2018-11-15

Breastfeeding Practices among Arab Mothers in Calgary with a Focus on Exclusive Breastfeeding: A Qualitative Inquiry

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by

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A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE

DEGREE OF MASTER OF NURSING

GRADUATE PROGRAM IN NURSING

CALGARY, ALBERTA

NOVEMBER, 2018

Abstract

Breastfeeding is university acknowledged as providing health benefits for the child, for breastfeeding mothers, and for the community. The World Health Organization and Health Canada recommend exclusive breastfeeding for the first six months of an infant's life. However, the rates of exclusive breastfeeding practices among immigrant mothers, including Arab mothers residing in Calgary, are lower when compared with rates for non-immigrant Canadian mothers and mothers in the immigrants' countries of origin. Using critical ethnography, the purpose of this study was to explore the contextual factors that influence initiation and exclusive breastfeeding practices by Arab immigrant mothers. Ten Arab mothers residing in Calgary were interviewed. Three of these mothers were interviewed twice for member checking. An analysis of the qualitative narrative data indicated that knowledge, family, religion, and infant feeding practices influence Arab immigrant mothers' initiation and exclusive breastfeeding practices. The findings from this study can be used to facilitate supportive culturally safe and sensitive interventions that are tailored to address Arab mothers' breastfeeding concerns and needs, so that exclusive breastfeeding might be promoted within this population in Canada. Further, the research will provide information needed for addressing key challenges relating to culture, religion, and the healthcare system with the practice of exclusive breastfeeding.

Acknowledgements

These last few years have been an intense journey full of ups and downs, twists and turns, and deep valleys and steep mountains to climb. I am incredibly grateful to my family and friends who have supported me along the way, cheering me to the finish line. Thank you to my parents for their prayers when I ran into so many barriers. Thank you to my beloved husband for supporting me to get to this point. Thank you to my children for their patience as I spent much of these past few years sleepless, stretched; and struggling to balance work, being a student, and the mom that you deserve.

This thesis would not have been possible without the ten Arab mothers who shared their breastfeeding experience with me. Throughout the course of this research, I have come to know each of them, and I appreciate the relationships and conversations we have shared. My deepest respect and gratitude is extended to these women.

I would like to thank Dr. Tam Truong Donnelly. The impact of your kindness has changed my life so much. Thank you for seeing me through the toughest time of my life. Your guidance and support have been critical with every step of my journey. No words will ever be enough to express my appreciation for all you have done. You have my gratitude forever.

My sincere gratitude to Dr. Shahirose Premji. Your excellent guidance, encouragement, and identification of resources are appreciated. The sharing of your expertise was invaluable to me and has always helped me to grow. I feel honored to have had this opportunity to learn from you.

Special thanks to Dr. Elaine McKiel for extending help when I was in need. Your concern and generous assistance are very much appreciated. I am forever grateful to you for the dedication you put forth to help me complete my study. Without you, I do not know where I

would be right now. I am deeply appreciative of all you have done for me, and I will pay it forward to others who are also in need of help.

Also, I would like to extend my gratitude to Dr. Shelley Raffin Bouchal for being a constant source of support and encouragement throughout this program. I appreciate the additional methodological resources you provided. Thank you, from the bottom of my heart.

I would also like to thank Kristin York, area manager with the Postpartum Community Services, and the staff. From the day I made inquiry regarding recruiting participants for the study at your site, you were warm and welcoming, and supported my study with enthusiasm.

Lastly, I wish to express my sincere appreciation to my friends Jasmine Hwang, Mae Sumrain, and Lama Bahafzallah for their encouragement and support throughout my study. I appreciated it very much.

Table of Contents

List of Tables

List of Abbreviations

CST	Critical Social Theory
HCPs	Healthcare Professionals
WHO	World Health Organization
CHREB	Conjoint Health Research Ethics Board
CCIS	Calgary Catholic Immigration Society

Chapter One: Introduction

My nursing practice background and focus in the Master's Program is community health with a passion for women's health and infants' feeding. Being in the nursing profession, I have been privileged to interact and work with immigrants from various countries. During my study as an undergraduate student, I participated as a student researcher and was awarded the Undergraduate Research Grant by the Qatar National Research Fund for the study entitled "Contextual factors influencing breastfeeding practices among Arab women in the State of Qatar." I discovered from the study that breastfeeding during the first few months of birth was not optimal and that there are many other alternatives that could be used for infants' feeding, such as formula feeding. Despite a high literacy rate in the Arabic region, there were increasing immiscible views towards infants feeding. I came to find out that religious and cultural practices were the main guides regarding the way Arab women breastfed their infants. I also realized that in the Arabic culture, affection and love towards children is shown through introduction of supplements in the first few days after birth. They also augment their lack of breastmilk with other sources such as juice and water.

During my graduate studies in the university, I have also come to realize that women who migrate from one country to another experience stress in terms of how their body reacts to sudden changes within their new environment. It is evident from research literature and personal experience that the environment transitions result in fluctuations to breastmilk output. As an immigrant, I came face to face with various challenges that have had an insightful encounter on how it feels to migrate from one country to another. From my personal experience with Arab immigrant mothers and my previous studies, it has dawned on me that Arab mothers tend to be

knowledgeable regarding breastfeeding. However, confusion arises when it comes to exclusive breastfeeding as there is limited knowledge regarding the subject.

As an Arab immigrant mother, many thoughts regarding breastfeeding among Arab mothers have crossed my mind. What do Arab women think of exclusive breastfeeding? What are the experiences of Arab women who continue with exclusive breastfeeding compared to those who do not? What are the contributing factors for formula supplementation among breastfeeding Arab mothers? Is the Arab way of breastfeeding the "right way" or are there other ways? Have Arab mothers adopted the Canadian breastfeeding values and practices or do they still follow the infant feeding practices based on their cultural beliefs and practices? How do language, power, a new cultural environment, and interaction with the Canadian health care system influence the breastfeeding experience of the Arab immigrant mothers? What support systems do recently immigrated mothers utilize during breastfeeding? Do marginalization of Arab immigrant in Canada, immigration status, gender, and cultural values create challenges for infant feeding practices among recent Arab immigrant women? In order to support women, it is important for me to understand factors that impact exclusive breastfeeding practices among Arab immigrant mothers.

1.1 Background

Breastfeeding is universally recognized as the most appropriate method of infant feeding (World Health Organization, 2018a). Since breastmilk contains all the essential nutrients, particularly calcium, vitamin D, protein, phosphorus, magnesium, potassium, vitamin B12, and zinc, which are required during the first 6 months of life, WHO and Health Canada recommend that it be the only source of nutrition during that time for healthy, full-term babies (Health Canada, 2010; WHO, 2016). Breastfeeding optimises a child's physical and mental potential by

supporting growth and brain development. This practice is known as exclusive breastfeeding and is defined as feeding infants only human milk with no supplementation of any liquid or solids apart from vitamins, minerals, and medications (WHO, 2018b).

Although breastfeeding initiation rates in Canada are high immediately after birth (90.3%), by 6 months of age only 13.8 % of babies are breastfed exclusively (Costanian, Macpherson, & Tamim, 2016). Immigrant mothers are significantly less likely to opt for exclusive breastfeeding (50.7%) at 16 weeks post-partum in comparison to non-immigrant Canadian mothers (70.9%) and mothers in the immigrants' countries of origin (Dennis, Gagnon, Van Hulst, & Dougherty, 2014).

A significant proportion of the Canadian population is comprised of foreign-born individuals who arrived as immigrants (Statistics Canada, 2017). According to the 2016 census, 29.4 percent of Calgary's population consisted of immigrants (Statistics Canada, 2016). Of that, 33.7% were visible minorities (Statistics Canada, 2016). The ethnocultural diversity of the Canadian population is likely to rise (Statistics Canada, 2015). Statistics Canada (2015) reports that three in ten Canadians are expected to be members of a minority group by 2031. As a result, it is projected that the population of Canada will include 11.1 million immigrants by 2031, of which over half (52.3%) will be women. This will represent at least 27.4 percent of the total Canadian female population (Statistics Canada, 2015). Arabs are identified as one of the minority groups. Suleiman (2011) defines Arabs as those who speak Arabic, those originating from Arabic speaking countries or areas of the world categorized as Arab, or those who are recognized as being of Arab descent. The countries that are most commonly represented are: Arab North-African countries (Algeria, Egypt, Libya, Morocco, Mauritania, and Tunisia), Arab East-African countries and Yemen (Comoro Islands, Djibouti, Somalia, Sudan, and Yemen),

Arab heartland (Jordan, Lebanon, Palestine, Syria, and Iraq), and Arab Gulf countries (Kuwait, Saudi Arabia, United Arab Emirates, Bahrain, Qatar, and Oman) (Aladwani, 2003). In 2017, there were 26.320 Arabs residing in Calgary (13.970 were male and 12.350 were female) (Statistics Canada, 2017). It is from this group that the participants for my study were selected.

Among Arab mothers, cultural values and norms may influence exclusive breastfeeding and infant feeding practices. Arab mothers' perceptions of insufficient breastmilk production or their uncertainty regarding the amount of milk the infant receives are considered to be significant factors contributing to the decision to continue with exclusive breastfeeding (Millar & Maclean, 2005; Oweis, Tayem, & Froelicher, 2009). In a study by Osman, El Zein, and Wick (2009), Lebanese Arab mothers were concerned about the impact of their milk on their babies due to having an inherited inability to produce milk, having "bad milk," and transmitting abdominal cramps to infants through breastmilk. Some Arab mothers believe that colostrum has inadequate nutritional value; therefore, infants may be offered either prelacteal feeds such as glucose water or supplementary infant formula feeds (Dashti, Scott, Edwards, & Al-Sughayer, 2010; Millar & Maclean, 2005; Oweis et al., 2009; Rogers et al., 2011). Steinman et al. (2010) reported that some Somali Arab mothers believe that colostrum is dirty and harmful to the infant as it has been stored in the breast for the last 9 months thus contributing to the high incidence of prelacteal feeding. In Kuwait, the majority of mothers (55.4%) delayed their first attempt to breastfeed until 24 hours or longer postpartum as giving prelacteal feeds, either infant formula or glucose water, was the norm (Dashti et al., 2010). The practice of delaying breastfeeding initiation beyond 2 hours after delivery has been associated with shorter duration of breastfeeding (Nakao, Moji, Honda, & Oishi, 2008; Vijayalakshmi, Susheela, & Mythili, 2015). There is some evidence that new immigrants in Canada are more likely to initiate breastfeeding than their Canadian-born

counterparts (Dennis, Gagnon, Van Hulst, Dougherty, & Wahoush, 2013; Woldemicael, 2009). However, Woldemicael (2009) argues that due to the general positive attitudes of Canadian women towards the use of formula milk, immigrant mothers often consider this alternative. The author points out that this is largely linked to the influence of mainstream media and healthcare institutions in promoting formula milk. Thus, as immigrant women reside longer in Canada, their rates of breastfeeding initiation decline due to the perceived support and positive attitudes towards supplementation during the breastfeeding duration (Woldemicael, 2009). Similar results have been found in the USA and other countries (Celi, Rich-Edwards, Richardson, Kleinman, & Gillman, 2005; Chen et al., 2011; Harley, Stamm, & Eskenazi, 2007).

Historical marginalization of visible minorities in Canada, immigration status, gender relations, and cultural values present key factors that influence infant feeding practices in recently immigrated mothers (Dennis et al., 2013; Woldemicael, 2009). Adjusting to a new life in Canada creates a great deal of stress for immigrants. Several studies suggest that mothers' knowledge, attitudes, and support systems strongly impact early breastfeeding initiation and exclusive breastfeeding rates among Arab mothers (Amin, Hablas, & Al Qader, 2011; Dashti et al., 2010; Nikaiin et al., 2013). Lack of social and family support, especially from the woman's mother, was the main obstacle to adopting exclusive breastfeeding among Vietnamese immigrant mothers in Canada (Groleau, Soulière, & Kirmayer, 2006). In addition, these mothers' new social environment did not facilitate the implementation of cultural practices and postnatal traditional rituals. For example, women of Arab culture believe that eating a traditional meal and protecting the body's heat and energy after birth would produce quality and quantity of breastmilk. Although social support and cultural practices may affect initiation of breastfeeding and exclusive breastfeeding duration, the importance of these factors varies across countries and

over time (Groleau et al., 2006).

Various research studies conducted in Canada have sought to investigate breastfeeding practices among women. However, the researchers largely focus on understanding the factors that limit or promote breastfeeding among selected populations. The specific concept of exclusive breastfeeding has not been a key area of interest for these studies. In addition, the breastfeeding experiences of immigrant mothers have not been explored extensively in the Canadian society. Thus, the lack of studies investigating exclusive breastfeeding practices among Arab immigrant population highlights the niche that the current study seeks to address. In order to facilitate successful breastfeeding by Arab mothers in Calgary, it is important to understand their experiences, as well as the factors that may influence infant feeding, and thus, the likelihood and sustainability of exclusive breastfeeding. Nurses might use the findings of the study to better understand both Arab mothers' and infants' health needs, and breastfeeding challenges.

1.2 Problem Statement

Breastfeeding practices within the Canadian society are considered a public health issue, due to the many associated health benefits and cost savings to health care. Increasing breastfeeding rates has a substantial economic impact on healthcare and treatment costs (Siregar, Pitriyan, & Walters, 2018). Despite growing attention to the importance of breastfeeding, particularly exclusive breastfeeding, there is lack of evidence-based knowledge regarding the factors that influence the breastfeeding decisions being made by Arab mothers in Calgary. This is significant because as the Arab population in Canada increases (Statistics Canada, 2017) the importance of investigating their breastfeeding practices to know what is needed to promote breastfeeding also increases. Although this research study was conducted in Calgary, it has the

potential to add to our understanding of Arab women's breastfeeding and immigration experiences in different Canadian locations. By understanding Arab immigrant mothers' experiences, the development of culturally appropriate and culturally safe healthcare interventions for this unique population gains greater feasibility. Therefore, the purpose of this qualitative research is to explore the contextual factors (e.g., social, cultural, geographical including immigration, and economic factors) that influence initiation and exclusive breastfeeding practices among Arab immigrant mothers. Understanding these contextual factors might help to develop intervention strategies to promote breastfeeding among Arab mothers. In the following chapter, I present the literature review and research questions.

Chapter Two: Literature Review

A comprehensive search of literature was conducted through searches of nursing and social sciences research databases, such as PsycINFO, SocINDEX, PubMed, CINAHL Plus, Global Health, MEDLINE, and Google Scholar. Search terms included “breastfeeding”, “feeding”, “nutrition”, as individual terms and in combination with “immigration”. Additional search combinations included the terms “Arab countries”, “middle east”, “exclusive breastfeeding”, “Arab mothers in Calgary”, “immigrant women”, “breastfeeding impairment”, and “attitude to breastfeeding”. I limited the search to peer-reviewed studies published in English or Arabic after the year 2004. When relevant articles were identified, reference lists were examined for additional articles. Studies that met the following inclusion criteria were included: (1) primary purpose was to explore and identify information related to breastfeeding practices among immigrant mothers; (2) involved mother participants 18 years or older; and (3) peer-reviewed quantitative and qualitative studies and literature reviews. Studies that included mothers or infants with health problems (e.g., postpartum depression, infant congenital disease) were excluded as they impact the breastfeeding experience.

Overall, the initial database search identified 204 records. After duplicates were removed, 140 records were screened using inclusion criteria; 51 articles were excluded as they focused on a medical diagnosis of mothers or infants, such as ear infection rates or weight loss rates. A total of 89 studies were retrieved for full review. Of these, 47 articles were further excluded because the study included a different population or included teenage mothers. Overall, 42 papers met the inclusion criteria and were included in this literature review. The literature search flowchart is included in Appendix A.

The literature has been synthesized and analyzed under the following categories: (a) benefits of breastfeeding, (b) Arabic culture, (c) religious beliefs and practices, (d) family tradition and practices, (e) socio-economic factors, (f) immigration status and years of residence, and (g) social support and other social influences. All seven themes provide the platform from which to explore the domain of inquiry for the proposed study.

2.1 Benefits of Breastfeeding

Breastfeeding is universally acknowledged as providing health benefits for child health, breastfeeding mothers, and for the community. A benefit of breastfeeding for the infant includes healthy growth and development (WHO, 2016). Breastmilk is a complete food in that it increases the nutritional and immune status of the infant (Bridgman et al., 2016). Breastmilk is highly associated with a decrease in childhood mortality and morbidity (Khan, Vesel, Bahl, & Martines, 2015; WHO, 2016). Breastmilk contains valuable antibodies that help the infant to fight infections in the first few months of life and protects against illnesses such as gastrointestinal, ear, urinary, and respiratory infections (Hanieh et al., 2015; Khan et al., 2015). It reduces the risk of the infant getting an allergic condition such as asthma and eczema (Dieterich, Felice, O'Sullivan, & Rasmussen, 2013; Munblit & Verhasselt, 2016). Breastfeeding can also help to protect the infant against serious illnesses, such as childhood obesity, leukemia, and Type 2 diabetes (Dieterich et al., 2013; Grube, von der Lippe, Schlaud, & Brettschneider, 2015; Moss & Yeaton, 2014). According to the Public Health Agency of Canada (2009), there is strong evidence that children who were breastfed score higher on intelligence quotient (IQ) tests and academic performance.

The benefits of breastfeeding are not limited to infants. Breastfeeding has the potential to contribute positively to mothers' health including decreased risk of breast cancer, ovarian cancer,

and type 2 diabetes (Yasuhi et al., 2017; Victora et al., 2016), and possibly reduced risk of hip fractures and osteoporosis during the postmenopausal period (Duan, Wang, & Jiang, 2017). Moreover, a woman's body uses calories to produce milk which can help them to gradually lose weight and return to pre-pregnancy weight (Yasuhi et al., 2017). Exclusive breastfeeding may decrease postpartum bleeding and reduce menstrual blood loss (Saxton, Fahy, Rolfe, Skinner, & Hastie, 2015; Public Health Agency of Canada, 2009). Moreover, breastfeeding is a special way for mother and infant to feel close to each other. Breastfeeding strengthens the bond with the infant and helps to build a loving relationship (Teles et al., 2017). In addition to its benefits for infants and their mothers, it offers greater economy to families as it is the least expensive method of feeding infants (Ma, Brewer-Asling, & Magnus, 2013; Siregar et al., 2018).

Breastfeeding is also associated with health benefits and cost savings to health care. In a recent study in the UK, Pokhrel et al. (2015) reported that supporting mothers to breastfeed exclusively until four months would reduce the incidence of childhood infections, which could save at least £11 million annually. Moreover, doubling the proportion of mothers' breastfeeding for 7-18 months would help in reducing the incidence of maternal breast cancer which could save £31 million annually. Another study from the USA found that if 90% of newborns in Louisiana were breastfed exclusively for the first 6 months, at least 18 infant deaths could be avoided by the reduction of the incidence of four conditions alone (respiratory tract infections, gastroenteritis, necrotizing enterocolitis, and sudden infant death syndrome), and result in a savings of $216,103, 368 of health care costs (Ma et al., 2013).

2.2 Arabic Culture

Culture is "the shared knowledge and schemes created by a set of people for perceiving, interpreting, expressing, and responding to the social realities around them" (Lederach, 1995, p.

9). It signifies the habitual and traditional behaviors of the humans, passing from one generation to another (Parsons, 1949). Culture includes different behavior terms that characterize a society, race, sexual orientation, socio-economic class, education, gender, area, era, and others (Brumann, 1999). It can be expressed in architecture, music, dance, art, and creativity. Moreover, culture can be seen in a country's history, food, attire, and in how its members comport themselves and behave towards each other (Arnold & Boggs, 2015). It is not a set of rules that everyone must obey (Inglehart, 2018). Culture presents the norms and values which provide a guide to how people should live within societal contexts, which one can choose whether or not to follow. Though belonging to a culture is essentially up to the individual in question, one's upbringing will, at least initially, influence her[1] belief system (Arnold & Boggs, 2015). For example, if a person's mother taught her to follow a certain way of cooking or raising a child, that person will grow up with this orientation to cooking and childrearing, perhaps believing it to be the right way and maybe the only way (Inglis, 2016). However, as that person grows older, life experiences may lead her to adapt to, and perhaps adopt, a different culture in part or in whole (Arnold & Boggs, 2015). For example, a person might move to another country and be exposed to a different culture. Because she takes her original culture with her, her adjustment and assimilation into the new culture cannot start from a blank slate. It will be influenced by the extent to which she can learn and accept that there are different ways to go about things while staying true to her original beliefs and values (Arnold & Boggs, 2015). Jacobs (2016) argues that the process of socialization is responsible for the acquisition of values, which transforms an

[1] For ease of writing and reading and because the participants in this study are all female, the pronoun "her" will be used rather than writing "him/her" although it is recognized that these points can also apply to males.

individual from a blank slate (tabula rasa) to a fully functional social person in society. Consequently, the acquisition of cultural values and norms that defines their social orientations and gender roles is achieved through socialization (Jacobs, 2016). The influence of culture on individual's health is significant. It impacts the perceptions of the general health, the way the patients ask for help and how they accept the diagnoses and treatment, among other factors (Mayhew, 2018). By acknowledging and understanding the culture of the patients, HCPs are able to give culturally appropriate advice, promote trust, and increase the rate of accurate diagnoses and treatment acceptance (Mayhew, 2018).

The Arab society, which largely traces its ancestry to the Middle East, has a rich cultural heritage amalgamating language, religion, tradition, customs, values, and beliefs. Its common language is Arabic, although the wide variety of dialects can sometimes make communication difficult (Nydell, 2018). The predominant religion is Islam and the Qur'an is the central religious text of Islam. Family is an integral aspect of Arab culture. Family loyalty is the first value taught to children by their parents, followed by social loyalty, self-reliance, individuality, and responsibility (Soffan, 2016). Family plays a key role in reinforcing expectations upon members of society to conform to the established norms and values.

Traditionally, roles in the Arabic society were delineated according to gender (Abu-Hilal, Aldhafri, Al-Bahrani, & Kamali, 2016; Nikaiin et al., 2013). The role of women was restricted to child bearing, child rearing, and house chores. The role of men was to provide for the family and ensure that the financial needs of both the mother and the children were met. Men were rarely involved in aspects related to child rearing (Abu-Hilal et al., 2016; Nikaiin et al., 2013). However, over time as economic changes occurred and women became educated, roles changed for some women (Abu-Hilal et al., 2016; Gardner, Green, & Gardner, 2015). Whether by choice

or because of financial necessity, they became employed outside of the home. Consequently, women's lives became busier, particularly among those who were expected to continue to maintain the traditional roles in addition to working (Alzaheb, 2017; Gardner et al., 2015). If their need to work was to provide financial support for the family, it potentially undermined the male role as the family provider (Nikaiin et al., 2013; Abu-Hilal et al., 2016).

The most revered member of the Arab family is the mother (Dowling, 2018). There are many customs around a new mother. For example, a new mother may sleep in a different room for the first few weeks after the birth to make room for others that will be near to support her and her baby (Dowling, 2018). A new Arab mother relies on her mother and grandmother during childbirth and in the childcare that follows (James-Hawkins, Qutteina, & Yount, 2017). She is also constantly surrounded by loved ones helping her with usual daily duties, so she can focus on care of the baby (James-Hawkins et al., 2017).

2.3 Religious Beliefs and Practices

The Qur'an (Holy Book) specifically endorses breastfeeding: "The mothers shall give suck to their children for two whole years, [that is] for those [parents] who desire to term of suckling" (Qur'an 2:233). Referring to the Qur'an, breastfeeding an infant is considered a spiritual act by Muslim mothers as it is believed that God rewards them and forgives their past sins (Zaidi, 2014). The Hadith, which is the saying and teaching of the Prophet Mohammed (Peace Be Upon Him), extends further support stating, "For each mouthful of milk that a baby sucks, the mother is given the reward of one good deed" (Hadith Muslim, 1:560).

The Arab culture is predominantly influenced by Islamic religious doctrine and practices. As a result, most Arab mothers perceive the act of breastfeeding as the child's given right from God (Allah) (Jamil, Muda, & Ismail, 2016). Fifty five percent (55%) of Arabs who live in

Canada belong to a Muslim faith (Dajani, 2015) and are followers of Islam; a faith that encourages Muslim mothers to breastfeed their babies for a full 2 years, if possible (Zaidi, 2014). Religious practices relating to breastfeeding are based on the Qur'an (Al-Kohji, Said, & Selim, 2012). However, there is a degree of flexibility among the mothers regarding what practices to follow strictly. In the cultural context, Arab mothers seek to breastfeed their children for at least 2 years following birth (Jamil et al., 2016). The period is interpreted in line with the Islamic months, which implies approximately 22 days prior to the child reaching their second birthday (Jamil et al., 2016). However, it is a common practice among Arab mothers to stop breastfeeding earlier where there is a consensus between the parents based on a legitimate reason. Experiencing breastfeeding problems represents some of the key reasons mothers quit breastfeeding early (Alzaheb, 2017; Falah-Hassani, Shiri, Vigod, & Dennis, 2015; Wandel et al., 2016). The need to stop breastfeeding earlier than the desired length of time might create a feeling of disappointment, fear, and guilt due to the failure to attain the culturally expected tradition for Arab mothers (Zaidi, 2017).

A crucial part of the Arab culture is the practice of prelacteal feeds referred to as "Tahneek". The practices are based on the Islamic doctrine the "Hadith" or saying of Muhammad, the prophet of Islam. Mothers, or sometime close relatives, soften a date and rub it on the hard palate of the newborn's mouth using a clean finger (Radwan & Sapsford, 2016). Alternatively, honey or cane sugar may be used, which implies that the practice seeks only the taste of the sweetness. The cultural implication of the practice is the perception that it represents good Sunnah (which is made up of the words and actions of the prophet of Islam - Muhammad) that protects new-born babies from a sudden drop in their blood-sugar level (Zaidi, 2014). These teachings influence individuals' breastfeeding perceptions and actions (Zaidi, 2014).

Arab communities have historically practiced wet nursing as an integral part of their culture (Saari et al, 2016). Prophet Muhammad, who plays a crucial role in defining their cultural practice, was breastfed by both his mother and a wet nurse (Saari et al, 2016). In cases where the mother was unable to breastfeed, both the mother and father could mutually agree to be assisted by a wet nurse (Yashmin, 2017). The practice was designed to ensure that the infants were fed with human milk as opposed to animal milk as much as possible. In selecting wet nurses to breastfeed the infants, Arab women prioritize mothers within their extended families to serve as wet nurses due to the close ties and relationships (Shaikh & Ahmed, 2006). However, in contemporary society, this aspect of Islamic culture has been lost and many mothers turn to formula milk without considering a wet nurse (Saari et al., 2016).

Islamic religious beliefs proclaim that there are parts of a woman's body that must be covered at all times in front of those who are not close family members (Shaikh & Ahmed, 2006). Many Muslim mothers may want to breastfeed; however, there may not be enough privacy in hospitals or public places (e.g., shopping mall). This impacts their ability to breastfeed and causes them to wean early (Shaikh & Ahmed, 2006). In many traditional societies where stricter Islamic regimes dominate, like Saudi Arabia, mothers are never seen breastfeeding in public (Amin et al., 2011; Shaikh & Ahmed, 2006; Zaidi, 2014), whereas in other Arab cultures such as Jordan and Palestine, it is common (Oweis et al., 2009).

2.4 Family Tradition and Practices

Family traditions and beliefs may influence breastfeeding practices (Zaidi, 2014). Overall, breastfeeding is a common practice among Middle Eastern mothers. Breastfeeding initiation rates are reportedly 92.5% in Kuwait (Dashti et al., 2010), 95.4.% in Lebanon (Batal & Boulghaurjian, 2005), and 77.8% in Saudi Arabia (Amin et al., 2011). However, practicing

exclusive breastfeeding for 6 months is less common among Arab mothers (Oweis et al., 2009). Exclusive breastfeeding rates are 12.2% in Saudi Arabia (Amin et al., 2011), 12% in Qatar (Nikaiin et al., 2013), and 10.5 % in Kuwait (Dashti et al., 2010). Arab mothers' perceptions of insufficient breastmilk production or their uncertainty regarding the amount of milk the infant receives are significant factors contributing to the decision to continue or not continue with exclusive breastfeeding (Millar & Maclean, 2005; Oweis et al., 2009). In another study, Osman et al. (2009) investigated common cultural beliefs among Lebanese Arab mothers that may discourage breastfeeding. The Lebanese Arab mothers enrolled in the study worried about the impact of their milk on their babies due to having an inherited inability to produce milk, having "bad milk," and transmitting abdominal cramps to infants through breastmilk. Mothers in Sierra Leone (Western Africa) believed that the mother's milk is harmful because it is contaminated with the man's sperm (Daglas & Antoniou, 2012). This same group held a cultural belief that bottle feeding the child by the father in public was considered to be a sign of the child being accepted and loved by the father, which ultimately strengthened the family bond (Daglas & Antoniou, 2012). Consequently, mothers who hold these beliefs may be more likely to choose bottle feeding over breastfeeding, seeing bottle feeding as way to enhance positive family relationships.

In some developing countries, mothers may delay breastfeeding because of a belief that is passed down through families that colostrum, the first milk produced by the breasts after the birth of an infant, has no nutritional value (Rogers et al., 2011). Steinman et al. (2010) reported that some Somali Arab mothers believe that colostrum is dirty and harmful to the infant as it has been stored in the breast for the last 9 months. In rural Northern Ethiopia, people believe that colostrum leads to sickness or even death (Rogers et al., 2011), while others report that

colostrum is “hot milk” and can cause a stomach ache, diarrhea, and vomiting (Semega-Janneh, Bøhler, Holm, Matheson, & Holmboe-Ottesen, 2001). In Kuwait, the majority of mothers (55.4%) delayed their first attempt to breastfeed until 24 hours or more postpartum as giving prelacteal feeds, either infant formula or glucose water, was the norm among this group of women (Dashti et al., 2010). The practice of delaying breastfeeding initiation beyond 2 hours after delivery has been associated with shorter duration of breastfeeding (Nakao et al., 2008). Beliefs such as these may prevent it altogether (Nakao et al., 2008).

The practice of introducing non-milk supplementation early in an infant’s life is especially common in Arab culture (Abdul Ameer, Al-Hadi, & Abdulla, 2008). Use of water or other supplementation within 6 months of childbirth, has been associated with reduction of frequency of breastfeeding, delay of lactation onset, rise in infant weight, and lower duration of breastfeeding (Kirkland & Fein, 2003). Abdul Ameer et al. (2008) explored predictors of exclusive breastfeeding among Arab mothers in Iraq and found that exclusive breastfeeding declined when mothers and relatives, gave water and sugar to infants early after delivery, especially for jaundiced infants. These mothers believed that their breastmilk was not enough and supplementing with sugar water was perceived as a way of reducing their infants’ thirst. Oweis et al. (2009) identified cultural practices as a major influence on Jordanian Arab mothers’ decisions about how to feed their infants. Although in Jordan, the cultural belief supports breastfeeding, most mothers supplement breastfeeding with water without knowing that this supplementation could affect exclusive breastfeeding or the continuation of breastfeeding (Oweis et al., 2009). It is viewed as an expression of their love and care for their infants (Oweis et al., 2009).

During breastfeeding, mothers are encouraged to take the herb black seed also known as blessed seed (Nigella Sativa) which is believed to have healing properties for various illness (Di Giovanni & Fantauzzi, 2017). The seed is also considered to play a crucial role as a galactagogue which seeks to improve lactation among mothers (Di Giovanni & Fantauzzi, 2017). Some Arab mothers, particularly in Egypt, are offered "mughaat" which is a combination of powdered fenugreek seeds and nuts fried in butter and sugar (Di Giovanni & Fantauzzi, 2017). Additionally, mothers are encouraged to take a lot of broth and soup to improve milk production (Saaty, 2010).

Mothers who are concerned about societal attitudes and stereotypes towards breastfeeding and its negative impact on maternal weight and body image may choose to formula feed because of the consequences of breastfeeding on their bodies, (e.g., changes in the shape and function of their breasts so that they droop and are unattractive) (Brown, Raynor, & Lee, 2011; Nikaiin et al., 2013). Some mothers are embarrassed by the changes in their bodies at a time when they already feel conscious about their appearance after giving birth (Nikaiin et al., 2013). Furthermore, some women experience anxiety related to their altered feminine roles associated with pregnancy and the lactation process which leads to the perception that they are unattractive to their husbands and the opposite sex (Daglas & Antoniou, 2012). Consequently, these mothers may determine that formula feeding is an easy, convenient, and more appreciated method by their partners (Nikaiin et al., 2013).

2.5 Socio-economic Factors

Social factors that influence breastfeeding include: mother's age, marital status, education level, income, and risky behaviors such as smoking during pregnancy or breastfeeding (Woldemicael, 2009). Young mothers in Canada (under 20 years of age) had a low rate (5%) of

exclusive breastfeeding for a full 6 months whereas adult mothers breastfed for a longer duration (Semenic, Loiselle, & Gottlieb, 2008). Similarly, immigrant mothers who are older are more likely to initiate and exclusively breastfeed their infant than younger mothers (Woldemicael, 2009). This may be due to older mothers' greater experience and knowledge of breastfeeding (Chaves, Lamounier, & César, 2007). In another study, Ku and Chow (2010) found that marital status was significantly associated with exclusive breastfeeding. Several studies (Agboado, Michel, Jackson, & Verma, 2010; Ku & Chow, 2010; Millar & Maclean, 2005) found significantly higher numbers of children being breastfed among married mothers than among single mothers. Moreover, maternal smoking and alcohol use is associated with low breastfeeding rates because they are linked with reduced volume of breastmilk (Chaves et al., 2007). In comparison to Canadian-born mothers, immigrant mothers are more likely to be married and are less likely to engage in risky behaviors during pregnancy, (e.g., daily/occasionally smoking during pregnancy) (Woldemicael, 2009). Other researchers have explored education in relation to breastfeeding decisions. Canadian-born mothers and immigrant mothers of all races/ethnicities who had higher levels of education were more likely to initiate and continue breastfeeding than were less educated mothers (Al-Sahab, Lanes, Feldman, & Tamim, 2010; Celi et al., 2005).

High breastfeeding rates among immigrant mothers have consistently been associated with higher household incomes (Celi et al., 2005). Low- income mothers are less likely to opt for exclusive breastfeeding due to short maternity leaves (Celi et al., 2005; Setegn et al., 2012). To maintain a source of income, these mothers have to return to work, thereby having less opportunity to stay at home and breastfeed their babies (Celi et al., 2005; Setegn et al., 2012). However, in a study of Arab women in Saudi Arabia, Amin et al. (2011) investigated the

influence of socio-economic factors on breastfeeding outcomes, and found that early breastfeeding initiation and breastfeeding exclusivity were lower among educated, employed, and high-income mothers. Similarly, Nikaiin et al. (2013) found that Qatari women with a higher level of social status were more likely to formula feed as formula feeding has been associated with being rich and fashionable. Setegn et al. (2012) also found a significant difference among employed (33%) and unemployed mothers (73%) in the Goba district, south east Ethiopia. They found that the employed mothers in their study did not breastfeed exclusively during the first 6 months because their workplace environment did not facilitate breastfeeding (e.g., no private place for milk expression and storage at work). In contrast, mothers who did not need to be employed (i.e., are able to stay at home) had more opportunity to breastfeed. Financial support from spouses/husbands is one of the most significant factors in continuing breastfeeding among Arab women in Qatar (Nikaiin et al., 2013), whereas the decision to discontinue breastfeeding was mainly due to the need to return to work or school (Nikaiin et al., 2013; Reeves, Close, Simmons, & Hollis, 2006).

2.6 Immigration Status and Years of Residence

Woldemicael (2009) conducted a review of immigrant mothers' breastfeeding practices in Canada and found length of residency was a key factor in mothers' choice to initiate and maintain breastfeeding. As the length of residency in Canada increased, the likelihood of breastfeeding decreased (Woldemicael, 2009). Years of residency has also been highlighted as an important factor in several other studies investigating breastfeeding. Upon immigration, women's beliefs, values, and way of life may undergo modification in a bid to resolve cultural conflict, either due to information they received about best method of breastfeeding or adapting to their new environment and their roles as mother, wife, and daughter-in-law (Choudhry &

Wallace, 2012). Years of residency was strongly associated with decreased breastfeeding initiation and exclusive breastfeeding; greater the length of residency, the lower the rate of breastfeeding and exclusive breastfeeding (Harley et al., 2007). For example, women of Mexican descent who had lived in the USA for 5 years or less had a median duration of 2 months of exclusive breastfeeding, those living in the USA for 6 to 10 years breastfed exclusively for 1 month, and those living in the USA for 11 years or more breastfed exclusively for less than 1 week (Harley et al., 2007). New immigrants of all races/ethnicities are more likely to initiate breastfeeding than their USA born counterparts (Celi et al., 2005). Choudhry and Wallace (2012) found that Pakistani immigrant women in the UK modified their values and beliefs around breastfeeding initiation and duration due to the influence of acculturation to the host country, especially due to their belief that formula feeding is the "way in the UK" (p. 82). Therefore, highly acculturated women view formula feeding as the cultural norm in response to their new surroundings where breastfeeding is a practice outside of the norm (Choudhry & Wallace, 2012).

2.7 Social Support and Other Social Influences

Several studies reported that the most important factor that leads mothers to breastfeed rather than bottle feed was support from the infant's grandmother or other family members (Negin, Coffman, Vizintin, & Raynes-Greenow, 2016; Radwan & Sapsford, 2016). Nikaiin et al. (2013) found that lack of social support from parents and spouses was a source of discouragement for continuing the practice of breastfeeding among Arab mothers living in Qatar. The same study highlighted the importance of the infants' grandmothers both in providing practical support and as a pivotal influence on infant feeding decisions. Mothers from Saudi Arabia were more likely to initiate breastfeeding if their husbands supported breastfeeding as Saudi husbands are responsible for most family decisions (Ogbeide, Siddiqui, Al Khalifa, &

Karim, 2004). These findings are consistent with results from other studies that found an association between social support for breastfeeding and maternal infant feeding choices. Ku and Chow (2010) explained the importance of social support among Hong Kong Chinese women. These women believed that following delivery, mothers should stay at home during the first month, avoid all household chores and social activities, and should be taken care of by others. In these situations, mothers have higher rates of exclusive breastfeeding (Ku & Chow, 2010). Among Canadian mothers, Millar and Maclean (2005) observed a sharp drop in breastfeeding within a few weeks of leaving hospital where there was an absence of social support. A lack of reinforcement by the family or community also resulted in low exclusive breastfeeding rates.

2.8 Summary of Literature Review

This review of the literature encompassed seven areas: benefits of breastfeeding, Arabic culture, religious beliefs and practices, family tradition and practices, socio-economic factors, immigration status and years of residence, and social support and other social influences. Understanding cultural values and beliefs of breastfeeding mothers regarding breastfeeding during the antenatal and postpartum periods is necessary for the initiation and sustainment of successful exclusive breastfeeding. The review shows several gaps in the literature. The studies that did address breastfeeding and in particular, exclusive breastfeeding, have one or more of the following limitations. Firstly, although the studies addressed several aspects of breastfeeding practices, few of them examined breastfeeding among immigrants in Canada (i.e., the majority of studies reviewed were done in the United States and European countries). Secondly, an extensive search of the literature failed to identify in-depth understanding of contextual factors (e.g., social, cultural, geographical including immigration, and economic factors) by HCPs that influence Arab mothers' breastfeeding practices in Canada. The increasing number of childbearing Arab

women living in Calgary**,** the importance of breastfeeding for the health of Arab mothers and their babies, and the lack of research within this group points to the need for more studies to be done specifically for this population. Critical ethnographic research is needed to provide in-depth information about Arab women's perceptions of breastfeeding which can then be used to develop health education programs and services that will support initiation and sustainment of exclusive breastfeeding practices among Arab mothers.

2.9 Research Questions

Carspecken (1996) suggested that research questions be general, comprehensive, flexible, and amenable to modification as the research progresses. The following questions guided this exploratory ethnographic research.

1. How do Arab mothers conceptualize exclusive breastfeeding practices?
2. How do Arab mothers utilize available health care services and social support network to support infant breastfeeding and exclusive breastfeeding?
3. How do contextual factors (e.g., social, cultural, geographical including immigration, and economic factors) influence Arab mothers' breastfeeding experiences and decisions regarding exclusively breastfeeding their infant?
4. What services or strategies could promote Arab mothers' breastfeeding practice and exclusive breastfeeding?

In the following chapter, I describe the theoretical frameworks that guided the research, demonstrate the research method of inquiry in relation to the research questions and purpose of the study, and discuss how the method of inquiry guided the research process.

Chapter Three: Methodology

3.1 Theoretical Framework: Critical Social Theory (CST)

The theoretical foundation for this qualitative study is based on CST as explicated by Western Marxism. CST is a conceptual framework that emphasizes language, power relations, and the social processes associated with knowledge (Rodgers, 2005). CST focuses not only on understanding or explaining the society, but also critiquing and changing society as a whole (Browne, 2000; Habermas, 1978). It aims to "dig" beneath the surface of social life, and uncover the assumptions that help us to understand true human life and experiences (Habermas, 1978). CST refers to a series of ideas that emerged during the 1920s and 1930s from the Marxist-orientated Frankfurt school of German schools and from liberation movements such as feminism (Browne, 2000; Stevens, 1989). This theory was expanded and reinterpreted over generations by theorists such as Jurgen Habermas (Rodgers, 2005).

Habermas's contribution to CST is largely based upon communicative action (Rodgers, 2005; Smyth & Holmes, 2005). In his theory of communicative action, Habermas places his philosophical position beyond other traditional forms of knowledge and understanding to emancipation from the structures, ideologies, and power systems that exist (Rodgers, 2005). A strong reliance on the aspect of communication throughout his work is evident (Rodgers, 2005). Communication is essential in nurse-patient relationships through language and tacit communication. HCPs can use CST to investigate and reduce communication failures that result from unconfirmed, unintentional, or erroneous assumptions and cultural misunderstandings between HCPs and patients (Smyth & Holmes, 2005). Therefore, improving communication is an important part of building capacity for the equitable treatment of all patients, regardless of social status related to socio-economics, ethnicity, age, or gender (Habermas, 1987). This, in

turn, could be applied to Arab women where an open exchange of ideas and information would enable a clear understanding and support breastfeeding practices that fit with their ethnic context. Differences in culture, language, social expectations, and health care systems can lead to misunderstanding between HCPs and their clients. Consequently, Arab women's health care needs might not be met. Inadequate communication between providers and Arab immigrant mothers may have serious negative consequences on these immigrant mothers, including increased psychological stress and misunderstanding of health information and medical advice (Lebrun, 2012). In a study by Shah and colleagues (2008), language barrier was the most pervasive barrier to health care access and quality of care. Arab immigrants may not be fluent in English (i.e., their English may be limited) which, in turn, can reduce their access and therefore, their utilization of healthcare (Lebrun, 2012). Even for Arab mothers who could speak English, many of them cannot fully explain their symptoms and health concerns in English and, therefore, their health care needs are not adequately addressed (Lebrun, 2012). This social theory methodology will empower Arab mothers to freely share their experiences because it allows them to converse in the language of their choice. The inclusion of the perspectives of Arab mothers and advocacy for expression of these mothers' points-of-view lay the groundwork for the movement to address the needs and issues of Arab mothers in Calgary. This research aims to help the HCPs understand the perspectives of Arab mothers in Calgary and their health care needs, thus, enabling breastfeeding to be facilitated and encouraged in a culturally-sensitive manner.

An assumption of CST is that cultural, political, and legal realms of society are not natural and fixed, but are historically created and alterable (Carspecken, 1996; Habermas, 1987). As suggested by Thomas (1993), this theoretical framework advocates for a type of

consciousness that recognizes, acknowledges, and understands how social structures work to influence Arab women's experience. For example, recently immigrated Arab mothers represent a marginalized group. Often, these women may have come to Canada as refugees, and they may have limited finances and limited access to health care (Lebrun, 2012). A study by Shah and colleagues (2008) emphasized that discrimination was observed in health care settings among Arabs in the US. Women who were wearing the hijab (Islamic veil or head scarf) were treated differently (i.e., denied access to public services and housing), and were incorrectly assumed to not speak English. In addition, because of their Arab ethnicity, HCPs incorrectly assumed that they had abusive husbands (Shah et al., 2008). Determinants of health, such as social isolation, poverty, economic status, and discrimination might have a negative effect on immigrant and refugee women's lives (O'Mahony, Donnelly, Este, & Bouchal, 2012). Being isolated in a foreign land with limited access to extended family significantly inhibits the process of socialization on values relating to breastfeeding in the cultural context (O'Mahony et al., 2012). Similarly, the level of poverty and economic status which are determined by access to opportunities define the level of access to quality health care services during the postnatal period (Gibbs & Forste, 2014). Further, due to their racial and cultural orientations, immigrant mothers are largely predisposed to discrimination which inhibits their level of access to opportunities (Shah et al., 2008). Further, the findings from the various studies highlight the historical marginalization of visible minorities in Canada, immigration status, gender relation, and cultural values creating a background that influences infant feeding practices in recently immigrated mothers (Dennis et al., 2013; Woldemicael, 2009).

CST has an emancipatory aim and seeks to challenge preconceived or conventional assumptions and social arrangements to move beyond the "what is out there to know" or an "ontology" to the "what could be" (Thomas, 1993, p. 33). The fundamental conviction that underpins this philosophy is that no aspect of social phenomena can be understood unless it is related to the history and structure in which it is found (Carspecken, 1996). According to Max Horkheimer, director of the Frankfurt School's Institute for Social Research, CST is applicable only if it meets three criteria: it must be explanatory, practical, and normative all at the same time (Abromeit, 2011). In this study, CST is used to explore the current social reality of Arab mothers, and provide both clear norms for criticism and achievable practical goals for social transformation as articulated by Abromeit (2011). Empowering mothers to raise their voices may help in promoting public policies that advance efforts for breastfeeding education, improving the health of Arab infants, and reduce health disparities in this population.

CST was described by Henderson (1995) as an action-oriented theoretical approach that can be applied to both nursing research and practice. Accordingly, research and clinical practice are seen as inherently political in nature, because they are formed by historical, social, cultural, and economic processes (Stevens, 1989). Wilson-Thomas (1995) believes that "by analyzing how and why embedded assumptions guide theory development, research, and practice, nurses can begin to describe and explain oppressive environmental effects on health and understand their role in society" (p. 573). This framework enables empirical evidence as well as subjective interpretation of health care practices to be uncovered; the way it is used affects communication between nurses and patients and experiences situated within patients' culture.

Habermas's CST has similarities with Foucault's poststructuralist approach in regard to the exercise of power relationships, but it moves more broadly to look at society and human

interactions (Rodgers, 2005) in order to address and alter relations of power that shape social reality (Browne, 2000). Foucault (1980) suggested that knowledge is shaped by language. Communication is a significant antecedent for performing the process of empowerment successfully. Effective communication between patients and HCPs is achieved through explanations, listening, using understandable words, and helping patients feel empowered to make informed decisions (Rohrer, Wilshusen, Adamson, & Merry, 2008). To limit or prevent misunderstandings and inaccuracies in communication and to facilitate the opportunity to become engaged and empowered women, it is crucial to understand and recognize their lived experiences. Otherwise, HCPs are at risk of unintentionally participating in the ruling relations that undermine their own professional knowledge, experiences, and skills in providing high quality patient care (Rohrer et al., 2008).

In nursing practice, we develop and implement interventions and interact with our patients to provide holistic care to improve their health and, ultimately, their lives. Nurses cannot assume that they understand the experiences and viewpoints of others, in spite of whatever commonalities the nurse and the patient may share (Rodgers, 2005). Nurses need to understand that each individual has a unique reality constructed by culture, language, and tradition (Rodgers, 2005). Therefore, nursing knowledge that incorporates cultural elements of breastfeeding practices into education about infant feeding and exclusive breastfeeding may contribute to the empowerment of Arab women as mothers, help to improve the health of Arab infants, and contribute to more comprehensive, inclusive health care for this population. Ultimately, by capturing larger contextual perspectives, CST provides the theoretical framework for my research. It could contribute to clinical practice that helps nurses to understand existing issues and form connections with Arab mothers and communities to create social and culturally

responsive health care program/services that will promote and sustain exclusive breastfeeding practice (Browne, 2000).

3.2 Critical Ethnography as a Method of Inquiry

In this study, Carspecken's critical ethnographic method (1996) was used to explore the phenomenon of interest. Critical ethnography is a branch of ethnography informed by CST (Fay, 1987; Thomas, 1993). The term ethnography is a "description of the folk" (Werner & Schoepfle, 1987, p. 42), which involves studying groups of individuals (groups of folks), their social interactions, ways of life, behaviours, and perceptions that occur within their own cultural environment (Wolf, 2012). Thus, ethnography is a description of cultures that characterize a group. Relative to an ethnographic methodology, the goal is to gain insight as to how a group of people experience their world and culture (Barbour, 2008).

Ethnography is the oldest qualitative research methodology (Hatch, 2002). It is synonymous with *anthropology* (Speziale, Streubert, & Carpenter, 2011). Hatch (2002) suggests that its roots can be traced back to anthropological studies describing "primitive" (p. 3) cultures in rural and faraway places. This methodology was later implemented by members of the Chicago School of Sociology and used to capture human and social life in urban settings (Hatch, 2002; Robben & Sluka, 2012).

Critical ethnography as refined from traditional ethnography (Thomas, 1993) is essentially political, ethical, and social (Baumbusch, 2011). While the aim of ethnography is to understand, describe, and interpret culture (Wolf, 2012), critical ethnography aims to "provide clearer images of the larger picture of which we are a part" (Thomas, 1993, p. 61) with the goal of changing it by analyzing hidden conditions, distracting the *status quo*, and "taken for granted" (Schutz, 1972, p. 74) assumptions, bringing into light any underlying processes of power and

control (Madison, 2012; Smyth & Holmes, 2005; Thomas, 1993). Thus, in this research, my focus is to understand Arab mothers' experience and to give voice to their exclusive breastfeeding experiences. As Carspecken (1996) states, "Criticalists find contemporary society to be unfair, unequal, and both subtly and overtly oppressive for many people" (p. 7). Therefore, criticalists desire to change social life and conditions. This study of cultures or social groups attempts to contribute to the emancipation of the Arab mothers through uncovering hidden oppressive constructions by critical analysis of the data, empowering Arab mothers, and using their voices in the analysis.

A critical ethnographic approach was used for this study as immigrant women of Arab origin come from cultures that are significantly different from those in Canada. A range of factors may limit their access to health care. One factor is language (i.e., lack of proficiency in English) (Felix, 2017). Another factor is gender which may play a role in subordinating them, particularly if they are being supported financially by their spouses or others (Nikaiin et al., 2013). Being in this country, far from any extended family, can also serve as a barrier by limiting family support. All of these factors can influence breastfeeding practices among Arab mothers (Chen et al., 2011; Falah-Hassani et al., 2015). A critical ethnographic methodology gives voice to Arab mothers' experiences helping to create a holistic perspective that can be used by HCPs to provide culturally sensitive and appropriate interventions. A critical ethnographic methodology seeks to understand and interpret the behaviors of groups of people in the setting in which it occurs (Speziale et al., 2011). The natural paradigm, which underpins critical ethnographic qualitative research methods, is suitable for exploring the lived experience of breastfeeding Arab mothers from their viewpoints. Critical ethnography can empower the Arab mothers to have more authority, empowers them to express their perspectives, challenges, and desires, addresses

unequal power relations, and gains new understanding of factors that influence their health care practices through critical thinking (Castagno, 2012).

3.2.1 Holistic approach.

Ethnography is a holistic approach which seeks to provide a larger picture of a problem or issue by identifying multiple perspectives and factors associated with the situation (Creswell, 2017). It aims to provide a description of an entire and whole cultural system (Boyle, 1994). Rather than just describing participants' behaviours, the researcher "must understand why the behavior takes place and under what circumstances" (Boyle, 1994, p. 162). To create a picture of the whole, the researcher attempts to gather as much data as possible about the group's history, religion, politics, economy, environment, and social relationships (Boyle, 1994). A holistic cultural portrait of the group describes a culture from both the participants' *emic* (insider's) perspective and the researcher's interpretive views from an *etic* (outsider's) perspective (Boyle, 1994; Fetterman, 2010). Therefore, the culture shaping the group is explored from both participants' descriptions and interpretations by the researcher (Creswell, 2017).

3.2.2 Reflexivity.

Reflexivity refers to the ability of researchers to engage in introspective processes in which they persistently challenge themselves to recognize how their own perceptions are affecting the method, analysis, and understanding of the research (Etherington, 2007; Madison, 2012). Reflexivity allows researchers to be intimately involved with the group in the research by making transparent their values and beliefs that impact the research process (Etherington, 2007). Carspecken (1996) supports Giddens' (1986) interpretation of reflexivity as being significant to the research process. Giddens' (1986) describes reflexivity as a protracted observation of one's actions and thoughts that are integral features of human life. A critical approach to reflexivity

brings attention to a researcher's own power and privilege which can contribute to tension when critiquing the power-struggles of participants (Madison, 2012).

To achieve reflexivity, I paid attention to my own beliefs and assumptions as an Arab immigrant woman and a healthcare provider in relation to the information, the data, and my own role as a researcher (Lipson, 1989). Some of my assumptions were that recently immigrated Arab women have limited social support systems, Arab women supplement with formula until the milk comes in, and cultural beliefs might have more influence on breastfeeding practices than HCPs' advice. Reflexive ethnography is not only about recognizing and trying to set aside one's own beliefs, values, and biases; it encourages additional integration and application of new understandings through critical thinking (Thomas, 1993). Moreover, reflexivity enriches fieldwork by making researchers attend more closely to the interactional processes through which knowledge is learned, developed, and transmitted, along with the interpersonal emotions experienced during fieldwork (Robben & Sluka, 2012). I recognize that, as a researcher, I bring personal constructions of the world, values, beliefs, strengths, weaknesses, and experiences to the research process. Therefore, in this study, I engaged in reflexive journaling during the research process, giving careful attention to my own social, cultural, and professional positioning and how they influenced my actions and thoughts in the field and eventually my interpretation of the data. The data acquired through journaling was instrumental in providing deeper insight into understanding breastfeeding practices with consideration of the socio-cultural and religious contexts. It provided a means through which information could be synthesized from the perspective of the Arab mothers. Consequently, there was more latitude in evaluating and contextualizing what was observed during analysis.

3.3 Research Process

3.3.1 Sampling

Hegelund (2005) states that the first step in an ethnographic study is to define the object of the study. Sampling is the process of selecting a cultural group of people to represent the population of interest (Liehr, LoBiondo-Wood, & Cameron, 2009). Sampling includes identifying eligibility criteria, sample size, sampling plan, gaining entry to the field, and recruiting the sample (Loiselle, Profetto-McGrath, Polit, & Beck, 2011).

3.3.1.1 Eligibility criteria.

The population of interest for my research study was immigrant Arab mothers in Calgary, Alberta from which I selected a sample that comprised my participant group. Characteristics that delineate the study sample constitute the eligibility criteria or inclusion criteria (Liehr et al., 2009; Loiselle et al., 2011). Accordingly, participant selection criteria included Arab mothers who were (a) within six months postpartum; (b) able to read and communicate in Arabic or English; (c) older than 18, thus (d) able to provide informed consent; and (e) residents of Canada for less than five years as duration of immigration influences breastfeeding initiation and exclusive breastfeeding (Harley et al., 2007). Participants were excluded if their babies were born before 37 weeks of gestation as their infant's unique health needs may affect their breastfeeding experience (McDonald et al., 2013; Premji et al., 2017). In addition, participants were excluded if they were caring for an infant with congenital abnormalities that impact feeding, had a known history of emotional instability or a physical condition that contraindicated breastfeeding. During the interview, if it became evident that the mother's emotional or physical condition was unstable (i.e., postpartum depression, pain), she would be given the opportunity to terminate the interview at any time.

3.3.1.2 Sample size.

Ethnographers rely on a small number of key informants who are highly knowledgeable about the culture and have the ability and skills to develop an ongoing relationship with the researchers (Loiselle et al., 2011). Purposeful sampling means that participants are selected because they are informants who can provide rich information (Higginbottom, 2004; Speziale et al., 2011) that allows the researcher to understand the "emic view" (p. 174) or the innate view of their world (Liehr et al., 2009). Key informants who had the appropriate characteristics and were able to reflect upon social and cultural practices of Arab mothers were interviewed. Rather than specifying the sample number, the researcher looked for data saturation evident by repetition of collected data (Speziale et al., 2011). Adequacy of research sampling was guided by the expertness of the participants and their ability to articulate their experience. Recruitment was ongoing until I reached data saturation (when no new information was identified). The data saturation occurred within the first 10 interviews.

3.3.1.3 Sampling plan.

The type of sampling associated with the study method was purposive sampling, which meant that the researcher identified a specific group that met the eligibility criteria (Speziale et al., 2011). Snowball sampling (Higginbottom, 2004) was the other technique that was used. I asked existing participants to recommend other Arab mothers whom they knew and might be interested to participate in the study.

3.3.1.4 Gaining entry to the field.

I focused on ensuring that the located sites presented the optimal potential to gather sufficient evidence for analysis (Speziale et al., 2011). Ethnographers gain access through assistance from key personnel in the selected site (Loiselle et al., 2011). Postpartum Community

Services, where services are provided to all women who give birth in Calgary, was a significant place for attendance by members of the Arab community. Based on this information, key personnel in Postpartum Community Services were identified and contacted for assistance. Sites managers' commitment to support and assist with recruitment of Arab mothers as participants was obtained.

3.3.1.5 Recruitment.

Approvals were obtained from the Conjoint Health Research Ethics Board (CHREB) at the University of Calgary and Alberta Health Services Administrative Committee (Study ethics ID: REB 17-0899). I contacted the area manager in Postpartum Community Services, explained the study, offered to meet with her, and explained her role which was to identify the prospective participants who met the eligibility criteria for the study. I provided her with a letter of introduction (Appendix B), eligibility criteria, and my contact information (Appendix C). Public health nurses shared the study information with Arab mothers and encouraged them to contact me if they were interested in participating in the study (Appendix D). The public health nurses also obtained permission from Arab mothers for the researcher to contact them (Appendix E). A list of potential participants was shared with the researcher. Once permission was obtained from Arab mothers, I contacted them, further explained the study, ensured their eligibility to participate in the study, and asked for their voluntary participation in the study. Starting with this group of mothers led to the use of a snowball technique in which respondents referred other friends or family members who also met the eligibility criteria for the study. Six mothers participating in the interviews were recruited directly and four were recruited through snowball sampling technique.

During the initial contact, I confirmed the eligibility, discussed the study, and negotiated a date and time for an in-depth interview and observation. Efforts were made to have the participants choose an interview location that was convenient for them and where privacy could be maintained. All mothers who enrolled in the study were interviewed at their homes. Attempts were made to minimize distractions and provide a comfortable atmosphere to gather their true experiences. To build trusting relationships with them and ensure informed consent, I provided information about my planned research, the study purpose, benefits, potential risks for participation, contributions to society, and how the participants' confidentiality would be protected as explicated by Macnee and McCabe (2008). Participants were interviewed face-to-face within six months of their infant's birth. As I conducted all the interviews, and I speak both Arabic and English, each participant could choose which language they preferred to use and they all wanted the interview in Arabic. Before the participant signed the consent form (see Appendix F), I invited questions to which answers provided clarification; however, none of the mothers asked specific questions. In addition, because English is not the first language of the subject group, to ensure that participants understood the full scope of their role, all documents (i.e. consent form and questionnaires) that were given to them were translated into Arabic by the researcher and they were given both the English and Arabic copies. By implementing these procedures, the research process imbued respect for the culture, language, literacy of the subjects, and assurance that the consent was an informed consent. Participants were provided a $25 store gift certificate on completion of the interview as an appreciation of their time and effort.

3.4 Data Collection and Data Analysis

Carspecken (1996) describes a five-stage process for doing critical ethnography that includes compilation of the primary record, preliminary reconstructive analysis, dialogical data generation, description of system relations, and application of the system relations to explain the findings. Carspecken suggests that data collection and analysis should be simultaneous and synchronized which allows the researcher to return to previous stages throughout the research process. Consequently, the data collection and data analysis processes were presented as an interactive process. As I moved through the stages, I maintained self-reflection and self-awareness regarding my beliefs and values biasing my work as explicated by Hardcastle, Usher, and Holmes (2006).

3.4.1 Preliminary plan.

Carspecken (1996) recommends developing a preliminary plan by generating a list of questions. The process of developing the questions was largely informed by the research objectives. As a result, more emphasis was placed on questions which would elicit optimal outcomes for the analysis. In preparation for member checking interviews, a list of questions was generated (Appendix H). A semi-structured format was used to allow guiding questions (see Appendix G). In this study, the phenomenon of interest was the breastfeeding practices among Arab mothers in Calgary, and factors influencing Arab mothers' decision or ability to breastfeed exclusively for the first six months. Exploratory or open-ended questions were useful for this study, such as "Tell me more about the beliefs and values that influence your decision to participate in breastfeeding." Probing questions were followed to reflect the researcher's need to investigate and answer the research questions (Carspecken's, 1996; Smyth & Holmes, 2005). Effective probing questions included, "can you tell me more about that please" or, "can you give

me an example?" These types of questions helped to explore, illuminate, and clarify Arab mothers' breastfeeding experiences (Smyth & Holmes, 2005).

3.4.1.1 STAGE 1: compilation of the primary record (data collection through observation).

Ethnographic observations are designed for the researcher to build and obtain an outsider's point-of-view, or the researcher's monological perspective that reflects the cultural group's behavior, activities, dialogue, tone of voice, social interactions, facial expressions, and postures between participants (Carspecken, 1996; Cook, 2005). During this stage, I observed the Arab mother's physical environment, behaviors, activities, social interactions, timing, tone of voice, gestures, body movements, and facial expressions. Field notes using thick description were written during observations to get a feel for the social and interpersonal milieu (Cook, 2005; Vandenberg & Hall, 2011). The observations were brief, informal, and no more than half an hour. After the observation, field notes and observer comments were entered in a word document for analysis. Observation and analysis of the observational data occurred simultaneously, using a recursive back-and-forth process (Carspecken, 1996). Primarily, the approach emphasises collecting data and interpreting it within its contextual setting. For example, the researcher while conducting the interviews could determine the underlying level of knowledge on exclusive breastfeeding using the recursive back-and-forth process. The results of analysis of the observational data were used as a source of knowledge of history, cultural themes, and context surrounding the domain of inquiry (Cook, 2005).

3.4.1.2 STAGE 2: preliminary reconstructive analysis (data analysis etic perspective).

This stage begins with analyzing the primary record and reconstructing meanings from the observations collected in Stage 1 (Smyth & Holmes, 2005). While Stage 1 explores objective data, in Stage 2, the researcher focuses on subjective and normative realms (Smyth & Holmes,

2005). The aim of this phase is to tease out themes, main issues, subjective references, and areas that need further exploration (Carspecken, 1996). Data analysis utilizes concepts of "pragmatic horizon analysis" (Carspecken, 1996, p. 103). Pragmatic horizon analysis helps us to learn about cultural backgrounds, against which social life and actions occur in the foreground (Smyth & Holmes, 2005). In this stage, when reviewing the primary record, I identified relationships between meaning reconstruction, power, and roles that influence participants' breastfeeding experiences as described by Vandenberg and Hall (2011). According to Carspecken (1996), "all qualitative studies should examine power relationships closely, to determine who has what kind of power and why" (p. 129). The power relationships established in the studies related to the role of gender in distribution of roles. As a result, women are assigned the largest burden for taking care of the infants and breastfeeding roles. Consequently, the power relations create a state of disenfranchisement for women whereas men are given more leverage in gender roles. Therefore, to reduce the power inequalities among the researcher and Arab mothers, my actions and questions conveyed appreciation and respect for these mothers' unique experiences as explicated by Hall and Stevens (1991).

3.4.1.3 STAGE 3: dialogical data generation (data collection through participant observation, individual interviews, and emic perspective).

Carspecken (1996) asserts that a semi-structured, in-depth interview is an ideal approach to collecting dialogical data. He describes interviews in relation to forms of questions, best interview responses, and data analysis of transcripts. To provide answers to the research questions, comprehensive and detailed information was obtained by using in-depth critical ethnographic interviews with Arab mothers to obtain an emic perspective and to give them a voice regarding their breastfeeding experiences. The key informants, or participants, who were

willing to share their information and insight, were invited to participate in face-to-face interviews. A semi-structured interview guide was used to gain a deeper understanding of Arab mothers' experience, such as questions related to (1) the breastfeeding practices among Arab mothers in Calgary for the first six months following the birth of their infant; (2) the desired social and professional supports that help these mothers breastfeed their babies; (3) what facilitates and impedes their decision and practice of exclusive breastfeeding; and (4) effective strategies to promote and assist Arab mothers to practice exclusive breastfeeding (See Appendix G). Prior to conducting formal interviews, friendly discussion and conversation were used to facilitate building trust and rapport with participants (Wolf, 2012). The interviews were conducted for approximately 60 to 90 minutes in duration and, with permission from participants, were recorded using audio recorders in order to increase the accuracy of data collection and transcription as explained by Wolf (2012). All participants gave permission to be recorded.

3.4.1.4 STAGES 4 and 5: conducting system analysis (data analysis emic perspective).

In the first three stages, Carspecken (1996) focused on one social site or culture group being studied. In Stages 4 and 5, the focus was to discover complex relationships between the Arab mothers and various other social sites. The purpose of Stage 4 was to explore specific system relationships between the Arab mothers in relation to broader social, or institutional factors (Vandenberg & Hall, 2011).

Data analysis included three aspects: description, analysis, and interpretation of culture the Arab mothers shared (Wolcott, 1996). The recorded interviews were converted from audio format into text. Data coding, analysis, and interpretation were undertaken using NVivo software. Data were coded into categories and themes using low level coding to group initial data

(Carspecken, 1996; Smyth & Holmes, 2005). After low level coding, I read the interviews again to get a sense of the emerging themes. High level coding of abstraction was then generated by linking categories to provide coherence and meaning to themes (Carspecken, 1996; Smyth & Holmes, 2005). Throughout the research process, I revisited the data several times and immersed myself in the data in order to move beyond categorisation of data to the synthesis and construction of these meaning fields (Smyth & Holmes, 2005). Direct quotes were chosen to support the themes and to give voice to Arab mothers' experiences. Validity was required for Stages 4 and 5 in relation to macro-level social theories to analyze findings through peer debriefing, member checks, and corresponding findings in published literature (Cook, 2005; Smyth & Holmes, 2005). Carspecken states that there is no one specific way to conduct the analysis and each researcher can create their own way that fits the findings. The researcher is cautious to be honest in writing and to not let personal beliefs affect or mislead what is written about others (Carspecken, 1996). The final research report needs to "define cultural reconstructions with references to both interview and observation material" (Carspecken, 1996, p. 163). To confirm the validity and credibility of the findings, I went back to three of the participants and checked if the preliminary findings made sense for them and to confirm that it was an accurate and complete representation of what they told me (Robben & Sluka, 2012; Thomas & Magilvy, 2011). It also gives these participants an opportunity to add more information that might have occurred to them since the initial interview and now in this member checking interview (Robben & Sluka, 2012; Thomas & Magilvy, 2011). Trustworthiness is important as it reflects the relationship between the researchers and participants. It can be achieved by credibility, transferability, dependability, and confirmability of meaning reconstructions (Guba, 1981; Smyth & Holmes, 2005). In this study, trustworthiness was

achieved with my engagement in the field, peer debriefing with my supervisors, and member checks. During my initial interview with the Arab mothers, I restated or summarized the information and then questioned the participant to determine accuracy (Guba, 1981; Smyth & Holmes, 2005). Additionally, to enhance transferability of the findings, data were collected and recorded from a variety of participants in their primary language with utmost care to preserve the meaning intended. After development of themes and sub-themes at completion of the study, I met with three Arab mothers and confirmed the accuracy of the findings (member checking). During member checking of my findings, I used simple language to explain to these mothers about the purpose of the interview. Further, I restated the findings of the study while making a follow-up question on whether they believe this was the general approach of their contribution during data collection. All participants confirmed the results/interpretation. Then I asked additional questions that arose from the previous interviews. For example: "What kind of advice did your mother give you? What could be done to make the communication between you and your mother, a better experience for you?"...etc. Finally, I incorporated any additional information into the research results.

3.5 Ethical Consideration

Health research ethics committee approvals were obtained from the Conjoint Health Research Ethics Board (CHREB) at the University of Calgary, Alberta and Alberta Health Services Administrative Committee. This study of Arab immigrant mothers' breastfeeding practices was guided by ethical principles from the Tri-Council Policy Statement (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada & Social Sciences and Humanities Research Council of Canada, 2010). In keeping with the principle of respect for human dignity which includes the principle of respect for persons,

concern for welfare, and justice (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada & Social Sciences and Humanities Research Council of Canada, 2010), an explanation of the study purpose was given to all participants. I explained to the participants that the information gathered from the interviews would help in developing a deeper understanding of the experiences of breastfeeding among Arab immigrant mothers and has the potential to inform practice in Alberta Health Services.

There were no perceived harms or foreseeable risks associated with participating in this research as explicated by Haber and Singh (2009). I provided the participants with enough information to be able to adequately assess risks and potential benefits associated with their participation in the research. I attempted to minimize the risks associated with answering any given research question. I informed them, in advance, about the potential of feeling emotional stress when reflecting on past experiences. Participants were treated with respect and dignity when sharing their personal experiences as explained by Cutcliffe and Ramcharan (2002).

In keeping with the principle of respecting justice and inclusiveness, all participants were treated fairly and equitably by making sure that they were informed about the research process and the details of the study (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada & Social Sciences and Humanities Research Council of Canada, 2010). People or groups whose circumstances cause them to be vulnerable or marginalized may need to be afforded special attention in order to be treated justly in research (Cutcliffe & Ramcharan, 2002; Haber & Singh, 2009). To do so, participation was based on inclusion criteria that were justified by the research questions which were aimed at mothers from Arab counties with no restriction on race and religion.

Another important ethical consideration is informed consent. This was managed by helping Arab mothers make an informed decision. To ensure full disclosure, I gave complete, clear, accurate, and understandable information during the informed consent process so that they could comfortably choose to consent or refuse to participate. Arab mothers were given a copy of the consent form in their language of preference, either English or Arabic copy. They were informed that their participation in the research project was entirely voluntary and that they had the right to withdraw at any time without a need to explain why and without prejudice.

Qualitative methodologies treat informed consent as an ongoing process (Speziale et al., 2011). Throughout the interviews, free, informed, and ongoing consent was maintained by revisiting participants' consent and allowing them to be involved in the decision-making process as to whether they want to continue their participation in the study.

It is an important ethical consideration to ensure no participant coercion. Ethnocultural minority groups are considered to be more vulnerable or marginalized than majority groups, often due to limited capacity or limited access to social goods, such as rights, opportunities, and power (Cutcliffe & Ramcharan, 2002). My research involved interviews with Arab mothers who came from the same cultural background (e.g., same religion, belief systems, and language). As an Arab Muslim woman myself, the potential subjects may feel an affiliation with me that would cause them to volunteer more readily than they would with a researcher who does not share the same ethnicity. Consequently, their consent may not be entirely voluntary because they may feel pressure to accept my request and to provide their consent. This can lead participants to get involved in research projects without fully understanding the research including their role, responsibilities, and rights. To avoid coercion, participation in this study was determined by the inclusion and exclusion criteria. Public health nurses were solely responsible for evaluating the

inclusion and exclusion criteria of each potential participant, shared the study information with Arab mothers, and encouraged them to contact the researcher. Once permission was obtained from Arab mothers, a list of potential participants was then shared with the researcher. I then contacted them, further explained the study, ensured their eligibility to participate in the study, and asked for their voluntary participation in the study. Arab mothers were informed of all necessary information required to make a decision about their participation without interference. Also, I asked the participants to tell me what they understood the study was about, what they expected their participation to involve, whether they had any questions, and whether they felt comfortable in agreeing to participate. Every effort was made to ensure that the Arab mothers were aware that their decision to participate or not to participant in this study would not impact the health care they receive in the clinics.

Privacy, confidentiality, and anonymity were maintained by assigning a pseudonym and transcription code numbers to data. All data were in electronic form and were stored on a password protected computer, accessible only by the researcher and the principal investigator. Data collection and analysis processes were supervised by the principal investigator of the research. No identifying information was included in the final research report. Direct quotes used in the report do not contain identifiers. After completion of the research, the consent forms, the field notes, transcribed interview data, and audio recordings files will be destroyed five years after the completion of the study, as per the University of Calgary, CHREB guidelines.

In the following chapter, I present the results, major themes and sub-themes that emerged from the analysis of the qualitative research data.

Chapter Four: Results

Addressing the research questions identified in section 2.9, this chapter presents results of the interviews that were conducted with ten Arab mothers in Calgary regarding breastfeeding practices. Through the lens of CST and Carspecken's critical ethnography method (1996), an analysis of the qualitative research data was conducted under key areas which were considered to influence the mothers' decisions regarding breastfeeding and alternative methods of feeding their babies. In the following sections of this chapter, the demographic data about the participants that comprise my sample, and four primary thematic components of support (knowledge, family, religion, and infant feeding practices) and the details about the support relative to each theme as described by the participants are reported. In reporting the results, pseudonyms are assigned to respect and maintain the participants' confidentiality.

4.1 Characteristics of Participants

The socio-demographic data about the ten female participants in the study are presented in Table 1. Maternity data are presented in Table 2.

Table 1. Participants' socio-demographic data.

Characteristic	Categories of Data	n (%)
Maternal age in years	20-30	3 (30%)
	31-40	7 (70%)
Marital Status	Married	10 (100%)
	Single/Never married	____

Characteristic	Categories of Data	n (%)
Country of Birth	Egypt	3 (30%)
	Iraq	3 (30%)
	Libya	1 (10%)
	Morocco	1 (10%)
	Somalia	1 (10%)
	Tunisia	1 (10%)
Religion	Muslim	10 (100%)
	Other	____
Years in Canada	Less than 1 year	1 (10%)
	1-2 years	5 (50%)
	3-5 years	4 (40%)
Education level of participant	High school	1 (10%)
	Post-secondary diploma	1 (10%)
	University	8 (80%)
Employment status of participant	Part-time student	1 (10%)
	Work Part-time	1 (10%)
	Self-employed at home	1 (10%)

Characteristic	Categories of Data	n (%)
	Unemployed	7 (70%)
Participant current Occupation	Business	1 (10%)
	Cashier at grocery store	1 (10%)
	Full-time homemaker	7 (70%)
	Student	1 (10%)
Current Education level of Spouse	High school	1 (10%)
	Post-secondary diploma	2 (20%)
	University	7 (70 %)
Current occupation of Spouse	Blacksmith	1 (10%)
	Cashier at a big box store	1 (10%)
	Chef	1 (10%)
	Construction worker	1 (10%)
	Electrician	1 (10%)
	PhD student	3 (30%)
	Taxi driver	2 (20%)
Annual household income	$11,000-$20,000 CAD	2 (20%)
	$21,000-$30,000 CAD	3 (30%)

Characteristic	Categories of Data	n (%)
	$31,000-$40,000 CAD	3 (30%)
	$41,000-$50,000 CAD	1 (10%)
	Do not know	1 (10%)
Involved within community activities	No	8 (80%)
	Yes	2 (20%)

Table 2. Maternity data.

Characteristic	Categories of Data	n (%)
Gravida	Primi-gravida	3 (30%)
	Multigravida	7 (70%)
Type of delivery	Caesarean section	3 (30%)
	Vaginal delivery	7 (70%)
Age of the infant	< 1 month	2 (20%)
	1 to 2 months	5 (50%)
	2 to 6 months	3 (30%)
Gender of the new infant	Male	3 (30%)
	Female	7 (70%)

Characteristic	Categories of Data	n (%)
Current breastfeeding practices	Predominant breastfeed	1 (10%)
	Formula feeding	4 (40%)
	Mix feeding (breastmilk and formula)	5 (50%)

As evident in the table, characteristics common to all participants were that they were Arab, Muslim, and married. Otherwise, they differed across a variety of criteria such as country of birth and years in Canada (see table 1and table 2). For a more detailed description about each participant, see Appendix I.

4.2 Sources of Support

Exclusive breastfeeding is nestled within a culture of support which serves to inform, motivate, enable, and sustain its practice. In this section, I identify four primary components of support that emerged from my analysis of the participant interviews. I describe how each component influenced the participants' decisions regarding their breastfeeding practices.

4.2.1 Knowledge

The WHO (2016) advocates the practice of exclusive breastfeeding, which is to give a baby only breastmilk and nothing else until they are at least six-months-old, (i.e., no other food or drink, not even water, except breastmilk [including expressed milk]). It does, however, allow the infant to receive oral rehydration solutions, drops and syrups (vitamins, minerals, and medicines). Despite the well-recognized importance of exclusive breastfeeding in the western world, this practice is not widespread in low-income countries (Gardner et al., 2015; Patil et al., 2015). Findings of the study indicated that all participants did not have the knowledge about exclusive breastfeeding, nor were they aware of the recommended number of months to

exclusively breastfeed. For example, when Sara was asked what came to her mind with the mention of "exclusive breastfeeding", she said, "I have never heard of this." As with Sara, Shaima had never heard of exclusive breastfeeding and questioned: "Do you mean only the mother would feed the baby?" The participants of this study indicated that they were never told by their family members or HCPs back home or in Canada about the practice of exclusive breastfeeding. Lena put forth that the concept of exclusive breastfeeding was unfamiliar to Arab mothers: "This terminology does not really exist in the Arab world." Six out of ten Arab mothers in this study breastfed their infants; none of them practiced exclusive breastfeeding for six months. Women in this study provided fluids other than breastmilk to their baby without knowing the negative impact of these fluids on breastfeeding frequency and duration.

Five participants expressed their concern that the practice of exclusive breastfeeding would not be sufficient for a baby's growth. Rather, they supported the introduction of formula as a complement to breastmilk to meet the baby's demands and promote their growth. Eman voiced her thoughts on this subject: "I learned that breastmilk is better than formula feeding but not *only* breastmilk." She considered supplementing breastmilk with formula as a necessity because, in her understanding, breastmilk is not sufficient for the baby's growth. Haneen said:

> Based on my experience, I think it will be next to impossible to only breastfeed without formula feeding. It is difficult. If I *only* breastfeed and I know I do not have enough milk, it will affect negatively on my infant's health. Without the formula, my baby will lose weight and her health will deteriorate.

Misinformation about the nutritional value of formula in comparison to breastmilk may have influenced breastfeeding practices among Arab mothers. Rania voiced her opinion on breastmilk versus formula saying: "In general, I think that formula is also very good. I do not think there is

any difference between the two." Some of the mothers conveyed the belief that formula milk contains more nutrients than breastmilk. This was evident in the statement by Shaima who said that: "When they [mothers] look at the formula feeding label, they see all the vitamins and they think they do not have it in their milk." Consequently, their lack of knowledge and misinformation inhibited their ability to make informed decisions about optimal feeding options for their infants.

Knowledge is recognized as a hallmark of establishing and sustaining successful breastfeeding and all mothers expressed their need for more knowledge. The participants acquired knowledge through a variety of ways including handouts in clinics, doctors' offices, and the hospital, internet, DVDs, and incidental (non-scheduled) teaching by nurses, lactation consultants, and dietitians. However, the mothers asked for more information about aspects such as feeding, positioning the baby to facilitate latching on to the nipple, how to know if the baby is getting enough milk, how often to feed, and whether to combine breastfeeding with formula feeding. They had questions related to themselves such as what foods they should eat that would stimulate milk production, what foods they should avoid that could cause the baby to have gas, how to care for engorged breasts and sore nipples, and whether lack of breast engorgement was an indicator of lack of milk. What they were advocating for, although they did not use the term, was an expansion of the nurse's role to include these components of care more completely. One of the Arab mothers pointed out that:

> They were the hardest for me because I was in a lot of pain from my Caesarian Section. I also had to clean the house, and I had to also take care of my son, and I had to run all my other daily errands. Well, my husband did also help me, but it felt like he could not help me enough. I needed a nurse to come to my house and help me with breastfeeding

> because I was not able to leave the house to go to the nurse. Also, the first ten days are also very tiring because of giving birth. And it is natural for every woman to feel this way, and especially for us women that live here in Canada without our family help and support.

Receiving a brochure that included the information they needed was not sufficient. It did not allow them to ask questions nor did it give the nurses the opportunity to ensure that their clients understood the information that was provided. For example, Fatima suggested: "It would be better to inform mothers about the benefits of breastfeeding… may be teaching mothers about the latching positions." Maya also stated:

> I need more answers and more explanations to my questions in order to be able to take the right decision regarding feeding my baby, formula or breastmilk. For example, why I should not give water to the baby? What is the reason for that? I do not understand why. What will happen if I give water?... etc.

Even when knowledge was made available, a major barrier to its acquisition was language. Although it varied from one participant to another, none of them was fluent in English. Some of the mothers spoke about the language barrier as an obstacle to understanding the information given by the HCPs. Lena said: "I do not speak English, so it was hard for me to understand the nurses. My English is not good, but they can make information guide in Arabic for whom that do not understand English." Their lack of comprehension was compounded further by the use of medical terms by the HCPs. Problems with the terminology prevented even those who could speak English from really understanding. For instance, Sara explained that: "My English is very poor, and I could not understand what they were talking about, especially the medical terms." Information on breastfeeding translated into Arabic would help mothers like Sara and Lena avoid

language barriers and improve their knowledge about the benefits of breastfeeding and how to achieve its success. In addition to increasing their knowledge, it could also reduce stress which was evident in Lena's statement: "I have fair English language understanding and speaking, but I would be much more comfortable speaking about my feelings in my mother tongue. Having a provider who can speak the same language as me would be extremely helpful." This lack of ability to communicate can be frustrating and worrying. A translator with the same background would facilitate understanding of problems that are being felt by the mothers.

4.2.2 Family

Family and friends traditionally exert a strong influence on the childrearing practices of Arab mothers. This was evident in the mothers' decisions on initiating and sustaining breastfeeding. Knowledge of the benefits of breastfeeding passed on from trusted family members supported the participants' decision to breastfeed their children. All participants identified that family, particularly mothers, strongly influenced their breastfeeding practices. They identified their mothers as a source of information about breastmilk. For example, Rania said: "My mother knows basically everything about breastfeeding. I heavily rely on my mother's advice." Like Rania, Sara relied on her mother's encouragement to breastfeed because of the benefits of breastfeeding for the infant, saying: "My mother told me that a mother's breastmilk makes a child mentally and physically healthy..." Both Sara and Rania took their mothers' advice with seemingly little hesitation showing that trust in their mothers' knowledge impacted their decision to breastfeed their infants.

The mothers' narratives communicated the importance of nutrition for best quality breastmilk and in promoting lactation and their desire to provide the best possible nutrition to their infants. Here again, advice from their mothers was significant. Haneen's mother provided

her with diet tips appropriate for a lactating mother, to increase milk supply. She said: "She [her mother] knows what kind of foods have more vitamins, and which foods help to increase the secretion of milk."

Five of the participants spoke about the support they received from their mothers' relative to dealing with breastfeeding related complications such as sore nipples. This was exemplified by Sara:

> One time, my breasts hurt a lot; there was blood coming out. I did not know why. I asked my mother if I should stop breastfeeding. My mother said no, you should get this oil and this and that…I did what she told me and got all things needed. I put the oil on my nipples and the pain decreased.

Seeking support and advice from mothers extended beyond encouragement of breastfeeding; physical care and domestic support with daily living activities were viewed as other major facilitators to participants' breastfeeding. Haneen and Nadia were fortunate enough to have their mothers come to Canada to visit. Their presence in providing support was instrumental in a variety of ways as was evident in Haneen's account:

> I am immigrant here and do not have any family member to help. So, it was great that I had my mother visiting from back home. My mother focused on the right diet and nutrition. She would tell me to sleep whenever the baby is asleep to help me mentally and not to feel stressed. She would clean the house for me and cook for me, which is less stressful. I just have to focus on the baby.

And Nadia explained, "The days she [the mother] stayed with me, she was helping me a lot. She would take care of the baby in the morning and that helped me to have enough sleep …when I slept well, I could feel the milk next thing in the morning." Both participants

asserted that having their mothers physically present and assisting with daily activities reduced their daily domestic responsibilities. As a result, they were relieved of the stressful physical work experiences. Both of the mothers pointed out that the assistance promoted increased secretion of milk for their infants. However, once their mothers left, the support decreased significantly and their milk secretion was inhibited due to stress associated with increased engagement in daily domestic chores.

The other eight participants were not fortunate enough to have their mother's direct support after delivery. They relied on telephone communication, (e.g., Skype, WhatsApp) which limited the support they received. As immigrants living in Canada without extended family members, these mothers consequently experienced difficulties in breastfeeding their infants. They were overwhelmed with their domestic responsibilities and felt tired, stressed, and sometimes depressed; feelings that negatively impacted their breastfeeding practices. Sara shared her experience, saying:

> I must take care of my 4-year-old a lot and I do not have anybody to help me, which cause my stress and anxiety to be worsened. Back in Iraq, if somebody gives birth, everyone is helping, cleaning, and helping around the house… here [in Canada] when I got out of the hospital, I could not do things for my baby, I was so tired…every time I face a difficulty with my baby and breastfeeding, I would cry...I do not have the help I needed… my milk probably reduced from all the stresses.

Sara recognized that her stress and anxiety related to immigration and the different environment and society impacted her milk production. She explained, "… the main reason for being stressed is to be immigrant in a country away from my family and because I am in a completely different environment…"

The participants' mothers were influential in whether the participants could trust their healthcare professionals' advice or guidance regarding breastfeeding, although in different ways. For example, when Asma was having problems with her breastmilk supply and the doctor told her to give formula to the baby as a supplement, her mother told her:

> …not to listen to what doctors said here [in Canada]. She advised me to be patient and eventually the milk will come out. I had given it a try, yet, as soon as I start breastfeeding her [the baby], she would cry immediately. However, I end up giving her formula feeding. It is my first baby and I was afraid to take the risk.

In attempting to be supportive, Asma's mother, who was giving advice from her home in Egypt, created conflict and insecurity for Asma. In contrast, Haneen's mother held an opposing view. Her mother advised her to abide by the doctor's advice. Haneen said: "She [her mother] would always tell me to ask the doctors and make sure I follow their suggestions because they have the education, more experienced in this field and trustworthy." In retrospect, the provision of conflicting information based on the advice of some of the mothers and the doctors presented a major challenge in terms of making decisions on breastfeeding. Self-determination is often the desired approach to rational decision-making. However, with the reliance on different information sources, the credibility of the decision derived may incorporate some bias. The immigrant mothers in Canada experienced some level of challenge in deciding whether to sustain exclusive breastfeeding or integrate the formula feeding as advocated by the less culturally conservative Canadian health care professionals. As a result, there was evidence of clear conflict and mistrust towards the information provided by healthcare professionals (HCPs) among mothers who had experienced profound influence from their more culturally conservative families. This implied that the extent to which advice was adopted largely depended on the trade-

offs made by the Arab mothers in critically evaluating the advice from both factions and arriving at a decision perceived to yield optimal outcomes for the infant.

Husbands were another source of support for the participants although their role was primarily limited to encouraging their wives to breastfeed and to meeting financial needs of their families. In the context of breastfeeding decisions, they were seldom involved. As described in the literature review (see p. 12), the Arab culture on the distribution of gender roles is key in establishing and maintaining this status quo. In the cultural context, women are considered responsible for all domestic chores as well as taking care of the newborn and the family. This implies that they are also responsible for making decisions in these respective areas. Not surprisingly, the men have few domestic skills and, at best, a limited capacity to take care of the older children. Having been enculturated into these roles, the mothers expressed discomfort in accepting help from their husbands even if it was offered. Lena clarified this saying:

> I did not like seeing my husband having to do my job. The idea of men working at home is not acceptable in my culture. He could help when I am sick, but that is not even part of his duties. We are not used to the idea of a women being sick. In my culture, I am supposed to be strong and healthy all the time… I do not feel very comfortable asking him for help. I would only ask for him to do simple things or things that I actually cannot do because I am either sick or pregnant. I do my best not to ask him for things much. That is what I have been taught when I was little.

A spouse's stress and financial pressure can also affect the level of support, which he could provide to the mother which, in turn, influences breastfeeding. Raina stated: "If the family is not financially stable, they will be under a lot of pressure …my husband is busy with work and he cannot help… if the husband cannot support and no family members to help for sure it would be

hard to continue breastfeeding." Nadia's husband helped her while at home, but she had no support when her husband went to work. Therefore, she did not get time to rest and breastfeed.

Despite acknowledging the presence of other relatives such as the mother-in-law and sisters, extended family members did not seem to have any direct influence on the mothers' breastfeeding practices. Perhaps this was because these family members were not in Canada and therefore less accessible to help these women. Additionally, although not a family member, one of the mothers had the support of a housekeeper, which allowed her to focus on caring for her baby and herself. However, given the income level and occupation of the participants and their spouses, not all of them could afford to pay someone to help them.

4.2.3 Religion

Religious beliefs and values strongly influenced breastfeeding practice by the participants, all of whom were Muslim. A verse in the Qur'an, which is the Holy Book of Islam, encourages breastfeeding for two years after the baby's birth. It is based upon the act of mercy as dictated by the Qur'an; an act that is demonstrated by the mothers' provision of food or nourishment to their babies who fully depend on them. This explains why Muslims believe in the practice of breastfeeding since it is enshrined in the Qur'an.

The strength of Shaima's religious beliefs was enough to ensure that she decided to breastfeed. She said: "Since it is mentioned in the Qur'an, then it is the best for the baby." Lena echoed Shaima's sentiments: "If it has been mentioned in the Qur'an, it must be the best for both the mother and the baby." Participants mentioned that in many Arab societies, breastfeeding is a strict religious practice and mothers breastfeed their children to follow the Qur'an. Maya said: "Some people are strictly following the religion. For them, it is mandatory to breastfeed for two years. It is more religious and cultural rather than a personal opinion." Haneen also linked

breastfeeding with culture. She stated that breastfeeding was not a religious matter only but also one of cultural beliefs. She said, “It is not about religion at all. People from different religions can support breastfeeding as well. It is more of cultural and personal beliefs and values.” Another participant stated that Islam encouraged but did not force a mother to breastfeed her child. For example, Eman explained: “In the Qur’an, it encourages breastfeeding for two years. It is not a must, but to whomever can breastfeed.” She emphasized that, in her religion, it is a choice rather than a rule.

The findings from this study revealed that some religious beliefs and values impeded breastfeeding practice. Given that exposing intimate body parts is unlawful for Muslim women, some participants were discouraged from breastfeeding in front of others. Maya reported “…in Islam, women should not expose her body to men other than a family. My mother-in-law and other women advised me not to breastfeed in front of others.” Consequently, some participants avoided socializing while breastfeeding their children. As Maya described: “I actually was invited to three different parties and I attended none of them because I am too shy to breastfeed in front of others.” As a result, some Muslim women opt to feed their baby with infant formula thus further hindering breastfeeding.

Another practice that inhibits or reduces the longevity of breastfeeding among Muslim women in Arab societies is the religious practice of using foods other than breastmilk for a duration after the birth of a baby. One practice, known as Tahneek, arises from a Sunnah, which involves sayings, practices, and teaching of Muhammad, the prophet of Islam. It is believed to prevent low blood sugar in the baby, increase immunity, and help the infant gain weight faster. Lena described the practice as: “… basically softening a date, and then rubbing it onto the palate of the baby’s mouth just after birth. We do it for about seven days or more.” Although these

customs are practiced to maintain the health of the baby, they might disrupt exclusive breastfeeding practice.

For these participants, the traditions of the family circle continued to hold strong here in Canada. Sara said, “I have practiced Tahneek on all my children here in Canada. I believe people should practice this because it is a culture tradition and it is healthy for the infant.” She carried this cultural belief and practice to Canada and suggested that this is a social tradition for most Arab families.

4.2.4 Infant Feeding Practices

The participants came from a variety of Middle Eastern countries which was reflected in their different cultural beliefs and practices pertaining to production of breastmilk and its quality, and introduction of foods in addition to breastmilk. In Iraq, sugar dissolved in water is given during the first three days of life. It is a traditional way to celebrate the birth of the baby and welcome the newborn to the family. This tradition, as described by Sara, has been passed down through generations. Sugar water is also given for physiological reasons including to clear bacteria and amniotic fluids from the baby’s stomach and to treat jaundice. Sara explained: “In our culture [in Iraq], we give our babies sugar dissolved in water in the first three days of the baby’s life to clean their stomach from bacteria and the amniotic fluids that were swallowed inside the mother’s womb.” She continued: “Back in Iraq, most people also suggest sugar and water to cure jaundice.”

Maya, who is also from Iraq, cited the practice of giving herbs such as anise (which also called niseed, a flowering plant in the family Apiacease native to the eastern Mediterranean region and Southwest) to alleviate gas pains. Maya chose not to give this herb based on advice

she received from Canadian doctors and nurses. She wanted to follow the Canadian standard even though her mother-in-law insisted that she abide by their ethnic traditions. Maya related:

> In Arab countries, they usually add sugar with water, and some herbs like anise to help with the infant's gas… My mother-in-law would force me to give him [the baby] water and sugar constantly. I try not to give him anything other than milk, as I was advised by doctors and nurses [in Canada].

This is an example of conflict, which can arise when two cultures are in opposition. Maya resolved her dilemma by pouring the anise down the sink and not telling her mother-in-law that she did so. Giving herbs is also the practice in Egypt although they are started after the first month. It is believed that products such as anise, licorice, fennel, etc. help to calm and relax the babies. Anise is also given to babies in Tunisia.

Giving water in addition to milk was also a practice among Arab mothers in this study, although the reasons were not always clear. Some participants maintained that babies, like adults, need water. Some believed that breastmilk does not contain sufficient water. Relative to regional areas, in Egypt, sugar water is given to babies in very hot weather. In Tunisia, water is also given to the babies but sugar is not added to it. Lena did not have an explanation for this; only that it is the practice. “Why do I have to add sugar to the water? Nobody in my family does this.” In Somalia, babies are given water in the hospital following the delivery. It is the traditional way of welcoming the newborn “because the baby is a blessing.” In Canada, the participants reported that the nurses told them not to give water to their babies although the nurses told Haneen she could begin giving water when her baby was six months old. The advice to withhold water created a conflict for Rania. While in Canada, she chose not give water to her baby. However, when she visited Tunisia, she was questioned: “Why do not you feed your son water? He must be

so thirsty, feed him some water." Most, but not all, of the participants said they were likely to hold to traditional beliefs and follow traditional practice in their decision to give or not to give water.

Other participants stated that they also gave their babies medicinal liquids and supplements. For example, Fatima and Asma gave their children Gripe Water (which is an over-the-counter liquid supplement containing sodium bicarbonate and herbs) to treat colic. They started giving them Gripe Water right after birth, especially when they feel that their baby might be having pain or having stomach discomfort.

Relative to the introduction of solid foods, participants described Middle East practices that are widely divergent from those that are advocated in Canada. Eman related the tradition she followed in Iraq.

> After turning three months old, I [normally] try to feed them things that we eat. My family does this, and I learned it from them. In my society, mothers start giving food at early stages despite the fact if she is breastfeeding or just formula feeding.

Other participants, like Shaima and Fatima, mentioned that they start having their infants taste food within the first 40 days of the baby's life. They believe that giving food at an early age helps the infant get used to it. Also, right after birth, they start giving them boiled milk, dates, and any fruits from which juice can be squeezed. Shaima also believes that solid foods provide the babies with the extra nutrition that they need, build up their immunity, and protect them against food allergies. She suggested that: "Mother should start giving the child other food at four months or maybe earlier, so she [the baby] will get the nutrition she needs and reduce the chances of having an allergic reaction to certain kinds of food later." Fatima added that introducing solid foods at an early age reduces the incidence of picky eating habits in children.

She emphasized: “This will help in the future to reduce eating habits and pickiness.” These practices are in direct contradiction to the teachings in Canada where solid foods are not introduced until six months of age.

All of the participants identified the quantity of milk they produced as a source of concern. For some, the amount of milk was never sufficient. For others, the amount was sufficient initially but then diminished over time. They perceived that their supply of milk was insufficient when their babies did not settle readily following a feeding or when the babies slept only short periods between feedings. The fact that they were not able to measure the amount of milk that the baby drank at each feed added to their lack of confidence as to whether their infants were getting sufficient amounts of milk. Factors that affected the production of breastmilk included sucking difficulties, fatigue, stress, diet, bottle preference by the baby, and supplementation with formula. A number of interventions were initiated in response to these factors. Shaima, who practiced both breastfeeding and formula feeding due to low milk production, argued, “I tried to breastfeed her [the baby] for the first month; however, the milk secretion got lower slowly […] so, I had to give her formula feeding along with breastfeeding and now I just formula feed her.” Shaima wanted to breastfeed only, but her milk production did not allow this so she had to turn to formula. Similarly, Rania struggled with getting her son to latch on properly, but even then, her milk supply was inadequate for him. Although at first, Nadia was able to easily feed her baby, once her milk supply started to diminish, she chose to formula feed as well; now she *just* formula feeds.

Lena perceived that her breastmilk production was insufficient for her baby, therefore, the baby remained hungry and lost weight. Lena stated, “She [the baby] was not gaining any weight at all whatsoever…for a while, her weight literally stopped increasing, it was just the

same. And that made me very worried and scared for her." Lena's baby's weight loss caused by her low milk supply began to alarm her.

Getting the baby to latch properly was one of the sucking difficulties encountered by several of the mothers. Two reasons for this included nipple size (too large, too small) and incorrect positioning of the baby. In response, they were shown how to use a nipple shield and how to position the baby to facilitate latching. Haneen said, "Due to my [big] nipple's size, the nurse gave me nipple shield to make the sucking process easier for the infant." Eman emphasized: "A nurse actually helped and showed me how to put the baby in position for breastfeeding. Before that, I used to use only one position to breastfeed my baby." These mothers noted that the support provided by the nipple shield and the concurrent teaching by the nurses helped them to initiate breastfeeding.

Three participants chose to formula feed their infants when their babies would not breastfeed. This refusal was perceived to be because the babies did not like the taste of breastmilk, had become accustomed to formula feeding (either favouring the taste of formula or preferring to feed from a bottle), or were taking insufficient amounts of breastmilk. Sara described her daughter's reaction to being breastfed: "She [the baby] found it [the bottle] easier. When I put her on my breast, she would push back. When the breastmilk gets in her mouth, she would spit it out."

Measures used to stimulate greater milk production included using a breast pump, feeding the baby on demand, medications, breast massage, application of warm cloth on the breast prior to feeding, and diet. Asma explained: "I massaged my breast and put something warm on top of my breast to help increase the milk supply. It worked for a while, but I generally do not have enough milk." In relation to diet, Rania maintained that the amount of breastmilk she

produced was dependent on the amount of milk that she drank. When these various interventions failed to achieve the desired result for at least eight of these mothers, they were advised by HCPs to supplement breastfeeding with formula feedings. Supplementation with formula was also recommended for mothers who were getting very little sleep because of the frequency of feeding required by the baby. Nadia described:

> I breastfed her [the baby], but she always cried a lot and the nurse asked me to give her formula milk. The milk supply was not ready to come out yet […] I could not feel anything in my breast. It came out in such small doses, it was mostly just drops of milk that were very small. The nurse told me to give her the formula at night so that she sleeps, and I can rest too.

However, some of the participants noted that supplementation with formula reduced the number of breast feedings resulting in diminished milk production. Consequently, while some of the women continued with a combination of breast and formula feedings, others discontinued breast feeding in favour of formula feedings only. None of the women continued with breastfeeding exclusively.

Shaima who had developed a complication during labour underwent a caesarean section. Following the surgery, she was in pain and experienced difficulties in breastfeeding, and afterwards her milk production reduced. Therefore, Shaima chose to formula feed her child. She stated:

> I tried to breastfeed her, but it was tough since the surgery pain. The nurse kept giving her formula feeding… I was too tired and sleepy. I tried to breastfeed her for the first month at home; however, the milk secretion got lower slowly. So, I had to give her formula feeding along with breastfeeding. And, now I just formula feed.

Sara who also had a caesarean section voiced her distress, with respect to the formal care provided by the HCPs. She recalled that her infant received formula feeding after birth and the decision to feed the baby formula was not brought to her. Sara felt lack of control over the discussion to breastfeed her baby.

The stress and anxiety related to being immigrants who were struggling to adapt to a different culture and society impacted their milk production. Sara perceived that being in a very different, unfamiliar environment, and being cut off from the support that her family would have provided had they been closer, diminished her milk production. Sara shared her experience:

> I am immigrant here and do not have any family member to help... There are lot things that I usually do with my family that I cannot do here because I am alone […] that really affects me here. For example, my mother used to always choose my kid's clothes and pack the hospital bags for me. But here is alone, alone, alone, and alone every time. I did feel stressed all the time and cannot focus on breastfeeding.

Four participants spoke about the possible negative impact of formula feeding on infants, for example, diarrhea, constipation, stomach gas and discomfort, and lack of immunity. Sara added: "Formula feeding has many disadvantages because you need to try different kinds until your baby finds one they like…This may cause diarrhea and other digestive problems for your baby." Here, Sara acknowledges that it is not as simple as buying one brand or type of formula and getting the right one for the baby immediately. It could take some time to get the baby established on the best formula for him. Lena shared her experience regarding reduced immunity, which she attributed to formula feeding. She believed that if she had not formula fed her son, he would have stronger resistance to illnesses "I did not breastfeed my first child, and now he has asthma and his immunity is very low."

Four of ten participants mentioned that formula supplementation was advised by the doctors and nurses to maintain the child's growth, weight, and hydration. As Maya explained:

> I went to the doctor and they have checked my baby's weight and told me to supplement formula feeding with breastfeeding to help him grow and gain weight. The nurse who was in charge of my situation had suggested to use formula feeding aside with breastfeeding due to my baby's fast weight loss. And that would quickly accelerate to dehydration.

She also mentioned that she was sent to the hospital emergency room for the child's weight loss where the doctor advised her to formula feed. Maya said, "I think it is the doctor's decision, it is not the mother…if a mother cannot breastfeed for more than two days, they would immediately give formula feeding." Asma said:

> I was really terrified of what doctors have been telling me about the baby not getting enough milk and that could affect her sleeping continuously, as well as it can be risky on the brain. So, I started giving her formula feeding.

Nadia started formula feeding and followed the feeding plan given by the doctor. The plan was to feed formula milk every four hours to make sure she was getting better and gaining weight. These mothers seemed to believe that by combining breastmilk and infant formula, their babies had better outcomes in terms of weight gain and overall wellbeing.

Other factors that influenced the participants' decision to breastfeed versus formula feed were convenience and finances. In terms of convenience, breastmilk can be readily delivered to the baby on demand. It is free of contaminants, is the correct temperature for the baby, and no clean-up is required once the baby has finished. It is inexpensive and readily available when the

mother is away from home with her infant. As a result, most of the Arab mothers who preferred breastmilk argued based on these perceived benefits. Nadia argued that:

> It is easier […] for the mother. It is less work, especially when you are outside your home. You do not have to worry about cleaning bottles or warming it [the milk] up, and it is not expensive. As well as healthy for the infant.

In addition to the mentioned perspectives, five of them added that breastmilk could be kept in the freezer for long periods without deteriorating. Additionally, Asma recalled the positive emotions that breastfeeding her children evoked for her. She echoed this sentiment with: "Breastfeeding is a treasure; it creates closer connections between the baby and the mother." Relative to combining breast feeding with formula feeding, Rania communicated her opinion about feeding the baby breastmilk and formula alternately saying:

> This is important. It teaches the baby to get used to being fed in both ways. In the situation [where] the mother wants to go out and leave the baby with a friend or a family member, it would be much easier for that friend or family to feed the baby.

Here, Rania touched on the inconvenience of having to always be with the baby to feed him and not being able to go out to work, or out to rest and relax, etc. Early use of formula can enable the baby to become accustomed to its taste and to drinking from a bottle so that the transition to formula only (if necessary) is easier. Another option is to express breastmilk and store it for use when breastfeeding is not convenient. Expressing breastmilk can be done either manually or by using a breast pump. However, this option was not viewed as desirable. Shaima found herself too tired and could not pump the milk, therefore could not follow the advice of the nurses "Even though nurses were encouraging breastfeeding and provided me with a pumping machine…I could not pump because I was too tired and sleepy."

The economic benefits of exclusive breastfeeding were stressed in this study. Asma expressed her concern regarding the price of formula: “Not everyone can afford the financial status to provide formula milk.” Haneen suggested: “It is better to breastfeed if a mother can, to save some money.” Rania spoke of breastfeeding in her home country of Somalia where most people breastfeed their children “I come from an underdeveloped country, and the poverty rate is very high.” Rania suggests here that the high rate of breastfeeding in Somalia may be due not only to the culture but also due to the cost of formula. Asma expressed her concern regarding the price of formula:

> Not everyone can afford the financial status to provide formula milk. And some mothers are in need since they are not able to breastfeed, including me. From an experience, when I delivered my baby, my husband was unemployed. Fortunately, we received several financial helps from the hospital to get formula milk.

Asma did not have a choice but to buy formula due to her problem of not producing enough breastmilk. If the hospital had not supported her, she could not have afforded to buy the formula for her baby daughter. Shaima stated: “People who cannot afford it [formula feeding]…and breastmilk is not enough for the infant, the mother would just give him food.” Shaima’s answer to not being able to afford formula is introducing food which results in solids being introduced earlier than the optimal age of six months and excludes any possibility of exclusive breastfeeding. At the other end of the spectrum, in Canada, formula is more affordable enabling more people to choose formula feeding. Also, some participants believed that the quality of the formula in Canada is much better and, therefore much healthier than back in their home country. Moreover, in a low-income family, the mother may find she has to go out to work. If her work environment does not have the resources to support breastfeeding, she may have to choose

formula feeding as her only option. Sara commented “I do not think that there is anything the mother can do to breastfeed when she works. This is one of the reasons that some women do not breastfeed in general because of their work.” Lena stated, “I could not stay home longer because then we would not have any income.” The family finances had to take precedence over providing breastfeeding.

Other potential negative outcomes of breastfeeding that were expressed by participants were related to body image. Some mothers may be embarrassed by the changes in their bodies and feel conscious about their appearance after giving birth and when breastfeeding. Some Arab mothers believe that breastfeeding has a negative impact on a mother’s breast shape and makes them unattractive. As Nadia stated: “It [breastfeeding] changes the breast’s shape and makes it look saggy.” For some mothers, this can play a role in their decision to breastfeed or not. However, Sara recognized that her body was likely to change, yet she decided that her body image was not important; her baby’s health was. In addition, women who prefer fashionable outfits choose not to breastfeed their children. Sara asserted: “Some mothers would rather choose style and clothes over their child’s health because it is uncomfortable to wear stylish clothes while breastfeeding. Some mothers think they are too good to breastfeed and that formula is the new trend.” During the member checking, it was observed that there was general concern among some mothers with regards to long-term effects of breastfeeding on their physique and social life. Lena confirmed: “I know that many women, including my sister, would not breastfeed because they do not want their breasts to sag. This would influence their decision to breastfeed.” Being concerned with-body shape and beauty takes precedence over the benefit of baby’s health. Therefore, HCPs need to explore further these issues with breastfeeding women (for example, the effect of breastfeeding to breast’s shape) and its implications for intervention.

4.3 Summary

Breastfeeding is widely acknowledged as providing health benefits for babies and breastfeeding mothers. As evident from the interviews with the participants in this study, making the decision to breastfeed, then initiating, and continuing with its implementation is complex. Despite the observed successful breastfeeding initiation by all the mothers interviewed, they all experienced breastfeeding problems from the outset. This included issues relating to failure to produce sufficient milk, painful nipples or stress due to juggling between child rearing, domestic chores and professional practice.

Using critical ethnography, the purpose of this study was to explore the contextual within a culture of support, which serves to inform, motivate, enable, and sustain its practice. The many sources of support that shaped breastfeeding experiences as described by the participants were presented in this chapter. Specifically, the sources of support included knowledge, family, religion, and infant feeding practices. In terms of success, all mothers initiated breastfeeding. Some of the mothers continued with a combination of breast and formula feedings while others discontinued breastfeeding in favour of formula feedings only. None of the mothers continued with breastfeeding exclusively. Support was shown to be a dominant factor in the mothers' decision ultimately to breastfeed exclusively, combine breastfeeding with formula feeding, or use formula feeding only.

In this study, Arab mothers had the opportunity to voice their insights regarding cultural beliefs and values, and other contextual factors that influenced their decisions to participate in breastfeeding. In the following chapter, I discuss the results and significant implications arising from them. I also present implications for practice, nursing education, and research, as well as the limitations of the study and conclusion.

Chapter Five: Discussion and Conclusion

The results of this study presented a basis for understanding breastfeeding practices among Arab mothers in Calgary, with a focus on exclusive breastfeeding. A critical ethnographic analysis as per Carspecken (1996) provided insight into how the complexities of mothers' knowledge, family support, religion, and infant feeding practices affected their experiences. This chapter recaps relevant information from preceding chapters to demonstrate how I have answered the research questions and further discusses the results and significant implications arising from this study. Implications for practice, nursing education, and research are presented to explicate a better understanding of what would be helpful in supporting breastfeeding among Arab mothers in Calgary. The chapter will conclude with limitations of the study and a conclusion.

5.1 Knowledge

The level of knowledge among the Arab mothers with regards to exclusive breastfeeding was determined to be an important attribute in delayed initiation and early cessation of breastfeeding. As suggested in the findings, despite the understanding of the participants about the benefits of breastfeeding for the baby, there was still a significant gap in their knowledge on implementation with regards to optimal exclusive breastfeeding practices. Similarly, Emmanuel (2015) reported findings on the negative influence of inadequate knowledge about exclusive breastfeeding. Not being familiar with the concept of exclusive breastfeeding and not knowing about the importance and benefit of it to the infant's health may have been the basis for mothers turning to a combination of breast and formula feeding or formula feeding alone. This is especially true when the mothers perceived that their milk supply was not adequate to meet their babies' needs. Also, the participants were unaware that supplementing with formula feedings and

the resultant reduction in the number of times that their babies suckled at the breast reduced their milk production. Not using a breast pump for delayed breastfeeding initiation, rather than giving formula, also lead to reduced milk production. These findings highlighted the need for maternal education about exclusive breastfeeding and stimulation of milk production that would enable these mothers to make decisions that are more informed. Similarly, there are a range of studies which place more emphasis on the evaluation of the nature of breastfeeding decisions (Cardoso, e Silva, & Marín, 2017; Lee, Bai, & You, 2018; Rempel, Rempel, & Moore, 2017; Tucker & Fouts, 2017). Findings of the studies suggest that mothers are predisposed to make poor choices when there is lack of adequate knowledge or family and spousal support. The relationship between the husband and the wife is defined by the existing cultural norms and values which in turn determine the level of support they offer to their spouses. Further, when women lack knowledge about breastfeeding practices, they have a tendency to incorporate any new knowledge without due consideration for its applicability. Awareness of health benefits of breastfeeding through education and support encouraged breastfeeding among mothers. HCPs should thus increase the prenatal knowledge of breastfeeding to increase the likelihood of mothers to continue breastfeeding (Cardoso et al., 2017).

Challenges such as insufficient milk secretion as described in Chapter 4, that were experienced within the first month following birth presented a greater probability for the cessation of breastfeeding (Falah-Hassani et al., 2015). As a result, access to quality information on how to optimize the breastfeeding period was crucial for the Arab mothers in ensuring the persistent practice of exclusive breastfeeding. The most highly used source of information (barring their mothers) by the Arab mothers was the Internet. While acknowledging that the information they browsed on the web could not be verified (much of it was from YouTube),

three of the participants in this study spoke of how valuable the Internet was in answering their questions on breastfeeding. Cochrane review by Teles et al. (2017) highlighted that by offering extra support to breastfeeding mothers via the media, in contrast to the delivery of standard maternity care, prolonged periods of breastfeeding and avoidance of supplementation can be achieved. This implies that both lay and professional support have a role in promoting better breastfeeding outcomes. In addition to breastfeeding support, it has been suggested that the mothers also need standard maternal care such as having someone assist them to maintain personal hygiene, offering emotional support particularly to those with depression, helping in postnatal, visits and ensuring that they eat healthy foods (Sacks & Kinney, 2015).

According to Wandel et al. (2016) improving the level of maternal education is positively linked to the enhancement of infants' health outcomes. Siggia and Rosenberg (2014) suggested the need to adopt effective education strategies to inform a breastfeeding mother about the relative benefits of different breastfeeding methods. Arab mothers in this study who accessed services of HCPs in Calgary were often provided with a lot of information that could be misinterpreted due to the language barrier. These mothers spoke Arabic and lacked fluency in English. Boateng (2015) argues that medical information that is increasingly prevalent within health care institutions further complicates the struggles that people have in trying to acquire and understand information that they need for healthy living. Even the mothers who were comfortable with English expressed their frustration and confusion with HCPs' use of medical terms in their explanations. Therefore, the prospects for progressive social change as identified in the CST highlights the importance of language in improving maternal health outcomes in addition to optimizing breastfeeding of infants. The HCPs expressed themselves in a manner or a language that made it difficult for those not in the medical field to understand. Therefore, the

information or the message that the HCPs tried to send was poorly received hence rarely implemented or followed as only medical experts could understand the difficult medical terms that the HCPs used. HCPs should therefore, consider ways in which their messages and knowledge can be appropriately communicated and accessed by Arab women. In addition, Arab mothers should be empowered to strengthen their English language skills to gain a better understanding of the health care information, to effectively access health care services and interpret information relating to breastfeeding.

In this study, Arab mothers with low milk supply, according to the assessment by the HCPs in hospital, were advised to use formula milk to satisfy their infants. Such advice leads mothers to engage in a practice that is contrary to exclusive breastfeeding. This can happen without the mother knowing that giving formula negates exclusive breastfeeding (Chantry, Dewey, Peerson, Wagner, & Nommsen-Rivers, 2014; Guruge, Thomson, George, & Chaze, 2015). Through creating an opportunity for mothers to use formula feeding, more Arab mothers with insufficient milk production may be encouraged to start the practice of formula supplementation. One of the mothers felt that the healthcare provider did not give her any option other than to introduce formula feeding to her baby. Others were reluctant to use formula supplementation but, after further discussion with the nurse, capitulated. Despite the perceived positive reception of support services to breastfeed by the HCPs, it was observed that most of the mothers were not open to the idea of supplementation. However, suggestion on using formula supplementation may have contributed to some of the Arab mothers terminating exclusively breastfeeding before the recommended six-month period (WHO, 2016). The CST concept that relates to the Arab breast-feeding mothers resisting, declining, or refusing the formula supplementation and the advice by the HCPs in the hospitals is ideology. Ideology is used to

determine how people make sense of things. Ideology is fundamental to human beings in that it defines what certain people cling to and defend by all means both consciously and subconsciously (Rodgers, 2005). In this case, breastfeeding Arabic mothers held on to certain values, beliefs, assumptions, and expectations regarding how the society should be hence making it very difficult even for education to dilute those ideologies. The HCP's were trying to educate the mothers about some set of ideals, principles, or doctrines regarding how individuals in the society function. The problems arose if the HCP's were going against the Arabic ideologies by trying to instill their culturally diverse values or ideologies into Arabic mothers who already had their own ideologies. Thus, HCP advice might not be acceptable to some women.

Several Arab mothers in this study held a post-secondary degree from their home countries. However, despite these high education levels, the maternal knowledge of practices such as exclusive breastfeeding was low. Much of the information that defines their conceptualization of breastfeeding is associated with cultural norms and religion. The results suggest that the existing breastfeeding perspectives and practices among the Arab mothers are limited by the low levels of awareness on the recommended period for exclusive breastfeeding. As a result, a significant number of the Arab mothers inadvertently violated the requirements for meeting the exclusive breastfeeding period of six months.

Zhao et al. (2017) reported that education is likely to have been essential in dismissing the existing attitudes and perceptions towards breastfeeding, giving room for professional advice. They reported this finding after examining two studies in Australia that indicated that the mother's level of education was positively linked to the initiation and increased duration of breastfeeding as well as from other studies which revealed that mothers with lower education backgrounds often reported more misconceptions regarding breastfeeding and formula feeding

(Zhao et al., 2017). This was not evident with the mothers in my study. With the exception of two participants who chose to follow the advice they received from health care professionals, the Arab mothers in this study placed more emphasis on their cultural knowledge and religious beliefs, hence giving them priority over professional information. Their education status seems not to have influenced their discussion to breastfeed. Their emphasis on the influence of cultural knowledge and religious beliefs more than education can once again be attributed to the CTS concept of ideology discussed previously. For them, there was a higher degree of mistrust and lack of confidence relating to the information provided by HCPs.

Research has shown that mothers who have access to individualized breastfeeding support demonstrate more positive outcomes (Latcu, Grama, Melit, Chincesan, & Marginean, 2017). Most of the Arab mothers who had little information regarding breastfeeding in this study sought assistance from a range of sources to increase their breastfeeding knowledge. In preparation for birth or after birth, they consulted either professionals in the health sector, a layman or both. A combination of these two approaches has been observed to deliver better outcomes in terms of exclusive breastfeeding. For example, longer periods of exclusive breastfeeding as the recommended by WHO and better health results for breastfed children (Thaker, Monypenny, Olver, & Sabesan, 2013).

Another source of information was the Internet which offering a complementary lay support system for the mothers to find out more information pertaining to breastfeeding (Thaker et al., 2013). Findings from interviews were consistent with Latcu et al. (2017) study that also reported that the Internet has the potential of offering personalized support to breastfeeding mothers during the early postnatal phase. The Internet offers an alternative domain through which mothers can access the delivery of health professional services while transcending the

challenges of cost and isolation. The services administered online include information dissemination, peer support, professional advice, and activities to support mothers in making better decisions and behavioral choices (Furkin, 2018; Giglia & Binns, 2014). The main reason for this consideration is the time-consuming nature of one-on-one breastfeeding support, high costs, and limited accessibility of services in rural areas. Additionally, the Internet is significant since it delivers a wide array of interventions, which incorporate different strategies to achieve the desired goals. In the context of exclusive breastfeeding, the Internet assists mothers to address breastfeeding problems, hence, increasing the potential to attain the six-month period. However, the accuracy and quality of the online information is an issue of concern for most mothers using the services. In this study, some mothers pointed out that they used Google search and YouTube to learn about practices, such as positioning of the baby or evaluating the benefits of formula milk. However, they were limited in the amount of information they could access due to lack of language proficiency. Similarly, the excessive amount of information available online might set a precedent for misinterpretation based on the lower degree of verifiability and the overdependence on trust (Furkin, 2018). Also, these sources of information may provide invalid ideas related to lack of regulation of information posted online. Latcu et al. (2017) reported that there are professional websites which are linked to credible health information that have been verified and maintain accountability. Here again, their lack of English fluency can limit their ability to discern the validity of the information they access.

Knowledge is among the important factors when it comes to delayed initiation and early cessation of breastfeeding. The findings from the study indicate that there is still a significant gap in knowledge among the Arab mothers about optimal breastfeeding practices. Therefore, there is a need for more maternal education about exclusive breastfeeding and the stimulation of milk

production. This is supported by above mentioned reports of maternal education being positively linked to enhancement of the infant's health outcomes.

5.2 Family

The family is an integral part of the Arab culture and the ties and support of family have been shown to have a profound influence on the practice of breastfeeding (Baer, 2016). The participants in this study spoke about the connections they have with their mothers, their husbands, their mothers-in-law, and sisters. They also spoke of how influential their support or, sometimes lack thereof, was towards their success in breastfeeding their infants.

All participants looked to their mothers for advice, trusting that their mothers have both knowledge of and experience towards breastfeeding techniques, ways to enhance milk production, maternal nutrition, and complications of breastfeeding that can serve them well. This reliance is universal as shown in studies by Prates, Schmalfuss, and Lipinski (2015) that grandmothers, mothers, and mothers-in-law are perceived to be individuals with wisdom, knowledge, and experience. Their importance is largely linked to the fact that they have already established a family; they are seen as knowledgeable about motherhood and breastfeeding based on their experience acquired throughout the years. Further, they are considered an essential source of information on issues relating to lactation and breastfeeding processes. The findings from the study suggested that, during the time of breastfeeding, mothers are often more sensitive and vulnerable to pressures and advice from other third parties such as family members or friends. However, third party advice has the potential to either enhance or hinder exclusive breastfeeding practices (Prates et al., 2015). This is linked to the fact that learning transmission processes involve the dissemination of beliefs, myths, and traditions based on the family context, which conventionally lacks scientific evidence and varies from professional recommendations in

some respects (Laugen, Islam, & Janssen, 2016). Immigrant mothers in Canada access services from health care institutions where they interact with professional HCPs who offer advice on issues relating to breastfeeding. However, the extent to which they consider the information they receive is contingent on the degree to which it resonates or differs with the information they access within the family contexts. A conflict in these ideas denotes that the mothers are forced to make a decision about which information to follow.

Participants who successfully initiated breastfeeding largely considered their immediate family, more particularly their mothers or grandmothers, as the primary source of support for sustaining the practice. In cases where breastfeeding problems such as painful nipples emerged, consultations with a family support system offered options on how to manage the problems. Further, among Arab mothers interviewed, there was a high degree of trust in complying with advice given due to the perceived years of experience by their mothers. However, despite the commitment to breastfeed, some belief systems ingrained within the Arab family culture contributed towards cessation of the practice.

At least eight mothers in the study were not able to access direct support from their mothers after delivery which had a profound impact on their breastfeeding practices. The breastfeeding mothers in this study also lacked both knowledge and experience coupled with the absence of support systems to offer guidance on how to overcome common breastfeeding challenges. Furthermore, the limited involvement by the spouse, based on Arab gender roles, presented both physical and psychological challenges for the participants in this study. Considering that the women were immigrants and that they had limited emotional and mental support, breastfeeding mothers had high chances of encountering breastfeeding challenges. This may set a precedent for the stress of managing domestic responsibilities, professional life, and

child rearing (Alhasanat & Fry-McComish, 2015; Falah-Hassani et al., 2015). The implication of this is that immigrant mothers who are isolated from their family social support system opt for the existing Canadian healthcare systems where formula feeding is considered an appropriate alternative for mothers with breastfeeding problems (Laugen et al., 2016).

HCPs in this study were used as a source of essential breastfeeding support as they provided breastfeeding support to the Arab mothers when the mothers had no family assistance. The HCPs provided knowledge for the Arab mothers on how to deal with common breastfeeding problems such as lack of sufficient milk or dealing with soreness of nipples. Similarly, the HCPs supported the Arab mothers' decision-making processes with regards to formula supplementation.

The women in this study had a major challenge in sustaining strong ties with their mothers as their mothers lived in the Middle East. Two of the participants' mothers travelled to Canada; however, their visits were short. These two Arab mothers who received the physical support from their mothers were positively influenced, even though it was only for a short encounter. In the early stages after birth, most women experienced a major challenge juggling domestic chores and child rearing (Falah-Hassani et al., 2015). Consequently, at this vulnerable time, having someone to offer psychological and social support allowed the mother to focus on the care of baby. The mothers interviewed leveraged on the experience of their more experienced mothers to build confidence and learn more on how to effectively manage the breastfeeding period.

The Arab cultural knowledge which played a key role in influencing breastfeeding practices among the Arab mothers was observed to be largely drawn from family members. According to the Arab culture, men are not encouraged to be involved in the breastfeeding

practices. Thus, the women largely take responsibility in making the decision to breastfeed or not. As a result, they rely on their mothers and grandmothers as a source of information. The culture also places the role of providing the advice and emotional support pertaining to child-rearing on the mothers, mothers-in-law, and grandmothers. Hence, this implies that the breastfeeding mothers will be mostly influenced by the information from their mothers and grandmothers, as dictated by their Arab culture. Despite the fact the belief system of the Arab family culture supports a commitment to breastfeeding, some cultural practices such as prelacteal feeding contributed towards the cessation of the process. The Arab mothers shared that they received advice which encouraged the use of pre-lacteals as this was considered part of an appropriate religious practice. As a result, the cessation of exclusive breastfeeding occurred inadvertently in some cases and might had further exacerbated by desire to meet religious requirements while being oblivious to the impact it had on the infant's health.

Breastfeeding mothers, particularly those who are Arabic immigrants in Calgary, can be confused about how to breastfeed, especially if they have little knowledge regarding breastfeeding or have geographical barriers with their family members as family members provide the mothers with information regarding breastfeeding as well as motivation. From the interviews conducted, lack of the physical presence of the participants' mothers contributed to considerable anguish because they were not able to easily access the experiential knowledge that their mothers possessed. This implies that there should be development of a support system within the Canadian society that provides an avenue for sharing and addressing cultural and religious concerns among the conservative Arab mothers. Telephone based breastfeeding peer support can, for instance, be developed to address the concerns of such breastfeeding mothers. In the context of migrant Arab mothers in Canada, CST seeks to evaluate how lack of information

associated with cultural practice may influence breastfeeding. It further presents the view that geographical barriers and absence of close family members limit cultural transfer across the generations hence creating room for cultural assimilation and accommodation in the new environment.

In alignment with Jessri, Farmer, and Olson (2013), the findings from this study suggested that immigrant families often maintain close ties with relatives back home. They relied on telephone communication, (e.g., Skype, WhatsApp) for the support they needed from "home". Maintaining close ties with family members back home presented an opportunity for these mothers to acquire cultural knowledge relating to breastfeeding. The strong family ties among Arab mothers informed their commitment to maintain their breastfeeding practices similar to those back home. Similar to Alzaheb's study (2016), this study found that some parents encouraged their children to uphold cultural practices such as Tahneek, which inhibit exclusive breastfeeding. Moreover, some Arab mothers in this study were influenced by opinions of their maternal parents with regards to decisions to comply with Canadian doctors' instructions. It was observed that Arab mothers demonstrated varied opinions with regards to following doctors' orders relating to breastfeeding practices. Some mothers in this study were advised to ignore any recommendations that encouraged the use of formula milk by doctors. However, there was a portion of mothers who supported their daughters to follow doctors' advices while encouraging them to practice both breastfeeding and formula feeding.

During the initial stages after giving birth, one of the major challenges to women was to balance both household responsibilities and child care. During this time, having a person to offer both social and psychological assistance gives the mother the chance to concentrate on breastfeeding the baby. As a result, mothers who received this form of support improved on their

ability to overcome challenges associated with breastfeeding and handling household chores. Based on the findings of the study, it was observed that the Arab mothers who received family assistance during the breastfeeding period demonstrated a better experience in contrast to those who lacked any support. Overall, there were some positive influences from the participant's mother and grandmother over breastfeeding practices. Furthermore, most of the mothers interviewed believed that relying on the experiences of those who are more experienced helped them build confidence and learn more about how to effectively keep calm and manage themselves during the breastfeeding period.

Immigrant women who have moved away from their home countries also move away from the support network of their families. When a woman becomes a mother in a foreign country, she rarely has the support of her mother to lessen her burden of caring for herself and her baby, and maintaining the customs that she was brought up with. The breastfeeding Arab mother may or may not depend on her husband who may in turn be inclined to adhere to the traditional male gender roles hence offering little or no support to the wife. Consequently, the wife will be under pressure to meet both the roles of child rearing and house chores. She needs help, support, and understanding so that she can do what is best for her and her baby, particularly concerning the decision about breastfeeding practice. However, the traditional gender roles for men present a significant barrier to their involvement in issues of breastfeeding and the associated decision-making processes. Due to Arabic men playing a minimal role in influencing breastfeeding practices, women take a lead in decision-making that pertains to breastfeeding (Alzaheb, 2017). This lack of involvement can cause the mothers to rely on other family members as a source of information. The immigrant Arab mothers in this study, who had no close family members, turned to health care professionals as the primary source of information.

Despite the provision of advice on breastfeeding, Canadian HCPs focus largely on promoting the health outcomes of both the mother and the infant (Chantry et al., 2014). As a result, little emphasis is placed on culture-specific knowledge in contrast to scientific information which may inadvertently contribute towards a higher supplementation rate among the Arab immigrant mothers interviewed in this study. In addition, it is possible that low exclusive breastfeeding practice among the mothers might have been somehow influenced by the Canadian culture that was more inclined to the use of formula rather than exclusive breastfeeding (Chantry et al., 2014).

5.3 Religion

Muslims believe that breastfeeding is a holy act as it is enshrined in the Qur'an where it is considered to be an act of mercy. Some of the participants practiced breastfeeding as they considered it to be a religious and cultural obligation while for others it was a personal preference. Some religious beliefs can inhibit breastfeeding. As already mentioned, Muslim women are expected to uphold a high standard of dignity in public spaces. Shaikh and Ahmed (2006) argue that Islamic doctrine prohibits indecent exposure by women particularly involving their intimate parts. It is forbidden to expose intimate body parts in the presence of a man who is not related to the woman. Participants in this study explained that women who are considered to have violated these socially accepted norms receive judgment or are ostracized by the family. They also explained that although they have been advised by both religious institutions and family members to breastfeed, they had to avoid indecent exposure as it would make them feel extremely uncomfortable breastfeeding in public. To these mothers, privacy is highly important. They are very particular about their modesty to the point that they declined invitations to social gatherings knowing that they could not breastfeed there. Consequently, they were restricted to

their home environment thus limiting their opportunities to assimilate into Canadian culture. Also, when male visitors come to their homes, they go into their bedroom to breastfeed. Consequently, these forms of restriction contribute significantly in inhibiting the autonomy to breastfeed among Arab mothers. Similarly, it highlights how religious doctrines and the cultural implications create a social barrier for women in receiving support from their husband and community. Through regulating behavior in public, the extent to which women can express themselves or reach out to others such as their husbands is limited.

The results highlight the relationship between men and women which are largely defined by gender roles. The prevailing cultural construct is informed by the doctrine of Islam which places more emphasis on patriarchy. Based on the perspectives highlighted by Vandenberg and Hall (2011), the dynamics of power and control among men and women shaped their approach to breastfeeding practices. The immigrant Arab mothers lived within the confines of a male dominated society, which gained patriarchal authority based on the Islamic doctrine. Consequently, there was a lower degree of involvement among men with regards to breastfeeding due to the religious doctrine's explicit role definitions. This implied that women were allocated the larger portion of responsibilities including child bearing, childrearing, and domestic chores. Additionally, the system of patriarchy prescribed some of the activities that were prohibited for women such as public breastfeeding or exposure of intimate parts of the body. As a result, these forms of structural barriers in power relations defined the ways through which the Arab mothers could breastfeed. In areas where there was lack of public facilities, the conditions influenced the potential decision of supplementation.

The interplay between culture, environment, religion, and family contribute significantly to breastfeeding decision-making processes. Islam encourages breastfeeding but ironically does

not explicitly promote exclusive breastfeeding due to the prescribed prelacteal practices. Based on the strong ties the immigrant Arab mothers maintain with their families back home, some mothers in this study undertook certain religious rituals or cultural practices such as Tahneek, which involves prelacteal feeding. The palate of infants is briefly rubbed with dates in small quantities in the immediate postpartum period and then every day for at least seven days as a way of ensuring that they are protected from hypoglycemia or low blood sugar (Radwan, 2013; Zaidi, 2014). It is intended as only a "taste of the sweetness" but sometimes mothers give the baby a large quantity without knowing the negative effects that this could have (Zaidi, 2014). Two of the participants spoke of practicing this custom. These mothers indicated that this religious practice is considered a healthy Sunnah and, hence, offers an incentive for mothers to participate. However, engaging in such practices technically might inhibit exclusive breastfeeding as described by Alzaheb (2017).

Communication between the mothers and the HCPs regarding the religious and cultural intentions for prelacteal feeding is crucial in order to support the timely initiation of breastfeeding and ensure the health of the infant (Shariff & Sharma, 2018). More particularly, in foreign nations, there is a need to promote a more inclusive outlook to maternal care, which accommodates cultural variations in the interest of the infant's health. The implication of this solution is the delay of prelacteal feeding until after the recommended time of six months for breastfeeding as promoted by the World Health Organization (WHO, 2016). Regular communication between the mothers and HCPs would ensure that breastfeeding mothers continue to breastfeed their babies as they would stay motivated and informed regarding the benefits of exclusive breastfeeding. Mothers that are unable to breastfeed claiming that they have little breastmilk or those that are working might also benefit when they receive the information

regarding how best to feed their children. This would be of great help to Arab mothers who have little information regarding exclusive breastfeeding and are unable to communicate with their mothers or other family members. Furthermore, Arabic mothers might receive the encouragement of breastfeeding very positively because it resonates with their religious beliefs and traditions.

5.4 Infant Feeding Practices

The results of the study indicated that, amongst most Arab mothers, their concern about lacking sufficient milk to meet the nutritional needs of their children was common. Similarly, the results of the study by Jessri et al (2013), Millar and Maclean (2005), as well as Oweis et al. (2009) reported that the dominant view in the Arab culture supports the use of alternatives based on the premise that some mothers do lack adequate milk supply. With the Arab mothers involved in this study, the mothers perceived that their babies were still hungry after being breastfed and ascribed this to a shortage of breastmilk. From this point, they began to supplement with formula. Arab mothers also believe that they can inherit low milk production from their parents (Jessri et al., 2013). Similar to the findings of this study, Osman et al. (2009) reported in a study with Lebanese Arab mothers that they also were concerned about the impact of their milk on their babies due to having an inherited inability to produce milk. This implies that the interpretations held by the mothers with regards to milk supply were based on perceptions and assumptions linked to their cultural socialization. Similarly, it highlights the fact that individuals can maintain a practice without questioning it since it is a social norm. The CST places more emphasis on the need to challenge these basic assumptions in order to develop a true understanding and propose effective solutions. In the context of Arab mothers, access to

scientific information on milk secretion might have positive impact on the exclusive breastfeeding practice of these mothers.

Despite the inherent importance of exclusive breastfeeding established in different studies (Health Canada, 2010; WHO, 2016), there was a limited scope of knowledge with regards to initiating feeding after childbirth among Arab mothers in this study. Participants in this study engaged in breastfeeding their infants, but there was low adherence to the WHO's recommendation of exclusive breastfeeding for the first six months. This may be linked to the Arab culture where there is a tradition to give prelacteal fluids to babies from the day of their birth. Similar to the findings in this study, Abdul Ameer et al. (2008) found that exclusive breastfeeding declined among Iraqi women when their mothers and relatives commonly gave water and sugar to infants early after delivery. Although these practices have been scientifically determined to inhibit the process of breastfeeding (Patil et al., 2015), they were carried out by some of the Arab mothers in this study. For instance, against the recommendations of the HCPs, water and sugar solutions were given by some participants to their babies in the first three days as this was believed to cleanse the baby's stomach of bacteria and the amniotic fluids that the baby swallowed before birth and to treat jaundice. This belief could give rise to the possibility that some of the Arab mothers lacked sufficient breastmilk as a result of engaging in certain cultural practices that reduced their production of breastmilk. Some of the cultural practices also made it difficult for the infant to continue breastfeeding.

Another practice that is common in Tunisia, Iraq, and Egypt is giving anise, licorice, and fennel to the babies from the age of one-month as an aid to digestion and to give the baby relief from gas (Dashti et al., 2010; Millar & Maclean, 2005; Oweis et al., 2009; Rogers et al., 2011). Two mothers chose to give their baby Gripe Water to relieve gas as recommended by their

family and friends. This has been practiced over the years in the Arab culture and passed down from generation to generation. From the interviews conducted, the Arab mothers claim that the practice is borrowed from their mothers and has been there over the ages. Those who created these breastfeeding practices are elders' mothers who are considered a source of authority; their opinions are endorsed as valuable due to their many years of experience with childrearing. As a result, it has been adopted as their best practice. In fact, participants' mothers have been the custodians of these practices and they pass it on to their daughters when they give birth. Since this is a custom that has been established and successfully practiced over the years, it becomes very difficult for that individual to depart from it as long as they have not found anything concrete to discredit this concept.

It is common for Arab mothers in most Middle East countries to supplement breastfeeding with solid foods as a way of ensuring optimal nutrition for infants who do not settle after a feeding with milk only (Gardner et al, 2015; Patil et al., 2015). This was also true for the mothers in this study. The participants introduced solids, such as herbs, dates, and softened foods before the recommended age of six-months, sometimes as early as the first day following birth. There was a general belief among the mothers that their milk production was not a sufficient source of nutrition for their babies. Moreover, some mothers interviewed also believe milk does not contain all the nutrients babies need. In accordance with socialized cultural practices in their Arab countries, if they perceived that their baby was still hungry after breastfeeding, they sought alternative ways of providing nutrition for their babies that included early introduction of solid food. All the mothers interviewed believed this tradition. This practice suggests that the mothers lacked knowledge about nutritional needs of infants and best practices in ensuring optimal nutrition. The system and the lifeworld concept of CST (Habermas, 1978)

are demonstrated here in that mothers have to immerse themselves in the lifeworld that they share with others. They have to live their social and personal lives in a manner that reflects the family life and culture as well as the informal social interactions that they are involved in. There is little personal choice here as the mothers have to follow certain regular patterns of strategic interest that somehow serve the interest of the environment that they are within. Interventions that introduce or reinforce the Baby Friendly Initiative (BFI) practices are needed among Arab immigrant women in Calgary to improve breastfeeding initiation, to reinforce exclusive breastfeeding, and delay introduction of non-breastmilk foods and/or liquids (Pound et al., 2016).

Misinformation and contradictory information provided to the mothers in this study contributed to early cessation of breastfeeding. Within the Canadian setting and in contradiction to the Canadian standard wherein solid foods are introduced at six months of age (Health Canada, 2010; WHO, 2016), some HCPs advised mothers in this study to give their babies solid food as early as five months to appease apparent hunger related to insufficient milk production or to encourage babies to sleep for longer periods between feedings thereby enabling mothers to get more rest. De Almeida, De Araújo Barros Luz, and Da Veiga Ued (2015) in their study that aimed to evaluate how health professionals promote and support breastfeeding, reported that many HCPs possessed theoretical expertise on breastfeeding, but they lacked the practical skills to support mothers in that they were not properly trained on how to promote breastfeeding. To better support exclusive breastfeeding, Chantry et al., (2014) suggested that strategies should be sought to support breastfeeding and to avoid unnecessary formula supplementation in the hospital and avoid early introduction of complementary food. HCPs need to be better trained to implement strategies that promote exclusive breastfeeding.

Based on the fact that the study considered mothers who had stayed in Canada for less than five years implies that most were still adjusting to the new environment. Further, there is evidence of different treatment of Arab women in Canada which exacerbates the situation. The study established that the Arab mothers who were immigrants in Canada experienced significantly more challenges in contrast to the Canadian mothers. Jessri et al., (2013) argue that Arab women are considered to be less knowledgeable and confident on issues of breastfeeding. These perceptions influence the extent to which the mothers are perceived to be open to new ideas on breastfeeding. The Arab mothers in this study, experienced some difficulty when adapting to new breastfeeding practices here in Canada. Some of the issues raised, including timing of breastfeeding, were observed to be new and strange to most of the Arab participants. Arab mothers' perceptions of insufficient breastmilk production or their uncertainty regarding the amount of milk the infant receives are considered to be significant factors contributing to the decision to continue with exclusive breastfeeding (Millar & Maclean, 2005; Oweis et al., 2009). For instance, the suggestion by the postpartum nurse to breastfeed the baby for half an hour then waiting three hours before the next feed. Thus, an "on demand" schedule was inadvertently rejected by the nurse. Despite the HCPs being an influence on the breastfeeding practices of the immigrant mothers in this study, some of the mothers turned to their cultural values and religion to inform their practices. The HCPs in Calgary were advocating formula supplementation because of their primary concern over the baby's weight, rather than focusing on ways to establish breastfeeding, which would culminate in appropriate weight gain. Consequently, these cross-cultural variations contributed to mistrust and lack of confidence in HCPs by the Muslim Arab mothers in this study, some of whom followed their beliefs rather than the advice of the healthcare professionals.

Arab culture forbids indecent exposure by women, meaning that women are supposed to cover their bodies at all times. As a result, this further complicates the process of breastfeeding for Arab lactating mothers (Nikaiin et al., 2013). Women are subjected to breastfeed only under favourable conditions away from male strangers. The mothers involved in this study found the requirement of modesty a significant challenge in that it isolated them while they breastfed. In contrast, formula feeding did not have this consequence. Arab mothers interviewed who are working or studying and trying to continue breastfeeding at the same time, experience significant challenges in breastfeeding, which make alternatives such as formula milk more attractive. The lack of adequate facilities to support the breastfeeding mothers in public spaces such as nursing rooms presents a significant barrier to the process (Russell & Ali, 2017). Similar to the findings in studies by Alzaheb (2017) and Nikaiin et al. (2013), Arab mothers in this study did not even mention expressing milk while at work to feed their infant with when they came home; formula was used instead. As a result, breastfeeding among Arabic mothers is very challenging and it is for this reason that exclusive breastfeeding is challenging too. The CST school of thought advances the idea that change can only be realized through challenging the existing social and economic structures. This implies that in addition to establishing a debate geared towards advocacy and policy change on breastfeeding, more emphasis should be in place on socializing the public and HCPs on the need to creating better social and economic support for breastfeeding mothers

The dominant culture in Arab countries encourages women to visit medical facilities to access nutritional health advice. HCPs often suggest the use of oral supplements and medications to augment milk production among mothers. This occurred for three of the participants in this study, whereby a nurse recommended fenugreek and blessed thistle to successfully increase her

milk supply. The use of over-the-counter medicines-resulted in an improvement in the stimulation of milk production. Most Arab mothers interviewed accessed healthcare resources in Canada that, in turn, challenged their conventional view about breastmilk supply and production.

As families grow larger, the level of their demand increases, particularly for the mother. When a new baby is born, the mother's attention is shifted to the baby. However, other children in the family continue to require her care and attention. Although a mother with multiple children is likely better informed with other births and breastfeeding experiences to draw upon, the continuing responsibility for her existing children, in addition to meeting the needs of her husband and the household chores, can be daunting. Under such circumstances, a mother can experience a lot of stress and pressure. The seven mothers in this study who had older children felt pulled in different directions when trying to juggle breastfeeding their newborns, in addition to their other responsibilities. With their time so divided, they struggled to maintain their breastfeeding practices, partly because being in constant demand increased their stress levels, and with little help available, their milk production suffered. The mothers believed that stress was a contributing factor to their reduction in breastmilk.

Some mothers may be embarrassed by the changes in their bodies and feel conscious about their appearance after giving birth and when breastfeeding. Some Arab mothers believe that breastfeeding has a negative impact on a mother's breast shape and makes them droopy and unattractive (Nikaiin et al., 2013). This can influence a mother's decision to breastfeed. Some of the Arab mothers interviewed agreed with this, others did not, believing that the health of the baby was more important than the way a mother looks.

Mothers who deliver their babies by caesarean section (C-section) face similar body conscious challenges when it comes to breastfeeding. A study among Canadian women reported

that exclusive breastfeeding rates at 6 months was higher by 25% among women who had vaginal delivery as compared to C-section delivery (Al-Sahab et al., 2010). This concurs with the study by Alzaheb (2017) in Saudi Arabia which reported caesarean births were associated with lower rates of exclusive breastfeeding rates at six months. The anesthetic during the procedure may delay the start of breastfeeding and can also cause a delay in the production of breastmilk (Zhao al., 2017). To offset these potential problems, it is vital that the baby is put on the breast as soon as possible to help with the stimulation of milk production. In doing this, concern was voiced by participants in this study that the painkillers and antibiotics given in the days post-surgery might affect the baby and the milk, though, at most, they will just make the baby a bit sleepy. However, the baby's sleepy state may make him be too lethargic to nurse (Zhao al., 2017). Mothers in this study suggested that the pain can make breastfeeding uncomfortable, and they may find it difficult to hold the baby. Consequently, breastfeeding can be affected while the incision is healing. HCPs can help a new mother position the baby correctly to minimize this discomfort and ensure that the baby is latching on to the nipple. If this does not occur, then the stimulation of the milk production can be affected and start to decline.

Three mothers involved in this study had a C-section. The Arab mothers were offered assistance by the nurses due to the pain of the surgery and problems with positioning the baby while breastfeeding. However, they reported a significant decline in the level of milk production. Ultimately, all three mothers discontinued exclusive breastfeeding of their babies.

The immigrant Arab mothers demonstrated a low level of exclusive breastfeeding largely due to their immigrant status. As immigrants in Canada, the mothers experience difficulties such as adapting to the new environment, being away from their family members, and a low socioeconomic status. As a result, the Arab mothers who were largely associated with the

middle-income socio-economic conditions considered a blend of different approaches in balancing between meeting economic demands and engaging in optimal breastfeeding practices. This includes engaging in supplementation strategies such as formula feeding in order to cope with issues of low milk production due to extensive engagement with physical and economic activities. Most participants involved in this study are at, close to, or below minimum wage; the participant with the lowest annual household income also works a part-time job. The extra stress placed on these mothers due to financial insecurity is likely to influence their breastfeeding practices. Research has demonstrated that marginalized women are often disadvantaged in the context of formal and informal breastfeeding support. They have limited access to information on breastfeeding. They are burdened with gendered childcare tasks and shame affiliated with exposure of their breasts (Temple Newhook et al., 2017). In consideration of breastfeeding as an issue of social justice, research studies have placed greater emphasis on the structural and systemic factors, which inhibit breastfeeding among birthing mothers (Skouteris et al., 2017; Nikaiin et al., 2013). As a result, these studies present evidence of the growing need to facilitate and support breastfeeding practices among mothers. In Canada, the feminist-equity approach considers that the issues of gender and race play a key role in shaping breastfeeding practices (Temple Newhook et al., 2017). According to Nickel et al. (2017), individuals from different ethnic and racial origins are represented by variations of income levels. Immigrants such as the Arab mothers in this study demonstrated a relative lower economic status in contrast to other citizens, due to the many obstacles such as adjusting in the foreign land. These findings raise awareness regarding the existing gender inequities in women's health and its influence on infants' health. Adopting a different focus that targets these disadvantaged mothers for more support on their needs will help to prevent an onset of social inequalities in health.

The results indicate that some mothers faced significant challenges in implementing recommendations by HCPs such as using formula milk due to low economic status. In enhancing the delivery of optimal breastfeeding, some mothers were requested to buy some utility items, such as nipple cream or the nipple shield. Similarly, mothers who were perceived to experience lower milk production were advised to consider formula milk feeding. Bartick et al. (2013) argue that apart from the cultural and religious motivations for avoiding some of the practices, the lack of adequate resources stood out as another barrier. Some of the mothers in this study argued that they would consider using formula milk due to its convenience, and the fact that formula in Canada was of higher quality than the formula that they could purchase in their home countries. However, few of the mothers agreed that the price of formula was reasonable, and were deterred by their inability to afford it. As a result, the economic status of the mothers demonstrated a profound effect in mothers' decisions about early food introduction. This was consistent with previous research by Gibbs and Forste (2014) which suggested that women with lower family incomes were less likely than their counterparts to breastfeed. Poverty, or insufficient resources, limits the scope of decisions which Arab mothers can make with regards to their infant's breastfeeding practices. These findings reinforce the importance of encouragement and support of breastfeeding, especially for low socio-economic mothers who are at increased risk of early introduction of solid food.

The results of the study highlighted the vital role of financial support and domestic support the mothers received from their husbands. In the process of supporting breastfeeding, men take up active roles as bread winners to ensure the breastfeeding mothers receive all the financial support that they need. These results complement the findings of other studies (Nikaiin et al., 2013; Reeves et al., 2006) that emphasize both financial and domestic support were the

primary avenues of improving breastfeeding. Nikaiin et al. (2013) found that Qatari women with a higher level of social status were more likely to formula feed. Given that formula is expensive, this suggests that there is a strong link between economic conditions and infant feeding practices. Mothers who have access to adequate resources can afford to use formula feeding. Despite the low levels of involvement in domestic and breastfeeding activities by the spouses of the Arab mothers in the study, they play a key role in ensuring that they could access adequate finances to support their chosen approach to breastfeeding. However, in some contexts there were some Arab mothers who reported low levels of support, hence their need to seek employment with subsequent termination of breastfeeding being an outcome of the need to meet economic obligations (Celi et al., 2005; Setegn et al., 2012).

Different social and cultural contexts influence the practice of exclusive breastfeeding and its determinants. Mothers must negotiate their decisions within the norms of the Arab culture and the Canadian health care culture. These norms, along with the religiously endorsed male gender roles, participants' mothers, and the HCPs influence mothers' decisions to breastfeed. However, cultural beliefs, values, traditional practice, and social support networks are the key influential factors that seems to determine the final breastfeeding decision. The findings from this study might help HCPs to identify potential barriers to exclusive breastfeeding with hope to facilitate culturally accepted interventions in their health care services. In retrospect, CST focuses on understanding the situations of individuals with regards to their socio-economic situations. This includes evaluating how factors such as culture, religion, or the economic status impacts breastfeeding practices. In the study involving immigrant Arab mothers in Calgary, it was established that culture and religion played a key role in defining practices of exclusive breastfeeding. This is with regards to power relations among men and women in the context of

gender roles and the influence of religious doctrine on Arab mothers' breastfeeding. As result, it presents insights on the need for re-orientation in some aspects of religion and culture.

5.5 Implications

5.5.1 Implications for Practice

There was a distinct lack of knowledge regarding the practice and even definition of exclusive breastfeeding. Furthermore, few of the mothers involved in the study believed that breastfeeding "only" is not possible, and even unhealthy for the baby. Information sessions and literature (in their native language) to help inform Arab mothers about the value of exclusive breastfeeding, both to the baby and to themselves, would help gain their buy-in to what, for them, was an alien concept. However, the promotion and encouragement of exclusive breastfeeding may cause mothers that struggle to breastfeed their babies due to their reduced milk production, to be put under more stress and make them feel guilty, further exacerbating the problem with their milk supply. It is, therefore, important that the men be involved in ensuring and encouraging their wives to practice exclusive breastfeeding. However, this may not be possible if the mother has no breastfeeding commitment. In order to practice (exclusive) breastfeeding, the mothers must therefore make a commitment to do so. To support breastfeeding among Arab mothers, information regarding exclusive breastfeeding needs to be made available (in print, videos, or on-line) particularly in the first six months after giving birth. This will ensure the mothers understand the health benefits associated with breastfeeding.

This study has shown that there is a need to provide culturally and socially appropriate and effective health promotion strategies or services to increase Arab mothers' breastfeeding practices in Calgary. It is important to start with prenatal support by talking to the mothers and providing them with information regarding exclusive breastfeeding. As support by spouses is

important for these mothers, prenatal support should be offered to their husbands as well. Given the sensitivity regarding gender among Arab population, gender appropriate prenatal classes might be an effective intervention. Gender roles and expectations within the family network are important considerations when providing care to Arab immigrant women as gender role expectations are influential in interpersonal relationships that construct the immigrant Arab women's practice. Gender appropriate classes would facilitate prenatal care services being attended by both the mother and the father and reinforce the significance of exclusive breastfeeding. This is important as it would enable the men to engage in the critical role of ensuring that the mothers effectively practice exclusive breastfeeding. Furthermore, accessibility to trained bilingual (English and Arabic) staff with skills and knowledge covering all aspects of breastfeeding is needed. Classes offered in Arabic could be developed for pre- and post-natal women and their spouses to help them in deciding on infant feeding practices.

For a new mother, breastfeeding is a skill to learn (or re-learn) and requires patience and perseverance. It may come naturally to some mothers, but to most, it does not. New mothers need to be shown how to breastfeed so that they and the baby are comfortable, and the baby is able to have his or her fill of breastmilk. To fill the gap in knowledge and to dispel any misinformation, information on breastfeeding should be provided to mothers in varying languages and accommodate cultural differences. This could be in printed pamphlets, booklets, or in the form of audio-visual presentations or programs. These could give details about all aspects of breastfeeding including how to express and store breastmilk, alternative methods of offering expressed breastmilk, a list of foods that promote milk production, stress management techniques, and ways to deal with fatigue. Furthermore, the intake of fluids other than breastmilk

could have a negative impact on breastfeeding frequency and duration, which also suggests a need for increased prenatal and postnatal breastfeeding education for immigrant Arab mothers.

Findings from this study also touched on the belief and fear by Arab mothers that they are not producing enough breastmilk. More efforts and resources must be put into providing culturally specific teaching related to how milk production can be stimulated. Issues related to breastfeeding would be better discussed during the antenatal and postnatal periods.

Only one out of the ten mothers interviewed for this study attended a support group to help her with any issues prior to giving birth. She attended the Calgary Catholic Immigration Society (CCIS) about infants, breastfeeding, and child-carrying. Once her baby was born, she no longer had time to continue attending. The other nine participants did not access support from any social service organizations. The reason for this appeared to be that since most of them were not in dire situations requiring social services intervention, the family and formal support from HCPs were deemed sufficient to address their needs. However, the interview data indicated otherwise. This study suggests that mothers need help understanding what services, resources, groups, etc., are available to them and where to find information, and that these groups can help them. Prenatal Arab mothers need to be referred to, or encouraged to attend, such groups so that they can share with other immigrant mothers any problems that may arise and listen to and exchange advice with each other. This teaching and educational opportunity can also be part of a socialization program which will help those mothers who are feeling isolated, not to feel so alone anymore. They can also learn coping strategies from each other using their common language.

Another key area that this study highlighted is the need for help for these mothers in the home. Due to the traditional gender roles, men are less inclined to help their spouses at home on issues of child rearing. As pointed out by Bich et al., (2016), with active support of the fathers

before, during, and after birth, mothers were less likely to give prelacteal food and more likely to breastfeed exclusively. If fathers were to better understand the extent of support their partners need and the impact they could make, this may motivate them to participate more actively in breastfeeding decision making. Therefore, fathers should be encouraged to attend programs such as breastfeeding education classes that support early initiation of breastfeeding.

5.5.2 Implications for Nursing Education

The fact that just over half the participants in this study were not satisfied by some aspect of the care that they received at the hospital speaks to the need for improvements in the way HCPs deal with Arab mothers. Issues relating to poor quality of information from nurses or the lack of self-determination in breastfeeding practices were some of the key areas of concern. Professional education that enhances the knowledge, skills, attitudes and behaviors of the healthcare providers so as to value the significance of breastfeeding should be implemented. HCPs involved in maternity care such as obstetrics, midwifery pediatrics and those in the family practice as well as lactation consultants, midwives, and nurses etc. can highly impact the decision, desire and the ability of a breastfeeding mother to continue to breastfeed. Breastfeeding education programs that are provided online or in person, in-service presentations by trained health care professionals within the health care centers and clinical protocols developed by experts can be used to provide in-depth knowledge and skills pertaining to breastfeeding and lactation management among the health professionals.

A key facet of the Arab culture and religion is the Qur'an. A Muslim's strong faith in the Qur'an promotes breastfeeding in the scriptures that state that it must be carried out for at least two years. All participants in this study intended to follow this religious edict rather than introduce formula so soon. Two of the participants mentioned that an influential factor was the

nurses rushing to suggest their babies start on formula when their babies would not stop crying. One of these mothers actually felt as though she had been forced to comply with giving her baby formula and that the decision had been taken away from her. To address this problem, there is a need to undertake a collaborative approach involving both HCPs and the immigrant mothers. More emphasis should be placed on protecting Arab mothers in addition to promoting self-determination. As a result, HCPs need to provide non-biased information to the mothers under their care to facilitate the process of making informed decisions on exclusive breastfeeding. Cross-cultural conflicts among the Arab and Canadian cultures also arose concerning prelacteal feeding customs, such as the giving of sugar water and the rubbing of a date on a baby's palate. Other research studies such as Steinman et al. (2010) reported that some Somali Arab mothers believe that colostrum is dirty and harmful to the infant as it has been stored in the breast for the last 9 months thus contributing to the high incidence of prelacteal feeding. In Kuwait, the majority of mothers (55.4%) delayed their first attempt to breastfeed until 24 hours or longer postpartum as prelacteal feeds, either infant formula or glucose water, was the norm (Dashti et al., 2010). These practices go against the practice of exclusive breastfeeding and are not recommended by HCPs. Such problems can be addressed through education programs for nurses that teach cultural sensitivity and awareness. Further, the integration of scientific knowledge on breastfeeding will play a crucial role in influencing positive outcomes towards exclusive breastfeeding. Through establishing the scientific causes of hypoglycemia and the recommended measure for treatment, there is a potential to transform the current retrogressive cultural practices. More particularly, this will focus on challenging the practice of prelacteal feeding through providing factual information on its implications hence promoting better breastfeeding outcomes.

Lack of English fluency among some of the participants created a communication barrier when explanations included unfamiliar medical and technical terms. Such a situation can be solved with providing more written information in the women's native language or having translators available. As well, more awareness should be created among HCPs regarding the importance of using lay terms when offering health information. Schools of nursing can promote breastfeeding by including its physiology, benefits, challenges, cultural aspects, management, and evidence-based research outcomes in their curricula. An advanced practice nurse educator/instructor can provide experiential examples and demonstrations to nursing students that will enable them to provide more inclusive care.

5.5.3 Implications for Research

Based on the findings from this study, intervention studies can be conducted to evaluate methods to assist mothers to increase rates of exclusive breastfeeding. The ethnographic study aimed to describe and interpret the influence of culture and other contextual factors on exclusive breastfeeding from the Arab women's perspective while recognizing the body of knowledge that has been postulated by different scholars (Madison, 2012; Schutz, 1972; Smyth & Holmes, 2005; Thomas, 1993; Wolf, 2012). The ethnographic approach has set a precedence for the development of effective intervention strategies aimed at improving breastfeeding outcomes through presenting trends in breastfeeding practices among Arab mothers. It highlights the underlying facilitators and inhibitors of optimal feeding practices that might impact health outcomes for infants. Consequently, it might have a far researching implication on the development of future policies on breastfeeding.

There are numerous opportunities for further research to examine and analyze various contextual factors that shape Arab mothers' decisions to exclusively breastfeed their infants. This

qualitative study considered the critical ethnography model in exploring breastfeeding practices among Arab immigrant mothers. It leads the way to more investigations being conducted about different cultural groups in different settings. This study was based on a small sample size (n=10). Additional research should incorporate a larger number of participants for a more representative study, with respondents drawn from more regions/countries.

Another opportunity is to conduct similar research with Arab mothers who were born and live in Canada. In addition, quantitative studies testing interventions to increase exclusive breastfeeding can be done based on findings from this study. Participatory action research can be done with Arab mothers to develop educational programs and support regarding exclusive breastfeeding to educate the mothers in a culturally sensitive way. Since mothers voiced isolation and a need for support, it is important for researchers to involve mothers in program planning and evaluate the outcomes of their participation. Further research is needed to evaluate best ways to involve male Arab partners in supporting exclusive breastfeeding.

In regards to other future research, there is a need to develop studies which focus primarily on understanding breastfeeding practices of mothers from specific cultural contexts. Findings from this study revealed that most of the mothers engaged in distinct prelacteal feeding practices that were representative of the Arab culture of their individual countries even though they were all affiliated with religion of Islam. Consequently, research focusing on specific groups which demonstrate mutual practices would offer greater insights into exclusive breastfeeding trends.

Further critical ethnographic research can be conducted with nurses, lactation consultants, and physicians who provide care to mothers and their families to evaluate their beliefs and practices that may affect exclusive breastfeeding among Arab mothers. Moreover, the spouses

who are perceived to play a minor role in supporting breastfeeding practices may provide greater insight into understanding new perspectives towards exclusive breastfeeding.

5.6 Limitations of the Study

This study has several limitations because of non-random selection of participants who met the inclusion criteria and the nature of qualitative design. Transferability of the findings might be limited to Arab mothers living in socio-cultural contexts similar to those where the study took place (Speziale et al., 2011; Speziale & Cameron, 2009). This study was conducted with Arab mothers who are within six months postpartum, in stable physical and emotional condition, able to read and communicate in Arabic or English, maternal age older than 18, and five years or less residing in Canada. It also described these mothers' experiences in the context of culture, religion, and immigration status. Therefore, the findings reflect the experience of this group of Arab mothers only due to their specific cultural attributes and the small sample size. The goal of the ethnocultural study was not to generalize findings (Cameron & Cohen, 2009). The aim of qualitative research is to understand and interpret the phenomenon (Saint-Germain, 2001). Readers of this study need to carefully evaluate the findings to determine if they are transferable to other Arab immigrant mothers.

This study examined the perceptions of the Arab mothers only. I did not interview other family members, including husbands, nor were the HCPs asked their views. Therefore, I do not have their first-hand perspectives, although I did hear about their perspectives from the mothers' points of view. Knowing HCPs' perspectives may also provide additional information to understand these mothers' experiences, identify best practices, and recognize opportunities for promoting breastfeeding among these mothers.

Furthermore, the interpretation of the data was done through my own lens on these women's perceptions of their experiences. Though I sought to remain impartial throughout the study and, although member checking of my interpretation with participants was conducted, there is no guarantee that I did not misinterpret some of the information due to my own experiences and expectations. However, the findings of this study provide considerable insight on the Arab mothers' experience regarding breastfeeding in Calgary and created an opportunity for critical reflection. The findings also created room for discussion and further research among health care professionals, governmental and none-governmental organizations as well as among individuals that are either interested or concerned about breastfeeding.

5.7 Conclusion

Initiation of breastfeeding by Arab mothers in Canada is high, but by six-months after birth, their breastfeeding duration rates quickly drop below the desired international rates. Lack of knowledge and support available to immigrant Arab mothers contribute to the lack of successful breastfeeding, leading them to prematurely wean their infants. This critical ethnography study has provided rich and in-depth insight into the exclusive breastfeeding experiences of Arab mothers and the contextual factors that influence their experiences. The findings from this qualitative study revealed influences of mother's knowledge, family, religion, and infant feeding practices on initiation and exclusive breastfeeding practices by Arab immigrant mothers.

Findings from this study revealed that immigrant Arab mothers in Calgary who no longer have traditional support systems struggled with challenges of breastfeeding. Mothers who identified that their husbands were their main support, in some cases, reflected a change in perspective towards traditional Arab male roles. Among other Arab mothers, traditional support

systems did not facilitate the continuation of breastfeeding due to the lack of help the husbands were able to provide. Moreover, women's lack of knowledge of exclusive breastfeeding and discomfort with breastfeeding in public and in front of strangers were associated with shorter breastfeeding durations. With regards to exclusive breastfeeding, there were conflicts between the women and the health care system, with the women wanting to carry out their traditional and religious customs against the recommendations of the HCPs. The mothers relied on the traditions they most identified with. Although mostly through short visits and long-distance communications, they still relied on their mothers for encouragement and emotional support. Mothers also actively sought information regarding breastfeeding from sources such as the Internet to assist them with problems they faced, rather than only going to HCPs, who they did not always understand due to the language barriers. A clearer understanding of the socio-cultural contexts that support and encourage exclusive breastfeeding is an important consideration by HCPs caring for Arab immigrant mothers in Calgary. Culturally sensitive interventions that are tailored to the specific Arab mothers' breastfeeding concerns and needs are needed in order to have exclusive breastfeeding become the norm among this population in Canada.

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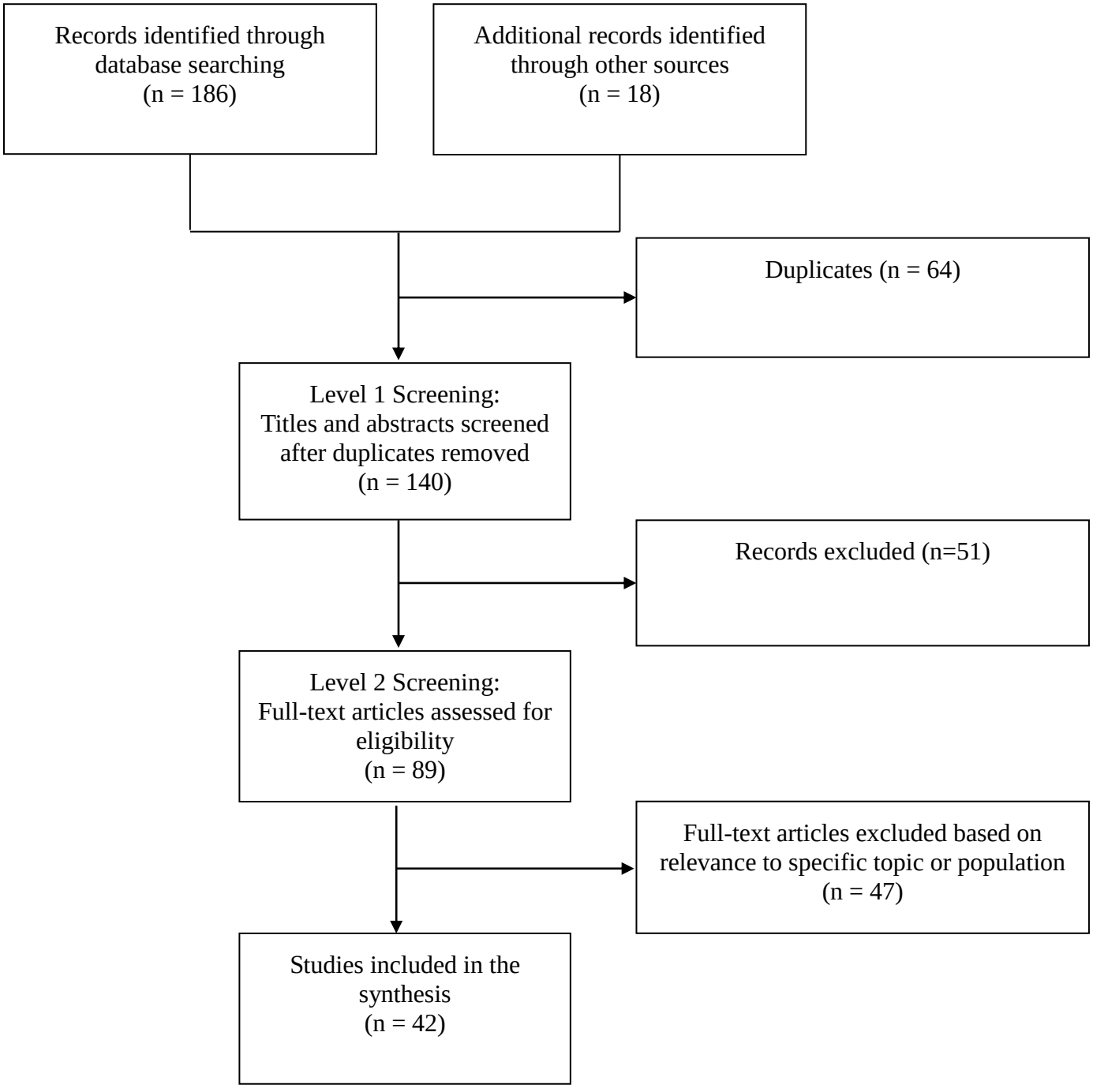
Appendix A: Literature Search Flowchart



Appendix B: Letter of Introduction to the Postpartum Community Services

Dear:

Re: **Breastfeeding Practices among Arab Mothers in Calgary with a Focus on Exclusive Breastfeeding: A Qualitative Inquiry**

I am writing to ask for your assistance and support for my master's project. I am a Registered Nurse and student in the Masters of Nursing program at the University of Calgary. I am studying breastfeeding practices and experiences focusing on exclusive breastfeeding in immigrated Arab mothers. The findings from this study can be used to facilitate supportive health education programs related to promoting exclusive breastfeeding in this population in a manner that is consistent with their cultural values.

We are recruiting Arab mothers who are

(a) within 6 months postpartum,
(b) able to read and communicate in Arabic or English,
(c) older than 18 thus able to provide informed consent, and
(d) residents of Canada for less than 5 years.

Participants will be excluded if their baby (a) was born before 37 weeks of gestation or (b) has a congenital abnormality that impacts feeding. With the mothers' permission, I will conduct interviews in either Arabic or English and ask mothers about their breastfeeding practices for the infant's first 6 months. Interviews will last 60 to 90 minutes.

Please provide Arab mothers who meet the eligibility criteria during their appointments at your clinic with information sheets about the study and my contact information. Please advise them to call me to discuss a possible study enrollment. In case the eligible Arab mothers would rather the

researcher to contact them, please collect the Consent to Contact form which will be share with me as the researcher of the study. Upon receiving the Consent to Contact form from you, I will contact the potential participants to provide more information about the study, to answer any questions that they might have, and to ask for their voluntary participation in the study. To express my appreciation of the mothers' effort, each participant will be provided a $25 store gift certificate. To facilitate supportive health education programs among Arab mothers, I will share findings with the Postpartum Community Services and Well Child Clinics staff once the study is completed.

This study has been approved by the University of Calgary Conjoint Health Research Ethics Board (REB17- 0899).

Thank you for your time and support.

Sincerely,
Roqaia Dorri, RN, BN, Faculty of Nursing
University of Calgary
(phone number)

Appendix C: A Study Contact Information

Title: **Breastfeeding Practices among Arab Mothers in Calgary with a Focus on Exclusive Breastfeeding: A Qualitative Inquiry**

- We are recruiting Arab mothers who are:
  - Within 6 months postpartum.
  - Older than 18 thus able to provide informed consent.
  - Residents of Canada for less than 5 years.
- We would like to speak with you, in Arabic or English, about your infant feeding and breastfeeding experiences.
- The interview will last 60 to 90 minutes. The findings from this study can be used to facilitate supportive health education programs related to promoting breastfeeding.
- This study has been approved by the University of Calgary Conjoint Health Research Ethics Board (REB17-0899).
- In appreciation for your time, you will receive a $25 store gift card.

If you are interested in participating or you have any questions about this study, please contact:

Roqaia Dorri, RN, BN, Faculty of Nursing
University of Calgary
(phone number: xxx-xxx-xxxx)

معلومات للاتصال بالباحث

عنوان البحث: ممارسة الرضاعة الطبيعية عند الأمهات العرب في كالجاري مع التركيز على الرضاعة الطبيعية الحصرية: بحث نوعي

- نحن نقوم بمقابلة الأمهات المهاجرات العرب على أن تكون:
  - خلال (6-0) أشهر من الولادة.
  - على أن تبلغ من العمر 18 سنة او أكثر، وبالتالي مخولة بالتوقيع على استمارة الموافقة.
  - من سكان كندا لمدة لا تقل عن 5 سنوات.

- نود أن نتحدث معكِ باللغة العربية أو الإنجليزية، عن تغذية طفلك وخبرتكِ مع الرضاعة الطبيعية.

- ستستغرق المقابلة من 60 إلى 90 دقيقة. ويمكن استخدام نتائج هذه الدراسة لتعزيز ممارسة الرضاعة الطبيعية بين الأمهات المهاجرات العرب.

- تمت الموافقة على هذه الدراسة من قبل جامعة كالجاري كونجونت مجلس أخلاقيات البحوث الصحية (REB17-0899)

- تقديرا لوقتكِ ولجهودكِ للمشاركة معنا، سوف يتم منحكِ قسيمة شراء بقيمة 25 $.

إذا كنتِ ترغبين في المشاركة أو لديكِ أي أسئلة حول هذه الدراسة، يرجى الاتصال بـ:

السيدة / رقيه دري، ممرضة مرخصة.
كلية التمريض، جامعة كالجاري
(phone number: xxx-xxx-xxxx)

UNIVERSITY OF CALGARY

Appendix D: Recruitment poster with tear-off contact information slips

Are you of Arab ethnicity and have moved to Canada within the last 5 years?
Did you give birth within last 6 months?
Then, you are invited to participate in a research study.

- I am a Master's student in the Faculty of Nursing at the University of Calgary who would like to speak with you, in Arabic or English, about your infant feeding and breastfeeding experiences. The interview will last 60 to 90 minutes. The findings from this study can be used to facilitate supportive health education programs related to promoting breastfeeding.
- This study has been approved by the University of Calgary Conjoint Health Research Ethics Board (REB17-0899).
- In appreciation for your time, you will receive a $25 store gift card.

For more information about this study, or to volunteer for this study, please contact:

Roqaia Dorri, RN, BN. Faculty of Nursing
University of Calgary
(phone number: xxx-xxx-xxxx)

Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx

هل أنتِ من أصل عربي وانتقلتِ إلى كندا خلال السنوات الخمس الماضية؟
هل أنجبتي طفلكِ في خلال 6 أشهر الماضية؟
إذاً، أنتِ مدعوه للمشاركة في بحث دراسي...

- أنا طالبة ماجستير من كلية التمريض في جامعة كالجاري. أود أن أتحدث معكِ باللغة العربية أو الإنجليزية، عن تغذية طفلك وخبرتكِ مع الرضاعة الطبيعية. ستستغرق المقابلة من60 إلى 90 دقيقة. ويمكن استخدام نتائج هذه الدراسة لتعزيز ممارسة الرضاعة الطبيعية بين الأمهات المهاجرات العرب.

- تمت الموافقة على هذه الدراسة من قبل جامعة كالجاري كونجونت مجلس أخلاقيات البحوث الصحية-(REB17 0899)

- تقديرا لوقتكِ ولجهودكِ للمشاركة معنا، سوف يتم منحكِ قسيمة شراء بقيمة $25

إذا كنتِ ترغبين في المشاركة أو لديكِ أي أسئلة حول هذه الدراسة، يرجى الاتصال بـ:

السيدة / رقيه دري، ممرضة مرخصة.
كلية التمريض، جامعة كالجاري
(phone number: xxx-xxx-xxxx)

Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx	Roqaia Dorri xxx-xxx-xxxx

Appendix E: CONSENT TO CONTACT FOR RESEARCH PURPOSES

TITLE: Breastfeeding Practices among Arab Mothers in Calgary with a Focus on Exclusive Breastfeeding: A Qualitative Inquiry

INVESTIGATOR: Mrs. Roqaia Dorri
Supervisor: Dr. Tam Donnelly
Co-supervisor: Dr. Shahirose Premji
Committee members: Dr. Shelley Raffin & Dr. Elaine McKiel

You are being invited to give consent for Roqaia Dorri to contact you at some time in the future to invite you to participate in a research study.

Are you willing to learn more about the research study?

☐ YES ☐ NO

If yes, you will be contacted at a later date. Please include your contact information below.

☐ **Telephone:** _____

☐ **E-mail:** _____

Every effort will be made to safeguard your contact information. Although access to this information will be limited, there is a small chance that this information could be inadvertently disclosed or inappropriately accessed.

You have been made aware of the reasons why the contact information is needed and the risks and benefits of consenting or refusing to consent.

This study has been approved by the University of Calgary Conjoint Health Research Ethics Board (REB17-0899).

This consent is effective immediately. Your consent to be contacted can be revoked by you at any time.

Patient's Signature: _____

Date: _____

عنوان البحث: ممارسة الرضاعة الطبيعية عند الأمهات العرب في كالجاري مع التركيز على الرضاعة الطبيعية الحصرية: بحث نوعي

اسم الباحثة : رقيه دري
المشرفة : د. تام دونالي
المشرفة المشاركة : د. شاهيروز برمجي
أعضاء اللجنة : د. شيلي رافن و د. إيلين مكيل

نود دعوتكِ لإعطاء الموافقة للسيدة / رقيه دري. للاتصال بكِ لغرض المشاركة في البحث.

هل ترغبين في معرفة المزيد عن تفاصيل هذا البحث؟

نعم ☐ لا ☐

إذا كانت الإجابة بنعم، سيتم الاتصال بك في وقت لاحق. الرجاء تسجيل المعلومات الخاصة للإتصال بك:

☐ الهاتف_____

☐ البريد الإلكتروني_____

سيتم بذل قصارى جهدنا للحفاظ على معلوماتكِ الخاصة. والوصول إلى هذه المعلومات سيكون محدوداً بين أعضاء البحث وأي كشف عن هذه المعلومات سيكون عن غير قصد. كذلك تم ابلاغكِ عن غرض تسجيل معلوماتك، وفوائد ومخاطر الموافقة أو الرفض.

تمت الموافقة على هذه الدراسة من قبل جامعة كالجاري كونجونت مجلس أخلاقيات البحوث الصحية (REB17-0899)

هذه الموافقة ستكون سارية فوراً. يمكن إلغاء هذه الموافقة في أي وقت ترغب بذلك.

توقيع المريض: _____

تاريخ: _____

Appendix F: CONSENT FORM

TITLE: Breastfeeding Practices among Arab Mothers in Calgary with a Focus on Exclusive Breastfeeding: A Qualitative Inquiry

INVESTIGATOR: Mrs. Roqaia Dorri
Supervisor: Dr. Tam Donnelly
Co-supervisor: Dr. Shahirose Premji
Committee members: Dr. Shelley Raffin and Dr. Elaine McKiel

This consent form is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, please ask. Take the time to read this carefully and to understand any accompanying information. You will receive a copy of this form.

BACKGROUND

Breastfeeding is known to provide health benefits not only for child health but also for breastfeeding mothers and for the community. In Canada, only a small number of mothers continue to breastfeed exclusively for the first 6 months of their babies' lives. The immigrant population in Canada have even lower rates of initiating and continuing breastfeeding when compared with rates for non-immigrant Canadian mothers and mothers in the immigrants' countries of origin. Not much is known about current breastfeeding practices among Arab mothers residing in Calgary. Therefore, to learn more about their practices, 10-12 Arab immigrant mothers will be interviewed.

WHAT IS THE PURPOSE OF THE STUDY?

In this study, we are trying to understand the breastfeeding practices by Arab immigrant mothers.

WHAT WOULD I HAVE TO DO?

If you agree to participate in this study, you will be asked to meet with the researcher for a one-on-one interview. The interview will be conducted in English or Arabic for approximately 60 to 90 minutes in duration and you can choose which language you prefer to use. You will be asked

questions about your experience with the breastfeeding. The interview will be audio recorded in order to review your responses after the interview is over. After the study is completed, I might need to talk with you one more time to share the findings and to affirm that the summaries reflect you views, feelings, and experiences.

WHAT ARE THE RISKS?

There are no foreseeable risks to you as a result of the participation in this study.

WILL I BENEFIT IF I TAKE PART?

The finding of this study will help us to better understand Arab mothers' breastfeeding practices. This information will help us to come up with actions to promote exclusive breastfeeding for Arab immigrant mothers.

DO I HAVE TO PARTICIPATE?

The choice to participate is yours and there will be no bad effects should you choose not to participate. You are allowed to stop or leave the study at any time without any effect on the care you or any family member receive from the clinic. During our conversation, if you feel overly worried or upset, we will help you to find someone that can help and talk with you if you think that would be helpful.

In addition, if new information becomes available that might affect your willingness to participate in the study, you will be informed as soon as possible.

WILL MY RECORDS BE KEPT PRIVATE?

If you agree to be in this study, you will be given a study number that will allow all records to be anonymous. All your information will be kept in a locked cabinet and password protected computers. Only the researchers will be able to access this information.

Authorized representatives from the University of Calgary and the Conjoint Health Research Ethics Board (CHREB) may look at your identifiable medical/clinical study records held at (Postpartum Community Services and Community Health Centers in Calgary) for quality assurance purposes.

SIGNATURES

Your signature on this form indicates that you have understood to your satisfaction the information regarding your participation in the research project and agree to participate as a participant. In no way does this waive your legal rights nor release the investigators or involved

institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time without jeopardizing your health care. If you have further questions concerning matters related to this research, please contact:

Mrs. Roqaia Dorri (phone number: xxx-xxx-xxxx)

If you have any questions concerning your rights as a possible participant in this research, please contact the Chair, Conjoint Health Research Ethics Board (CHREB), University of Calgary at 403-220-7990.

Participant's Name	Signature and Date
Investigator/Delegate's Name	Signature and Date
Witness' Name	Signature and Date

The University of Calgary Conjoint Health Research Ethics Board (CHREB) has approved this research study.

A signed copy of this consent form has been given to you to keep for your records and reference.

نموذج الموافقة

عنوان البحث: ممارسة الرضاعة الطبيعية عند الأمهات العرب في كالجاري مع التركيز على الرضاعة الطبيعية الحصرية: بحث نوعي

اسم الباحثة: رقيه دري
المشرفة: د. تام دونالي
المشرفة المشاركة: د. شاهيروز برمجي
أعضاء اللجنة: د. شيلي رافن و د. إيلين مكيل

هذه الاستمارة هي جزءاً من عملية الموافقة المسبقة. ولكي تمنحكِ فكرة أساسية عن موضوع البحث وما الذي ستشاركين فيه. فاذا كنتِ ترغبين في معرفة المزيد عن تفاصيل البحث، أو اي معلومات غير مدرجة هنا، يرجى السؤال. نرجوا أن تأخذِ وقتكِ لقراءة هذا بعناية وفهم أي معلومات مصاحبة. وسيتم منحك نسخة من هذا النموذج.

خلفية عن البحث:

نسبة الرضاعة الطبيعية عند المهاجرين العرب في كندا هي أقل نسبة عند مقارنتهم بمعدلات الأمهات الكنديات الغير مهاجرات من بلدهم الأصلي. حالياً لا توجد معلومات عن ممارسة الرضاعة الطبيعية عن الأمهات العربيات المقيمات في كالجاري. لذلك، لمعرفة المزيد عن ممارساتهم وخبراتهم، سنقوم بمقابلة ما بين 10-12 من الأمهات المهاجرات العرب.

ما هو الغرض من اجراء هذا البحث؟

في هذا البحث، سنحاول أن نفهم ممارسة الرضاعة الطبيعية عند الأمهات المهاجرات العرب. ويمكن استخدام المعلومات حول تصورات المرأة العربية حول الرضاعة الطبيعية لتطوير برامج وخدمات التوعية الصحية لتعزيز ممارسة الرضاعة الطبيعية بين الأمهات المهاجرات العرب.

ما الذي يتعين عليكِ فعله؟

إذا وافقتي على المشاركة في هذه الدراسة، سيُطلب منكِ مقابلة الباحثة لإجراء مقابلة فردية. ستجرى المقابلة باللغة الإنجليزية أو العربية لمدة من 60 إلى 90 دقيقة تقريباً، كما يمكنكِ اختيار اللغة التي تفضلين التحدث بها. سوف يتم طرح أسئلة حول تجربتكِ مع الرضاعة الطبيعية. وستكون المقابلة مسجلة من أجل مراجعة إجاباتكِ بعد انتهاء المقابلة. و بعد الانتهاء من الدراسة، سنكون بحاجة إلى التحدث معكِ مرة أخرى لتبادل النتائج وللتأكد أن ملخص المقابله تعكس وجهة نظركِ ومشاعركِ وخبراتكِ.

هل توجد أي مخاطر يتعرض لها المشارك؟

لا توجد مخاطر متوقعة لكِ نتيجة للمشاركة في هذه الدراسة.

هل هناك فوائد متوقعة لصالح الُمشارك في هذهِ الدراسة أو لغير المشاركين؟

لا توجد فوائد مباشرة للمشاركات. سوف تساعد نتائج هذه الدراسة على فهم أفضل لممارسة الأمهات العرب للرضاعة الطبيعية. وستساعدنا هذه المعلومات في التوصل إلى إجراءات لتعزيز الرضاعة الطبيعية الحصرية للأمهات المهاجرات العرب. كما سيتم منحكِ قسيمة شراء بقيمة 25 $ عند الانتهاء من المقابلة كتقدير لوقتكِ ولجهودكِ للمشاركة معنا.

هل يتوجب على المشاركة؟

لديكِ كامل الخيار للمشاركة او عدم المشاركة ولن يكون هناك أي آثار سلبية عند اختياركِ عدم المشاركة في هذا البحث. يُسمح لكِ بإيقاف الدراسة أو تركها في أي وقت دون أي تأثير على الرعاية الصحية التي تحصل عليها من العيادة سواء كانت لكِ او لافراد اسرتكِ. إذا أردتِ الانسحاب من البحث، لديكِ الخيار لسحب البيانات الخاصة بكِ أيضاً. أثناء محادثتنا، قد تنزعجين عاطفياً عندما تخبرينا قصتكِ، فإذا كان الأمر كذلك، فإننا سنوقف المحادثة معكِ، ونستطيع تحويلكِ إلى مقدمي المشورة أو أي خدمات داعمة، إذا كنتِ تعتقدين أن من شأنه أن يكون مفيداً لكِ.
وبالإضافة إلى ذلك، إذا أصبحت لدينا معلومات جديدة التي قد تؤثر على مشاركتكِ في الدراسة، سيتم إخباركِ في أقرب وقت ممكن.

كيف يتم حماية سرية البيانات؟

عند موافقتكِ على المشاركة في هذه الدراسة سيتم منحكِ رقم دراسة من شأنها أن تسمح لجميع السجلات لتكون مجهولة المصدر. كما سيتم الاحتفاظ بكافة المعلومات الخاصة بكِ في خزانة مقفلة وكلمة مرور محمية في أجهزة الكمبيوتر. فقط الباحثين سيكون لهم القدرة بالاطلاع على هذه المعلومات.

التوقيع:

يشير توقيعك على هذا النموذج إلى فهمك للمعلومات المتعلقة بمشاركتكِ في مشروع البحث والموافقة على المشاركة كمشارك. وهذا لا يعني بأي شكل من الأشكال التنازل عن حقوقكِ القانونية ولا يعفي المحققين أو المؤسسات المعنية من مسؤولياتهم القانونية والمهنية. لديكِ الحرية في الانسحاب من الدراسة في أي وقت دون التأثير على تلقيك الرعاية الصحية. إذا كانت لديكِ أسئلة أخرى تتعلق بهذا البحث، يرجى الاتصال بالسيدة / رقية دري. هاتف رقم: (xxx)-xxx-xxxx

إذا كانت لديكِ أية أسئلة تتعلق بحقوقك كمشارك محتمل في هذا البحث، يرجى الاتصال برئيس مجلس أخلاقيات البحوث الصحية المشتركة، جامعة كالجاري على الرقم (xxx)-xxx-xxxx

اسم المشارك	التوقيع والتاريخ
اسم الباحث / المندوب	التوقيع والتاريخ
اسم الشاهد	التوقيع والتاريخ

تم الحصول على موافقة مجلس البحوث الصحية بجامعة كالجاري للعمل بهذا البحث.

وسيتم منحك نسخة موقعة من نموذج الموافقة هذا للاحتفاظ به.

UNIVERSITY OF CALGARY

Appendix G: Initial Interview Guide for Arab mothers

Introduction

Thank you for taking the time to speak with me today. As you know, I am very interested in hearing about your experience with breastfeeding. My goal is to find ways to help to improve breastfeeding among Arab mothers in Calgary. I will be asking for your experience about breastfeeding, what prevents or motivates you to breastfeed your infant, and what you think are best ways to support and promote breastfeeding among Arab mothers in Calgary. I want to assure you that all the information will be confidential. If there is a question which you do not want to answer, all you have to say is "I do not want to answer that question". You also have the right not to participate in the project at any time. During our conversation, if you feel upset, we can stop the interview. We can also arrange for a health care professional to talk with you if you think that would be helpful.

First, I would like to start with some personal and demographic questions:

Personal, demographic questions:

1- What is your age? _____/years old

2- What is your marital status?

1. _____Single/never married
2. _____Married
3. _____Separated
4. _____Divorced
5. _____Widowed

3- What is your country of birth? **……..**

4- How long have you been living in the Canada?

□ Less than one year □ 1 – 2 years □ 3 – 5 years □ 5+

5- What is your religion?

1. _____ Muslim
2. _____ Buddhism
3. _____ Catholic
4. _____ Protestant
5. _____ Other_____ please specify: _____
6. _____ Prefer not to answer

6- What is the highest level of education that you had received?

1. _____ Never went to school
2. _____ Primary/junior high school
3. _____ High school
4. _____Trade school
5. _____University
6. _____Other_____

6

7- With regards to employment, do you:

1. _____ Work full-time
2. _____ Work part-time
3. _____ Self-employed at home
4. _____ Full-time homemaker
5. _____ Full-time student
6. _____ Part-time student
7. _____ Unemployed – for how long? _____ [skip to Q9]
8. _____ Other – please specify: _____

8- What is your current occupation? _____

9- What is the highest level of education that your spouse had received?

1. _____ Never went to school
2. _____ Primary/junior high school
3. _____ High school
4. _____Trade school
5. _____University
6. _____Other_____

10- What is your spouse current occupation? _____

11- What is your annual household income from all sources?

1. _____Less than $10,000 CAD.
2. _____$11,000-$20,000 CAD.
3. _____$21,000-$30,000 CAD.
4. _____$31,000-$40,000 CAD.
5. _____$41,000-$50,000 CAD.

6. _____$51,000-$60,000 CAD.
7._____ $61,000-$70,000 CAD.
8. _____$71,000-$80,000 CAD.
9. _____More than $80,000 CAD.
10. _____DON'T KNOW
11. _____Prefer not to answer

12- With regard to children,

A) How many children do you have? _____
B) What are the ages of your children? _____
C) How many children live with you? _____

13- What is the gender of your new infant?
□Male □Female

14- Birth date of the new infant? _____ How old is your infant? _____

15- Kind of delivery?
□ Natural delivery □ Caesarean section □ Others (e.g.: Forceps delivery….)

16- Are you currently breastfeeding your child?
□ Yes □No □ other ……

17- Usually, are you involved in activities that are:
1. _____Within my family only
2. _____Within my religion community only
3. _____Within all my family, my neighborhood, my religion community
4. _____I don't participate in community events

Next, I would like to find out about your experience with breastfeeding:

Questions:

1. Please tell me what do you think about breastfeeding?
2. How has your experience with breastfeeding been so far?
3. What comes to your mind when I say "exclusive breastfeeding"?

4. What are your thoughts about feeding your infant with only breastmilk?
5. What do your family members (for example, husband, mother, sister…) tell you about feeding your infant with only breastmilk?
6. Who did you seek advice from when you faced the breastfeeding issues? Please explain
7. Did anyone help you with your daily tasks at home? Could this factor influence you to or not to breastfeed? Please explain.
8. Did you ever breastfeed or try to breastfeed your infant, either in the hospital, birth center, or after you went home? If yes,
    a) When was the first time you tried?
    b) Who helped you with breastfeeding?
9. If you didn't try to breastfeed:
    a) Please tell me why?
    b) What could have helped you to breastfeed?
10. What kind of beliefs and values influenced your decision to participate in breastfeeding?
11. In your opinion, what might affect you and other Arab mothers' decision to breastfeed or not breastfeed?
12. In your opinion, does economic status influence Arab mothers to breastfeed or not in Calgary? Please explain
13. Is there anything in your religion that influenced you to breastfeed? Please explain
14. In your opinion, what should we do to support (make it easier for) mothers to breast-feed their infant with breastmilk only?
15. What kind of information about breastfeeding would be most helpful to you and other mothers?
16. What would be the best way for us to give this information?

After the study is completed, I might need to talk with you one more time to share the findings and to affirm that the finings reflect your views and experiences or that they do not reflect these experiences. Would it be fine for me to call you again?

□ Yes □No

if yes, best number to be called …….

Lead ins:
Please tell me about…
Please tell me more about that please?
Can you give me an example?
I am also wondering about …
Could you help me understand…?
I would appreciate hearing from you about…
What does that mean to you?

How does this make you feel?
Do you believe it would make a difference if …?
How would it make a difference if…?
What do you mean…?
What does that mean to you?
How do you think…?
Other people told me that…., and I was wondering if…

Initial Interview Guide for Arab mothers

المقدمة:
شكراً لقضاء وقتك في التحدث معي اليوم. وكما تعلمون، نحن مهتمون جداً لسماع رأيك عن تجربتك مع الرضاعة الطبيعية. هدفي هو إيجاد سبل للمساعدة على تحسين الرضاعة الطبيعية بين الأمهات العربيات في كالجاري. سوف أسألك عن تجربتك حول الرضاعة الطبيعية، ما الذي يمنعك أو يحفزك على إرضاع طفلك، وما هو في رأيك أفضل الطرق لدعم وتعزيز الرضاعة الطبيعية بين الأمهات العربيات في كالجاري. كما أريد أن أكد لكم ان جميع المعلومات ستكون سرية. وإذا كان هناك سؤال لا ترغبي الإجابة عليه، كل ما عليك القيام به هو أن تقول "أنا لا أريد الإجابة على هذا السؤال". لديك أيضا الحق في عدم المشاركة في البحث في أي وقت. خلال محادثتنا، إذا كنت تشعرين بالضيق، يمكنك ان توقف المقابلة. ويمكننا أيضا ترتيب موعد مع أخصائيين في الرعاية الصحية للتحدث إليك إذا كنتِ تعتقدين أن من شأنها أن تكون مفيدة لك.

أولاً، أود أن أبدأ ببعض الأسئلة الشخصية والديموغرافية:

1. كم هو عمرك؟ _____ / سنة

2. ما هو وضعك العائلي؟

1. _____عزباء/لم يسبق لي الزواج
2. _____ متزوجة
3. _____ منفصلة
4. _____ مطلقة
5. _____ أرملة

3. ما هو بلد ميلادك؟**.....**

4. كم هي مدة اقامتكِ في كندا؟
□ أقل من سنة واحدة □ 1 - 2 سنة □ 3 - 5 سنوات □ 5+

5 . ما هي ديانتك؟

1. _____ مسلمة
2. _____ بوذية
3. _____ كاثوليكية
4. _____ بروتستانت
5. _____ أخرى _____ يرجى التحديد: _____
6. _____ يفضل عدم الإجابة

6. ما هو أعلى مستوى تعليم تلقيتهِ؟

1. _____ لم تذهب إلى المدرسة
2. _____ الابتدائية / الإعدادية
3. _____ الثانوية
4. _____ مدرسة التجارة
5. _____ الجامعة
6. _____ اخرى

7. فيما يتعلق بالعمل، هل تعملين:

1. _____ بدوام كامل

2. _____ بدوام جزئي

3. _____ لحسابك الخاص من المنزل

4. _____ ربة منزل

5. _____ طالبة بدوام كامل
6. _____ طالبة بدوام جزئي
7. _____ غير موظفة. ومنذ متى_____ [انتقل إلى س9]
8. _____ أخرى -- يرجى تحديد: _____

8. ما هي وظيفتكِ الحالية؟ _____

9. ما هو أعلى مستوى تعليم حصل عليه زوجك؟

1. _____ لم يذهب إلى المدرسة
2. _____ الابتدائية/الاعدادية
3. _____ الثانوية العامة
4. _____ مدرسة التجارة
5. _____ جامعة
6. _____ اخرى

10. ما هي وظيفة زوجك الحالية؟ _____

11. ما هو دخل اسرتك السنوي من جميع المصادر:

1. _____ أقل من $ 10،000 دولار كندي.
2. _____ $ 11،000- $ 20،000 دولار كندي.
3. _____ $ 21،000- $ 30،000 دولار كندي.
4. _____ $ 31،000- $ 40،000 دولار كندي.
5. _____ $ 41،000- $ 50،000 دولار كندي.
6. _____ $ 51،000- $ 60،000 دولار كندي.
7. _____ $ 61،000- $ 70،000 دولار كندي.
8. _____ $ 71،000- $ 80،000 دولار كندي.
9. _____ أكثر من $ 80،000 دولار كندي.
10. _____ لا أعرف
11. _____ يفضل عدم الإجابة

12-بالنسبة للأطفال:

أ) كم عدد الأطفال لديك؟ _____
ب) ما هي أعمار أطفالك؟_____
ج) كم عدد الأطفال الذين يعيشون معك؟ _____

13- ما هو جنس طفلك الجديد؟

ذكر □ أنثى □

14- تاريخ ميلاد طفلك الجديد؟ _____كم عمر طفلك؟ _____

15- نوع الولادة؟
□ الولادة الطبيعية □ عملية قيصرية □ أخرى (على سبيل المثال: الولادة باستخدام الملقط...)

16- حاليا هل ترضعين طفلك؟
□ نعم □ لا □ آخر.....

17- عادة ، هل تشاركين في الأنشطة التي تكون:

1. _____ضمن نطاق عائلتي فقط
2. _____ضمن نطاق المجتمع الديني فقط
3. _____ضمن نطاق عائلتي، جيراني ، مجتمعي الديني
4. _____أنا لا اشارك في الفعاليات الاجتماعية

ثانياَ، أود معرفة تجربتك مع الرضاعة الطبيعية:

1) من فضلك قل لي ما رأيك في الرضاعة الطبيعية؟
2) كيف كانت تجربتك مع الرضاعة الطبيعية حتى الآن؟
3) ما الذي يتبادر إلى ذهنك عندما أقول "الرضاعة الطبيعية الحصرية"؟
4) ما رأيكِ بتغذية طفلك حليب الثدي فقط؟
5) ماذا يقول لك أفراد عائلتك (على سبيل المثال، الزوج، الأم، الأخت ...) عن ارضاع طفلك من حليب الأم فقط؟
6) من تستشيرين عندما تواجهين أي مشاكل او صعوبات مع الرضاعة الطبيعية؟ يرجى توضيح.
7) هل يساعدك أي شخص في مهامك اليومية في المنزل؟ هل يمكن أن يؤثر هذا العامل على عدم ممارسة الرضاعة الطبيعية أم لا؟ يرجى توضيح.
8) هل سبق لك أن أرضعت طفلك من حليب الثدي أو حاولت ذلك، سواء في المستشفى، أو مركز الولادة، أو بعد عودتك إلى المنزل؟ إذا نعم،
1- متى كانت المرة الأولى التي حاولت فيها؟
2- من ساعدك في الرضاعة الطبيعية؟
9) إذا لم تحاولي الرضاعة الطبيعية .
1- الرجاء أخباري لماذا؟
2- ما الذي كان يمكن أن يساعدك على الرضاعة الطبيعية؟
10) ما نوع المعتقدات والقيم التي أثرت على قرارك بممارسة الرضاعة الطبيعية؟
11) برأيك، ما الذي قد يؤثر عليكِ وعلى قرار الأمهات العربيات الأخريات بالرضاعة الطبيعية أو عدم الرضاعة الطبيعية؟
12) هل تعتقدين أن الحالة الاقتصادية تؤثر على قرار الأمهات العربيات في الرضاعة الطبيعية أم لا في كالجاري؟ يرجى توضيح
13) هل هناك أي شيء في دينك أثر على قرارك بممارسة الرضاعة الطبيعية؟ يرجى توضيح .
14) برأيك، ما الذي ينبغي أن نفعله لدعم (التسهيل على الأمهات) على ممارسة الرضاعة الطبيعية فقط؟
15) ما هو نوع المعلومات المتعلقة بالرضاعة الطبيعية التي ستكون مفيدة لك وللأمهات الأخريات؟
16) ما هي أفضل طريقة يمكننا تقديم هذه المعلومات؟

بعد الانتهاء من الدراسة، قد نحتاج للتحدث إليكِ مره أخرى لتبادل النتائج والتأكيد على أن المعلومات تعكس وجهات نظركم والخبرات أو أنها لا تعكس هذه التجارب. هل تمانعين أن نتصل بكِ مرة أخرى إذا إحتجنا ذلك؟

نعم □ لا □

إذا كان الجواب نعم، أفضل رقم يمكننا الاتصال بك.....

العناصر الرئيسية:
فضلا أخبرني عن ...
من فضلك قل لي المزيد عن ذلك؟
هل تستطيع أن تعطيني مثالا؟
أنا أتساءل أيضاً عن ...

هل يمكن أن تساعدني على فهم ...؟
سأكون ممتنا لو اخبرتني عن ...
ماذا يعني ذلك بالنسبة لك؟
كيف هذا يجعلك تشعر؟
هل تعتقد أنه من شأنه أن يحدث فرقاً إذا ...؟
كيف يمكن أن يحدث فرقاً إذا ...؟
ماذا تعني...؟
ماذا يعني ذلك بالنسبة لك؟
كيف تفكر...؟
قال لي أشخاص آخرون إن ...، وكنت أتساءل عما إذا ...

Appendix H: Member Check #1

Introduction:

I (Roqaia) will begin the interview with some social talk e.g. "How are you? The weather is glorious right now. Are you able to get out and take advantage of it? Maybe more social chit chat before I thank the participant for making time to meet with me again. Our conversation will be very helpful to completing my research.
Before I came today, I read the transcript of our first interview back in _____(date) so it's now fresher in my mind. After our 1st interview, I prepared a report where I talked about the various things that you told me. What I would like to do today is to tell you what was in my report and get your feedback as to whether what I said is correct and whether I included everything. After that, I have some additional questions that I've thought of that we didn't talk about when we met before. Are you okay with that?"

After participant agreed, I presented my findings to her to check that my recollection and interpretation from the interviews are accurate. I started with thanking her for her time to meet with me. We started to socialize and chatted with each other. I shared and discussed about my finding with her. She agreed upon everything and even repeated some of the facts that the other participant stated. While doing this, she did not add any new information.

After we talk about what I included in the results chapter, I will proceed with the

additional questions

Roqaia: As I recall, you said your family lives back home?
Participant: Yes, that's true.
Roqaia: All of the participants identified that their family, particularly their mothers, have strongly influenced on their breastfeeding practices. How did your mother support you?
Participant: my mother is back home so our communication is mainly through telephone, but she wouldn't always answer because she also had work to do. My mother in law lives in Calgary, but she lives far from my house. I couldn't talk to her though, she was visiting her daughter in Dubai during the first four months after I gave birth. She only stayed with me the first week and then left to Dubai.
Roqaia: when you talked with your mother, as your communication with her beneficial? Whenever you had any questions, would she answer them?
Participant: It was hard to communicate with my mother through the phone because of the time zones and also because she works fulltime. Which is also why the first four months were hard for me.
Roqaia: Did the fact that your mother lived so far and the fact that the times were different affect your ability to breastfeed?
Participant: Yes, it did affect my ability some nights because I had question that needed answer to as fast as possible. It was also very tiring because my son is very attached and needs a lot of care and always wants to be carried around, and it's all too tiring. I feel like if the baby gets less attached if they were bottle fed more and it also gives the mother some time to relax.

Roqaia: Do you believe that the need to relax is a reason that some mothers would start by bottle feeding and breastfeeding together?
Participant: Yes, because it's very tiring. It's also much easier because with the bottle, you can easily tell how much your child has drunken. For a while, because of how tired I was, my milk stopped producing as much as before. The doctor offered to give me hormones to help me produce more milk, but he said that the side-effects included depression. So, I refused immediately. At the time, my son was five months old. Because I refused to take the hormones, the doctor told me to start feeding him solid foods.
Roqaia: The doctor told you to feed your son solid foods?
Participant: Yes, even the nurse in the public health told me to start using solid foods.
Roqaia: What did you start with feeding him?
Participant: I started with using blended rice, I also used mashed potatoes.
Roqaia: Regarding Tahneek, do believe that Arabs should practice this? Did you practice Tahneek for your kids here in Canada? Please explain.
Participant: I haven't done it to my own child, but my parents have done it to me and all of my siblings.
Roqaia: Why didn't you practice Tahneek?
Participant: I didn't do it because I don't know how to do it. If I had known how, I would have done it.
Roqaia: how? Please explain.
Participant: because as I have already said, I had nobody with me during the first four months. My mother in law was traveling, my husband had work, and I couldn't reach my mother. I was just there alone not knowing what to do.
Roqaia: so, if you had someone with you to do it for you, you would do?
Participant Yes, for sue.
Roqaia: Do you think that Tahneek affects breastfeeding?
Participant: Not really, maybe in a small amount.
Roqaia: Have you noticed advertisements for formulas, in doctors' offices, around the hospital, on TV or the Internet)?
Participant: Yes, I notice these all around and everywhere I go. I see them in the papers, on tv, and many other places. They're all advertisements about formula brands, bottles, vitamins, and things like that.
Roqaia: Do you see these advertisements in the clinics as well?
Participant: Yes, I see them there as well. I've seen them many times at the family doctor's office too.
Roqaia: How has your diet changed before you started breastfeeding, during breastfeeding? Has it changed since breastfeeding?
Participant: Nothing has really changed for me. I still eat normally and as usual. People have told me to eat a lot of different things, but I still kept my normal everyday diet. People have told me to start eating more sweets and drinking more milk, but I don't really like sweets, so I just kept things normal.
Roqaia: Other participant have told me that the drink milk to make milk, do you agree with that?
Participant: I don't have any knowledge about that, so I can't speak for it.
Roqaia: What would have helped you breastfeed at the hospital?
Participant: Probably having someone there who is able to speak Arabic to me.

Roqaia: As you look back over your experience this time with feeding your baby, what other supports (informal and formal) would have helped?
Participant: All I would have needed to solve my problems would have been having my mother and my sister with me.
Roqaia: Have the doctors or your pediatrician advised you to go to any classes or anything like that?
Participant: No, nobody has told me to go anywhere. There were no classes for prenatal and postnatal. When the nurse came to me on the second day after giving birth, she told me that if I had any questions, I should go to the clinic for answers. I was too tired and had nobody to drive me to the clinic every time.
Roqaia: Has anybody told you about the classes that you could go before giving birth?
Participant: No, sadly nobody has told me anything about that. Not even the doctors told me about it.
Roqaia: Didn't the doctor transfer you to any classes or workshops?
Participant: No, all they gave me were two books, one book had information about the mother, the other had information about the baby. Both of the books were in English, so I didn't really benefit from them. They were both Alberta Health Services books.
Roqaia: Has anybody told about exclusive breastfeeding?
Participant: The first time I had learned of it was from you that do.
Roqaia: Did any Doctor or nurse or pediatrician tell you about it?
Participant: No, no one has ever told me about it.
Roqaia: Even after giving birth?
Participant: No, they never talked about it.
Roqaia: Did the doctors ask you how you feed your baby?
Participant: All they have ever asked me about was whether I breastfed or if I formula fed my baby. That's all the asked.
Roqaia: Did the doctors tell you that you shouldn't feed the baby anything during the first six months?
Participant: no, all they told me was don't let him eat anything. They didn't specify anything at all.
Roqaia: But they said that formula was allowed?
Participant: Yes.
Roqaia: What could be done to make breastfeeding better experience for you?
Participant: someone were to come to me after I had given birth to teach me how to breastfeed and how to latch my baby. It would have been very helpful if they taught me about exclusive breastfeed. They should have told me about before I had given birth.
Roqaia: What kinds of classes would you have wanted?
Participant: Visual and practical classes would have been the most beneficial to me.
Roqaia: What would you have wanted them to talk about?
Participant: About breastfeeding in general maybe. About do's and don'ts. Some people don't go to the classes due to the pain they're in. Even with me, sometimes I would say that I am not going to breastfeed because of the pain I was in.
Roqaia: What could have helped you with your family?
Participant: As I have already said, if my mother and my sister were with me.
Roqaia: What could have helped you breastfeed?

Participant: If someone was with me to support me. Someone to help me, to take care of me, answer my questions, and just be there so I wouldn't be alone.
Roqaia: Do you think that giving the baby some water decreases the quantity and quality of breastmilk? Please explain.
Participant: No, I do not believe so. I think that water is normal to feed to a child. Because just as how you get thirsty, they also get thirsty. But the sugar and water help treat jaundice.
Roqaia: Formula feeding is also more expensive than breastfeeding here in Canada. So, I'm wondering why either they formula fed and or given mixed feeding? What do you think?
Participant: Because Formula feeding in much easier. With my son, Breastfeeding is tiring, he would never sleep unless he is latched onto my breasts. With breastfeeding, it takes up to 30 to 45 minutes, six times a day. But with a bottle its doesn't take that long.
Roqaia: how do you think breastfeeding has affected your body? For example: participant said "Some mothers would rather choose style and clothes over their child's health because it is uncomfortable to wear stylish clothes while breastfeeding. Some mothers think they are too good to breastfeed and that formula is the new trend." Do you think it is a new trend in her home country; in Canada?
Participant: Yes, even here in Canada. this one time, I was invited to a wedding, and I was forced to either wear dress that exposed my breasts, or a shirt. I wasn't able to dress comfortably nor with the style that I liked. One of my friends stopped breastfeeding because she didn't want to have to expose her breasts in public or have to feel uncomfortable.
Roqaia: In a low-income family, the mother may find she has to go out to work. If her work environment does not have the resources to support breastfeeding, do you think the mother would have to choose formula feeding as her only option. If she doesn't want to do that?
Participant: Exactly, If I women works it would discourage her from breastfeeding her child.
Roqaia: What resources would help a mother to continue breastfeeding when she is working? Do you know if any work places have any of these resources?
Participant: I am not sure. Maybe if there was a private room where she could express her breastmilk.
Roqaia: Is there anything that we haven't talked about that you wanted me to know?
Participant: you know, Lately I heard that Formula feeding is better than Breastfeeding because it has added vitamins.
Roqaia: From where you learned this information?
Participant: My friends told me this. One of my friends has five kids, she formula fed the last two and nothing is wrong with them.
Roqaia: Do you have any questions for me?
Participant: No Thanks.

Appendix I: The Participants

Pseudonyms are assigned to respect and maintain the participants' confidentiality.

Participant #1 – Asma

Twenty-six-year-old Asma is a married Muslim woman from Egypt. She has lived in Canada under two years with her husband, who is a cook. Her annual household income is $11,000-$20,000 CAD. She is educated to the level of a University degree, as is her husband. She is currently unemployed and is a full-time homemaker. She participates in neighborhood and religious community activities with her family. She and her husband have one daughter, who was 25-days-old at the time of this interview. Her daughter was born through a natural delivery on October 22, 2017. Asma is currently breastfeeding her daughter and supplementing with formula.

Participant #2 – Haneen

Haneen is a 31-year-old married Muslim woman from Morocco. She has lived in Canada under two years with her husband, who is a driver with Uber. Her annual household income is $41,000-$50,000 CAD. She is educated to the level of a University degree, as is her husband. She is self-employed and runs her own business from home. She and her husband have one daughter, who was six-months-old at the time of this interview. Her daughter was born through a natural delivery on May 11, 2017. Haneen is not breastfeeding her daughter.

Participant #3 – Maya

Maya is 26-years-old and married. She has lived in Canada under two years with her husband, who is an electrician. She is a Muslim woman from Iraq who is currently unemployed and is a full-time homemaker. Her household income is $21,000-$30,000 CAD, annually. She is educated to the level of a University degree, while her husband had attained a High School Diploma. She and her husband have one son, who was three-weeks-old at the time of this interview. Her son was born through a natural delivery on November 6, 2017. Maya is currently breastfeeding her son and supplementing with formula.

Participant #4 – Nadia

Thirty-three-year-old Nadia is a married Muslim woman from Egypt. She has lived in Canada under two years with her husband, who is a currently a Ph.D. student. Her household income is $21,000-$30,000 CAD, annually. She is educated to the level of a University degree, as is her husband. She is currently unemployed and is a full-time homemaker. She and her husband have a six-year-old son and a daughter, who was two-months-old at the time of this interview. Her daughter was born through a natural delivery on October 13, 2017. Nadia is not breastfeeding her daughter.

Participant #5 – Shaima

Shaima is a thirty-one-year-old married Muslim woman from Egypt. She has lived in Canada less than one year with her husband, who is a Ph.D. student. Her annual household income is unknown. She is educated to the level of a University degree, as is her husband. She is currently unemployed and is a full-time homemaker. She and her husband have three children,

aged seven and five years and a six-month old daughter (at the time of this interview). Her daughter was born through a Caesarean Section on June 25, 2017. Shaima is not breastfeeding her daughter.

Participant #6 – Eman

Thirty-four-year-old Eman is a married Muslim woman from Iraq. She has lived in Canada between three-to-five years with her husband, who works in construction. Her annual household income is $31,000-$40,000 CAD. She is educated to the level of a University degree, as is her husband. She is currently unemployed and is a full-time homemaker. She participates in local activities with her family. She and her husband have three children, aged six and four years and a one-month old daughter (at the time of this interview). Her daughter was born through a Caesarean Section on August 12, 2017. Eman is currently breastfeeding her daughter and supplementing with formula.

Participant #7 – Fatima

Fatima a is thirty-three-year-old, married Muslim woman from Libya. She has lived in Canada between three-to-five years with her husband, who is a Ph.D. student. Her annual household income is $41,000-$50,000 CAD. She is educated to the level of a University degree, as is her husband. She is currently unemployed and is a full-time homemaker. She and her husband have five children, aged nine, seven, six and three and a two-month old son (at the time of this interview). Her daughter was born through a natural delivery on November 27, 2017. Fatima is currently breastfeeding her son.

Participant #8 – Rania

Twenty-five-year-old Rania is a married Muslim woman from Somalia. She has lived in Canada for less than two years with her husband, who is a cashier at Canadian Tire. Her annual household income is $31,000-$40,000 CAD. Both she and her husband are educated to the level of Post-secondary Diploma. She is currently a part-time student currently studying English language for newcomers at Bow Valley College. She participates in local activities with her family. She and her husband have a one-year-old daughter and a two-week-old son (at the time of this interview). Her son was born through a natural delivery on December 21, 2017. Fatima is currently breastfeeding her son and supplementing with formula.

Participant #9 - Sara

Sara is a thirty-eight-year-old a married Muslim woman from Iraq. She has lived in Canada for just over one years with her husband, who is a blacksmith. Her annual household income is $21,000-$30,000 CAD. Both she and her husband are educated to the level of High School Diploma. She is currently unemployed and is a full-time homemaker, though formerly she studied English Language in Calgary Immigrant Women's Association (CIWA) before her pregnancy. She participates in cooking activities in her kid's school and attends activities at Calgary Catholic Immigration Society (CCIS) about infants, breast feeding, and child-carrying. She and her husband have three children, aged 22 and 14 years and a six-week-old daughter and a two-week-old son (at the time of this interview). Her daughter was born through a natural delivery on December 1, 2017. Sara is not breastfeeding her daughter.

Participant #10 – Lena

Thirty-one-year-old Lena is a married Muslim woman from Tunisia. She has lived in Canada for four years with her husband, who is a taxi driver. Her annual household income is less than $10,000 CAD. She is educated to the level of a University degree, as is her husband. She is currently employed as a part-time grocery store cashier. She participates in neighborhood and religious community activities with her family and friends. She and her husband have a three-year-old and a three-month-old daughter (at the time of this interview). Her daughter was born through a Caesarean section on January 1, 2018. Lena is currently breastfeeding her daughter and supplementing with formula.