INVESTIGATOR(S):
Manvinder Mann

SPONSORING AGENCIES:
N/A

PROJECT TITLE:
An Exploration Of Factors Influencing the initiation of Breastfeeding Among South Asian Immigrant Women

CERTIFICATE EXPIRY DATE: April 19, 2008

DOCUMENTS INCLUDED IN THIS APPROVAL:		DATE APPROVED: April 19, 2007
Document Name	**Version**	**Date**
Protocol:		
Research Porposal	N/A	February 28, 2007
Consent Forms:		
main study consent	Version 2	April 11, 2007
Questionnaire, Questionnaire Cover Letter, Tests:		
Questions	N/A	February 25, 2007
Letter of Initial Contact:		
Letter of initial contact	Version 2	April 11, 2007

The application for ethical review and the document(s) listed above have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human subjects.

Approval is issued on behalf of the Behavioural Research Ethics Board and signed electronically by one of the following:

Dr. Peter Suedfeld, Chair
Dr. Jim Rupert, Associate Chair
Dr. Arminee Kazanjian, Associate Chair
Dr. M. Judith Lynam, Associate Chair
Dr. Laurie Ford, Associate Chair