

**Infant Feeding in Newfoundland and Labrador: Perceptions and experiences of maternal
grandmothers**

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Abstract

The influence of a grandmother can be an important factor in a new mother's decisions about infant feeding. Research suggests that an important predictor of choosing to breastfeed is whether or not your own mother breastfed her child(ren). In addition mothers state that they need and want their mothers' support both in making the decision to breastfeed and in being supported while doing so. In Newfoundland and Labrador, many grandmothers who had their children during the 1960s or 1970s when breastfeeding rates were low are unable to pass on helpful breastfeeding advice. However, including the maternal grandmother in a discussion on infant feeding practices with the goal of better understanding their experiences and perspectives is important. The purpose of this study was to examine the primary influences that impacted grandmothers' choices of infant feeding in Newfoundland and Labrador and to explore the role that grandmothers feel they played in their daughters' choices about infant feeding. Twenty two maternal grandmothers who bottle fed their children and whose daughters bottle fed their babies were recruited to participate in either one of four focus groups or two semi-structured interviews. Transcripts were analysed using the constant comparative method of analysis to reveal insights into the grandmothers' perceptions and experiences. Three themes emerged describing how the grandmothers felt about infant feeding: powerlessness, modesty, and ambivalence. These themes provided insight into the way that the grandmothers made decisions about how to feed their babies and the way that they interacted with their daughters in regards to infant feeding.

A better understanding of grandmothers' views of infant feeding may be used to develop an educational intervention to help improve grandmothers' knowledge and perceptions of breastfeeding and to therefore help mobilize the much needed support their daughters require to breastfeed.

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ATTITUDES TOWARDS INFANT FEEDING

Chapter One: Introduction

Infant Feeding

Mothers have lots of choices to make when it comes to their babies. However, there is perhaps no choice as steeped in politics and as heavily scrutinized as the way a woman chooses to feed her baby. Whether she chooses to breastfeed or bottle feed, a mother will often face criticism from proponents of either feeding method and be forced to justify her choice to both herself and others. In addition, the type of infant feeding method she chooses can have an impact on her own health and the health of her baby. It is for these reasons that infant feeding is an important area of academic study.

For most of human history, the norm in terms of infant feeding was breastfeeding. However, in the 1900s, other forms of infant feeding became more popular. The invention of canned milk, baby formula, bottles, and nipples, allowed for increased options of how babies could be fed. Studies from around the world show that, depending on where they are born, babies under six months of age may be offered, among other things: porridge, water, a root mixture named mzuwula, a mixture of herbs named dawale (Bezner Kerr, Berti, & Chirwa, 2007), teas, or other animal milks. In Newfoundland and Labrador (NL), as with other parts of eastern Canada, canned sweetened condensed milk was frequently used to feed babies in the first half of the twentieth century. In later years, the use of canned evaporated milk became popular. Commonly called *Carnation* milk, this milk remained popular until the 1970s and 1980s when breastfeeding rates began to increase.

Since the 1980s, many studies have linked breastfeeding with improved health outcomes and as a result, breastfeeding is currently being promoted as the preferred infant feeding method.

According to the *Breastfeeding Handbook* (2010), a recent publication of the government of NL, that is provided to all new mothers in the province, there are numerous health benefits that can be accrued by breastfeeding your baby. For example, babies who are breastfed may benefit from the reduced incidence of diarrhea, vomiting, and ear infections, as well as earlier speech development and protection from various diseases such as type 1 diabetes mellitus (Breastfeeding Handbook, 2010).

The list of benefits to breastfed babies is seemingly unending and has, with new research, been extended to include benefits accrued to the breastfeeding mother as well. Studies have shown that breastfeeding may lower a women's risk of developing breast cancer and ovarian cancer (Salone, Vann, & Dee, 2013). Other health benefits can also be realized by the breastfeeding mother:

Mothers who breastfeed typically are at lower risk of developing certain diseases. In general, longer exclusivity and duration of breastfeeding are associated with improved health outcomes. Breastfeeding reduces postpartum bleeding [...] risk, which help mothers recover from childbirth. Breastfeeding is associated with longer birth intervals resulting from lactational amenorrhea, or suppression of ovulation, giving mothers' bodies more time to recover fully from pregnancy and childbirth. Breastfeeding also provides women with a nonpharmacological method of family planning. (Salone et al., 2013, p. 147)

Infant feeding in Newfoundland and Labrador

Currently in NL, 68% of mothers initiate breastfeeding (Newfoundland and Labrador Provincial Perinatal Program, 2013). This rate is low compared to Canadian breastfeeding initiation rates which range from 93.1% in British Columbia to an average low of 74.8% in the Atlantic Provinces (Health Canada, 2010). The national average is 87.3% (Health Canada, 2010).

The current breastfeeding initiation rate in NL represents a significant increase in breastfeeding popularity since the 1980s. However, despite the benefits of breastfeeding, this province still lags considerably behind all other provinces when it comes to breastfeeding initiation and duration.

The Breastfeeding Research Working Group

It is in this context that the Breastfeeding Research Working Group (BRWG) was formed under the auspices of the Baby Friendly Council of NL to gain a better understanding of the low breastfeeding rates in this province. The BRWG is a multidisciplinary group of researchers who are committed to promoting and protecting breastfeeding by studying infant feeding practices in the province, improving breastfeeding initiation rates, and ultimately improving the health and well being of mothers and their babies.

As part of a larger program of research, the BRWG undertook a study in the spring of 2010 to explore the experiences of NL mothers who chose to formula feed their babies. The “You’re Not Going at That!” study consisted of focus groups conducted in three locations across the province. One of the major findings was that new mothers looked to their own mothers as a significant source of advice and support in regards to their choice of infant feeding method (Bonia et al., 2013; Ludlow et al., 2012). Based on the findings of this 2010 study, it was

decided that further research into the attitudes and experiences of NL grandmothers towards infant feeding was warranted.

Grandmothers and Infant Feeding

Most grandmothers in NL today did not breastfeed their children. For many years the main type of infant feeding used in this province was *Carnation* (canned milk). It is estimated that with careful marketing by companies and lack of support from health professionals, the breastfeeding rate in NL may have gone down to as low as 5% or less in the late 1950s and early 1960s (CWA Report, 1961). The grandmothers of today who are in the 50 to 70 year age range would have grown up and had their babies in a culture where breastfeeding was not the cultural norm.

This is not the first study to look at grandmothers in regards to infant feeding. There is quantitative research to suggest that grandmothers may play a role in determining the infant feeding choices of their daughters. Studies have found that if a woman was breastfed herself, she is much more likely to breastfeed her own baby (Bentley et al., 1999; Ekstrom, Widström, & Nissen, 2003; Meyerink & Marquis, 2002). Other studies have found that the opinion of the grandmother with regards to infant feeding is a major contributing factor to a new mother's decision to breastfeed or not (Bentley et al., 1999; Duong, Binns, & Lee 2004).

There is very limited qualitative data available that describes in detail the experience of the grandmother when it comes to helping her daughter with infant feeding decisions. The few studies conducted in this area suggest that grandmothers play a very important role in the infant feeding decision-making process and should be included in educational efforts aimed at

promoting breastfeeding (Agunbiade & Ogunleye, 2012; Bezner Kerr, Dakishoni, Shumba, Msachi, & Chirwa, 2008; Grassley & Eschiti, 2007, 2011).

Grassley and Eschiti (2007, 2008, 2012) completed several studies suggesting that the experience of the grandmother needs to be acknowledged and that their knowledge can be developed along with their support for breastfeeding. They wrote, “Grandmothers are important to successful breastfeeding because their knowledge, attitudes, and experiences influence their daughters’ decisions to initiate and continue breastfeeding.” (Grassley & Eschiti, 2007, p.23). Reid, Schmied, and Beale (2010) also found that grandmothers play an important role in infant feeding decisions. Their findings suggest that in planning interventions it would be useful to help grandmothers facilitate breastfeeding. They wrote:

Given that grandmothers are often highly motivated to help the new mother, particularly in ways that achieve the best outcomes for their grandchild, it might be helpful to include grandmothers in parenting education sessions which would allow their expertise and experience to be acknowledged while at the same time ensuring that they are aware of current recommendations for the care of infants (p. 79).

Hilde (2006) also acknowledged the importance of grandmothers. Her study, which looked at 31 paternal grandmothers in rural Nepal found that, “In households consisting of several generations, as was the case among the Tamangs in this study, failing to acknowledge the key role of the grandmother in perinatal care would overlook one of the main gatekeepers to health care” (p.30). She concluded that, “there is a need to further explore the potential in including grandmothers in perinatal interventions in settings where they are already involved” (p.30). Her findings are particularly relevant to grandmothers in NL as there are often very tight

knit family groups in rural parts of the province and many who still live in multigenerational households as did the participants in this study.

The research has shown that grandmothers should be included in routine pre- and post-natal programs that promote healthy infant feeding. Aibel (2012) found that grandmothers should be “actively involved in public health programmes that promote optimal nutrition and health practices for children and women” (p. 31). Similarly, Ekstrom et al. (2003) found that, “Our data suggest that a helpful strategy to optimize support to mothers with respect to breastfeeding outcome is for health professionals to discuss the grandmother’s perception of breastfeeding with each mother”(p. 265). Additionally, in a systematic review of intervention studies for breastfeeding support, Kaunonen, Hannula, and Tarkka (2012) found that, “Partners and grandmothers’ ability to give breastfeeding support increased even with brief training or a discussion. Breastfeeding education for partners and grandmothers should therefore be included in all parenting education programmes”(p. 1952).

Much of the present qualitative research in this area has dealt primarily with infant feeding perspectives of grandmothers who have breastfed, as opposed to perspectives of those who have bottle fed their babies. Therefore studies that focus on the experience of the mother or grandmother who decided to bottle feed are needed to fill this gap in the literature. In regards to this, Grassley and Eschiti (2011) state that

We found, however, that grandmothers who did not breastfeed appeared to be reticent to share their stories in a group setting in which most members breastfed. They may be more comfortable sharing their stories individually or within a group of grandmothers who did not breastfeed (p. 139).

They recommended further qualitative research into grandmothers and their infant feeding experiences as , “[...] grandmothers’ stories could be a rich data source for understanding and addressing the cultural messages from the past that influence mothers’ infant-feeding decisions” (p. 140). They noted that studies, such as this one, that concentrate on women who did not breastfeed are vitally important.

Many other researchers also suggested that further research into grandmothers and their role in the infant feeding decision making process was warranted. For example, de Medeiros Gross, Van der Sand, Girardon-Perlini, and Cabral (2011) concluded their qualitative study of 11 new mothers with the following statement.

Finally, it is important to say that this study does not end in itself, but opens other possibilities for new studies that also consider the grandmothers point of view about their interactions with their daughters/daughters [sic], with regards to feeding their grandchildren (p. 539).

It is with this gap in the literature in mind, that the current research thesis set out to explore the experiences and perceptions of NL grandmothers who bottle fed and whose daughters bottle fed their children as well.

Problem Statement

The purpose of this study was to examine grandmothers’ perceptions of the primary influences that impacted their choice of infant feeding method in Newfoundland and Labrador. A second purpose was to explore the role that grandmothers feel they played in their daughters’ choices about infant feeding.

Research Questions

Given previous research which emphasizes both personal and social influences on infant feeding decisions, the Theory of Planned Behavior (TPB) (Ajzen, 1985) was used as a framework for this study to answer the following research questions:

- Why did these grandmothers make the choice to bottle feed their children?
- According to grandmothers, what are the social influences that impact infant feeding choices?
- What personal beliefs about infant feeding do the grandmothers hold?
- What role do grandmothers feel they played in their daughters' choices about infant feeding and how do the grandmothers feel about this role?

Summary

Infant feeding is an important area of academic research. Grandmothers have the potential to play a key role in the infant feeding decision making process. This study contributes valuable knowledge towards understanding the complex decision making process surrounding infant feeding, from the viewpoint of maternal grandmothers who did not breastfeed. The hope is that by better understanding the attitudes and perceptions of grandmothers in regards to infant feeding, they can be mobilized to support their daughters in their decisions and to empower new mothers to make informed choices regarding infant feeding methods.

Chapter Two: Review of the Literature

This chapter will offer a review of the relevant literature as it pertains to grandmothers and infant feeding practices. It will begin by giving an overview of the history of infant feeding practices in NL and subsequently address the current infant feeding practices in the province. It will outline the benefits of breastfeeding, explain the theoretical framework used in this study, and discuss the internal and external predictors of breastfeeding. As well, it will identify the impact that grandmothers can have on infant feeding decisions and the literature as it pertains to the influence of the maternal versus paternal grandmother. Finally, existing research on the role of the grandmother in regards to infant feeding and intervention studies that have focused on grandmothers will be presented.

The History of Infant Feeding in Newfoundland and Labrador

As the oldest and most easterly part of North America, NL boasts numerous unique attributes. Whether it is the unique combination of Irish, Scottish, French, and British heritage or just the fact that it is still a fairly isolated island in the middle of the North Atlantic, things are often done a little differently here. The customs and traditions surrounding infant feeding practices in NL are no exception.

1900-1930

Life for babies and children in NL was hard during the early 1900s. The infant mortality rate in the province was the highest in the country at 141.8 per 1000 births in 1910 (Cooper, 2010). In 1909, a *Report of the Commission Appointed by the Government to Deal with and Report upon the Subject of Public Health* sounded the alarm about the state of child welfare in the province. The report found blame in several areas:

The scarcity of milk throughout the Colony and the prevailing ignorance among mothers of how to treat young children, especially as regards to feeding and fresh air, tend from the first to hinder the natural development of the power to resist disease. (Extracts, 1909, p.6)

Things began to change in the summer of 1918, when St. John's Mayor Gosling arranged for a New York City public health nurse to come to the province to run the province's first community nursing service. Nurse Rogers, as she became known, was appalled at the condition of women and children in the city. With regards to infant feeding, she found that the majority of babies were breastfed, although she noted that breastfeeding was done at irregular intervals and often improperly. She criticized breastfeeding mothers on two fronts: firstly, they did not breastfeed often enough or they breastfed too frequently and secondly, that they offered supplementary drinks and food far too often. Her true apprehension at the way babies were being fed though was evident in her statement, "The nursing bottle with the tube is responsible for much evil. Legislation should be enacted to forbid the importation and sale of the pernicious 'baby killer'" (Rogers, 1918). Rogers went about setting up Well-Baby clinics for new mothers around the St. John's region.

1930-1960

Mothers responded very well to the community nursing initiative founded by Nurse Rogers and the Child Welfare Association (CWA). Attendance at the Well-Baby clinics rose from 2,433 in 1926 to 3,232 in 1932. In addition to the clinics, the CWA distributed 60,720 tins of evaporated milk in 1938 and 413.5 gallons of cod liver oil in the same year (CWA Annual Reports, 1932 and 1938).

Despite the CWA's efforts to promote breastfeeding, the rate of breastfeeding continued to fall from 40% in 1945 to 27% five years later (CWA Annual Report, 1945). The CWA report from 1943 noted that more and more women were switching to "the sweetened milks, which caused digestive upsets to many". The 1947 *Report on Nutrition in Newfoundland* stated the same concern over the decline in breastfeeding.

Although breast feeding is definitely the ideal method of feeding an infant, the local doctors, in general, believe that if the milk should fail and artificial feeding becomes necessary, then it is better for the mother to have received instruction in this technique before leaving hospital rather than to flounder about with unhygienic methods. It is thought that this practice tends to reduce the duration of breast feeding..." (Cuthbertson, 1947)

The period from 1940 to 1960 was a period of great decline in breastfeeding rates in the province. A review of the CWA Annual Reports from those years shows that the rate of breastfeeding, at least among the babies and mothers visited by the CWA in the Avalon Peninsula region of the province, dropped significantly during this time. The 1943 report, for example, shows that CWA nurses found that 846 of the 1274 (66%) babies visited were being breastfed. The report noted that some new mothers "for various reasons (some genuine) have changed to bottle feeding" (CWA report, 1943). The following year, the CWA found that the breastfeeding rate had dropped further as only 694 of the 1296 (53%) babies visited were breastfed (CWA Report, 1944). By 1948, only 535 of the 1926 (28%) babies visited were breastfed for at least 3 months (CWA Report, 1948). By 1955, most mothers were bottle feeding their new babies, but they were however still "encouraged" to try breastfeeding (CWA Report, 1955). It is clear that by this time bottle feeding was the norm as the CWA found only 88

breastfed babies during their home visits (CWA Report, 1955). Six years later, in 1961, infant feeding seemed to have become a taboo subject. A mere 70 of the 2001 (3.4 %) babies visited that year were being breastfed and the report noted that, “The whole subject of infant feeding is perhaps the most difficult about which to give definite directions, since what suits one baby is altogether unsuitable for another.” (CWA Report, 1961)

The reasons for this rapid change in infant feeding habits are many. First, when NL joined Canada in 1949, it brought about vast improvements in the economic situation of Newfoundlanders (Eisener, 2002) and this might have played a role in the decisions that mothers made as many were now able to afford canned and fresh milk.

In his 2010 presentation on the topic, Dr. Rick Cooper outlined some other factors that caused the growing acceptance of artificial feeding methods during this time:

“[The] increased number of women working outside the home; Manufacture of feeding bottles and rubber nipples; Greater understanding of cleanliness and sterility; Increased medicalization of infant feeding and development of formula; Strong advertising campaigns of infant formula companies; Psychological factors; [and] Increased medicalization and hospitalization of child birth” (slide 47).

Also, because many physicians had recommended that women stop breastfeeding during the tuberculosis outbreak some women believed that breastfeeding was somehow related to tuberculosis infection. Finally, Severs, Williams and Davies (1964) found that “a relic of the depression days, breast feeding is still regarded by a portion of mothers as a sign of poverty” (p.18).

The quick change in infant feeding patterns in NL from predominantly breastfeeding to predominantly bottle feeding did not come without some repercussions for infants in the province. Because of the lack of vitamin C in evaporated milk, the most popular alternative to breastmilk, cases of scurvy had increased in the province by 1959 (Severs et al., 1964). A major source of the problem was the change in infant feeding method from breastfeeding and “fresh cow’s milk and occasionally goat’s milk” (p.217) to a situation where “practically all infant feeding depends upon the use of evaporated milk” (p. 217). According to Severs et al., “if mothers could be persuaded to feed their babies in the natural way the problem would be negated. But the odds against achieving this goal are considered by many to be too great” (p. 218). Instead, to combat the incidence of infantile scurvy, doctors such as Severs recommended that vitamin C be added to evaporated milk.

1960-Present

The late 1960s and 1970s was a time of revival of breastfeeding promotion in most of North America. In her thesis on the subject, Eisener (2002) suggests four causes of this revival:

“[...] the ‘back to nature’ movement of the 1970s; a “mother’s rebellion” represented by such organizations as La Leche League, the recognition that the introduction of commercial formulas to Third World countries had detrimental effects among those populations and continuing biomedical research that forced the acknowledgement that many features of human milk cannot be replicated.” (Eisener, p. 59)

The resurgence of breastfeeding in NL is evident in the work of Matthews (as cited in Cooper, 2010) that shows the rate climbing from much less than 10% in 1966 to 33.7% in 1984. From there the rate steadily climbed until it reached a plateau at just over 60% in the mid 1990s.

The increased interest in breastfeeding led the American Academy of Pediatrics, along with the Canadian Pediatric Society, to publish a joint statement about breastfeeding in the October 1978 edition of the journal *Pediatrics*. They stated that, “Full-term infants should be breast-fed, except if there are specific contraindications or when breast-feeding is unsuccessful” (Breast-Feeding, p. 598).

Along with endorsement from the medical community, peer help was also a factor in improving breastfeeding rates. The largest provider of this support came from La Leche League (LLL), a mother to mother support group that was started in the US in 1956 (La Leche League International, 2004). The first Canadian groups came to Quebec and Ontario in the 1960s (Nathoo & Ostry, 2009). Although some of their philosophies were considered outlandish at the time, the LLL promoted breastfeeding as less of a medical issue and more of a “womanly art” (Nathoo & Ostry, 2009, p. 114).

Breastfeeding promotion was further continued in the 1990s in Newfoundland with the establishment of federally funded Healthy Baby Clubs in 1994. The clubs were targeted at high risk women and provided nutritional supplements as well as peer support for such things as breastfeeding (Eisener, 2002). In a statement prepared for INFACT Canada in 1997, NL provincial breastfeeding consultant, Janet Murphy Goodridge, explained the purpose of the clubs, “The emphasis is not on overwhelming the women with breastfeeding information, but on helping them to identify and work through the many perceived barriers to breastfeeding in their communities” (Eisener, 2002).

The Breastfeeding Coalition of NL was established in 1991 to “protect, promote, and support breastfeeding”. Significant work has been accomplished through the Coalition within

the areas of breastfeeding promotion. The rate of breastfeeding initiation in the province increased dramatically from 33% in 1985 to 54% in 1998 (Newfoundland and Labrador Provincial Perinatal Program, 2008).

Today the rate of breastfeeding initiation in NL remains the lowest in the country at 68% (Newfoundland and Labrador Provincial Perinatal Program, 2013). Despite this, the Breastfeeding Coalition of NL, recently renamed the Baby Friendly Council of NL, and its partners remain focused on providing new mothers in the province with breastfeeding information and support. Over the last few years they have developed an interactive website complete with regularly updated blogs from local breastfeeding moms, released several promotional videos, and managed to secure thousands of dollars in funding from the provincial government. As well, local breastfeeding groups have organized support programs for breastfeeding moms and hosted family events to highlight World Breastfeeding Week each year. Through promotion and education there is a growing recognition in NL that breastfeeding is an attractive infant feeding option.

The Importance of Studying Infant Feeding

The choice of infant feeding method can impact the immediate and future health of an infant. The World Health Organisation (WHO) states that: “sub-optimal breastfeeding, especially non-exclusive breastfeeding in the first 6 months of life, results in 1.4 million deaths and 10% of the disease burden in children younger than 5 years” (WHO Report, 2009, p.3). It is thus vitally important that in making the choice between breastfeeding and bottle feeding, a mother has up to date information about the advantages and disadvantages of each feeding method. Research into both methods of infant feeding is important because it adds to this information and can help a new mother make an informed choice about feeding her baby.

Breastfeeding

Research on breastfeeding suggests that it offers certain advantages to mothers and babies. First, breastmilk is different than formula milk in that it is a fluid that changes with the baby's needs and as such, has the potential to give numerous health benefits to the baby. As Wahlqvist et al. (n.d.) report, research has found that the mother's milk made for pre-term babies is different from the milk made available for full term babies, as is the milk at the start of the feed different than the higher fat milk at the end of a feed. They state that the cells in breastmilk are most numerous in the first milk a mother makes, the colostrum, and lower in mature milk. Also, there are enzymes, growth factors, and hormones present which help to stimulate and regulate optimal growth and development in a breastfed child (Wahlqvist et al., n.d.). It is this unique combination of factors that contributes to the improved immunity and health outcomes that are found in breastfed children. The life preserving abilities of breastmilk have earned it the name "white blood" in some cultures (Wahlqvist et al., n.d., sec. 2.3.1).

Second, breastfeeding has been linked with the reduced incidence of various diseases and illnesses. Perhaps the most important illness that is prevented by breastfeeding is gastroenteritis or other diarrhoeal illnesses. One study found that there was 9.3 fold increase in the likelihood of having a prolonged diarrheal illness if the baby was not breastfed (Strand et al., 2012). The WHO notes that this protection against diarrhea also occurs in developed countries where sanitation and hygiene are not concerns (WHO, 2009). Breastfeeding provides immediate protection against other illnesses such as otitis media, meningitis, and urinary tract infection (WHO, 2009). As well, infants who are breastfed are less likely to suffer from childhood leukemia (WHO, 2009). In terms of long term benefits to the child, the WHO (2009) states that breastfeeding has been associated with a lower incidence of type 1 diabetes, asthma, celiac

disease, ulcerative colitis and Crohn's disease. In addition, breastfed babies are less likely to be overweight and to suffer from high blood pressure, altered blood cholesterol levels, and atherosclerosis as adults (WHO, 2009).

Third, there are several developmental benefits of breastfeeding as well. As the WHO (2009) states, breastfed babies differ in IQ level from formula fed babies.

Regarding intelligence, a meta-analysis of 20 studies showed scores of cognitive function on average 3.2 points higher among children who were breastfed compared with those who were formula fed. The difference was greater (by 5.18 points) among those children who were born with low birth weight. (p.5)

The longer a child is breastfed, the higher the increase in IQ for the child in later childhood and into adulthood (WHO, 2009). Breastfeeding might also influence behaviour later in childhood as suggested by a large cohort study in the UK. They found that longer duration of breastfeeding was associated with less behavioural problems in five year old children (Heikkila, Sacker, Kelly, Renfrew, & Quigley, 2011).

Fourth, research has shown that mothers who breastfeed also have certain health advantages over those who formula feed their babies. Just after childbirth, breastfeeding can help with uterine contraction, decrease postpartum hemorrhage, and speed up weight loss (WHO, 2009). In addition, exclusive breastfeeding is a reliable form of contraception for the first six months after childbirth. Also, a woman's risk of breast and ovarian cancer and osteoporosis can be reduced through breastfeeding (WHO, 2009).

Finally, the environmental and economic impact of breastfeeding is far smaller than that of bottle feeding. Breastfeeding requires no farm land, transportation, or packaging to be

delivered to the consumer (Radford, n.d.). On an economic level, researchers in the US and Scotland found that those babies who were not breastfed required many more visits to the doctor and hospital than those who were breastfed (Ball & Wright, 1999). Another study found that if exclusive breastfeeding rates in the United States were increased to 90% for six months then approximately \$13 billion would be saved in health care costs in that country (Bartick & Reinhold, 2010).

Bottle Feeding

Bottle feeding offers mothers and babies certain advantages as well. While it cannot claim the same wealth of research on health benefits that breastfeeding can, it offers other benefits that breastfeeding does not. For example, researchers in the previously mentioned “You’re Not Going at That!” study found that mothers in NL chose to formula feed because of several perceived disadvantages of breastfeeding (Bonia et al., 2013). They worried about a lack of support from their own mothers and partners, the inconvenience of being the only one who could feed the baby and they were concerned about the embarrassment of breastfeeding in public. It was concern over these perceived disadvantages of breastfeeding that resulted in most of the mothers deciding to bottle feed even before their baby was born. Bottle feeding allowed these mothers to maintain a sense of independence, flexibility, and modesty that they felt they would lose if they chose to breastfeed.

Participants in the “You’re Not Going at That” study also revealed other advantages of bottle feeding (Ludlow et al., 2012). Many felt that they could better manage their household chores and care of older children while bottle feeding. In addition, participants admitted that the relationship with their partner benefitted from their choice to bottle feed. For example, they were

better able to balance the division of labour in the household and were able to continue with their normal sexual relations. The findings from this study also showed that several women felt that bottle feeding resulted in nutrition that was equal to that of breastfeeding and that babies were more content as a result of being bottle fed. Finally, with regards to the financial benefits of breastfeeding, one woman in the local study felt that breastfeeding could actually be just as expensive as bottle feeding once you factored in the cost of the things you needed to buy in order to do it:

I can't see how it's [breastfeeding] cheaper because by the time you buy the [breast] pads, the [milk] pumps and the cream for when you get sore and then you have the bras. Then you had to buy the Vitamin D . . . Whereas I buy my formula and that was one thing. (p.297)

It is important to keep in mind that not all women who bottle feed their babies choose to do so initially. For some, the advantages of bottle feeding only become clear after they started breastfeeding. For example, a recent study published in the journal *Pediatrics* showed that 60% of new mothers did not breastfeed for as long as they set out to (Odom, Li, Scanlon, Perrine, Grummer-Strawn, 2013). The participants reported that they stopped breastfeeding earlier than desired due to concerns about: "lactation", "infant nutrition and weight", "the need to take medicine or illness", and "milk pumping" (p. 729). They also found that new mothers experienced difficulty with continuing to breastfeed once they returned to work or school. On the other hand, bottle feeding with formula allowed the women to continue with their work or school lives and relieved them of their worries about baby's weight gain.

Theoretical Framework

The TBP was used as a theoretical framework in this study to describe the factors that influence infant feeding behaviour. In the case of this study, the TPB can help to explain why grandmothers made the decision they did in terms of choosing to bottle feed their children.

The Theory of Planned Behavior

The Theory of Reasoned Action (TRA), the precursor to the TPB, was developed by Icek Ajzen and Martin Fishbein in 1980 to predict volitional behaviour and enable an understanding of the psychological determinants of behaviour (Ajzen, 1985). It is based on the premise that “human beings behave in a sensible manner; that they take account of available information and implicitly or explicitly consider the implications of their actions” (Ajzen, 1985, p.12). According to the TRA, a person’s actions are the immediate result of their intent to either perform or not perform a certain behaviour. Intentions are the result of two principle determinants: personal attitude and social influences. The former refers to the person’s attitude and personal beliefs about the behaviour, while the latter refers to the person’s judgement of what is expected of him in a social context. The social determinant is also known as the subjective norm.

The TPB builds on the TRA by adding another factor: perceived behavioural control. A person’s perceived behavioural control refers to their belief in the control they have over the performance of a certain behaviour. It is a direct result of

“[...] their perceptions about the probability that events will occur that will either enable or deter their ability to perform a behaviour [and] their perception of the effects that these

events will have on making the performance of the behaviour easy or difficult” (Alves, 2010, p.37).

The perceived control part of the TPB is related to Bandura’s theory of self-efficacy (Bandura, 1977). He reasoned that the more self-efficacy a person has, the more they will persevere at an activity. Bandura (1977) wrote:

Efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences. The stronger the perceived self-efficacy, the more active the efforts. Those who persist in subjectively threatening activities that are in fact relatively safe will gain corrective experiences that reinforce their sense of efficacy, thereby eventually eliminating their defensive behavior. Those who cease their coping efforts prematurely will retain their self debilitating expectations and fears for a long time (p. 194).

Therefore, the TPB states that behavior will be the result of three main factors: personal attitudes and beliefs about the behaviour, social or normative beliefs, and perceived behavioural control. A fourth factor is the actual behavioral control which takes into account the fact that the intention to perform behaviour is not always sufficient to ensure that it will be performed. In some cases the actual behavioural control will help to determine if the behaviour is successfully

performed. The TPB, as illustrated by its creator Icek Ajzen, is shown in figure 1.

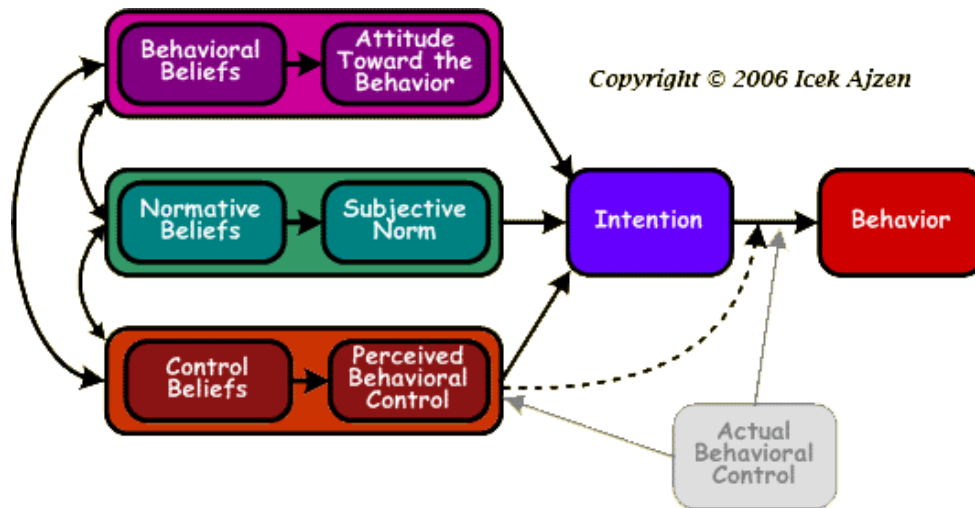


Figure 1. The Theory of Planned Behaviour as illustrated by its creator Icek Ajzen (Ajzen, 2006)

Previous research involving the theory. The TPB is useful for many fields of study. It has been extensively used by those in the epidemiology and public health fields in studies aimed at identifying or changing health related behaviours. Additionally, Romano and Netland (2008) suggest it “is applicable to domains of interest of counseling psychologists and other applied psychologists, offers a framework for systemic change among groups with low motivation for change, and provides a process to individualize prevention activities for specific population groups” (p. 800).

More specifically, the TPB has been shown to be effective at predicting infant feeding behaviour. A 2003 study by Dodgson, Henly, Duckett and Tarrant found that perceived behavioural control was a strong predictor of breastfeeding duration. Similarly, Avery, Duckett, Dodgson, Savik and Henly (1998) found that the theory was a good predictor of women who were “at risk for early weaning” (p.167). Finally, McMillan et al. (2008) found that the TPB was a good predictor of both breastfeeding intention and behaviour.

The TPB provides an appropriate framework for this study on infant feeding as it takes into account, among other things, the subjective norms or the social pressure either to perform or not to perform an activity. Pressure on new mothers might come from any number of areas: health professionals, friends, relatives, society, the media, a partner, and in the case of this study, a grandmother. In this study, the relationship between the mother and daughter is the focus. A new mother might feel that breastfeeding is not something that her own mother would want her to do and thus experience great difficulty in doing it. On the other hand, a woman might believe that she must breastfeed in order to be a “good mother” (Ludlow et al., 2012) and exert great determination and perseverance in doing so. Thus, as Winterburn, Jiwa, and Thompson (2003) wrote, it is possible that by including grandmothers in the discussion of infant feeding they might start to view breastfeeding as a positive activity and as a result their daughters will be “motivated to meet the expectation of relevant others [the grandmother in this case], then a positive subjective norm is expected” (p.7).

The TPB provides a framework for understanding the factors that may impact a woman’s infant feeding decision and therefore her intent which, in turn, may predict her behavior. By gaining a better understanding of the factors that impacted grandmothers in their decisions regarding infant feeding, intervention planners might better be able to reshape the efforts of grandmothers towards supporting their daughters in making healthier infant feeding choices.

Predictors of Breastfeeding

There has been a significant amount of research on the factors that predict whether a woman will breastfeed her baby or not. The prediction of such behaviour is based on various internal and external factors. As the theoretical framework for this study states, the performance

of a certain behaviour is the result of three things: the personal beliefs and attitudes of an individual, social or normative expectations, and perceptions about how much control one has over the behaviour. Research into predictors of breastfeeding has shown that internal factors such as age, marital status, and commitment/expectations and external factors such as woman's education level, employment situation, and support are important in the prediction of infant feeding behaviour. Viewed through the lens of the TPB, these predictors would be considered background factors that would help to shape a person's personal beliefs about the behavior, the societal expectations they experienced, and perceived behavioural control they felt.

Internal Factors

Age. Depending on her age, a woman may be more or less likely to breastfeed her infant. A Quebec study of 4365 new mothers found that the rate of any breastfeeding at six months climbs steadily with a mother's age bracket. For example, 19.2% of those less than 20 years of age, 27.5% of those between 20 and 25, 48.9% of those 25-35, and 52.5% of those over 35 years of age were breastfeeding their babies at six months. Similarly, 21.7% of those over 35 were exclusively breastfeeding at four months postpartum while only 4.7% of those in the less than 20 years age group were doing the same (Recueil statistique sur l'allaitement maternel au Québec, 2006).

These findings were replicated in a Canadian study completed in 2012. Dennis, Gagnon, Van Hulst and Dougherty found that migrant women in the 35 years or greater age range were more likely to exclusively breastfeed their babies and migrant women in the less than 20 years age range were much less likely to do the same.

Marital status. Some studies have shown that a woman's marital status is related to her decision to breastfeed or not. The Health Canada (2010) study showed that 88.5% of those

women who were married/common-law initiated breastfeeding while only 80.6% of those women who reported being widowed/separated/divorced/single did so. Similarly, the Quebec study found that 90% of those who were married initiated breastfeeding compared with 81.1% of those women who were single mothers (Recueil statistique sur l'allaitement maternel au Québec, 2006).

Similarly, a 2012 study found that, for women who conceived children with male partners, not living with the baby's father was a predictor of not breastfeeding for Canadian women (Dennis et al.). The same condition was not a predictor of breastfeeding for migrant women.

Expectations. A woman's expectations about what breastfeeding will be like are likely to impact her decisions in regards to infant feeding. An Australian retrospective study found that for half the women involved, the gap between what they expected breastfeeding to be like and what it was actually like impacted their breastfeeding duration (Hegney, Fallon, & O'Brien, 2008). As well, Mozingo, Davis, Droppleman, and Merideth (2000) found that the difference between what was expected and what breastfeeding was actually like is a factor that may lead to premature weaning.

When expectations are different than the reality of breastfeeding, it can take a lot of hard work and commitment to continue. Hegney et al. (2008) found that perseverance and determination were the most important factors in the continuation of breastfeeding. Many women in that study had personal goals that they wished to reach and worked hard to reach them. For them, duration of breastfeeding was related to their level of commitment.

External Factors

Socioeconomic factors. Various external factors, including education, employment, and income, have been shown to impact a woman's infant feeding choices. These factors are further discussed below.

Education. Education seems to play an important role in whether a woman decides to breastfeed her baby or not. The Quebec survey (2005) found that 91% of mothers with university level education were breastfeeding their newborn in the hospital as opposed to just 71% of mothers who had less than a high school diploma. Similarly, 59.8% of the more educated women were still doing some breastfeeding at six months, while only 27.3% of the less educated women were still nursing. As well, Mahoney and James (2000) found that new mothers who had less than 12 years of schooling were more unlikely to not plan to breastfeed than those who had more education.

In the 2012 study by Dennis et al., the researchers found that of Canadian women who had more than 12 years of education, 71.8% were exclusively breastfeeding at 16 weeks while only 62.2 % of the group that had less education were doing the same.

Employment. A woman's work situation might also impact her decision regarding infant feeding. A 2006 study analysed data collected from both women who worked full time and those who were not in the workforce. It was found that although breastfeeding initiation rates were almost equal, at six months postpartum a significantly higher number of women in the non working group (35%) were still breastfeeding as compared to the working group (26.1%) (Ryan, Zhou, & Arensberg, 2006).

Income. The income level also appears to be a factor in breastfeeding decision making. One study found that almost 60% of new mothers in an annual income bracket of \$80,000 and up were exclusively breastfeeding in hospital in comparison to only 42.4% of women making less than \$20,000 annually (Recueil statistique sur l'allaitement maternel au Québec, 2006). Dennis et al. (2012) found that in the group of Canadian women who reported incomes of \$30,000 or greater, 72.7% were exclusively breastfeeding after 16 weeks and 27.3 % were not. This was in comparison to the group of Canadian women who reported incomes of less than \$30,000 where the majority of women were not breastfeeding exclusively at 16 weeks (46.4% vs. 53.6%).

Support. The support that a breastfeeding mother receives, either from health professionals or family and friends, is an important factor in deciding whether she will initiate and/or continue breastfeeding.

Health professionals. A large qualitative study of adolescent mothers who kept a diary about their postpartum experiences found that support was incredibly important. Some described a situation where they considered weaning, but ended up continuing on with breastfeeding because of the support they received from either a midwife or another health professional (Lavender et al., 2005). Also, a study of 1163 women in California showed that those who had been supported by health professionals were more likely to still be breastfeeding at 12 weeks postpartum (Taveras et al., 2003). On the other hand, some health professionals have hindered breastfeeding efforts through the distribution of free formula in hospital. A study from 2008 found that women who receive free formula samples in hospital exclusively breastfeed their children for less time than those who do not receive free samples (Rosenberg, Eastham, Kasehagen, & Sandoval, 2008).

Family and friends. In their 1999 study of low income women in the United States, Bentley et al. showed that those who had female relatives who either had breastfed or had a positive opinion about breastfeeding were more likely to intend to initiate breastfeeding themselves. Also, almost half of the women who planned on breastfeeding felt that their partner wanted them to do so and 40% of those who intended to formula feed felt that their partner wanted them to do so (Bentley et al., 1999). Daly et al. (1998) found that the father wanting to be involved in feeding the baby was a common reason given for mothers to stop breastfeeding. Meyerink and Marquis (2002) reported that the more close female relatives with breastfeeding experience a woman has, the more likely she is to breastfeed for at least one month. As well, the previously discussed qualitative study by Lavender et al. (2005) found that, “Although professional support was perceived as important, women suggested that physical and emotional support from family and peers was pivotal to their success” (pp. 1051-1052).

This is echoed in the results from a Swedish study which found that women’s evaluation of their overall breastfeeding support network was related to how long they exclusively breastfed (Ekstrom et al., 2003). Alder et al. (2004) found that lack of encouragement to follow guidelines for starting solid food from friends led women to prematurely stop exclusive breastfeeding. Arora, McJunkin, Wehrer, and Kuhn (2000) found that one of the primary reasons that the mothers in their study chose to bottle feed was their perception of what the father wanted them to do. Duong et al. (2004) found that although most women thought that they could decide independently about infant feeding, the reality was that friends, partners, and grandmothers had “substantial” (p.798) influence.

Matthews (1994) found similar results in her study of mothers in NL. She found that both the partner and maternal grandmother played a role in influencing the infant feeding choice of

the new mother. Of those surveyed, 67.6 % said that they were influenced by their partner and 28.6 % said they were influenced by their mother. As well, 47.2% of women said that they had discussed infant feeding with their own mother (Matthews, 1994). Given the obvious importance of the grandmother in infant feeding decisions, a review of the literature as it pertains to grandmothers and infant feeding follows.

The Role of Grandmothers in Regards To Infant Feeding

The important role that a grandmother plays in supporting a new mother and influencing her infant feeding decisions has been illustrated in the research. Research has shown that whether or not a woman was breastfed herself as an infant will determine her likelihood of attempting breastfeeding. Also, it has been found that grandmothers can hinder breastfeeding by offering the early introduction of solids. Finally, both the opinion of the grandmother and the advice she gives can have an impact on the infant feeding decisions of her daughter.

Breastfed Mothers

First, if a new mother knows that she herself was breastfed as an infant, she is more likely to breastfeed her baby (Bentley et al., 1999). In fact, one study found that women who knew how long they had been breastfed as infants had a longer duration of both exclusive and total breastfeeding (Ekstrom et al., 2003). Meyerink and Marquis (2002) reasoned that:

If the mother were breastfed, she would more likely receive support in favor of breastfeeding from her own mother. Also, the knowledge that she was breastfed could bring a degree of familiarity with breastfeeding that mothers who were not breastfed as infants do not possess (p. 43).

Meyerink and Marquis (2002) also found that only two factors predicted breastfeeding past one month postpartum: if the mother had breastfed previous children, and if the mother herself had been breastfed as an infant. The latter was linked with “an increase in breastfeeding duration of more than 6 weeks” (p. 42).

The influence of knowing that she was breastfed can even encourage a woman who does not want to breastfeed to try it. As one mother explained, “Well, it really wasn’t me that wanted to breastfeed my child... it was my mother at the time...she breastfed all of us, and she said that it’s only fair that I breastfeed my baby because she breastfed me.” (Bentley, 1999, p. 31) Thus, the infant feeding decision made by the grandmother is a factor in the infant feeding choices made by a new mother.

Early Introduction of Solids

It has been found that grandmothers often promote and insist on the early introduction of foods other than breastmilk or formula (Alder et al., 2004; Duong et al., 2004; Tarrant, Younger, Sheridan-Pereira, White and Kearney, 2010). In the case of breastfeeding, especially in the early weeks when a mother’s supply is being established, this can have very negative consequences. In a study of 401 new mothers in Dublin, Ireland, it was found that starting solids at less than 12 weeks old was much more common for mothers who reported that the maternal grandmother was the main source of infant feeding advice (Tarrant et al., 2010). Similarly, Alder et al. (2004, p. 530) found that “women who were strongly influenced by their own mothers’ opinion were more likely to introduce solids early”. Duong et al. (2004) reported that the feeding preferences of the maternal grandmother and woman’s partner were factors in the decision to exclusively breastfeed.

Daly et al. (1998) found that new mothers did not take advice from health care professionals as easily as they did from their own mothers. As the authors stated, “There appeared to be a general reluctance by the mothers to change long-established methods of weaning handed down by their own mothers. Advice offered by grandmothers was readily adopted and had the advantage of being readily available.” (p. 387)

Grandmothers often recommended the use of supplemental foods. Susin, Giugliani, and Kummer (2005) found that the mere suggestion of using such foods by the maternal grandmother meant that the baby was 2.2 times more likely to not be exclusively breastfed at the end of the first month. The persuasive power of a grandmother is also evident through this study’s other finding that daily contact with the maternal grandmother meant that new moms had a higher chance of discontinuing breastfeeding in the baby’s first six months (Susin et al., 2005). Reid et al. (2010) found that one of their participants had tried to convince her daughter that she should start her baby on solids at six weeks old. She said:

I says don’t go by what your friends have said, you can’t start solids until four months, you can’t do this until the- I said bugger that. I said that’s old wive’s [sic]... I said what do you think? She wants more, give her more, give her solids”. (p. 78)

It is clear that grandmothers are “key decision-makers in deciding when to introduce food other than breastmilk to infants” (Bezner Kerr et al., 2008, p. 1099). The problem is that the information provided by grandmothers is “frequently flawed” (Daly et al., 1998, p. 387). It’s important to keep in mind that grandmothers do not try to maliciously ruin a nursing mother’s best laid plans; just the opposite, they merely try to help their daughter at a challenging time in

her life. After all, many of the grandmothers of today had their children in the 60s and 70s when breastfeeding was not encouraged. As Susin et al. (2005) explains,

The breastfeeding rates were very low, the use of waters and teas was recommended by pediatricians, and the belief that breast milk was “weak milk” or “little milk” held sway. Therefore, in many situations, the grandmothers are just transmitting to their daughters or daughters-in-law their own experience with breastfeeding, believing it to be the most appropriate. (p. 5)

Some grandmothers might even go as far as to offer supplemental liquids to their grandchild. Susin et al. (2005) found that 17.3% of maternal grandmothers had offered water or tea to the baby as supplementation to breastmilk given by the mother.

Exclusive breastfeeding is uncommon in many parts of the world because the early introduction of other foods is so readily accepted. Vietnamese researchers found that 26 out of the 30 grandmothers studied had never heard of the concept of exclusive breastfeeding (Almroth, Arts, Quang, Hoa, & Williams, 2008). The grandmothers in this study expressed anxiety at the thought of exclusive breastfeeding: “[They] could not imagine how they would take care of [the grandchildren], because: ‘What do I do if the mother is out and the baby cries? I have to give formula’ or ‘When my grandchild cries I have to give sugar water’” (p. 1068). The researchers did find, however, that once the participants understood the value of exclusive breastfeeding they were more than willing to help support it. One grandmother even offered to go to work so her daughter could stay home and care for the baby instead.

Almroth, Mohale and Latham (2000) found that grandmothers in Lesotho were unwillingly to accept any responsibility for new mothers giving water to their breastfed babies.

They were adamant that it was not a practice that they used with their own children and was instead a new approach recommended by nurses in the health clinics. As one grandmother who disagreed with the practice of water supplementation bitterly explained, “The mothers tell us what to do because they are now clinic children.” (Almroth et al., p. 1411).

Interestingly, Hilde (2006) found that some grandmothers in Nepal were surprised by the thought of anything other than breastmilk being needed by infants. A participant from the study is quoted as saying, “Even if the milk doesn’t come I keep the baby’s mouth on the breast. Later it comes. No other thing is needed”. (p. 27)

Along with the early introduction of solids, grandmothers have also been found to advise the early and frequent use of pacifiers for breastfed babies. Australian researchers study found that of the 79% of mothers who introduced a pacifier, 28.7% were advised to do so by the baby’s grandmother. The researchers found that if pacifiers were given before four weeks and used on most days, the breastfeeding duration was likely to be shorter (Mauch, Scott, Magarey, & Daniels, 2012).

Opinion of the Grandmother

The research shows that the opinion of the grandmother has a big influence on the infant feeding choices of their daughter. Hilde (2006) found that all the Nepalese grandmothers in her study held breastfeeding in high regard and viewed breastmilk as “a natural, sufficient, necessary, and irreplaceable resource that was to be provided, supported, and encouraged as soon as possible” (p. 27). This favourable view is reflected in the high breastfeeding rates in some parts of Nepal which are as high as 99% at one week and 83% at 4 months.

However, grandmothers in other parts of the world don't always hold breastfeeding in such high regard and as a result they transmit their unfavourable opinion of breastfeeding to their daughters. A mother who took part in a focus group held in the United States described how her mother told her "breastfeeding was gross" (Grassley & Eschiti, 2008, p. 332). Another participant in that study noted that she felt that grandmothers who view breastfeeding as insignificant or too hard can "tear you down in a skinny moment" (p. 332). The mothers in that study universally agreed that more support or advocacy on the part of the grandmother in favour of breastfeeding would have made their breastfeeding experiences more positive.

Results from a study of African American women indicated that those who reported that their mothers thought they should breastfeed were more likely to intend to breastfeed their infants. The grandmothers influenced their daughters both through their "opinion and experience" (Bentley et al., 1999, p. 31). A few women in this study even reported that "their mothers' negative breastfeeding experience discouraged them from trying to breastfeed" (p. 32). When grandmothers view breastfeeding as something that should be encouraged, new mothers are more likely to plan to breastfeed (Mahoney & James, 2000). When grandmothers offer their support, mothers are more likely to follow the practices recommended by health professionals (Sharma & Kanani, 2006).

Even though they may not recognize that their mother's infant feeding experience has any impact on their own experience (Ekstrom et al., 2003) or that their mother had any influence on their decisions (Susin et al., 2005) mothers can still spend a lot of time and effort defending their decision to breastfeed to their own mother. This is time and effort that would be better suited to infant care or other more positive uses. As Grassley and Eschiti (2008) found, "[New mothers] wanted grandmothers who understood and trusted the process of breastfeeding and

would offer them loving encouragement when they experienced difficulties rather than pressuring them to supplement their breastfeeding with formula”(p. 333).

Similarly, nearly 91% of the new mothers in a Pennsylvania study reported that they felt that support from the baby’s grandmother or other family member would have encouraged them to breastfeed (Arora et al., 2000). It is worth noting that the participants in this study were comprised of a group of women with a fairly low exclusive breastfeeding initiation rate (44.3%) and that only 13% of them were breastfeeding by the time the child was six months old.

Sometimes the grandmother’s opinion can cause friction between them and the child’s mother. Paternal grandmothers in a study in Malawi were reported to sometimes be overbearing in their thoughts and ideas about how an infant should be fed. However, because of their position of authority, the younger women reported that they sometimes did as they were told even though the hospital offered different advice and they were not in agreement with the grandmother (Bezner Kerr et al., 2007). In contrast, while Reid et al. (2010) found that grandmothers sometimes struggle with their role and the fact that sometimes the new mother just won’t heed their advice. One participant is quoted as saying, “But I couldn’t sway them to what I thought [...] within about two days of being down there, I was probably in tears... they wanted to do it their way.” (p. 78).

The Grandmother as a Source of Information about Infant Feeding

Research has shown that new mothers often use their own mother as a source of information about infant feeding (Berry, Jones, & Iverson, 2011). This information is usually sought out by the new mother and frequently accepted (de Medeiros Gross et al., 2011). A grandmother’s opinion on maternal health matters is valued and their advice is often requested

by mothers, partners, and other family members (Aubel, Touré, & Diagne, 2004). As one study participant pointed out, “If I am in doubt, the first thing I do is asking her [sic] whether it’s good or not, things like that” (de Medeiros Gross et al., 2011, p.537). Grandmothers are frequently expected to fulfill the role of advice giver and to be “generous, patient, tolerant, and committed to the well-being of family members, especially of young children” (Aubel et al., 2004, p .949). Finally, Schmied et al. (2012) found that in their review of 11 studies involving new mothers, “Most support came from the woman’s own mother and or mother-in-law” (p.10).

Grandmothers may use this power to either promote or discourage breastfeeding in a family. Sharma and Kanani (2006) found that in families where the grandmother was present, the mothers were more likely to feed their child on demand perhaps because of the help with childcare offered by the grandmother. However, in the same families, the baby was less likely to have received colostrum than in a family where the grandmother was absent. At the same time, in the families where a grandmother was present, they found that the more help the grandmother gave a new mother, the more caring the new mother was towards her kids.

Grandmothers are frequently the ones who offer tips on giving colostrum, stimulating a mother’s milk supply and getting breastfeeding started. Colostrum may or may not be offered depending on the grandmother’s beliefs. Beliefs such as “colostrum was stale milk” or “was unhealthy for the child” may mean that a child will not receive colostrum and the start of breastfeeding will be delayed (Sharma & Kanani, 2006, p. 296). Other grandmothers give advice on traditional practices such as washing the breast in hot water and squeezing out “khil” (believed to be different than colostrum), before the baby is put to the breast (Hilde, 2006, p. 28). Pakistani grandmothers were not convinced by public health campaigns to get women to feed

their babies colostrum, believing that it was “old and has been stored in the breast for a long time (Ingram, Johnson, & Hamid, 2003, p. 322).

Some grandmothers are traditionally put in charge of ensuring the new mother’s diet is healthy so that she will produce good quality breastmilk. The grandmothers in one study, for example, indicated that a good postpartum diet would include, among other things, such foods as “green vegetables, spring (young) chicken, meat, ghee (clarified butter)” and would not include “chickpeas or prawns” as they may cause the baby to have an upset stomach (Ingram et al., 2003, p. 321). Another study showed that grandmothers often encourage their daughters to eat foods that they consider beneficial such as “grits” and “popcorn” (de Medeiros Gross et al., 2011, p. 536).

Regardless of the type of information being provided, it is clear that the grandmother plays an important role in the feeding of a young child. For example, de Medeiros Gross et al. (2011) wrote that, “The grandmother’s opinion is valued because she is the heir of a cumulative process of knowledge transmission, that comes from her interaction with others and her own experience acquired over the years [...] (p. 539). In addition, Chisuwan, Prasopkittikun, Sangperm, Payakkaraung (2013) found that advice from grandmothers was the most common reason for new mothers to stop exclusive breastfeeding.

In addition to their place of power as an experienced child nurturer, the grandmother’s advice also has “the advantage of being readily available” in comparison with a health professional who may only visit the new mother occasionally (Daly et al., 1998). This might be particularly true in non-western environments where the mother and baby duo might be isolated

for days or weeks with access only given to the grandmother so that she can teach the new mother about infant care (Aubel, 2012).

Several studies have found that grandmothers or other family members are the main source of information for new mothers. For example, Arora et al. (2000) found that almost 34% of mothers studied stated that their family is their primary source of information compared with nearly 11% who stated that their information came from a doctor and nurse. Barton (2001) also found that mothers relied mostly on their mothers or mothers-in-law for advice, even more heavily than the child's pediatrician. In their review of studies on the experience of parents who bottle fed their children, Lakshman et al. (2009) found that "when women do not get information from healthcare professionals, they are reliant on friends and family, and incorrect practices are likely to be handed down from one generation to the next" (p. 599). This turned out to be particularly true in the case of bottle feeding where mistakes were found to be common in preparation and handling of artificial milks (Daly et al., 1998; Lakshman et al., 2009).

Grandmothers as advice givers can sometimes pass on knowledge and advice that is not conducive to breastfeeding. Mothers may be advised by the grandmother to offer formula, put cereal in a bottle, give supplemental solid food, or give a pacifier (Barton, 2001; Grassley & Eschiti, 2008; Haider, Kabir, Hamadani, & Habte, 1997; Mauch et al., 2012). As well, Tarrant et al. (2010) reported that mothers who used their own mother as their main source of advice about infant feeding were much more likely to discontinue breastfeeding at less than 12 weeks postpartum. They refer to the grandmothers' input as "negative inter-generational influence of the maternal grandmother on weaning practices" (p. 1553).

Maternal vs. Paternal Grandmothers

While both maternal and paternal grandmothers can impact a woman's infant feeding choices, the research is clear that, in many societies, the maternal grandmother is the one who has the most powerful influence in many societies. For example, Susin et al. (2005) found that when the maternal grandmother suggested the use of a supplemental liquid, the "risk that the child might not be exclusively breastfed at the end of the first month increased by 4.51 times" (p. 4). The same suggestion by the paternal grandmother only increased the risk of non exclusive breastfeeding by 1.86 times. Similarly, new mothers who had non-daily contact with their own mother were more likely to keep breastfeeding for six months than those who saw their mother more regularly. Susin et al. (2005) found that non-daily contact with a paternal grandmother did not have the same effect. Arora et al. (2000) found that women who did not breastfeed stated that more support from their own mothers would have encouraged them to try breastfeeding. Also, de Medeiros Gross et al. (2011) found that, "[...] the mother's mother appears to have greater influence with regard to infants' feeding than the father's mother, which was confirmed by the present study."(p. 538) However, paternal grandmothers often play a larger role than maternal grandmothers in maternal and infant care in many places in the world such as Africa, Asia, Latin America, and the Pacific (Aubel, 2012; Bezner Kerr et al., 2007; Hilde, 2006).

Differences in the relationships between maternal grandmothers and their daughters and paternal grandmothers and their daughters-in-law might also help to explain why a maternal grandmother is more of a factor in infant feeding choice. As the researchers in an Australian study explained,

The mother-daughter bond can be strong and even when the relationship with their daughter has previously been shaky, having a baby tends to bring mother and daughter closer; conversely new mothers appear to experience more tension with their mother-in-laws. (Reid et al., 2010)

Interventions to Increase Grandmother Support for Breastfeeding

Very few intervention studies have been done to evaluate the effectiveness of including grandmothers in the discussion of infant feeding. Despite the fact that many researchers have suggested that grandmothers should be included in the discussion of infant feeding with their daughters (Arlotti, Cottrell, Lee, & Curtin, 1998; Bezner Kerr et al., 2007; de Medeiros Gross et al., 2011; Ekstrom et al., 2003; Grassley & Eschiti, 2008; Hilde, 2006; Mahoney & James, 2000; Nankunda, Tylleskar, Ndeezi, Semiyaga, & Tumwine, 2010; Sharma & Kanani, 2006; Susin et al., 2005). Meyerink and Marquis (2002) suggested that “a surrogate maternal figure may be more effective than a peer” (p. 44) in promoting and supporting breastfeeding among young mothers. Arlotti et al. (1998) wrote that “mothers of breastfeeding women play a critical role and should be more involved from the prenatal period through the lactation period” (p. 176).

Winterburn et al. (2004) conducted an intervention in which a grandmother or another close female confidante was chosen to be a support person by the new mother. Home visits by midwives were then completed with both the mother and grandmother (or other support person) present. They found that, in comparison to a group of women who had not chosen a support person, the women in the intervention group had a longer duration of breastfeeding. The researchers felt that this might have been related to the fact that the women in the study group

had someone who knew the importance of breastfeeding and thus felt more pressure to keep it up based on wanting to meet the other's expectations.

A second grandmother intervention was completed within a Canadian First Nations reserve in Quebec (Banks, 2003). In this project a local woman representing a grandmother-type figure was hired to help increase breastfeeding rates. This goal was accomplished through the set up of a mother's support group, raising community awareness about the importance of breastfeeding, and finally, through a talking circle which "aimed at providing information on the benefits of breastfeeding, [it] was held with a group of elders, and discussion arose over how a grandparent could be helpful to their daughter when a new baby came home" (p. 346). As a result of these interventions, the breastfeeding initiation rate in the community rose an astounding 43% over six years.

Ingram et al. (2003) completed a two part study with South Asian grandmothers in Great Britain. Firstly, they conducted focus groups and interviews with grandmothers from various South Asian backgrounds. Secondly, a midwife conducted home visits which included the grandmother and new mother. They found that 87% of the women in the intervention started to breastfeed and 75% were still breastfeeding at 8 weeks postpartum. These numbers represent a slight increase over the usual breastfeeding statistics for the area. The researchers felt that intervention was helpful in "influencing behaviour, particularly in giving colostrum, water or artificial milk and the use of dummies" (p. 326).

Another intervention with grandmothers was completed by Aubel et al. (2004). This week-long intervention included the use of stories and songs to help educate grandmothers about the importance of exclusive breastfeeding. In the end, the grandmothers felt empowered and

proud of their ability to now advise new mothers in both the traditional way and the modern way. As one grandmother put it, “We shouldn’t be stuck in our old ways. We should be open to the new ideas and see how to integrate some of them into our practice” (p. 954). The post test reported that 93% of grandmothers said that they would encourage exclusive breastfeeding, a huge increase over the 29% that said they would before the intervention.

More recently, Grassley, Spencer, and Law (2012) completed an intervention in which they included grandmothers in the discussion of breastfeeding with their pregnant daughters or daughters-in-law. The “Grandmothers Tea” intervention used in this study was developed by the Illinois State Breastfeeding Task Force and included activities for grandmothers and daughters to do together such as “The Grandmothers Apron” activity where grandmothers are educated about the benefits of breastfeeding. Other activities included talking about myths and barriers to breastfeeding in “Grandmothers Cell Phone” activity and finally, in the “Grandmothers Necklace” activity, the creation of “a beaded necklace to remind them of ways they could offer support through loving encouragement, updating their breastfeeding knowledge, and being helpful” (p. 82). The researchers found that, in comparison to a control group, the women who took part in the intervention had more knowledge about breastfeeding and its benefits. They also found that regardless of the intervention, the attitude of the grandmother towards breastfeeding was based on whether they had breastfed themselves or not.

Not all interventions with grandmothers have been considered successful. A 2011 study (de Oliveira, Giugliani, Santo, & Nunes) included grandmothers and their adolescent daughters in breastfeeding counselling sessions after the birth of the baby. The study sample was divided into four groups, two who received the intervention and two that did not. One of the intervention groups included the grandmother and one did not. Although the intervention was successful in

boosting exclusive breastfeeding rates, the researchers found no difference related to the presence of the grandmother or not. They felt that this might be partly explained by the fact that other studies that showed the impact of a grandmother included women of all ages and not just adolescent mothers as this study did.

A Gap in the Literature

Several studies have mentioned the need for interventions with grandmothers in regards to mobilizing their support for breastfeeding. As Grassley et al. (2012) recently wrote, “exploration of grandmothers’ breastfeeding attitudes and how their attitudes influence grandmothers’ support is needed in order to plan strategies that address their beliefs about breastfeeding, particularly grandmothers who did not breastfeed” (p. 87-88). Similarly, Aubel et al. (2004) suggested that “future community health/nutrition interventions be designed, in other cultural contexts, in which grandmothers play a leading role” (p. 957). Ingram et al. (2003) recommended that an intervention such as the one they did where grandmothers would be present for in-home visits about breastfeeding be “integrated into the routine antenatal care plan” (p. 326). Banks (2003) noted that while planning such interventions it is important to take note of the “distinctive learning styles” and “uniqueness of each aggregate” in a community and to concentrate on building on a community’s strengths as opposed to focusing on its weaknesses. Winterburn et al. (2003) suggested that further research is needed into the use of a close female support person for new mothers in regards to creating a breastfeeding culture. Finally, de Medeiros Gross et al., (2011), admitted that their study is “not an end in itself” but instead should serve to open up the doors to more research into the role of grandmothers in regards to infant feeding.

In addition to the further study of a grandmother's role in infant feeding, some studies suggest that more focus needs to be put on women who did not choose to breastfeed. For example, Grassley and Eschiti (2011) found that during their focus groups with grandmothers, the grandmothers who had formula fed their own children acted differently than the ones who had breastfed. They wrote, "they [the women who had not breastfed] appeared to be reticent to share their stories in a group setting in which most members breastfed. They may be more comfortable sharing their stories individually or within a group of grandmothers who did not breastfeed"(p. 139).

Lakshman et al. (2009) also support the idea of further research into how bottle feeding mothers make decisions, recognizing that the vast majority of research in this area has concentrated on breastfeeding and that formula feeding mothers often feel guilty and unadvised.

Interventions that involve the grandmother and other family members may help to mobilize support for breastfeeding and may also have the side effect of initiating a family discussion about expectations in regards to infant feeding (Grassley & Eschiti, 2011). It is this discussion that Reid, Schmied, Sheehan, and Fenwick (2013) found to be most important in their study of family groups and the impact that they can have on infant feeding and early parenting choices. They found that:

the results of this project may advocate the need for midwives and child and family health nurses to more actively engage with a woman's support network with education and other strategies to assist in creating an environment for new mothers that is conducive to the continuation of breastfeeding and thriving as a mother. (p.8)

This present study adds to the literature in several ways. First, it adds to the very small amount of literature on infant feeding in NL. Second, it contributes the perspective of the formula feeding grandmother to the research on grandmothers and infant feeding. While most studies have focused on women who have breastfed, this study contributes to the small body of knowledge on women who did not breastfeed in an attempt to understand the values, perceptions and beliefs that are behind the decision to formula feed. Third, it is a qualitative study in a field where the majority of work looking at grandmothers and their influence on infant feeding is quantitative in nature.

Summary

The TPB was used as a framework to review the literature as it pertains to grandmothers and infant feeding. It is clear that the norm in terms of infant feeding has changed significantly over the last century in NL. This has resulted in a generation of grandmothers for whom breastfeeding was not their choice of infant feeding method. The literature demonstrates that grandmothers are an important factor in the decision making process about infant feeding and that intervening to facilitate their support for breastfeeding by engaging them in prenatal education may result in changes in their behaviour and may increase their support of breastfeeding.

Chapter Three: Methodology

A qualitative study using focus groups and interviews was conducted to address the following research questions:

- Why did these grandmothers make the choice to bottle feed their children?
- According to grandmothers, what are the social influences that impact infant feeding choices?
- What personal beliefs about infant feeding do the grandmothers hold?
- What role do grandmothers feel they played in their daughters' choices about infant feeding and how do the grandmothers feel about this role?

This chapter provides an overview of the study design. It includes a general explanation of qualitative research as well as details specific to this study including sample selection, recruitment process, participants, data collection, data analysis, validity/credibility, reliability/transferability, researcher bias/assumptions and ethical considerations.

Design of the Study

Explanation of Qualitative Research

Qualitative studies are a key component of understanding a problem or relationship. As Merriam (2009) explains, “research focused on discovery, insight, and understanding from the perspectives of those being studied offers the greatest promise of making a difference in people’s lives” (p. 1) It is for this reason that the researchers of the BRWG felt it was important to explore the attitudes and perceptions of grandmothers using a qualitative methodology.

A concise definition of qualitative research is difficult to find. As such, it is perhaps best to describe it based on the four most important characteristics of this type of research: a focus on

meaning and understanding, the researcher as the primary instrument, an inductive process, and rich description (Merriam, 2009).

A focus on meaning and understanding. The central purpose of any qualitative study is to, “achieve an understanding of how people make sense out of their lives, delineate the process of meaning making, and describe how people interpret what they experience” (Merriam, 2009, p. 14). This study focused on understanding infant feeding from the perspectives of the grandmothers that were interviewed. The researcher attempted to develop an understanding of how the grandmothers felt about infant feeding by talking about how they had fed their babies when they were new mothers and how they helped their daughters to feed their grandchildren. It was through the open-ended questions asked during the focus groups and interviews that the researcher discovered the ways in which the grandmothers justified their own decisions and the decisions of their daughters and learned more about the thought process they used when formulating their opinions about the different infant feeding options.

The researcher as the primary instrument. It is both an advantage and a disadvantage that a central component of qualitative research is that “the researcher is the primary instrument for data collection and analysis” (Merriam, 2009, p. 15). It is advantageous in the way that a human being can be flexible and curious in the research process. Relying on a human as the main source of data collection, however, can also be disadvantageous as people have various “shortcomings and biases that might have an impact on the study” (Merriam, 2009, p. 15).

In the case of this study, the researcher was interested in the promotion of breastfeeding due to its numerous health benefits. Through the course of this research study, she developed a better understanding of the complexities of choosing an infant feeding method and developed an

understanding of the variables that might make someone choose not to breastfeed, despite the health benefits.

An inductive process. A key difference between quantitative and qualitative research is that while the former relies heavily on deduction to test a hypothesis, the latter requires that “researchers gather data to build concepts, hypotheses, or theories” (Merriam, 2009, p. 15). Often qualitative researchers have no idea what they will find when they start interviewing subjects; they may, however, use a theoretical framework to inform the literature review and help to interpret the data.

The researcher in this study expected to find that grandmothers were involved in the infant feeding decision-making process. There were, however, no expectations as to how the grandmothers felt about the different methods of infant feeding or how they related to their daughters in regards to infant feeding choices for the grandchildren. Through use of the constant comparative method of data analysis, three main themes emerged from the data that described the experiences of grandmothers with regards to infant feeding. It provided an understanding of how personal attitudes and beliefs, societal expectations, and perceived behavioural control could be used to influence the infant feeding behaviour of the grandmothers and their daughters. As previously discussed, the TPB (Ajzen, 1985) was used as the theoretical framework for this study.

Rich description. Perhaps the most obvious component of qualitative research is that direct quotes from participants are used as evidence of the findings of the study. The quotes are usually “richly descriptive” (Merriam, 2009, p. 16) and the researcher might provide additional “descriptions of the context, the participants involved, and the activities of interest” (Merriam,

2009, p. 16). All of this detail is used to give the reader a very good understanding of the themes or relationships established.

The three themes that emerged from the data of this study are outlined in Chapter Four. Each is broken down into several sub-themes and illustrated through the use of quotes that emerged from the focus groups and interviews. In addition, a description of demographic variables of the participants is provided.

Sample Selection

For this study, purposeful sampling was used to allow for the selection of specific research participants who could contribute detailed information that would enhance our understanding of the infant feeding experiences of grandmothers. As Merriam (2009) describes, “Purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned.”(p. 77).

Participants were selected based on a list of five specific inclusion criteria. First, the participants had to be maternal grandmothers; second, it was required that the women had bottle fed their babies; third, the grandmothers were required to have had a grandchild born in the last five years; fourth, only grandmothers who had a grandchild who had been or was being bottle fed were invited to participate. Finally, women had to be available for a focus group or a one-on-one interview at a local Family Resource Center (FRC).

Recruitment Process

The recruitment drive was focused on the FRCs throughout the province. An information kit including a poster and letter with contact information were distributed to potential

participants through contacts at the FRCs (see Appendix A). The contact people at each FRC worked hard to contact local women who they felt might be interested. Potential participants were notified about the date and time of the focus groups. Every effort was made to ensure that the group was held at a time and place that was convenient to the local women. Transportation to and from the group location was provided, if required. Although child care was offered to any grandmother who needed to bring along children, no one availed of the service.

The aim was to hold several focus groups of between 6-8 women each, some in rural areas and at least one in an urban area. Merriam (2009) maintains that,

Although there are no hard and fast rules about how many to include in a group, most writers suggest somewhere between six and ten participants, preferably people who are strangers to each other (p. 94).

The end result of the recruitment drive was the formation of four focus groups and two individual face-to-face interviews. As they are “the most time-consuming and costly approach” (Cresswell, 2008, p.226), interviews were used only in the case where there was interest in the study from only one person and so holding a focus group was not an option. The focus groups and interviews were held across the island portion of the province. One was in a large urban area and the others were in rural areas. The number of women in each ranged from 1 for the interviews to 7 in the largest of the focus groups. Due to the close knit nature of the communities that the women came from, the participants in each group knew each other.

Participants

The recruitment drive resulted in 22 Caucasian women who were willing to participate in this study. This group of women had two things in common: they had each at some point bottle

fed their own baby and they each had at least one grandchild who had been mostly bottle fed. Information was collected on the women's ages, education levels, locations of residence, income ranges, and the types of infant feeding method they chose for their children. The women ranged in age from 43 years to 81 years, with the mean age being 59.9 years. Table 1 presents other characteristics of the sample.

Table 1

Participant Characteristic

Characteristic	n	%
Education level completed*		
Less than secondary	8	38.1
Secondary	6	28.6
College	6	28.6
Some university	1	4.8
Location of residence		
Rural	5	22.7
Small population center	12	54.5
Large population center	5	22.7
Annual Income*		
Under 10,000	6	28.6
10,000-30,000	11	52.4
30,000 and up	4	19

*These figures are calculated for a sample size of 21 as one response was left blank.

Age. This range of ages of the participants meant that there were some younger grandmothers who still had older children of their own at home as well as older grandmothers who had a number of great-grandchildren. The advantage of having a range of ages was that a variety of views and experiences with infant feeding would be included; some of the older women had been pushed to formula feed while some of the younger ones remembered feeling more pressured to breastfeed.

Education/work. Overall, most of the women had completed secondary education or had some college education. It is interesting to note the only woman who reported having some university education was also the oldest woman of the group. Qualitatively, it was learned that many of the women had worked before having their children and some had continued after childbirth, while others had waited until their kids were older before returning to work.

Location of residence. The figures relating to location of residence as shown in Table 1 refer to the Statistics Canada definitions of communities. A rural community is one where there is a reported population of less than 1000 people. Alternatively, a small population center is one where there is between 1000 and 29,999 people and a large population center is one where the population is 100,000 or greater. The vast majority of the sample came from small population centers which although not considered rural by Statistics Canada definitions, still do not have access to many of the amenities of a larger center and might still experience some degree of isolation.

Income. The statistics on income level demonstrated that most of the participants were from lower income homes. Only three participants reported that they had an annual income of over \$40,000 and five reported annual incomes of less than \$10,000.

Infant feeding method chosen. The type of infant feeding method chosen by the women is shown in Figure 2. Although they had all decided to bottle feed their child at some point, there was some variation in the substance they chose to use. *Carnation* milk came out on top as the most popular infant food (68.1%), with formula being second (59%). Sugar water (13.6%), breastmilk (9.1%), and plain water (4.5%) were used occasionally. A few women had started out breastfeeding but for various reasons discontinued it and one woman had mixed breastfeeding

and formula feeding for the first six months. Qualitatively, the women reported that the vast majority of them had started solids within the first couple of months of their baby's life, usually starting with cereal and then continuing on to include other foods.

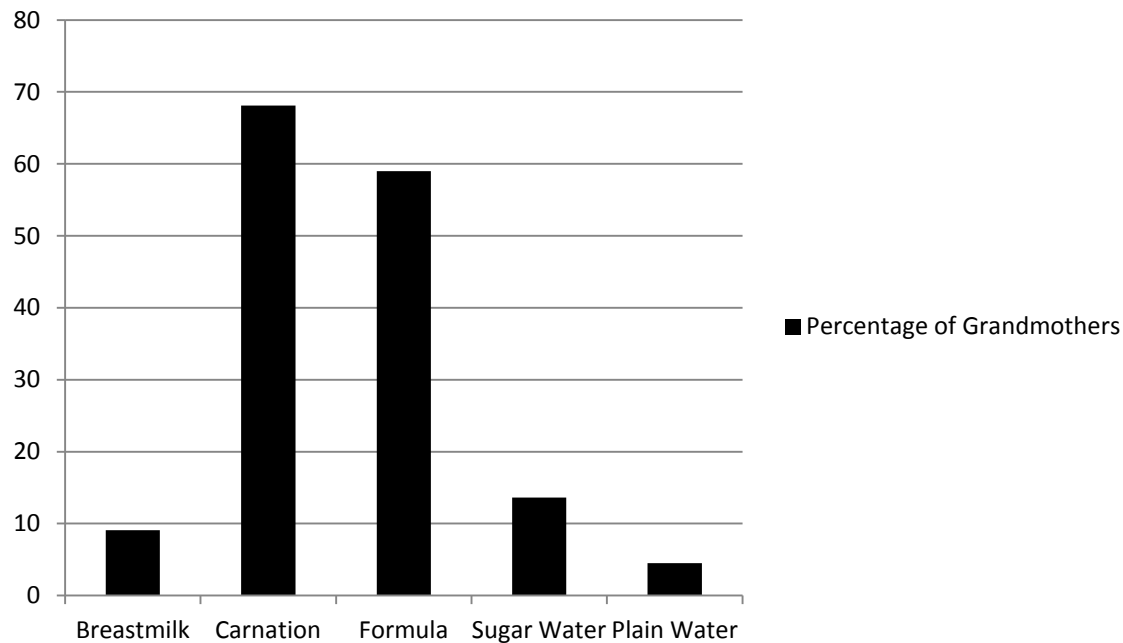


Figure 2. Types of food used by grandmothers in the current study to feed their infants.

Data Collection

The data for this study was collected through four focus groups and two one-on-one interviews. Focus groups were the primary vehicle for data collection in this study. As Cresswell explains, “focus groups are advantageous when the interaction among the interviewees will likely yield the best information and when interviewees are similar and cooperative with each other” (2008, p. 226). They provide an interesting way to gather data as the researcher will not only learn from the answers provided, but also from the social interaction and conversation that occurs between the participants. As Merriam (2009) describes, the data “is socially constructed within the interaction of the group” (p. 94).

Although the interviews and focus groups were mainly semi-structured, they did have a structured component as individual demographic data was collected from each participant by way of a questionnaire (see Appendix D) that was handed out at the start of each session. Once completed, the researcher led the participants through various open-ended questions as outlined in the interview guide (see Appendix E). The semi-structured part of the session was guided by these questions, but there was no predetermined sequence or expectation of what might be said. The focus was on hearing their thoughts on how they made their decisions during their infant feeding years, how they helped their daughter to make her own decisions, what they considered to be the community norms in the past and the present, and their thoughts and experiences related to infant feeding. Finally, the women were invited to add anything else they thought was beneficial to the discussion.

Each focus group and interview lasted approximately 60 minutes and was audio-taped with the consent of the participants. The focus groups were facilitated by a qualitative investigator experienced in focus group research. In three of the four focus groups, notes on body language and important comments were taken by a second investigator. At the end of each session each participant received a \$20 gift card for a major department or grocery store as a thank you gift for their participation. The participants were not aware of this before the data collection took place. Transcripts of the focus groups and interviews were prepared by professional transcriptionists.

Data Analysis

This researcher read through the transcripts to identify the individual voices of the participants and to link them with their demographic data and notes from each session. The data set included a set of six audio recordings and their typed transcripts from the focus groups and

interviews, twenty-two demographic survey forms that had been completed by each participant, and hand written notes from this graduate student and another researcher who helped conduct some of the focus groups and interviews. Two copies of each transcript were made: one as a master copy and one as a working copy which would be used to highlight key words and make notes in the margins. The master copies were kept in one binder and the working copies were each bound separately. Another file was made to include the demographic forms and hand written notes. Based on discussion with the supervisory committee, this researcher decided to analyze the data by hand, without the use of a qualitative data software program.

As with most qualitative studies, the process of data analysis for this project started before the completion of the data collection. The analysis of the first transcript occurred as soon as it was prepared, many months before the date of the final focus group. Merriam (2009), in her book on the subject, suggests that qualitative studies are done best when the data analysis occurs along with the data collection. She writes,

The much preferred way to analyze data in a qualitative study is to do it simultaneously with data collection. [...] Without ongoing analysis, the data can be unfocused, repetitious, and overwhelming in the sheer volume of material that needs to be processed. Data that have been analyzed while being collected are both parsimonious and illuminating. (p. 171)

Data analysis for this study began by simultaneously listening to each audio recording and reading through each transcript as it was prepared in order to identify each participant's voice and match them with the correct demographic information. This also gave this researcher

the opportunity to link the notes taken during each session with the commentary given by each participant.

It was at this point in the process of data analysis that the transcripts were analyzed using the constant comparative method of qualitative analysis. This method was developed in 1967 by Glaser and Strauss as a way of “evolving grounded theory” (Merriam, 2009, p. 199). Since then the strategy has been adopted by many researchers, even those not concerned with building substantive theories. As Merriam (2009) explains,

Basically the constant comparative method involves comparing one segment of data with another to determine similarities and differences. Data are grouped together on a similar dimension. The dimension is tentatively given a name; it then becomes a category. The overall object of this analysis is to identify patterns in the data (p. 30-31).

The process basically involves finding key words in the data, grouping these key words into categories, and then breaking the categories down into broader themes. Cresswell (2008) suggests that the constant comparison that a researcher does between key words, categories, and themes, “eliminates redundancy and develops evidence for categories” (p. 443).

In the case of this study, this researcher first coded the data into different key word categories. Any words that stood out as occurring often or signifying an essential part of the script were coded. As other transcripts were completed and subsequently coded, the key words from each were compared and new ones were added if necessary. When all transcripts had undergone the first round of initial coding, similar key words were grouped under broader categories. For example, all statements that were coded under the key word “breastfeeding in public” were grouped under the broader heading “feelings about breastfeeding”. The quotes in

each group were then analyzed and transcripts reread at which point the details of each category were further broken down. In the example given above of the category “feelings about breastfeeding” the researcher realized that just about every quote in the category conveyed the message that grandmothers felt that breastfeeding in public was wrong and that modesty should prevail. This researcher then determined that the name best suited to represent that group of quotes was “modesty”. The theme of “modesty” could then be further broken down into the various ways that grandmothers felt modesty was important.

Using this process, the themes “Modesty”, “Ambivalence”, and “Powerlessness” emerged from the data. The researcher was then able to formulate an understanding of the experiences of and attitudes towards infant feeding of grandmothers in NL.

Validity/ Credibility of the Study

With any type of research, it is important that the reader be able to trust that the results of the study are accurate. As Merriam (2009) states, “though qualitative researchers can never capture an objective ‘truth’ or ‘reality’” (p. 215), it is still an important feature of a qualitative study to include some measures to ensure the reader of the credibility of the results. Because qualitative research deals with people and their perceptions of events, it is more difficult in this type of research to achieve validity than in quantitative research. The very fact that the researcher is the primary instrument for data collection and data analysis in qualitative research means that it has to be viewed through a different critical lens than does quantitative research. Cresswell, (2008) suggests that:

Qualitative researchers do not typically use the word bias in research; they will say that all research is interpretive and that the researcher should be self-reflective about his or

her role in the research, how he or she is interpreting the findings, and his or her personal or political history that shapes his or her interpretation. Thus, accuracy or credibility of the findings is of utmost importance (p. 266).

It is with this view in mind that this study includes certain measures to ensure the reader of a measure of credibility or accuracy in the results. These measures include: triangulation of the data, adequate engagement or saturation of data, reflexivity, and peer examination or review.

Triangulation of the data. Triangulation is a commonly used practice in qualitative studies. It is basically a process of “corroborating evidence” (Cresswell, 2008., p. 266) from several different sources. These sources could be different people who are interviewed or different types of data that have been collected. Cresswell (2008) suggests that triangulation is a natural part of the data analysis process for researchers using the constant comparative method of analysis. He writes:

[...] during the constant comparative procedure of open coding, the researcher triangulates data between the information and the emerging categories. The same process of checking data against categories occurs in the axial coding phase. The researcher poses questions that relate the categories, and then returns to the data and looks for evidence, incidents, or events [...] (p. 450)

Using the constant comparative method of analysis in this study allowed this researcher to triangulate between different parts of the data, thereby ensuring the internal validity or credibility of the findings.

Saturation of the data. Although it is difficult in a qualitative study to reach a point where a researcher can say that “enough” data has been collected, it is nevertheless possible to

reach a point where “saturation” occurs. This is the point in the data collection process whereby a researcher would start to notice that no new information is provided and similar key points come up in each focus group or interview. Merriam (2009) suggests that ensuring adequate engagement of the data makes sense when a researcher is, “trying to get as close as possible to participants’ understanding of a phenomenon” (p. 219). In the case of this study, the researcher who conducted the focus groups felt that a “saturation” point was reached after the third focus group and two interviews had been completed. The fourth and final focus group provided no new important key points or emerging themes.

Reflexivity. This is a process whereby the researcher makes clear to the reader the unique, “perspective, biases, and assumptions” (Merriam, 2009, p. 219) that the researcher brought to the study. As the primary instrument of data collection, it is vitally important for the researcher to be honest and up front about his or her own standpoint. The purpose of this is not so that the reader can be critical of a researcher for having a specific point of view, but instead for the reader to have a good idea of where the researcher is coming from and how that might have influenced the results of the study. In the case of this study, the primary researcher came from a pro-breastfeeding stance. Her position is further described in the section on researcher biases and assumptions. An additional source of bias is that this study arose from findings of the BRWG’s 2010 study on women who did not breastfeed.

Peer examination or review. This is a process, as described by Merriam (2009), whereby a researcher would ask, “a colleague to scan some of the raw data and assess whether the findings are plausible based on the data” (p. 220). As this study is part of a dissertation for a Masters degree, the thesis committee met regularly to review the data and assess the findings.

The committee members included an expert in qualitative research who assessed the steps taken in the process of data analysis and advised on the plausibility of the findings.

Reliability/Transferability of the Study

The extent to which findings from a qualitative study on one situation or population are transferable to other situations or populations is questionable. Merriam (2009), suggests thinking about reliability and transferability from a different perspective than quantitative researchers do. She writes:

Probably the most common understanding of generalizability in qualitative research is to think in terms of the reader or user of the study. Reader or user generalizability involves leaving the extent to which a study's findings apply to other situations up to the people in those situations. The person who reads the study decides whether the findings can apply to his or her particular situation" (p. 226).

It is with this in mind, that this study provides the reader with "rich, thick descriptions" (Merriam, 2009, p. 227) to further enhance their ability to decide whether the findings are transferable or not. This includes descriptions of the study location and demographic information on the study participants. It also includes evidence of the reported themes through the use of direct quotations from the participants.

In another bid to increase transferability and reliability, this study also makes use of "maximum variation". This is a process of, "purposefully seeking variation or diversity in sample selection to allow for a greater range of application of the findings by consumers of the research" (Merriam, 2009, p. 229). The idea is that the more diversity that is included in a study increases the likelihood that it will be applicable to other situations or populations. The

researcher in this study, for example, travelled to six different parts of the province to obtain the data. The locations of the focus groups and interviews included a large urban center, several larger rural communities and some smaller, more isolated communities. The variety of participants is also a strength of this study. For example, some of the grandmothers had tried breastfeeding, while others were completely foreign to the concept; some had several grandchildren, while others had only one. This variety in both the participants and the locations of this study enhance the possibility of reliability and transferability of these results.

Researcher Bias and Assumptions

A crucial component of any qualitative study is the expression of any biases or assumptions of the researcher(s). This type of research is unique in that the researcher is the primary instrument of data collection and analysis. This means, as Merriam (2009) suggests, that, “data have been filtered through his or her particular theoretical position and bias” (p. 233).

It is with this in mind that the primary researcher in this study wished to make note of her personal perspective on the phenomenon being studied. She is a graduate student with two young children, both of whom were breastfed. She has been active in breastfeeding promotion in her community, both as a weekly blogger for the Baby Friendly Council’s website and as committee member of the local La Leche League chapter and other breastfeeding committees. She comes from a family where breastfeeding is the norm as her own mother breastfed her and her two siblings and fully supported this researcher in her own breastfeeding adventures.

At the beginning of the project, this researcher assumed that grandmothers would have very little accurate information or knowledge about breastfeeding. She also assumed that there would be wide regional variety in the types of responses being offered. In an effort to minimize

bias throughout the data collection process, this researcher did not deviate from the interview guide questions and did not offer any personal thoughts on the subject matter.

Overall this researcher approached this study from a pro-breastfeeding point of view. Ultimately, she would like to see the results of this study used in an intervention to increase the support that grandmothers have for breastfeeding and to enable them to help their daughters make informed decisions about how to feed their babies.

Ethical Considerations

The Health Research Ethics Authority (HREA) provided ethics approval for this study in March 2011 (see Appendix E). During the recruitment for the study, participants were given the opportunity to consent to participation in the research by signing a consent form (see Appendix B). Participants were assured that their information would be kept confidential and that they would not be identified in the results of this study. A \$20 gift card was given to the participants as a thank you gift, but they were not made aware of the gift card before agreeing to participate in the research. Pseudonyms are used throughout the results chapter in order to protect the identity of the participants.

Summary

This was a qualitative study that focused on the experiences and perceptions of grandmothers towards infant feeding. In all, 22 participants were selected to participate and data was collected through a series of interviews and focus groups. The data was analyzed using the constant comparative method of data analysis.

Chapter Four: Results

Introduction

This study was designed to explore grandmothers' perceptions of the primary influences that impacted their choice of infant feeding method in NL. A total of 22 women participated in this study. The interviews and focus groups took place between November 2011 and July 2012. The participants were asked to share their thoughts and experiences with regards to infant feeding. The research questions were:

- Why did these grandmothers make the choice to bottle feed their children?
- According to grandmothers, what are the social influences that impact infant feeding choices?
- What personal beliefs about infant feeding do the grandmothers hold?
- What role do grandmothers feel they played in their daughters' choices about infant feeding and how do the grandmothers feel about this role?

The transcripts from each focus group and interview were transcribed and analyzed using the constant comparative method. Data analysis resulted in the researcher finding three themes that reflected the experiences and perceptions of grandmothers. This chapter provides an overview of the three themes that emerged from the work: Powerlessness, Modesty, and Ambivalence.

Themes

Powerlessness

It became apparent that the women in this study felt a great sense of powerlessness when it came to their infant feeding decisions. This feeling of lack of control was related not only to infant feeding, but to other areas of their sexual and reproductive lives as well. It seemed to come from a number of places: lack of birth control options, lack of knowledge and support, lack of financial resources, illness, the influence of health professionals, and family pressure. It meant that overall the women didn't feel they could make an informed choice about how they fed their babies and in some cases it meant that they didn't have control over the use of their own bodies- whether it had to do with pregnancy and childbirth or with the pain they experienced in what was done to them during the postpartum period in order to dry up their milk supply. Interestingly, the women seemed to feel that their daughters did have a choice in how they fed their babies and were not as powerless as they themselves felt.

Lack of birth control options. Lack of birth control options seemed to play some role in undermining some of the women's feelings of control over their own private lives. It was clear that some grandmothers felt that religious institutions governed the areas of their lives related to child bearing. For example, women in one group overwhelmingly agreed that birth control was not available to them and suggested that had it been, they might not have had so many children or had them so frequently over a short period of time. They described how the only way they would have access to birth control was to go see their priest and have him decide if it was right for them or not. And even then the only option was to use the rhythm method which according to several participants did not always work. Other options like the birth control pill were discouraged by the Catholic Church. In conversation after one focus group, a 77 year

old woman named Louisa reported that, “In those days the only thing you could do was to keep your knees together and sometimes that didn’t even work because they could be forced apart”. Other women commented that, “There was no protection then... back then... years ago” and that “There was no pill in my day. It came out on my last one.” It became clear that many of the women felt powerless to control the number of births that they had and the timing of them.

The lack of birth control options seemed to extend to another area and reason that the women felt powerless: they were always too busy being pregnant and looking after kids to think about much else. In many cases this meant they didn’t always consider breastfeeding because it seemed unmanageable in the context of their busy lives. As Louisa, who fed her eight children *Carnation* milk, described,

“I had eight in ten years. So I didn’t – I couldn’t stop to breast feed them. Never had time. I was pregnant all the time, you know. I had two years between the first two and two years between the last two, so I only used to have twelve months – eleven months between one of them. [...] I didn’t have any choice either because I didn’t have – I was always pregnant, so I had to feed them out of the can more or less, right.”

Similarly, Jeanette, aged 53, remembered that, “Back in them days they believed women were bare foot and pregnant in the kitchen.”

Ironically, only a few of the women knew that breastfeeding could offer some form of birth control protection. Victoria, a 65 year old, who had fed her own children formula and sugar water when they were babies, explained that she remembered something about breastfeeding being used as birth control:

I remember years ago hearing women say, like, you know, a lot older than me, hey, like, I was only a child to them, that they keep their babies breastfeeding so they wouldn't get pregnant. [...] [A friend's mother] said as long as she had her baby on the breast she wouldn't get pregnant. Yeah, but she said as soon as she take them from the breast from the baby [sic] she'd get pregnant.

Her assertion in this particular focus group, that breastfeeding might have offered birth control protection, was quickly dismissed by a chorus of, "No, no dear that's a myth" from the other participants. In another group, Paula, a 57 year old woman who fed her two children *Carnation* milk, said, "I think too if you had been breastfeeding, you probably wouldn't be having babies every year too. I think it had something to do with a little bit of [birth control]." Her assertion was neither approved nor denied by the others.

Lack of knowledge and support. Some participants expressed that when they were having their children they were young, inexperienced, and lacked knowledge. As Paula explained, "We knew what we knew at that time. That was it. [...] We winged it a lot." Similarly, Madonna, a 59 grandmother whose only child was diagnosed as having colic as a baby, explained that she has regret over not having had more knowledge at the time:

So I can only assume that's the way it was or maybe it wasn't really, I didn't look into it enough. Sometimes I feel really guilty about that. So, it still does bother me.[...] that she was, that she had so much problems, right? Um. But anyway, that's the way it turned out. And she, she was 9 lb 7 oz when she was born too, but ah, she tells me too, "Mom, I'm overweight because I got fed *Carnation!*" I said, "Sorry Baby. That's all I knew."

Winnifred, a 43 year old whose teenage daughter recently had a baby, explained that she feels for the young parents of today and recognizes how little she knew back when she was a new mother. She worries about the effect of pressuring those who have little knowledge to adopt a certain type of infant feeding method:

When you're young... sometimes a lot of these parents out here now they are between ages 16 and 24 right, so their knowledge is not as, like I was 25 when I had [my firstborn] and my knowledge wasn't... It was there, but, like I mean I was smart enough to know that I wanted to breastfeed, but I was getting pressure so how much do you think a teenager is getting?

It became obvious that many women recognized the fact that they didn't go and seek out information and that led to a lack of knowledge on their part regarding infant feeding. Janet, aged 51, described how she felt about the lack of information she received about infant feeding, "You know, I didn't look for it, if it wasn't offered, I certainly didn't go looking for it." In the same focus group, Josephine, aged 48, agreed, "No, I didn't either. It wasn't offered to me so I didn't go looking."

Other women expressed concern that when they were young mothers they had very little support offered to them. When asked who helped her back in the days when her four kids were small, Jennifer, a 45 year old single mother of four and grandmother of two from a small population center, replied, "Just me, my darling, haha, nobody else helped me." Similarly, Madonna recalled not being able to access the support of her doctor or her parents:

If you had a bad back, or you went once a month just to see what your blood pressure was or whatever, or you became toxic like I did. I mean, I had different problems, but not support, just problems. Nothing to help with. And my mom and my dad... they, they

couldn't help me with stuff like that. There was no way. Mom could say, 'yes, feed her', or 'give her this', or 'mash her potatoes and give her that'... that's, like you know what I mean? Give her something, right. But that was... and they loved him. That was it, they just loved them and they did the best they could but...

For some women this feeling of being alone started early on with the experience of child birth and their delivery experience. Susan, a 50 year old grandmother, bitterly described how her feeling of being alone stemmed right from the case room:

Like you say, it all gets back to the information. Cause like you said, you had your kids and I had my kids. You know, you went to the hospital, you were dropped off. [...] You were dropped off. There was nobody there holding your hand.

In the same focus group, Madonna vividly described her horror in realizing that she was ultimately completely alone in the childbirth experience. Her delivery did not go smoothly and she ended up needing an emergency caesarean which her husband was not welcome to attend. She says, "I remember being terrified. I was, I was like, 'Oh my god. How come I'm going through all this and now I gotta go'... you know? But, ah, she was five days old before I got to hold her."

This theme of feeling alone and isolated even from their partner resonated with other women too. For example, Karen, aged 65, described how it was ultimately up to the woman to deliver the baby and bring it home, all alone, without assistance:

And another thing, in our day there was no such thing as a husband going into the delivery room. They stayed home with the babies that you had before and you went on and come back with a new baby. That was it, you know.

Upon hearing this, Karen's friend and fellow focus group participant, a 70 year old named

Georgina, sarcastically chimed in, “Look what the stork brought in!” to which all the other participants sadly nodded their heads.

Finally, there was an obvious lack of support felt by the couple of women who had attempted breastfeeding. Madonna explained how she ended up feeling very alone after voicing her decision to try breastfeeding. She could not access the support of health professionals, family, or even friends:

I know what you're saying cause I can still remember when I said that I wanted to breast feed and uh, I remember though a couple of the girls... cause there was a couple of girls, my friends, that were pregnant that the time, and they said, “Well, where would ya go?. Like ya can't go nowhere, you know. Like, you can't... what do ya do? Like you can't just go and have.” I said, “No, I'm not saying that, but I would like that feeling. I would really like to have that”. And I think I kinda felt... but nobody, like you said, no doctors suggested to me, or... well, I mean, we didn't have, like where you could go to a... all those classes. What do they call them?

Lack of Financial Resources. The effect that money had on their choices in term of infant feeding was apparent in some of the women's stories. The backdrop was a widely held idea that breastfeeding can be equated with poverty. As Paula, 44, explained:

I did hear one comment this morning from a lady. We were talking about we were coming to this, and she's not that old, and she said breastfeeding was always associated with poverty, and that's probably why- a lot of people thought that way that you couldn't afford to buy milk and everything.

Sherry, 53, agreed, “I mean, that only makes sense what you said too, you know, breastfeeding associated with poverty because they’re thinking you can’t afford a can of milk, so you got no other choice but breastfeed.” In another group, Sarah, aged 81, echoed the same sentiment, but from a different perspective: “There was nine of us and we were all breastfed. I guess we couldn’t afford to buy milk.”

Several of the participants talked about resorting to *Carnation* milk as a direct result of being unable to afford formula for their children. Sherry explained her situation:

I bottle fed mine because my mom bottle fed us, and we all grew up on *Carnation* Milk. I have three children. My two older ones were on *Carnation* Milk, but my youngest one, I have 11 years between them, so she had formula because – well, when I had my other two, you were on just a limited budget and we couldn’t afford the formula, so we always had the *Carnation* Milk, but then like I said, my youngest one, I could afford the formula then, so I went with that.

After one of the participants expressed regret about feeding her daughter *Carnation* milk, Sherry justified her own choice to feed her babies *Carnation* milk by saying that:

Now when you look at it, but you had no other choice. Like, with me, I had no other choice [...] Like the formula was too expensive for me. I was on a certain budget and that was it, I couldn’t afford it.

Illness and other problems. It became clear that many participants felt powerless in situations where things did not go as planned due to illness or other problems. They resorted to the advice of others without concern for their own wants and needs. This was especially obvious in the case where someone might have wanted to breastfeed, but the nursing did not work out for

various reasons. It was as if the women felt powerless to control the outcome. At times there was an obvious sense of loss or failure evident in their voices. Winnifred explained her predicament:

I tried breastfeeding, but they would not latch on. Neither one of mine would. And after a week in hospital, like I was in about five days with [my firstborn]... And three or four with [my second baby] and both of them would not go for breastfeeding. On the last of it I gave up and went to formula. Couldn't have them starving.

For others, the inability to produce sufficient milk was viewed as an unavoidable outcome.

Elizabeth, aged 79 had actually breastfed her first two children, but when it came to her third she described him as, "a real glutton" and said, "I didn't have enough milk so I had to put him on the bottle". Jeanette had a similar experience. Although she truly wanted to breastfeed and had her mother's support, she found that, "I couldn't breastfeed. I didn't produce any milk".

When it came to illness or hunger on the baby's part, some women also expressed a sense of powerlessness and a notion of having to resort to a less desired option, whether it was formula or *Carnation* milk. Karen, who bottle fed all five of her kids, said,

My second baby was fed on formula through medical reasons. She had to have the formula, but *Carnation* Milk at that time was the known thing, the normal thing. [...] I never even thought of breastfeeding. It wasn't even an issue.

Jennifer explained that in her situation, she was also told that her child required formula, "The oldest he had a condition of reflux. So he had to go on formula." There seemed to be no other option in either of these cases and the women felt powerless to do anything else.

Jeanette described a situation where she was told to start her baby on cereal before she felt he was ready:

Right so I had to put him on cereal when he was a month and a half old and that was the doctor told me back then to do it because he was drinking like eight ounces of milk every two hours and he was always crying and when we put him on the cereal he was fine.

Other women described a similar situation where the baby was seen to be unsatisfied with what he was getting and cereal seemed to be the only option; there was nothing else the women could do. As Karen explained, “I used formula and my son was a couple of days old and I put him on Pablum. I mean, I didn’t know the difference back then. He was 10 pounds, starved to death.” For many women it was clear that they felt that there was no remedy for many of these situations other than to go with the advice given, even if it was different than what they had in mind initially.

Influence of medical professionals. The perceived power and authority of medical professionals was a reoccurring theme in the focus groups and interviews. Many of the women felt powerless to stand up to medical advice that they felt was unnecessary or unfair. It was clear that many felt that if breastfeeding was not encouraged at this level then it would be unfathomable for them to suggest it themselves. Sarah, the oldest participant, echoed this common complaint:

They didn’t ask me in the hospital what I wanted to do. I mean she was born the night and the next morning they came in with the baby and the bottle. [...] of course, I didn’t ask any questions which I should have I suppose, but didn’t and I ended up three weeks afterwards with a breast infection where they didn’t give me anything to dry up the milk

and I was only home for a week or so when I was back in the hospital with a breast infection.

In another group, Paula said the same thing, “I don’t think it was ever mentioned which would you prefer, breastfeeding or bottle feeding. They came in with the formula.” Mary, a 44 year old from the rural group, recalled:

You know, thinking back... I don’t know if I was ever asked if I wanted to breast feed either one of my kids. Like I know, like, like a family member, or whatever, but when it comes to a doctor or anything like that, I don’t know if I... I can’t recall ever being asked.

The idea of breastfeeding “never being mentioned” or “not being offered” by medical professionals was brought up over and over again in each of the focus groups and interviews. As 57 year old Maureen described, she felt like breastfeeding was a bit of a taboo subject even with her doctor, “Cause from what I can recall back then, breastfeeding wasn’t even something that was discussed or offered or anything of that nature, right?”

While it was clear that the participants held medical professionals in high regard, as they readily took their advice in terms of infant feeding, but at the same time there was an undercurrent of being afraid to stand up to health practitioners. For example, Winnifred, who tried to breastfeed her firstborn, recounted her experience with a nurse the community had nicknamed “Sergeant Slaughter”:

I had a really good nurse, now the crowd up there called her Stg. Slaughter because she is English and she is very strict, but [this nurse] she was no midwife and she don’t care about the visitors and she’d kick everyone out and it was baby and mom time and she

would help you as much as she can. If you are going to breast feed if you have the capability of breast feeding she would make it happen, but it was not working. She is more or less gave up on me, too. So when she gives up...

Winnifred clearly felt powerless to continue trying to nurse in the wake of this nurse “giving up” on her. Even at age 70, Georgina could remember a similarly disappointing experience with her doctor. She remembered that he didn’t give her any information on infant feeding and that, “We just went to the doctor once a month and he rooted at you, and that’s it, you were gone.” Finally, Martha, aged 63, recalled her policy in regards to medical professionals when she was young: “You did what you was told and there was no questions asked really.”

Influence of family. It was not surprising to find that family had a big role to play in how a woman felt about her ability to decide on an infant feeding method. Over and over again the participants noted that they followed what their own mother had done. Sherry explained the influence of her family like this:

No, I mean, we grew up, like I say, with our parents and our grandparents – well, I mean, some of us anyway with the *Carnation* Milk and that and we just figured, okay, that’s what you got to do. When you have a baby, you have *Carnation* Milk.

Janet, who lives in a small population center, noted that sometimes a mother’s opinion is the only one you have to go by:

It was just, you know, breastfeeding wasn’t really encouraged. My mom hated it, she couldn’t even, well, I mean, I was never really fond of the idea I got to say. [...]I was the first out of the few of my friends to get married and have, you know, children and I had no one really to go by only mom and she couldn’t stand it and I had no desire to,

honestly. I don't know why, maybe if I had of been encouraged I might have felt different, but I didn't have any inkling to breastfeed at all for some reason.

A couple of women felt the pressure from their families in the opposite direction. They felt that their families wanted them to breastfeed as opposed to bottle feed. Winnifred shared her thoughts on the issue:

I think it is, I think like if you are making this choice that has to be your choice to make, I mean I wanted to breast feed but I had a lot of pressure, too. I think that is half the reason why I couldn't because people were there pressuring me. I had my mother in-law and stuff like that. I had in-laws, friends... "You're not much of a mother if you don't breast feed" "It's the cheapest way to go." "It's all natural, it's the healthiest if you can give them the first week they get the stuff to protect them from the flus." And stuff like that. That pressure was on me and I guess I could not do for my baby. I honestly believe too much pressure.

Jeanette expressed a similar sense of helplessness, "Well mom did encourage me to breastfeed, but I didn't because I couldn't. But there was no big lot of information from no one back then." Although these women who tried to breastfeed were in the minority, it was clear that they felt a strong sense of loss and regret over not being successful in their attempts.

Winnifred witnessed the influence of family more recently through the eyes of her pregnant teenage daughter. When they discussed breastfeeding, her daughter's biggest fear was that her father and younger sister would make fun of her:

She said, "Can you imagine me in the house feeding, there is my sister [she] is sarcastic too and...." [...] She has done an awful lot of babysitting and she does a lot for [the new

mom] babysitting and she said “if I haven’t got milk pumped off [the sister] would torment me or she’d say, “oh gross...” That’s the way she is. So that was her reasoning- with [her sister] and her father for tormenting her.

Pain of drying up milk. The powerlessness that the grandmothers felt was perhaps most evident in the way that many of them endured enormous pain, humiliation, and suffering in the postpartum period. This suffering was due to the fact that they did not breastfeed and therefore had to dry up their milk supply. The extent of their feelings of powerlessness was evident in the way that most of them didn’t even consider breastfeeding even though it would have meant not suffering with drying up their milk supply.

Bertha, aged 66, recalled how her mother-in-law was the one who was in charge of the process of getting a greasy mixture cooked up, slathering it over her body, and then binding her with flannel:

My mother-in-law used to do mine... put a sauce with some butter and salt in to it [...] and she’d put it on the stove at night and when everybody’d go to bed she’d get me in to bind it right tight.

The greasy mixture of butter and salt was said to aid in the process of drying up the milk. It was interesting to note that only the participants in one focus group described the process of using the greasy mixture along with the binding to dry up milk. The women in other locations also experienced painful binding, but without the same greasy mixture.

Overall it seemed to be the mother-in-law or mother who did the binding, although one woman did recall having her husband pin a towel around her. Still a couple of others recalled having to do it themselves as they were told it was a necessary thing to do postpartum.

The accounts of binding were unanimous in their account of the pain and suffering it caused. Karen described how she felt in the early days after giving birth:

When your baby was first born, when you came home from the hospital, they had this big thing to dry up your breast, so you put a big binder around you as tight as you can get, and, I mean, for the first week I think you suffered like hell.

Others described how they spent the first few days postpartum crying in pain or being unable to lift their newborns. Paula, aged 57, also recalled how she felt unable to leave the house during this time:

It's really hard too because back then they would bind your breast. There was no pills. It was very painful, and you couldn't go anywhere because you'd be leaking all over the place. So I remember it being a very difficult time, you know.

The participants in the one rural focus group were the only ones who had not experienced binding themselves. Some of them had heard of it being used in their mother's day, but most of them had been offered pills at the hospital to help dry up milk. One of the participants in this group, Madonna, recalled hearing about a reason other than drying up the milk to do the binding in the post partum period: "[...] Women thought that if they were bound after their breasts, that they would prevent from getting pregnant quick again. Which is not true, but that's what some of them believed, right."

But our daughters have a choice. Many participants felt optimistic for their daughters when it came to choice in infant feeding. They saw this optimism as a result of better education for their daughters and, as a result, a chance for their daughters to make more informed decisions. The Healthy Baby Clubs that are widespread throughout the province are a big part of

this optimistic attitude. Winnifred, who had tried to breastfeed her babies, used a local new mother that she knew as an example:

Let them be informed from the day they start. The young girl out there now she, she was informed through Baby Club she breastfeeds and she is comfortable with it. She knew and she learned on her own without people pressuring her and that's the thing.

Madonna agreed, echoing the common sentiments of choices being offered and the freedom to choose. She said:

Sure just with the Health Baby Club that they have started over here now. There's a lot more young girls, you know, women that are having their babies. They have the option. We didn't have the option, so you know, and they are shown all of the things, and I don't know, maybe I'm a little bit crazy, but the things that I have read about or saw, I still think that a baby that is breast fed... I don't know, maybe it's a connection with the mom and maybe, you know, whatever, but I don't know, I just think that it's got, it's value. But everybody's different, you know?

Maureen, from the same group as Madonna, agreed that a change is in the air. She felt there was a change in both the way health care is delivered and in the mothers' attitudes:

It's not the mothers. Even the health care. You go now, everything is questioned, whereas one time, you went on what they told you, that's what you did. You believed it. What they told you, you believed. Now it is questioned. It is "why am I doing that?" or "why is it that I do that?"

Another participant, Madonna, had experienced this new model for delivery of information about infant feeding first hand while bringing her grandchild to the playgroups offered at the local FRC. She summed it up best by saying:

But I think, the most I got out of all this information and seeing what's available now, just for the mom to go to for healthy babies, to learn... again to bring their children, and to be more open with things. They do have the choice. They have the information. They have the choice. It's up to them what they do.

With regards to infant feeding specifically and especially breastfeeding, some women felt that the door was now wide open to talking about it, where as for them, it had been shut. Sherry explained how things have changed, "You got more supports now, rights. You got more people to talk to and stuff about it now. Like, years ago it was taboo to talk about it really, you know."

Many women described how their daughter just went ahead and made their own decisions about how they were going to feed their babies. While some grandmothers were pleased with the idea of their daughter having more choices than they themselves had, others showed some discontent that their daughters were not always following blindly in their footsteps the way they themselves had done. Mary bitterly expressed her opinion, "But what cracks me up today, like we did what our mothers did, what our mothers told us. But today, they don't listen to their mother, a lot of them don't." The idea of this new generation of mothers not heeding the advice of their mothers meant that many of the grandmothers felt that they had no influence on the choices their daughter made. Paula, for example, felt that her daughter, living away on the mainland, was unaffected by her mother's feelings on the subject:

They're just smart today. They got all the education, they go to school, university and that, they just – I know I had no influence on my daughter. She knows what she knows, but let's just say silently I was waiting for her to give it up, you know, when she tried it the first couple of weeks.

Modesty

Aside from their feelings of powerlessness, the participants in this study also felt strongly about the importance of modesty of their own and other women's bodies. This strong sense of modesty meant that breastfeeding as an infant feeding option is almost unthinkable for some, or at the very least, breastfeeding in public is unthinkable and, if chosen, breastfeeding is something that should be kept private. Not only that, but this sense of modesty about female bodies extended to other areas of their lives so much so that it was evident that many participants felt that the female body is something to feel ashamed about. Some of the functions of the female body, especially menstruating, childbearing, and breastfeeding were subjects of such extreme taboo that many women didn't appear to feel comfortable discussing them at all. This sense of modesty carried over to extreme feelings of disgust for breastfeeding past infancy and to a feeling that choices in the past needed to be justified as many felt ashamed about the choices they made at the time.

Breastfeeding in public is unnatural. Of all the topics discussed in the focus groups and interviews, the issue of public breastfeeding caused the most emotional reaction. There was a mix of opinion on the issue, some women were vehemently against nursing in public, others were okay with it as long as the mother kept herself and the baby covered, while others still wondered what all the fuss was about.

Those who were strongly opposed to breastfeeding in public based their opinions on their own experiences of seeing it being done and on their own opinions about the importance of modesty. This exchange between the members of one focus group shows the way some of the grandmothers felt:

Karen: Well, we did have a flower child family living close to us up here, and, I mean, poor [husband] went to the back window to look out over the city, and there was this girl...

Paula: Instead of the city, he saw a titty.

Karen: I mean, we were shocked, and they had all the teenagers – all the young ones around watching and this one out breastfeeding out in the open, not covered.

Louisa: Yes, and all the kids out watching.

Karen: And the kids were having a grand time. [Husband] was disgusted, closed the window and came in out of it, right.

Sherry: Well, see because we grew up not seeing that stuff, right, but now it's like they got no shame, you know, they don't care.

It was clear from this exchange that the act of nursing in public was not okay in the eyes of these women. Even though the breastfeeding mother was in her own backyard, it stood out in Karen's memory because the woman was doing it in front of children whom she felt should not be exposed to such things and because of her husband's disgusted reaction to it.

Some grandmothers had stories about a relative or friend who had breastfed. In describing the secrecy surrounding her breastfeeding aunt, Paula shed further light on the extent to which nursing in public was considered wrong or strange:

Yeah, it was always done, like, in cloaked – like, she was in the living room, and it was, like, a big cloak thing, you know. It was almost, like, forbidden, taboo. [...]

Don't go in there, and everything was "shhh", like, she was in there like chanting or something or other. You just knew you didn't go in on a feeding mother, right, and it just never felt natural. It felt, you know, she's weird.

Similarly, other women reported being "shocked" at seeing a woman breastfeeding in public. Some wondered why breastfeeding could not simply be done behind closed doors. As Sherry wondered, "I'd be the same way, I'd be like, 'oh my God, can you go to the washroom or something?' like, you know."

Some felt that this sense of outrage or disgust at the thought of breastfeeding in public was a result of their own mother's warnings about what was and was not acceptable. As 48 year old Josephine explained, these warnings were hard to ignore:

Yeah, Mom used to say you can't go nowhere. You've got to stay in the house in the bedroom or no one could come when it was feeding time and that kind of discouraged me so I went to the *Carnation*, what I was fed on.

Others agreed that they were told they would have to "hide away" if they decided to breastfeed. This seemed to lead to the conclusion that bottle feeding either *Carnation* milk or formula was looked upon as being more "convenient".

This view of public breastfeeding sometimes clashed with the view held by others, particularly when they came from outside the province. Martha, for instance, was astounded to see her own sister-in-law nursing in public when she visited when their kids were small:

It's just that they have to feel comfortable doing it. Like I remember my sister in law coming from [other country], is the first time ever I seen anyone young breastfeed, you know? And she had her daughter and her daughter is, well, I guess she's younger than [Martha's child]... and I can see her now, and it wasn't no issue with her. When she wanted to breastfeed, she just sat back and you know what I mean? She didn't go in the room or anything like that...

In a similar way, Jeanette was amazed to find that breastfeeding in public was almost normal upon visiting her new grandchild in another Canadian city recently:

It's like when I was in [city] last year I couldn't believe it, like, wherever, like, they're just sitting there breastfeeding wherever to, in the restaurants, in the mall you'd see it, it was really common.[...] In [city], I couldn't believe it. I couldn't get over it. It was like the normal thing.

The participants seemed to agree that some women are just more comfortable with breastfeeding in public or as Susan so eloquently put it when referring to someone she knew who breastfed in public, "She was comfortable breastfeeding where we were too". Sherry seemed to understand this difference of opinion and stated, "That's just something natural to them, right, they don't think – like, with us, we're not used to that, right. It wasn't natural to see somebody."

It is interesting to note that for some participants it wasn't just that breastfeeding in public is unnatural it was that any breastfeeding is unnatural. Many women reported never having seen anyone breastfeeding before. In one focus group, Paula said, "Breastfeeding was, like, almost unimaginable" and Karen agreed, "Breastfeeding wasn't quite known" in the days when they were young mothers. In another group, 71 year old Katherine offered her reflections

on the topic, “[...] I don’t know how you feel, but it was something that you – it was kept to yourself and nobody really. If it was done when I was growing up I never seen nobody breastfeeding.” Janet seemed to agree, “People found it embarrassing, you know.”

In addition, many participants found breastfeeding past infancy to be particularly offensive. Winnifred related with outrage the story of her friend who is breastfeeding her five year old twin boys:

When one breast is dry they say, “mom, time to switch”... they don’t stop in time. When the child can tell you that, you know, it’s time to switch and you have two boys on, like... Yeah, I think after a year, year and a half it’s more for the mother then it is for the baby. [...] She says “I don’t want to... I don’t want to kick him away... make him feel like he’s not loved by mom.” But it’s mom that don’t want to miss the love from him. Like give him a glass of milk in the cup. He is five years old, right. They know the difference between at that age. A breast was for under two, say under twos, because you can accept a two year old that’s the normal range, but usual around a year they try to wean them. But the breast is known as comfort food... Whatever... After that it should be closed off and kept to something between.... It is the mothers, you know.

Louisa had a similar story about a boy she grew up with:

But you know, there was a young fellow that I grew up with on [location], and he was ten years old and his mother used to call him to be breastfed. [...] But he’d be out, you know, with all of us out playing or whatever. She’d be singing out to him by name, “Come and get your titty!”

Along with the sense of disapproval or disgust, there also came a sense that breastfeeding past infancy was odd and almost comical. It was also viewed as something that had to be stopped at all costs. For instance, Elizabeth shared a story about her granddaughter who had nursed her baby way past the acceptable window of time:

Well my granddaughter put mustard on her nipples because she couldn't get her baby to give up. [...] Yes she used to chase her around and say, "titty, titty" and she said one day she got the mustard and put on her nipple, but it worked.

Bertha also knew of someone who had breastfed for a long time and ended up using gentian violet, a substance usually used to treat thrush, to quickly wean her child:

That was her last child and she wanted to hang on to that for, you know, as long. But she put the blue stuff, used to get the blue stuff then for putting in their mouths and stuff, and she put that on her breasts, see for it to stop.

Modesty in other areas of our lives. For some of the participants, this emphasis on modesty carried over into other areas of their lives. The most extreme example of this came from Louisa, one of the older women in the group. She explained how she could not even bring herself to look at her sister's breasts even though her sister was worried about her breast health:

My sister was down a couple of months ago and she said to me, "Louisa, I have never shown anybody my breast" and she had them reduced, right. She said, "I've never shown anyone other than the doctor my breast" and she's quite worried about them and she said, "Can I show you?" I said, "I don't know, I'm not really..." Because we didn't do it.

Another woman in the same focus group, Paula, aged 57, explained how she can't even bring

herself to go to the local swimming pool:

Because they're over there swinging everything. I can't go in there. [...] That's what I'm saying; you're in a nudist camp. There's some people don't. It's just a natural thing for them. I guess it's the way that you're brought up, I suppose. But that's the way they are brought up, I'd say.

A sense of modesty about the female body was also evident in Louisa's comments about feeling a need to hide her pregnancies from others when in public. She described how she did it, "If you were pregnant and anyone came in, you sat behind the table, so no one would see that you're pregnant, right. It was sort of a hidden thing, right." Others described how they would hide their pregnancies by wearing something too big for them or even wearing men's clothing.

Still other women talked about how when they were young you wouldn't hear talk about things such as breastfeeding, pregnancy or sex as it was "too embarrassing", "unnatural", or they were "too modest". There seemed to be a very clear sense of what was not acceptable to talk about. As Sherry explained, this code of silence was respected even within the confines of a family, "Well, there was only certain things that your parents and your grandparents would talk to you about because they were-you weren't allowed to talk about anything like that back then, right." A good example of this is that some of the women reported not even knowing about menstruation when they started their period. As Karen explained, "I was never spoken to by my mother, [she] just passed me a box of pads". Sherry reported that, in regards to her period, "Mom would never discuss that with me." For others it meant maintaining your privacy even within a large family, as Paula did. She summed up her thoughts on the issue by saying, "I have four sisters. We never even undressed in front of each other. So when somebody is swinging

their boobs around – we just grew up modest and that’s just how we grew up.” Thus it was clear that for many participants this notion of modesty was an important factor in their lives.

Things have changed and our daughters are not so modest. There was a real sense that values have changed since the grandmothers had their babies. For some this provided an obvious sense of relief and pride that their daughters would not have to endure the same strict moral code, but for many others there was a clear sense of loss and anger that modesty was not held in high regard anymore.

For those grandmothers who welcomed an escape from such strict modesty, seeing a woman, whether their daughter or someone else’s daughter, breastfeeding in public was a wonderful experience. Winnifred said it most eloquently when she talked about her feelings towards seeing a mother nursing in public:

I think it’s one of the nicest things you can see. They take the time out for their child and they are not worried about anyone else around them. Like a child breastfed in public or a dope dealer over in the corner selling drugs what’s the, you know, this is the most beautiful. You know that love and attention is there.

Jennifer, who bottle fed all four of her kids and whose daughter tried breastfeeding for a few weeks, said:

I don’t, I don’t be on the go very much into the public. Ahh, I heard people talking about it and people thinks it’s disgusting but I says like you got a youngster you gotta feed it. I even taught mine, the one who tried it- the blanket over! How they gonna know that you’re breastfeeding? I mean, I wouldn’t be embarrassed, not to me. I felt peoples not embarrassed; it’s the people that’s looking at you that’s embarrassed. But my daughter

fed hers and I was there and she wasn't embarrassed. I said, "My dear, you got the same thing as I got, ha ha".

Katherine felt the same way:

Not only that, but sure they do it so discretely now, they just put a blanket over and what's any more beautiful than seeing a mother breastfeeding? I mean, you don't see everything today, I mean, it's just, you know.

Others, although they were not so positive in supporting breastfeeding, felt that the shift in attitudes was real. For instance, Diana admitted that her feelings on the subject had changed over the years:

No, I got to say that I just would not have breastfed so. I was not one of those, like, now they don't, you know, I don't know how to say it if you were going somewhere and breastfeed that to me would be the end of the world, but not nowadays right, you know, but back then it would.

Although she came from a place and time where breastfeeding in public was not acceptable, Bertha recounted a situation where she had done her best to encourage a young mom to breastfeed:

I seen a lady. I was in town one time and she was in. It was on the food court really, but it was up at the other end, right, and she was, her baby was crying and she looked at me and asked and I said, "No, my dear, you go ahead."

Although there appears to be a shift in attitudes towards breastfeeding, many of the participants reported that had never or had very rarely seen anyone nursing in public. Jeanette stated, "To tell

you the truth I don't see a lot of people breastfeeding out in public around here at all. No, to see someone sitting in the mall in [name of town] with a blanket up I don't even see that." Paula reported the same thing, "If they do, they do it in behind closed doors that we – like, they don't come here to the community centre and breastfeed. We have never seen it. I have never seen it, anyway." Georgina agreed, "They don't be out on their step breastfeeding." Josephine wondered if there might be a good reason for this lack of public breastfeeding, "Unless they're pumping the milk before they leave so they won't have to do it out in public."

For those who have seen young mothers nursing in public, they have been relieved to see that they are often covered to make the nursing as discreet as possible. Madonna was quite taken with the displays of breastfeeding she saw while taking her grandchild to the local family resource center. She exclaimed, "They were breastfeeding up at the centre because they get their little blanket and I'd look over at 'em and my heart would... you know?" Jeanette expressed similar regard for her daughter-in-law who lives out of province and breastfed her son. She said, "Yes, yeah, she used to take her out with her when she was in public- she's a breastfeeder, she didn't care. She kept herself covered, but she didn't care, she breastfed. There's days she went by herself." Another participant, Sherry, felt conflicted but seemed to prefer some level of modesty:

You know, it's their choice, but I'd prefer that they be covered, but now, I mean, if somebody was there and they were doing it, I'm not going to say, "My God, will you cover yourself up?" I wouldn't, you know, but I would prefer – like, it don't bother me, but I would prefer they'd be covered, but it is what it is.

There were also a few women who found it hard to get beyond the modesty they were so accustomed to. Sherry explained her own struggle with it, "Well, see because we grew up not

seeing that stuff, right, but now it's like they got no shame, you know, they don't care. [...] I mean, like, now they just whips it out in the public, right." Georgina's frustration was obvious when she said, "Sure, they shows them now even without breastfeeding." Louisa also expressed some bewilderment at the way things had changed, "No, you were covered up. You weren't allowed to show your breast, not even in the hospital. Even in the hospital, they didn't tell new mothers to breastfeed. Now they take it out in the mall."

Recognizing that nursing in public takes confidence, Josephine wondered if being too open about it might have played a role in turning her daughter off of breastfeeding:

Maybe if they [the prenatal class] didn't show her the video, maybe that might have turned her off because she's the type of girl, [name], is shy, like, to do things like that and it could be a little bit above her head. But she's a bit on the shy side and she wouldn't be able to do it. Maybe my other girl might try it when she has her child, when she has them.

Overall, the grandmothers felt that modesty was a very important point in the discussion about infant feeding. Although many of them recognized and celebrated the fact that times had changed and attitudes were shifting, some felt held back by the powerful pull that the societal expectations of modesty had put on them.

Ambivalence

It became clear that many of the grandmothers felt a great sense of ambivalence or struggle when it came to their daughters' infant feeding choices. While on one hand they were acutely aware of the importance of breastfeeding thanks to the promotional efforts of public health agencies in the last few years, many struggled to support their daughters in the endeavour.

This often seems to be due to the fact that some see breastfeeding as a bit of a meaningless fad with no real health benefits: while they were told to use *Carnation* on their babies, their daughters are told to breastfeed, and the next generation might be told to use something else. Also, many have concerns about hunger and infant growth that they do not feel are being addressed properly by their daughters or medical professionals. Finally, grandmothers genuinely want to be a “good grandmother”, but struggle with how to provide support to their daughter.

There’s no real benefit to it. Although every participant knew that breastfeeding is promoted as the best way to feed a baby, there were several who did not agree. For example, Martha gave her opinion, “From my view... From like, my kids and my daughter-in-law, I don’t consider that a breastfed baby is any better off than a bottle fed baby.” In the same focus group, Maureen agreed, “My friend breastfed her son and he’s been sick. He’s, he’s twenty... [her child] is 26, so he’s 27 and he’s been sick from the day he’s been born. And breastfeeding him never done anything for him.” In another group, Diana, aged 61, also disagreed with breastfeeding being promoted as the healthier choice. She said:

[...] I got to say I don’t see the difference in the kids breastfed and the kids bottle fed.

All my kids were healthy as anything and my grandkids were healthy. I don’t see it. If you want to do it- do it, some people like to do it so, but I don’t see any difference in it.

They’re no healthier.

Along with disregard for the health benefits of breastfeeding, some participants seemed to think of breastfeeding as something that is incredibly difficult and not worth the effort. As Paula explained, she felt this way about breastfeeding when her daughter tried it:

That didn't work because I know my daughter tried it for the first couple of weeks. It was a miserable time. Like, I was praying every night please give up this foolishness. It was just so – to see her so miserable, you know, you don't get any sleep, all you're doing is laundry, all the baby is doing is pooping over everything, and it didn't seem like it was agreeing with him.

Part of her judgement might have been jaded by the miserable experience her sister had when trying to breastfeed years ago. As Paula explained, "I wouldn't do that to myself until your boob swells off. [...] She was most of the time on penicillin because her nipples were falling off, actually."

Similarly, Sherry felt that breastfeeding is yet another difficult task after pregnancy and delivery that women must endure. She recalled how her daughter opted out of performing this task after a difficult pregnancy:

And she had a hard time with her first one, so she just wanted it over with, you know.

She put on a lot of weight, she was toxic, she was – like, she had pregnancy diabetes. She had everything that could – you know, she had a hard time, so she just didn't want to put herself through anything else, so she said she was bottle feeding and that was it, there was no changing her mind.

Other women were concerned about the hassle they figured it to be when trying to eat and drink themselves while nursing a baby. Their concerns were often clouded by myths that they believed to be true about breastfeeding. For instance, Mary wondered about the impact a mother's food intake would have on her baby:

I mean, if, if I was breastfeeding, whatever is, like the fluids that's in my body or what not, what I'm eating... that could affect that baby. Right? So if I'm sitting down having a spicy dinner and then like, around 2 o'clock I gotta feed my child, you mean to tell me that's not affecting my child?

Similarly, Madonna criticized a young breastfeeding woman she had seen recently:

I saw a girl, God love her... I don't know who she was and whatever, and I knows maybe in her heart she was thinking she was doing the right thing... She was breastfeeding and she was drinking a pop, like a Pepsi. That's caffeine. Like you're loaded with caffeine, right?

Jeanette had similar criticism for a breastfeeding mom she knew:

They're getting everything you're eating, as long as you're eating healthy. I knows a girl that was breastfeeding and she wasn't eating healthy. She was eating everything and I mean everything and her little boy when he was like, what he's a month -- he's two weeks younger than, two weeks older than [her child]. It's like he was at eight months old he was wearing twenty four month clothes because of the size. Not the length, because of the weight and that's what the doctor told her he figured it was. She was eating so much take-out and junk.

These concerns over the change in eating habits that breastfeeding might require and the widely held assumption that breastfeeding is a very difficult task meant that many grandmothers struggled with the new messages of breastfeeding promotion that they and their daughters hear regularly.

Hunger and weight gain concerns. Concern over the amount of food their grandchild was receiving was a major area of concern for the grandmothers. This was particularly hard for the grandmothers who felt that the new guidelines on starting solid food at four to six months were too drastically different than what they had followed when feeding their babies. For instance, Paula recounted her feelings on the topic:

[Her daughter] listened to the doctor and the youngsters were starved to death, but they had to wait and they would be adamant: “don’t feed them, don’t feed them”, and I never used to feed them. I used to listen to her, but I don’t know how – and it was a real long time before they were allowed to feed them, and I didn’t understand because, like, [her son] was two days old.

Jennifer knew firsthand how much the guidelines had changed as her daughter who lives with her had to recently make a decision about when to start her baby on solids. She said:

They just tells ya, like when I carried my kids they say at 3 months you put ‘em on cereal and 6 months you start feeding them on baby food. 8 months was table food. But now everything is different now compared to what it was.

After much deliberation, Jennifer and her daughter decided it was best to start giving the baby some solid food. She went on to describe a conversation she had, shortly after, with the local public health nurse:

Her first cereal was three months. And we were into the public health nurse with her needles she said, “But you’re not supposed to.” “But”, she said, “If she is handling it, keep going.” “But the guidelines say no.” I said “Yeah, but the pediatrician said. And I’m not being argumentative, okay, but just for the sake of it, if the child is hungry and

they are going after the milk and stuff and you see the changes every child is different.”

She said “Oh yeah, but there are guidelines to follow, but there are certain ones you have

to try.” And I said, “Yes because it is always stage one of each and under six months I

said you have to go with beginners. I said, “There is different stages you got to follow.”

We were talking about it... she said, “She sounds like she is well adjusted and wants her

food.” I said, “Oh yeah, she is started now on those cookies now that she holds and

sucks.”

Josephine had a unique perspective on weight gain issues. Her grandchild has a serious heart condition and struggles severely with trying to gain weight. Although breastfeeding is almost completely foreign in her view, she has struggled lately with the news that her grandchild might actually have been better off had she been breastfed. As she describes, her and her daughter have done a lot of talking with doctors about infant feeding:

And they were saying that there was now she was telling me that the Good Start is

excellent milk for [her granddaughter] to be on, but she was saying if she was breastfed

she would probably gain a little bit more weight, right.

Another participant, Elizabeth, connected starvation and breastfeeding through a story her mom, a breastfeeding mother of four girls, had told, “For awhile the nurse told mom she said she was starving us so she had to start getting some milk in us...”

For some grandmothers, the issue of weight gain and hunger was so important that they stepped in to fix the problem themselves, even without their daughter’s approval. This was particularly easy and tempting for the grandmothers who lived in the same house as their

grandchildren. Sherry described how when she was babysitting she would often feed her grandchild cereal or other solid food even though her daughter did not agree. As she said:

That's like me, I mean, you know, what the eyes don't see, the heart don't feel. [...] She'd probably say something to me after the fact, but it's too late now, he got it ate, right. [...] Do you see him crying now? Look, best kind now, look, all you had to do was a bit of cereal.

Jennifer did the same thing with her grandchild:

I did with [her granddaughter] because I knew she wasn't getting a lot. So I used to go out, when I make her warm her milk, I used to put a spoon of cereal in her milk and give it to her. Mom didn't know. She was in bed asleep.

Upon hearing of Jennifer's sneaky actions, Jeanette expressed her desire to do the same:

Oh believe me, if I could, I would. Because I knew he was hungry, I knew, I just knew he was hungry because when she started giving him the cereal he couldn't get it into him fast enough. Even now with his food, like, that child can't get enough to eat. I mean he's not very big, he's not fat, he's tall because he's starting to wear the eighteen to twenty four months.

The concept of using cereal to help babies to feel full for longer and more satisfied so they will sleep better was a popular one amongst the participants. Mary even recalled that her own mother had done the same to help when Mary's babies were young:

Babies loves it. I know the first time, when I was feeding [her child], mom used to say, "She looks like she's starved to death all the time". So mom was going to [location] this

day, and she brought out a box of cereal, the baby's rice cereal[...] and when I got ready that evening for to make her milk, mom shook a little bit of the cereal in the bottle and it thickened her milk up, and she slept for 7 ½ hours. Yeah, the milk wasn't satisfying her, right?

Some of the grandmothers expressed great frustration with being told not to feed their grandchild when they figured the child was hungry. The following exchange shows the extent of these feelings:

Sherry: You either feed them more milk or listen to them howling, you know.

Paula: And you're like me, I'm saying that's belly wash, give them something to eat.

Sherry: Yeah, like I just say go ahead and give them a bit of cereal or a bit of fruit. It wouldn't hurt them.

Louisa: I spit it into them and everything.

Occasionally this frustration meant that a grandmother encouraged her daughter to ignore medical advice. Such was the case of Sherry and her daughter.

Yeah, see some of them goes by what the doctor or the nurse or whatever tells them, and figures, like, if they don't do that, well, there's something going to happen to them. So they just goes by their doctor, but, like, my daughter would go to the doctor and they'd tell her, you know, you shouldn't feed them until this or whatever, but then she'd ask me and I used to say, you know, I done it with ye, you know, you're no better off for it – you know, you're doing the best kind or whatever. So then she'd just go ahead and do it.

Stories like these showed the extent to which the grandmother plays a powerful role in the infant feeding decision making process.

They want to be a “good grandmother”. There is much talk about the concept of trying to be a “good mother” (Ludlow et al., 2012), but there is not much talk about being a “good grandmother”. Nonetheless, the participants in this study seemed to feel a great deal of pressure to do what is “good” in their view. This sparked a conflict in many of the women as they struggled with deciding what is “good”.

Paula, angry about her daughter’s attempts to breastfeed, was torn up about what to do. She knew on the one hand that she should be encouraging her, but on the other hand she was praying she would give it up.

My daughter tried to breastfeed for a little while, she was in [province]. It wasn’t a great big support group, she had no friends, and I never said anything to her. I encouraged her all the way for the two or three weeks she was on it and prayed every night she’d give up the foolishness. I thought it was – why do it to yourself? When she had the second one, her husband was gone away all the time working and she had two small children. I’ve never ever said anything to her, but I was praying every day she’d give it up. I thought it was good enough for us – I don’t know about *Carnation*, I don’t agree with that now, but the formula and stuff like that – let’s just say I was happy when she wasn’t breastfeeding.

Josephine, knowing it was a fine line to walk, opted to steer clear of encouraging her daughter to go with either breastfeeding or bottle feeding.

Because she asked me my opinion. I said it's your choice, your body if you want to go ahead and try it- go ahead and try it. I didn't do it so I can't explain to you what it's like, but she said no she wasn't going to do it. That was her choice, not mine.

Sherry took a similar tactic with her pregnant adolescent daughter.

Now my daughter was 18 when she had my granddaughter, and she never ever – I never said to her, like, you should breastfeed, I never said to her you should bottle feed. She just made her own choice. She never had no interest in breastfeeding.

Karen felt that breastfeeding wasn't even an option for her daughter.

My daughter, she was – one of my daughters was only 16 when she had her first baby and, I mean, she was still in school, so naturally she didn't breast feed. She did everything – like, I watched the baby until she came home, and then she took over because that's the way we did it. [...] She couldn't breastfeed obviously- she was in school.

Bertha felt that the right thing to do in her case was to not put pressure on her daughter either way.

Maybe the parents do. My daughter she had such a hard time and I said to her, she didn't want to breastfeed, I said, "My dear it's up to you, you can breastfeed or you can bottle feed", but she said, "I wants to bottle feed" and I said, "Fine".

Katherine felt that she had no influence on her own daughters as they all lived out of province, but she commented that, "I think if I could encourage her to breastfeed, I would." On the other extreme, Winnifred found herself stepping in and caring for her grandchild more than she would

have liked. With a teenage mother who still needed a lot of parenting herself, Winnifred quickly justified it in her own mind:

Well she is sensitive, she is sensitive right, so I just says “You know [her daughter] honey you are doing a wonderful job but would mind if mom took her out and feed her?” And that’s the way I handles it. I know she is going through postpartum [depression] and I understand that sometimes it’s harder for her to get out of the bed than it is me or her sister, you know what I am saying. [...] I just think sometimes if I help her a little bit, you know don’t take over her responsibility if I can help her. She will grow a lot faster and she will get her education and she can be a better person for her.

For many of the grandmothers, being a “good grandmother” meant providing healthy food for their grandchild. Even though it was not a question that was asked during the focus groups, many women went to great lengths to describe the healthy food they provide for their grandchildren in their households. For example, Jeanette said, “No junk. He’s not getting no junk food. Whatever she’s got rules out for him and then when he goes to his other nanny’s, he does what he wants.” Mary liked to brag about how healthy her daughter and granddaughter’s diet is:

She eats the vegetables, and like, when she goes to [city] to buy groceries, she buys these great big, I don’t know if they are 20 pound bags, of carrots. Right? She might get two meals out of that. [...]And her daughter [granddaughter], like they go... she buys the little bags of mini carrots and stuff. She just... [granddaughter] sits down and eats a bag of them while she watches cartoons.

Madonna also had praise for her granddaughter’s appetite:

Now, [grandchild] don't drink the stuff, let me tell you now, she can eat, whatever is on the go! (laughter) But now, they're good with her. I can't complain. She loves moose meat, she loves... her grandfather makes moose soup, we make moose stew, we bottle it, and she'll ask, 'Poppa, you have any moose stew?' and she loves that. She loves any kind of fish, not a great pork eater and she likes chicken if it's only just white, just done with a little bit of a crust, and she'll eat that, but not chicken, like if you bake a chicken, she's not fussy. And, believe it or not, she doesn't like rice very much! (laughter) Loves noodles, loves noodles. Yup.

Jennifer goes out of her way to provide healthy food for her grandson.

Okay well my 4-year-old grandson, when he comes to my place, he goes to the cupboard and he goes to the fridge. Whatever he sees, he eats. [...] But now, when it comes to the junk food I, I say "cookie" I'd rather for him to eat a tin of fruit or eat an orange or an apple before he gets his cookie. [...] Right, she's like ah nothing for him to take a head of cabbage and eat that. Mine never eat any cabbage raw, you know what I mean, but he eats his carrots raw and all. He loves his fruits and vegetables. [...] Right, and he'll come down and stay at my place and when he comes to my place and I got vegetables on the go he'll eat everything.

Summary

This study analyzed the views of 22 maternal grandmothers in regards to infant feeding. Three themes that reflected the experiences and perceptions of grandmothers emerged from the data: Powerlessness, Modesty, and Ambivalence. These themes give insight into the experiences, influences, and perceptions of grandmothers with regards to infant feeding. It was clear that the

grandmothers felt as if they had little or no control over their own infant feeding decisions. They also felt that modesty was a strong societal expectation for mothers and women in general.

Finally, grandmothers in this study seemed to struggle with their role as many of them felt very ambivalent about infant feeding and their position in the family.

Chapter Five: Discussion

This study was designed to examine the primary influences that impacted grandmothers' choices of infant feeding in NL, and to explore the role that grandmothers feel they played in their daughters' choices about infant feeding. The research addressed the following questions:

- Why did these grandmothers make the choice to bottle feed their children?
- According to the grandmothers, what are the social influences that impact infant feeding choices?
- What personal beliefs about infant feeding do the grandmothers hold?
- What role do these grandmothers feel they play in their daughters' choices about infant feeding and how do the grandmothers feel about this role?

The following chapter will discuss the three main themes that emerged from the data and the research questions that they answered in the context of the presently available literature and the TPB. The chapter is organized according to the research questions with application of the conceptual framework and relevant literature where applicable.

Why Did These Grandmothers Make the Choice to Bottle Feed Their Children?

The findings from this study suggest that the grandmothers felt that they had no choice when it came to choosing an infant feeding method. For these women this meant that they bottle fed their babies either initially or after some time. They perceived themselves as having little or no control over their infant feeding choices. This feeling of powerlessness was evident throughout the focus groups and interviews.

This powerlessness, or lack of perceived behavioural control as identified in the TPB, meant that the participants felt that they had lost all control in the face of strong influences or

difficult obstacles. Participants identified the influence of medical professionals and family, as well as financial situations and of lack of birth control options as the main culprits. For instance, for some women they felt powerless to go against the advice of medical professionals. It was as if they found themselves to have no control over how their babies were fed; they were at the mercy of the nurse bringing a bottle in with the newborn or the doctor who prescribed that a baby had to have formula. For others, this lack of control came as a result of their situations. Some said they were so busy being pregnant and chasing after children that breastfeeding a baby would have been impossible for them. Still others blamed their own lack of control on the opinions of their mothers or other family members who made it impossible for them to choose anything other than the norm for fear of repercussions.

This lack of perceived behavioural control went even further to include the humiliation and pain that some endured as a result of choosing not to breastfeed and having to dry up their milk supply. Even though it was described as extremely painful, some of the women put up with being slathered with oil and salt and bound so tightly they sometimes could not even lift their newborns. However, it was all done in the name of helping them as new mothers. The women in this study perceived that they lacked the control to stop it.

Grassley and Eschiti (2011) also found that some of the grandmothers in their focus groups recalled a sense of lack of choice, especially in the face of pressure from medical professionals. For example, they recounted the words of one woman who talked about breastfeeding with her doctor. She said,

Well, I received nothing but opposition the first time. In fact, my pediatrician told me that I would be stupid to even try that if I planned on going back to work...it definitely not only was not encouraged, it was severely discouraged. (p. 137)

They also heard stories of women whose doctors had “convinced them to feed formula when they or their infants developed complications such as toxemia or having caesarean surgery” (p. 137).

The grandmothers in this study reported feeling unable to question the opinion of a medical professional. At the same time, many of the grandmothers were aware that their own daughters did not feel the same way about the medical profession. This may suggest an inherent power struggle that an older generation, like that of the grandmothers in this study, has with the medical profession that is not applicable to a younger generation who are used to asking questions and doing their own research on the internet. If so, this power struggle is something that should be taken into account when planning interventions involving grandmothers. Grandmothers should be made to feel comfortable about asking questions of doctors or nurses and given resources so that they can inform themselves about their own health care, as well as the health care provided to their daughters.

As previously discussed, some of the grandmothers in this study reported that financial situations played a role in their infant feeding decisions. The idea also emerged in the Grassley and Eschiti (2011) study. They found that some grandmothers were aware of the possible economic stigma of breastfeeding and that “purchasing formula was a sign of economic prosperity” (p. 136). Similarly, a study conducted in Vietnam found that mothers who were

exclusively breastfeeding felt that they would switch to formula if their financial situation changed and allowed them to do so (Duong et al., 2004).

The concept of family influence being so strong as to render a new mother powerless over what her new baby eats was echoed in a 2011 study of Brazilian women (de Medeiros Gross et al., 2011). The researcher in this study found that, “the lack of independence, whether it is financial or emotional, often forces young mothers to live with the infant’s grandmothers, and subordinate their desires and beliefs in relation to their infants care.” This was very similar to the accounts of the grandmothers in this study which found that they often blindly went along with what their own mother had done. Also, the grandmothers in this study who lived with their grandchildren were often able to force things to go their way by feeding the baby in secret or by doing what they thought was best and knowing their daughter had no other option. Although this powerful influence of the grandmother may certainly be viewed in a negative way, it shows that, with the right intervention, the grandmother could also be a very powerful supporter of breastfeeding. The women in this study were highly motivated to be involved in the care of their grandchild and perhaps just needed to be shown how to be involved in a way other than bottle feeding the new baby. In order to foster breastfeeding, they might be encouraged, for instance, to help the mother with housework, meal preparation, or looking after other children.

It appeared that many of the grandmothers in this study felt that their lack of choice or powerlessness when it came to infant feeding was due to the fact of being pregnant all the time and looking after young children without much support. McFadden, Atkin and Renfrew (2013) also found that many of the grandmothers in their study reported feeling alone and isolated which meant that they struggled with breastfeeding. One participant in their study stated, “It is true that if the mother is doing housework all day she cannot breastfeed.”

Most of the grandmothers in this study, as reflected in previous research (ie. Grassley & Eschiti, 2007) admitted to not being very familiar with breastfeeding. As one of the participants in this study suggested breastfeeding “wasn’t quite known” when she was having her babies. Grassley and Eschiti found that grandmothers expressed a desire to know more about the current guidelines regarding infant feeding. This came as a result of them having not been given information on breastfeeding when they were young mothers. This was similar to many of the grandmothers in this study who had been given misinformation or discouraged from breastfeeding.

For some, the idea of recognizing their feelings of powerlessness when they were young brought up questions about what they could have done differently. This was also found by Grassley and Eschiti (2011), who reported that a participant in a focus group of grandmothers commented: “And I’m embarrassed that I had no more planning or forethought to not have my own plan of what I wanted”.

The idea of feeling powerless or lacking control over the behaviour of breastfeeding helps to explain why the grandmothers in this study chose to bottle feed. It was not so much a choice as it was a consequence of not feeling empowered enough to take on the possible challenges that breastfeeding might entail. These challenges might have required them to stand up to medical professionals or family or find a solution to a difficult situation they were in. Studies that have looked at women who continue to breastfeed despite various struggles have found overwhelmingly that perseverance, commitment, and determination are key to continuing to breastfeed (Hauck & Reinbold, 1996; Hegney et al., 2008). Also, according to the TPB, a person’s perceived behavioural control or their beliefs about how hard or easy a behaviour is to accomplish have a significant effect on whether or not they complete the behaviour. Similarly,

Bandura's Self Efficacy Theory (Bandura, 1977) can also be applied to this situation. In her 2002 dissertation on the subject, White wrote:

Breastfeeding mothers with low self-efficacy will likely have low aspirations regarding their breastfeeding success. They will attempt breastfeeding (often in response to persuasion from others, or out of a sense of moral obligation), because they know that breastfeeding is the best choice for infant feeding. However, they are more likely to have an attitude of "I'll try," instead of with the conviction that "I will succeed" (p. 28).

When analyzing the data from this study, it became clear that the few grandmothers who had wanted to breastfeed had stated their intentions in just that way, as in, "I tried to breastfeed, but I couldn't because..." It was partly this low self-efficacy or low perceived behavioural control which led them to be bottle feeding mothers.

In planning interventions to enable women to breastfeed, it is clear that empowering them is important. As Banks wrote in her 2003 paper about the very successful intervention with grandmothers on a Mohawk reserve, "promotion strategies were aimed at empowering the mother emotionally, but also at the collaboration with the community as a whole" (p. 345). The findings from this study suggest that empowering the grandmothers could be a first step towards gaining their support for new infant feeding initiatives.

According to the Grandmothers, What Are the Social Influences That Impact Infant Feeding Choices?

The participants in this study very clearly expressed that they felt society expected them to be modest in their roles as women. As an extension of that, they generally felt that breastfeeding had to be done in a very modest way, which for some would have meant not being

seen at all while feeding the baby and for others meant that being covered was a necessary part of breastfeeding. Modesty was a big deterrent for some participants as they felt that society would not accept them if they were breastfeeding. In fact breastfeeding was seen to be such a taboo form of infant feeding that many grandmothers could not see it as a viable option for themselves or their daughters. In many cases this sense of modesty was passed down to the grandmothers by their own mothers. Grassley and Eschiti (2011) found that grandmothers recalled being taught that breastfeeding was embarrassing or “trashy” (p. 136). A participant in that study recounted how she once told a young child about breastfeeding when he noticed her feeding her baby. She remembers being worried that the child’s mother might be mad at her for telling him about it. Such accounts demonstrate the idea that breastfeeding is something women are taught to be modest and private about. Also, McFadden, Atkin, and Renfrew (2013) found that new mothers reported being taught by their own mothers that breastfeeding was something to be embarrassed about. One participant in their study stated that she would not be able to breastfeed in front of her mother because she thought her mother would be embarrassed; she would have to instead “go upstairs in my room” (p. 5).

Other participants took the concept of the societal expectation of modesty to another level. It was clear that some of the grandmothers lived under a strict moral code that they learned about as children, particularly from their own mothers. Under this code the female body was something to be kept out of view and female experiences like menstruation, pregnancy and breastfeeding were to be kept private. This would have prevented them from choosing breastfeeding and helping their daughters to choose breastfeeding if they wanted to. This finding is reflected in the research of Ingram et al. (2003), who found that, “the inability to breast feed

anywhere in public is quite a problem for [the mothers in their study] and may be compromising the exclusivity of breast feeding.” (p. 325)

Some of the grandmothers criticized the women of today as not having “any shame” when it comes to exposing their body parts or dealing with issues pertaining to the female body. Some expressed concern that the generation of their daughters and, in some cases, granddaughters was not so committed to modesty and “had no shame”. A sense of loss of values was also evident in the study by Bezner Kerr et al. (2008) study. The grandmothers in this study felt that there was more malnutrition in their village in recent years because the “young women do not respect the old ways.”(p. 1100)

In addressing the concerns of grandmothers with regards to the issue of modesty and infant feeding, it is perhaps best to respect the moral code that the grandmothers grew up with. Using “participatory” methods, any intervention designed for grandmothers needs to “actively [solicit] grandmother involvement and [advocate] a respectful view of their position” (Bezner Kerr et al., 2008, p. 1103) in order to be successful.

In their 2008 analysis of the theory of planned behaviour’s ability to predict breastfeeding behaviours, McMillan et al. added a variable called “moral norms” to the model. They described this variable as “an individual's perception about the moral correctness of performing a behaviour” (p. 771). Through their analysis they found that this variable was a good predictor of breastfeeding intention. Thus, the moral beliefs about breastfeeding held by the participants in their study were good predictors of the intention to breastfeed. The connection can be made then that the infant feeding behaviors of the participants in this study might also have resulted from

their beliefs about morality, and their perception of society's expectation of modesty most especially.

What Personal Beliefs About Infant Feeding Do the Grandmothers Hold?

It was apparent that the participants in this study had many different personal attitudes and beliefs about infant feeding. Some felt very strongly that breastfeeding is no more than a fad and offers no real benefit to mother or baby. Others, meanwhile, seemed to hold a special place in their heart for breastfeeding even if they didn't do so themselves. Findings seem to suggest that there was a sense of ambivalence amongst the grandmothers when it came to their personal feelings about infant feeding choices.

Many of the beliefs and attitudes about infant feeding were related to weight gain and hunger. Some participants had very strong opinions about these issues, so much so that some went against their daughters' wishes and fed their grandchildren behind closed doors or openly disputed the advice of medical professionals. In many cases, they were not sure how to reconcile the advice given today regarding these issues with what they had been told years ago. This finding was reflected in the work of Reid et al. (2010), who found that grandmothers were sometimes not supportive of the later introduction of solids that is presently promoted. They found that, at times, the advice given by grandmothers seemed to be based more on "the grandmothers own parenting experience rather than an understanding of what might be important for the baby and the continuation of breastfeeding" (p. 78). Bezner Kerr et al. (2008) also found that grandmothers can be reluctant to adopt infant feeding practices that are different from those that they have known throughout their own lives. For instance, the grandmothers who were interviewed felt that, "women often have insufficient milk when breastfeeding and babies may

need water, dawale or porridge to supplement breastmilk” (p. 1099). This was a difficult belief to change as it was long held and widespread in the community. This particular belief considerably influenced the advice given to young mothers from grandmothers and the way that they interacted with and took advice from medical professionals.

What Role Do These Grandmothers Feel They Play in Their Daughters' Choices About Infant Feeding and How Do the Grandmothers Feel About This Role?

Findings suggest that the grandmothers also felt ambivalent about their role within the family. Some, for example, believed that their role was to encourage their daughter to breastfeed or introduce solids early; for other it meant stepping back and letting their daughter find her own way. Still others felt that it meant going out of their way to provide healthy foods for their grandchild to eat. Those grandmothers who lived with their daughters and grandchildren seemed to have a particularly hard time with this as they were more highly involved in the grandchild's care and thus had to more carefully negotiate their role as a grandmother.

Reid et al. (2010) also found that grandmothers were sometimes unsure of their position within the family. They wrote,

Grandmothers in this study were aware that stating their own views carried a risk in terms of potentially jeopardising their relationship with the new family. In other words, if they exercise the ‘power’ they have from the other levels of interaction they may not be able to ‘preserve’ a good relationship with the new mothers. Responses in this theme indicated that grandmothers were evaluating the possible effect of their interactions with the new mother. (p. 78)

The idea of being unsure about their position in the family was also evident in the work of McFadden, Atkin, and Reid (2013) who found that grandmothers who were immigrants reported a struggle with their role once they had grandchildren born in the United Kingdom. They knew that in their country of origin the grandmother would have been a respected source of advice, but in their new country they felt that they were not afforded the same respect. This caused the grandmothers distress over their role. When asked how she would feel if advice she gave to the new mother was not accepted, one participant said, “If they don't it does make you feel small and unworthy” (p. 6).

Part of the struggle felt by the grandmothers in this study was evident through the various ways that grandmothers chose to approach the question of infant feeding with their daughters. They seemed to take one of two routes: they either told their daughter that they would support whatever feeding method she chose, but that they themselves could not help with breastfeeding as they had no experience with it, or they simply ignored the issue altogether. Although many of the women who employed the latter strategy felt that they had little or no impact on the infant feeding decisions of their daughters, this is inconsistent with other studies that have looked specifically at the perspective of the daughter. For example, the “You’re Not Going At That” study conducted by the BRWG (as cited in Newfoundland and Labrador Centre for Health Information, 2010) found one participant who said:

My mother wouldn't even think about sitting down and talking about that [breastfeeding]. If I looked at my mother and told her I was going to breastfeed, she'd look at me like I had ten heads because she never done it and it's just not her to sit down and talk about something like that.” (p. 6)

For this young mother, the idea that her own mother wouldn't even talk about breastfeeding was a significant factor in her choosing to bottle feed her baby. Thus, the influence of the grandmother is so strong that in some cases she does not even have to say a word. As well, Grassley and Eschiti (2011) also found that grandmothers who had struggled with breastfeeding when they were young mothers had mixed feelings about supporting their daughters in breastfeeding. One of their participants talked about the "pressure" she had felt as a new mother and wanting to relieve her daughter of that same pressure. It was very similar to the participants in this study who expressed memories of feeling pressured to choose one type of infant feeding method over another and not wanting their daughters to feel the same way.

In some cases, this ambivalence about their role resulted in the grandmothers acting in a way they kept secret from their daughters. Some admitted to secretly hoping that their daughters' plans to breastfeed would be sabotaged, while others fed their grandbabies solids without their daughters' permission. Many admitted to feeling frustration when their advice or guidance was ignored. This finding is also reflected in the work of Reid et al. (2010) who found that the grandmothers in their study also admitted to not always following the instructions left by the new mother and to feeling the emotional stress when their advice was not accepted. Similarly, Grassley and Eschiti (2007) reported that some grandmothers in their study found that supporting their daughters in making choices different than their own was especially hard. As one of the participants in their study stated, "I think you have to learn when to back off and how to give them space and to support their choices, even if they aren't the same as ours. That's a really hard one." (p. 24).

Summary

When viewed through the lens of the TPB, these themes help to explain how grandmothers made their infant feeding decisions. The theme of powerlessness, for example, reflects the lack of perceived behavioural control that the grandmothers felt in regards to infant feeding. The subjective norm or social expectations that impacted the choices of these grandmothers is reflected in the theme of modesty. Finally, the personal beliefs of the grandmothers regarding both infant feeding and their role in the family are expressed in the theme of ambivalence.

Chapter Six: Limitations and Recommendations

This chapter will begin by focusing on the limitations of the present study in terms of the sample population, credibility, and assumptions of the study. The focus of the chapter will then turn to recommendations for the planning of interventions with grandmothers.

Limitations of the Study

Sample Population

This study was based on a non-random sample localized to six locations across the province of NL using qualitative methodology. As a result, the results are limited in generalizability to those who volunteered to participate and may not be fully representative of the provincial population. Demographic variables such as the population sizes of the communities of residence, ages of the participants, and types of infant feeding methods are all included to help other researchers determine the transferability of these findings.

Credibility

As the data for this study was collected through interviews and focus groups it should be noted that most of it cannot be verified as being absolutely factual. The results of this study might be tainted by the inaccurate recollection by the participants of certain situations or feelings. Also, as this study focused on women who did not breastfeed and it is well known that the currently promoted infant feeding method is breastfeeding, it is possible that some of the participants may have expressed views that they know are more politically correct than those that they hold in reality.

Assumptions

During the data collection phase and the data analysis phase of this study, it was assumed that each participant would offer honest answers to each question. The researcher also assumed

that the number of focus groups and interviews conducted would be sufficient to answer the study's research questions.

Significance of the Study

This study attempted to add to the literature by researching the experiences and primary influences of grandmothers who formula fed with regards to infant feeding. Prior investigations have shown that grandmothers play an important role in the care of a new baby and the choice of infant feeding method to be used. Most studies, however, have concentrated on grandmothers who breastfed. This study is significant in that it looks specifically at women who did not breastfeed their babies and whose daughters did not breastfeed either. It also contributes to the very small group of studies that have looked at infant feeding specifically in the province of NL and included women from both urban and rural communities. Finally, the study is also important in that it is a qualitative study looking at the influence of grandmothers in a field where most of the studies conducted thus far have been quantitative in nature. Qualitative research provides very rich data that cannot be captured using quantitative data collection methods. This study provides significant insight into the experiences and perceptions of grandmothers who bottle fed which complements the previously completed research in this area.

Recommendations

This graduate student, under the guidance of the BRWG, undertook this study of grandmothers and their attitudes and perceptions of infant feeding with the ultimate goal in mind of using the results to formulate an intervention with grandmothers to increase their support of breastfeeding. Other such interventions have been successful at raising local breastfeeding rates

(Banks, 2003, Aubel et al., 2004). Based on the results of this study and an analysis of the previous interventions, the following recommendations are offered:

1. Any intervention involving grandmothers should be respectful of the local culture, language, and traditions. As Aubel et al. (2004) found, a crucial component of their own grandmother intervention included: “acknowledgement of health-related values, practices and roles in the communities’ popular health culture, juxtaposition of traditional and biomedical concepts in nutrition education activities/materials, and challenging communities to integrate the “old” and the “new” (p.956). Similarly, Banks (2003) found that the highly successful intervention she studied demonstrated “the application of principles of cultural competency and capacity building, and it [utilized] the strengths that existed within a people and their culture” (p.347). In the context of NL culture, this might mean, for example, that an intervention would include humour as the grandmothers in these focus groups almost universally had a strong sense of humour and showed a readiness to laugh even when dealing with difficult subject matter. It might also be prudent to include some reference to the many traditional foods Newfoundlanders like to feed babies and to take into account the fact that breastfeeding was almost nonexistent in the province about 60 years ago. It would also be important to respect the strong sense of modesty that the women in this study expressed.
2. Interventions should be designed to include both new mothers and grandmothers together. The idea of “learning together” was suggested by Grassley and Eschiti (2007). They found that grandmothers preferred the idea of accompanying their daughter in the learning process to doing it on their own. For the grandmothers in this study who were experiencing some ambivalence over their role in the infant feeding decision-making

process, perhaps accompanying their daughter would give them the chance to start a conversation about infant feeding that they might not otherwise have initiated.

3. Grandmothers need to be given some room to share their own stories of pregnancy, childbirth, and infant feeding. Although these are almost universal experiences, they are not always ones that are discussed among friends. After several of the focus groups for this study, the participants remarked that they had learned new things about one another, even though they had been friends for many years. Some confessed that had never before talked about the things they mentioned in the group. Grassley and Eschiti (2011) recognized the need for women to be heard before they can start to learn. They wrote, “By asking grandmothers to tell their stories, health care professionals may facilitate a place for grandmothers’ voices to be heard and their breastfeeding perspectives to be understood” (p.135). The recognition that many of the feelings they possess, particularly those that are linked to the experience of being powerless, are universal and could be a significant motivator for grandmothers to change their views on infant feeding.
4. Grandmothers need some direction in terms of the role they could play should the daughter choose to breastfeed. The grandmothers in this study and in many others expressed a strong desire to be a “good” grandmother and to provide superior care to their grandchild. However, they expressed real turmoil over the role that they should play in looking after their grandchild and helping their daughter. This was especially true for the women whose daughters expressed a desire to breastfeed. Interventions should include specific things that grandmother can do to encourage their daughter to breastfeed: such as helping with other household duties, helping to ensure a good latch, and supplying healthy meals that encourage milk production. In countries where the

breastfeeding rates are much higher and grandmothers are very supportive of breastfeeding, the preparation of galactogogues is a role proudly taken on by grandmothers (Hilde, 2004). The women in these societies do not appear to feel useless as they have a role to fulfill that they are confident will benefit their grandchild. As one Nepali grandmother stated:

Our food mainly contains spices, chicken, and soups of spices. It is said that if this type of food is eaten, mother's milk will be nourishing. If it is not given, where will the milk come from to feed the baby? (Hilde, 2006, p.28)

In cultures and societies where modesty is a considerable obstacle to breastfeeding in public, grandmothers might be taught to help their daughters by knowing where the nursing rooms are found in the local malls and giving them confidence by staying close to them while they nurse in public.

5. Grandmothers are open to learning new things and as such, should be given the latest information on infant feeding methods, especially breastfeeding. Other studies have found that grandmothers want to learn more about the latest research on infant feeding (Grassley & Exchiti, 2007; Aubel et al., 2004) and when they do, it helps them to help their daughter to breastfeed successfully (Banks, 2003; Aubel et al., 2004). Care should be taken to address the many myths and questions that grandmothers hold about breastfeeding. For example, the women in this study wondered about the effectiveness of using breastfeeding as a form of birth control and about the necessity of limiting one's diet while breastfeeding. The planners of such interventions should recognize that grandmothers had their children during a time when breastfeeding was not promoted the

way it is today. Grandmothers have the right to up-to-date information so that they can help their daughters make informed choices when it comes to infant feeding.

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Appendix A: Recruitment Letter and Poster



NL Breastfeeding Coalition Research Group
Memorial University
300 Prince Philip Drive
St. John's, NL
A1B3V6

10/11/2011

Dear -----,

You are invited to participate in a research study from Memorial University's Faculties of Education and Medicine, exploring grandmothers' thoughts on infant feeding.

This study will involve a focus group of 6 to 8 women who bottle fed their children and whose daughters are formula feeding their babies. As part of this focus group, you will be invited to share your experiences with infant feeding and discuss the factors that influenced you and/or your daughter's infant feeding decisions. The group discussion will be held at a Family Resource Centre or Public Health Clinic and will last approximately 90 minutes. It will be led by a qualified researcher and will help us to understand women's decisions around infant feeding.

A mother's chosen method of infant feeding can affect both the baby's and mother's health and well-being. It is important to have an in depth understanding of women's decision-making processes and what *they* perceive influences their infant feeding decisions. It has been found that grandmothers can influence their daughters in these decisions, and a better awareness of these influences will help to guide and inform health policy.

If you are interested in taking part in this study, or if you have any questions, please contact Felicie Young at either (709) 699-7078 or f.young@mun.ca.

We thank you for your consideration.

Sincerely,

Felicie Young

Are you a new Grandmother?

Would you like to take part in a research study?

Are you a grandmother who

- Bottle fed her own children
- Had a grandchild born in the last five years and
- Has a daughter who is formula feeding her baby

If so, we invite you to take part in a study of grandmothers and their thoughts on infant feeding.

For more information about the study or to ask if you can take part, please contact: Felicie Young by telephone (709) 699-7078 or by email f.young@mun.ca. Thank you!



Appendix B: Consent Forms

Consent to Take Part in Research

- **TITLE:** “You’re not going at that!” A qualitative study to explore mothers’ attitudes, beliefs, and values around their decision not to breastfeed.

INVESTIGATOR(S): Dr. Laurie Twells, BA, MSc, PhD., Dr. Leigh Anne Newhook MD, MSc, FRCPC, Janet Murphy Goodridge RN, MN, IBCLC, Lorraine Burrage RN, MSc, Phil A. Murphy MSc, Beth Halfyard MSc, PhD Candidate, Kim Bonia MSc, PhD Candidate, Felicie Young, BA, BEd, Karene Tweedie, RN, MM

You have been invited to take part in a research study. It is up to you to decide whether to be in the study or not. Before you decide, you need to understand what the study is for, what risks you might take and what benefits you might receive. This consent form explains the study.

The researchers will:

- discuss the study with you.
- answer your questions.
- keep confidential any information which could identify you personally.
- be available during the study to deal with problems and answer questions.

1. Introduction/Background:

There is limited information on why women choose one infant feeding method over another. It is important to have an in-depth understanding of women’s own decision-making processes and what *they* perceive influences their infant feeding decisions. A better awareness of the demographic, community and/or societal/cultural factors that shape infant feeding decisions will help to guide and inform policy. It has been found that grandmothers can have an effect on how their daughters decide to feed their infants.

2. Purpose of study:

The purpose of each focus group is to understand the experiences of mothers, whose daughters decided to formula feed their infant.

3. Description of the study procedures and tests:

You are invited to participate in a focus group of 6 to 8 women whose daughters have chosen to formula feed their babies. The focus group discussion will be held at a Family Resource Centre and led by a qualified researcher. It will last approximately 90 minutes. The discussion will be audio-taped and analyzed at a future date. These discussions will help us to understand women's decisions around infant feeding.

4. Length of time:

Focus group will last approximately 90 minutes.

5. Possible risks and discomforts:

There are minimal risks/inconveniences anticipated with participation in the focus groups except the time required to participate.

6. Benefits:

It is not known whether this study will benefit you.

7. Liability statement:

Signing this form gives us your consent to be in this study. It tells us that you understand the information about the research study. When you sign this form, you do not give up your legal rights. Researchers or agencies involved in this research study still have their legal and professional responsibilities.

8. What about my privacy and confidentiality?

Protecting your privacy is an important part of this study. Every effort to protect your privacy will be made. However it cannot be guaranteed.

When you sign this consent form you give us permission to;

- Collect information from you.
- Share information with the people conducting the study.
- Share information with the people responsible for protecting your safety.

Use of records

The research team will collect and use only the information they need for this research study.

- This includes the audio-taped discussions.

Information collected for this study will kept for 6 years.

If you decide to withdraw from the study, the information collected up to that time will continue to be used by the research team. It may not be removed. This information will only be used for the purposes of this study

Information collected and used by the research team will be stored by **Dr. Laurie Twells** in a locked office. Audio-taped information will be analyzed and stored at the NL Centre for Health Information in a locked office and on a password protected computer.

Your access to records

You may ask Dr. Laurie Twells, if you wish, to see the information that has been collected about you.

9. Questions:

If you have any questions about taking part in this study, you can meet with the investigator who is in charge of the study at this institution. That person is: Dr. Laurie Twells, 777-8920, ltwells@mun.ca

Or you can talk to someone who is not involved with the study at all, but can advise you on your rights as a participant in a research study. This person can be reached through:

Office of the Human Investigation Committee (HIC) at 709-777-6974 or

Email: hic@mun.ca

After signing this consent you will be given a copy.

Signature Page

- **Study title:** “You’re not going at that!” A qualitative study to explore new mothers’ attitudes, beliefs, and values around their decision not to breastfeed.

Name of principal investigator:

Dr. Laurie Twells

To be filled out and signed by the participant.

Please check as appropriate:

- | | | |
|--|---------|--------|
| I have read the consent | Yes { } | No { } |
| I have had the opportunity to ask questions/to discuss this study. | Yes { } | No { } |
| I have received satisfactory answers to all of my questions. | Yes { } | No { } |
| I have received enough information about the study. | Yes { } | No { } |
| I have spoken to Kim Bonia/ Felicie Young and she has answered my questions. | Yes { } | No { } |
| I understand that I am free to withdraw from the study | Yes { } | No { } |
| • at any time | | |
| • without having to give a reason | | |
| I understand that it is my choice to be in the study and that I may not benefit. | Yes { } | No { } |
| I agree to be audio taped. | Yes { } | No { } |
| I agree to take part in this study. | Yes { } | No { } |

Signature of participant

Date

Signature of witness (if applicable)

Date

To be signed by the investigator or person obtaining consent

I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the participant fully understands what is involved in being in the study, any potential risks of the study and that he or she has freely chosen to be in the study.

Signature of investigator/person obtaining consent

Date

Telephone number: _____

Appendix C: Demographic Survey

Demographic Survey

1. Age: _____

2. What is the highest level of education you have completed?
 - Elementary school
 - Some high school
 - Graduated high school
 - Some vocational/technical/college
 - Graduated vocational/technical/college
 - Some university
 - Graduate university
 - Post-graduate or professional degree

3. What is your income?
 - Under \$5,000
 - \$5,000-\$10,000
 - \$10,000 - \$20,000
 - \$20,000 - \$30,000
 - \$30,000 - \$40,000
 - Over \$40,000

4. How were you fed as a baby? (Check all that apply)
 - Formula
 - Breastfed
 - Water
 - Sugar water
 - Carnation milk
 - Cow's milk
 - Other (please specify) _____
 - Unknown

5. How many children do you have?
 - 1-3
 - 4-6
 - 7-9
 - 10 or more

6. How did you feed your children in their first 6 months? (Check all that apply)
 - Formula
 - Breastfed

- Water
- Sugar water
- Carnation milk
- Cow's milk
- Other (please specify) _____

7. How many grandchildren do you have?

- 1-3
- 4-6
- 7-9
- 10 or more

8. How old are your grandchildren? (youngest to oldest)

9. Do any of your grandchildren live in communities close to you? Yes/No

10. In what communities do your grandchildren live? (Please list)

11. How were your grandchildren fed in their first 6 months? (Check all that apply)

- Formula
- Breastfed
- Water
- Sugar water
- Carnation milk
- Cow's milk
- Other (please specify) _____

Appendix D: Interview Guide

Focus Group Interview Guide

I am interested in your attitudes and opinions about infant-feeding choices. I invite you to share experiences of feeding your own children, your thoughts about breastfeeding, and your thoughts about your daughter's decision to formula-feed.

Your Experience with Infant-Feeding

1. Please describe your experience with feeding your children when they were babies.
2. Why did you choose to feed your baby this way?
3. Thinking back, what or who influenced your decision?
4. What factors had the most and least influences on your decision?
5. Do you feel that your mom influenced your decision?
6. What was the community norm at that time?
7. What did you know about breastfeeding at that time?
8. Where did you receive your information about infant-feeding?
9. Did you take a maternity leave from work? If so, how long?

Breastfeeding

10. What do you know today about breastfeeding?
11. What concerns if any do you have with breastfeeding?
12. What are the advantages and disadvantages of breastfeeding that you know of?
13. What do you think when you see a woman breastfeeding her baby in public? What are your first thoughts or impressions?

Daughter's Decision around Formula-Feeding

14. What do you think influences mothers' decisions about infant feeding today?
15. How have things changed since your babies were young?
16. How do you support your daughter with feeding your grandchildren?
17. Do you feel like your advice/support is welcome?
18. Do you feel able to help your daughter with her decisions regarding infant feeding?
19. Have you talked with your daughter about her choice in feeding your grandchildren? Why or why not?
20. Do you have any concerns about the decision your daughter(s) made about feeding your grandchildren?
21. Is your daughter on a maternity leave from work? If so, how long is her leave?
22. What is the norm in terms of infant feeding in your community?
23. Is there anything else you would like to add?

Narrative Sessions Prompts

1. Can you tell me more about that?
2. Can you give me an example of that?
3. How did you feel about that?