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## Contextual Factors Influencing Breastfeeding Practices Among Arab Women in the State of Qatar

**Abstract** Breastfeeding is an important source of nutrition and sustenance for infants and toddlers, and has also been linked to several aspects of emotional, physiological, and psychological developments. Benefits of breastfeeding include lower morbidity and mortality rates in infants, appropriate nutrition for early physiological development, and improved immune system development. Some studies also suggest it may enhance cognitive development and reduce the risk of diabetes. These health benefits positively influence the physiological status of the infant throughout his or her early childhood and adolescence. The World Health Organization (WHO) recommends that breastfeeding be initiated immediately following birth and continued until the infant is at least 6 months of age. However, according to the UNICEF report, between 2000-2007 in Qatar, only 12% of babies under 6 months were exclusively breastfed. Funded by the QNRP (Qatar Undergraduate Research Experience Program), the goal of this exploratory qualitative study was to find ways to effectively promote breastfeeding practices among Qatari women by investigating factors affecting the ways in which Qatari women (national and non-national Arab women) make decisions to engage in breastfeeding practices and their overall knowledge of breastfeeding. Purposive sampling was used to recruit 32 Arab mothers as research participants and individual in-depth, semi-structured interviews were conducted with each participant. Results showed that professional support from doctors and nurses, social support from parents and spouse, cultural and religious values, economic ability work restrictions, time, as well as availability of help and care at home, personal challenges, such as perceptions of pain, body image, and body changes, were some of the major factors in making decisions to breastfeed or not.

**Keywords** Breastfeeding; Qatar; Arab Women; Qualitative; Social Support; Professional Support

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Recent research has shown that there were significant long-term benefits to both mother and child if breastfeeding were allowed to continue to a minimum of six months and up to two years. Breastfeeding, especially in the early months of infancy, has a history of multiple physiological, psychological, and emotional benefits for the developing child (Lawrence 1989; Slusser and Lange 2002; Forster, McLachlan, and Lumley 2003; Gartner 2005; Lawrence and Lawrence 2005). Comparisons of morbidity and mortality rates between infants and young children that were breastfed against those who were bottle-fed indicates that the health of breastfed children is superior to those who have received bottle-feeding (Lawrence and Lawrence 2005). These health benefits appear to influence the physiological status of the infant throughout his or her early childhood and adolescence, as longitudinal studies that followed the development of breastfed and bottle-fed infants for up to 17 years have shown that breastfed subjects had lower rates of food and respiratory allergies, fewer skin conditions, and increased resistance to atopic disease (Saarinen and Kajosaari 1995). Therefore, the World Health Organization (WHO 2005) recommended that exclusive breastfeeding be initiated immediately following birth and continue until the infant is at least 6 months of age (Saarinen and Kajosaari 1995).

Both the WHO and UNICEF demonstrate that breastfed children have at least six times greater chance of survival than others within the first six months of life (WHO and UNICEF 2003). Breastfeeding, in this respect, significantly decreases the chance of infection and death from acute respiratory diseases and diarrhea (Callen and Pinelli 2004). These statistical differentials were found to be true not only for children of women in developing countries but also in developed nations such as the United States, where UNICEF found a 25%

increase in mortality among non-breastfed infants (UNICEF 2007). In the UK, as well, six months of exclusive breastfeeding was shown to decrease hospital admissions for diarrhea by 53% and respiratory tract infections by 27% (Kramer et al. 2008).

Breastfeeding has a number of other benefits, which drastically reduce the chance of mothers and children being affected by both infectious diseases and long-term illnesses. For children, it provides protection against gastrointestinal infections, as well as a decrease in the potential for high blood pressure, diabetes and related indicators, serum cholesterol, overweight and obesity (WHO 2005). In addition, breastfed children have been shown to have higher intellectual performance over the course of their education (Kramer et al. 2007; 2008). For mothers, exclusive breastfeeding for six months or more indicates a decrease in the acquisition of type 2 diabetes and breast, uterine, and ovarian cancer (UNICEF 2007). Furthermore, some studies have also found that breastfeeding can help to prevent the onset and severity of postnatal depression in mothers (Weaver et al. 2004).

According to a recent UNICEF report, between 2000-2007 in Qatar only 12% of babies under 6 months were exclusively breastfed, 42% were breastfed with complementary food between the age of 6-9 months, and 12% breastfed for 20-23 months (UNICEF 2009); this is the only report on Qatari breastfeeding practices published in the past ten years. Similar findings are evident in other countries in the Middle East. In a recent study of breastfeeding practices in Kuwait, researchers found that less than one third of mothers (29.8%) were fully breastfeeding their infants after release from hospital, fewer than 1 in 5 infants (18.2%) received colostrum as their first feed, and only 10.5% of infants had been exclusively breastfed since birth (Dashti et al.

2010). The Kuwaiti study found that a major indicator of breastfeeding success was the interest or approval of the baby's father in breastfeeding (Dashti et al. 2010). In a similar fashion, only 10% of Turkish mothers breastfed their infants immediately, with most women (90%) breastfeeding two days after birth (Ergenekon-Ozelci et al. 2006). There is also evidence of the prevalence of prelacteal feeding, the feeding of a newborn baby with carbohydrate-electrolyte solutions to reduce initial weight loss until breastfeeding is fully established. This was reported in a Lebanese study where 49% of women used sugar water as a prelacteal feeding practice (Batal and Boulghaurjian 2005), as well as 61% in a Jordanian survey (JPFHS 2003) and 60.2% in an Iraqi study (Abdul Ameer, Al-Hadi, and Abdulla 2008). A recent Iranian study shows that, although post-hospital breastfeeding is around 57%, this rate is increasing due to promotion of breastfeeding through hospital services and through booklets, pamphlets, breastfeeding journals, CDs, workshops, and websites (Olang et al. 2009). Although the numbers of studies are increasing in the Middle East, the low prevalence and short duration of breastfeeding in the region have highlighted the need for more investigations into the problems associated with continued breastfeeding.

A large body of evidence suggests that breastfeeding has obvious benefits, but some academics are concerned about the strength of the scientific evidence behind a number of these studies. In her book, *Is Breast Best? Taking on the Breastfeeding Experts and the New High Stakes of Motherhood*, Wolf (2007) argues that the science behind some breastfeeding studies is problematic. Wolf states that in the science we trust most, we do randomized controlled trials. But, we can't do that with breastfeeding because the groups are self-selecting. Some studies, for example, argue that the association of breastfeeding with higher IQ, lower obesity, and

diabetes in children is not convincing. A few scholars believe, "the observed advantage of breastfeeding on IQ is related to genetic and socioenvironmental factors rather than to the nutritional benefits of breastfeeding on neurodevelopment" (Jacobson, Chiodo, and Jacobson 1999:71). Other studies suggest that the higher level of IQ might be related to maternal behavior and the possibility that mothers who breastfeed their babies spend more time with them later in life (Krugman et al. 1999; Mortensen et al. 2002). It's been suggested that some studies that have reported benefits such as lower diabetes rates are biased. Wolf states that studies in this area "failed to point out that the decision to bottle-feed was also correlated with less exercise and more central obesity, both independent risk factors for the disease" (2007:29; see also Pettitt et al. 1997; Simmons 1997).

Even though recent research around breastfeeding has raised some controversy, particularly around the claims of higher IQ and lower rates of obesity and diabetes for breastfed babies, the health benefits of breastfeeding, particularly for respiratory and gastrointestinal health in the first few years of life, are accepted by the majority of scholars. Thus, most would agree that mothers should be supported in choosing this method of feeding. As UNICEF (2007) illustrates, there are major problems associated with the societal and commercial pressure to stop breastfeeding. This means that the provision of support for breastfeeding mothers and their children should become a priority (Weaver et al. 2004). Education around the use of and benefits to breastfeeding should be connected to social education classes for both male and female students, so that society can begin to grasp the rationale for its utilization in public and in the family home (Callen and Pinelli 2004). Thus, the aim of this qualitative study was to gain insight on how personal values, social, cultural, economical, and professional support systems influ-

ence Qatari women's breastfeeding practices and their decision to breastfeed. Also, the study was conducted to explore mothers' knowledge of breastfeeding and how this influences their breastfeeding intentions.

## Qatar

Qatar is a small country in the Middle East with a population of 1.6 million. Qatar residents are from many different cultural backgrounds. The majority of them are Muslims with strong religious beliefs that influence their daily activities. There is no systematic data bank in the country and, as a result, accessing information in any area including the health care system is very difficult. Women's Hospital is the largest hospital that provides maternal-childcare to the families. The majority of births happen in this hospital. The number is close to 16,000 births per year. There is no community health-care system in the country and public health is missing some critical components in regards to maternal-childcare, such as systematic prenatal and postnatal education, and breastfeeding education and support. The primary health care centers also provide some prenatal and postpartum care to mothers, but the data is not accessible. There is no official prenatal education service available to the public and the only breastfeeding clinic is located in a small hospital with only 1500 births a year in a city 45 kilometers away from the main Women's Hospital in Doha, the capital city. There are no official statistics available on the number of births in each hospital or even the prenatal/postpartum services that are provide by the health care agencies. The Qatar Information Exchange website is a national project run by a number of government bodies. The website offers limited information about Qatar statistics which indicates that the number of live births across the country has been 19,504, including the number of births in the private hospitals (see [www.qix.gov.qa](http://www.qix.gov.qa)). In many cases,

a person-to-person conversation with the agencies' administration is required to obtain reliable data. Qatar is a fast developing country and despite its tremendous infrastructure and urban construction in the past 15 years, it is still working vigorously to fully develop and implement the most necessary systems to run the new establishments.

In regards to the breastfeeding promotion efforts at the hospital, the hospital policies support exclusive breastfeeding, initiation of breastfeeding within 1 hour after delivery, and not using the formula unless there is a medical indication for it. In reality, although many health care providers try to help mothers with breastfeeding, they do not receive regular training to improve their support skills. In some cases, the breastfeeding initiation is conducted within the first hour, but the use of formula is quite common and normally formula is being offered to many mothers. There are only a few lactation consultants present at the hospital. With 16,000 births per year, this makes it more difficult to provide sufficient support to mothers. There are not enough pumps on the postpartum units to help mothers with breastfeeding issues maintain their milk supply. There are also no breastfeeding clinics or postpartum clinics to support mothers with the breastfeeding problems after they get discharged. All the above is being improved as the Qatar National Health Strategy document recognized improving breastfeeding as one of the main priorities of the health care system in 2012. Women's Hospital officials are working on obtaining the Baby Friendly Hospital Initiative (BFHI) for the hospital and efforts such as staff training, initiation of breastfeeding in the first hour after birth, and facilitating breastfeeding practices have significantly been increased.

The Qatar community's challenges are not limited to the above. The health care providers come from not only

different social and geographical but also professional backgrounds. Almost all health care providers in Qatar are expatriates and do not have strong bonds with their patients' population and the community. Many of the health care providers do not have any knowledge about the social, cultural, and religious beliefs of their patients. Regardless of the institutional breastfeeding policies, the health care providers use their own professional expertise, judgment, knowledge, and attitude to provide care to the mothers and guide them with breastfeeding practices. Although similar studies have been done in other countries in the region, this research has focused on Qatar and its unique demographics and context. Although there are similarities in regards to culture and beliefs among Arabs who live in the Middle East, significant differences also can be found. For example, according to our participants, mothers in many Arab countries such as Saudi Arabia are more open to breastfeeding in front of the family members or in public as long as they are covered. Mothers in Qatar are uncomfortable with both. They require a private space for breastfeeding either at home or in the community. Recognizing these specific cultural, social, and religious beliefs can help us understand the practices better and enable the health care system authorities to develop more sustainable interventions to promote breastfeeding practices in this country.

The other reason that makes this research significant is the fact that there are only three research projects in relation to breastfeeding which have been conducted in Qatar in the past 20 years. Lack of general knowledge in this area could contribute to poor breastfeeding practices there. This study sheds light on the social, economical, cultural, and religious factors that positively or negatively influence mothers' breastfeeding practices and can help the health care providers in their future planning in this area.

## Methods

### Participants

A purposive sampling technique was used to recruit 32 Qatari women (national and non-national Arabic women) in the 3<sup>rd</sup> to 8<sup>th</sup> week of their postpartum period as research participants. This exploratory research was conducted in the prenatal unit of Women's Hospital. The research utilized a semi-structured questionnaire to encourage participants to explain their experiences in their own words. An interview guide was used, which included open-ended questions regarding participants' breastfeeding knowledge, attitude, beliefs, and practices, what problems the participants think they would experience and what help/service they think needs to be in place for them to engage in breastfeeding practices. Questions assessing socio-demographic information provided additional information about participants' social support networks. Each participant was interviewed once, within 3-8 weeks after birth at the hospital, conducted in either Arabic or English by four bilingual female nursing students. The participants were informed that the project has been approved by the Ethics Boards of both Hamad Medical Corporation and the University of Calgary. They were ensured no risk would be involved and the participation in the study would be completely voluntary and kept confidential by the researchers. The participants were identified by pseudonyms to protect their identities. Interview data recorded on a digital voice recorder was converted from audio to text using a transcriber, and a qualitative data analysis approach was used for the examination of narrative data. Transcripts were coded to identify preliminary themes and to formulate a list of code categories to organize subsequent data. Data codes were examined for relevance. The final outcome of this analysis is a statement about a set of complicated interrelated concepts and themes. Research team members met to

review interview data during the process, and to share reflections on the process of conducting the interview, personal feelings, and analytic descriptions.

### Data Collection

Female participants who met the inclusion criteria were interviewed in this study by four bilingual (Arabic and English) female research assistants from Qatar. Inclusion criteria were described as being an Arabic woman who is in between the third and eighth week postpartum period and is in stable physical and emotional condition. Research assistants involved in this study were nurses who had experience working in different units, and were also in their final year of a nursing bachelor's degree program in Qatar. The students were trained extensively prior to and throughout the research process. Detailed contextual information was obtained by using individual in-depth interviews. These interviews were conducted in Arabic by using a semi-structured questionnaire with open-ended questions. The questions were about the women's past and current experience with breastfeeding. Also, investigated factors that influence their decision to engage in breastfeeding their baby, and perceived barriers and motivators to such activities. The participants were asked as well about their perception regarding the best possible strategies for promoting breastfeeding practice among Arabic women living in the state of Qatar. With the permission of the participants, the interviews were recorded on a digital voice recorder. The interviews lasted between 20-50 minutes with the majority of the interviews being 30-45 minutes. The interviews were stopped when it reached data saturation and no more new information could be identified (after 32 women were interviewed). The data was translated into English by the bilingual student researchers, and then transcribed and analyzed by the research team. Selected demographic data was also obtained from the participants (Table 1).

Table 1. Participants' socio-demographic data.

Variable	Range	N	%
Age	20-30	23	72%
	31-40	9	28%
Country of Birth	Qatar	21	66%
	Oman	3	9%
	Sudan	1	3%
	Egypt	2	6.5%
	Syria	2	6.5%
	Lebanon	3	9%
Current Citizenship Status	Qatari Citizen	15	47%
	Qatari Resident	17	53%
Years in Qatar	0-10	6	19%
	11-20	5	16%
	21-30	14	43.5%
	31-40	7	21.5%
Marital Status	Married	32	100%
	Single/Never married	—	—
Having Children	Yes	32	100%
	No	—	—
Religion	Muslim	32	100%
	Other	—	—
Education Level of Participant	Primary/Junior	4	12.5%
	High School/Trade School	19	59.5%
	University	9	28%
Employment Status of Participant	Work Full-time/Part-time	8	23%
	Full-time Homemaker	16	50%
	Unemployed	1	3%
Participant's Current Occupation	Receptionist	3	9%
	Secretary	1	3%
	Teacher	3	9%
	Health Care Provider (Nurse)	1	3%
Education Level of Husband	Primary/Junior	3	9%
	High School	16	50%
	Trade School	2	6.5%
	University	8	25.5%
	Other Degrees	3	9%
Current Occupation of Husband	Management, Business, Science, Accountant	15	47%
	Service Occupations	7	21.5%
	Military Occupations	6	19%
	Office Work	4	12.5%
Annual Household Income	Less than \$30,000	6	19%
	\$31,000-\$70,000	5	16%
	More than \$71,000	6	19%
	Don't know/Chose not to answer	15	46%
Activities Involvement	Within family only	6	19%
	Within religious community only	7	21%
	Within all: family, neighborhood, religious community	13	41%
	Don't participate in community events	6	19%

Source: self-elaboration.

## Data Analysis

The narrative data was analyzed using NVivo 8 software. Analyses were performed in the following four steps. (1) The student researchers translated and transcribed the collected data from Arabic into English. The students were trained by two University of Calgary-Qatar faculty members to conduct data collection and analysis. A professional translator validated the translated and transcribed information. (2) The coding process started early in the project. As data was collected, a preliminary list of code categories was developed. The categories evolved as more data were collected throughout the project. (3) Categories were compared and a list of interrelated data categories was generated. The transcripts were reviewed carefully by the student researchers and the faculty members for the purpose of developing code categories and subcategories. The codes evolved as the researchers reviewed more transcripts. (4) Similar themes and concepts emerged and were identified across data set transcripts and across research subjects as they were discussed among the researchers. The emergent themes, ideas, and concepts generated a higher level of data conceptualization. This allowed the researchers to develop a deeper understanding of the data, the cultural and religious beliefs, the social and professional support systems, and the incentives and barriers regarding breastfeeding practices.

## Findings

A number of overarching themes emerged from the data, which illustrated that Qatari women's experiences of breastfeeding were similar to those of other populations in the Middle East region. Women's

ability to participate in breastfeeding, and their interest in doing so, were largely determined by key factors that included (a) knowledge of breastfeeding and professional support for learning breastfeeding techniques; (b) social support including parental, spousal, cultural, and religious values regarding breastfeeding; (c) economic ability or necessity, including work and time constraints, as well as home help or care; and (d) personal challenges connected to perceptions of pain, body image, and body changes linked to breastfeeding. Participants suggested viable means to engage the Qatari female population in advancing the knowledge and promotion of breastfeeding.

### Knowledge of Breastfeeding and Professional Support for Learning Breastfeeding Techniques

Qatari women, for the most part, were well-informed about breastfeeding and professional support for learning breastfeeding techniques through both personal experience and hospital information. One participant noted: "...what I know about breastfeeding has come from my personal experience. The kids who are not breastfed are more prone to getting sick. Also, I think nonbreastfed babies feel unhappy."

Respondents noted other benefits of breastfeeding, such as greater immunity from disease, lower rates of maternal cancer, better maternal health, better bone density for babies, and normalcy in infant bowel movements. Respondents also noted the necessity of maternal training and the provision of information for new mothers, especially first time mothers. One respondent recommended: "...before her delivery, there should be classes to educate mothers about the benefits of breastfeeding

and show the mother how to breastfeed her baby. This will help her to be emotionally and physically ready for that." There was a general consensus that mothers and babies were better able to connect emotionally and cognitively through breastfeeding than through formula feeding. One respondent stated:

...when Allah gifted me breast milk, I started breastfeeding. As I started breastfeeding, [the baby] bonded with me and my breast. He felt comfortable with me and I felt the bonding became very strong between us. That is how I started breastfeeding.

The majority of respondents noted that they believed that breast milk contains vitamins and other nutrients necessary for a child at the beginning of life. Nonetheless, there were respondents who believed that formula was a viable option if it was not possible to breastfeed. Most respondents reported that because they did not know what components were included in formula milk, and whether formula would be good for the baby or not, they refrained from using it as much as possible. There were common thoughts expressed that some babies suffer from dehydration, diarrhea, constipation, and abdominal distention due to formula feeding. One mother said:

When I go to the health care center, I talk to mothers who have babies like me. Most mothers are there because their kids have diarrhea, constipation, and other digestion issues and almost all those kids are formula fed. I see that among my family and friends too. The breastfed babies are healthier and don't get diarrhea often, the formula fed babies are often sick, it's diarrhea, cold, constipation, or other things. It seems that they are not as strong as breastfed babies.

About a third of the women interviewed presented more challenging viewpoints on breastfeeding. One respondent noted, "In Doha, they prefer formula feeding from the first day of delivery. I have seen it in the community of my friends and family," while another stated:

My mother told me to breastfeed my baby and not to give him formula. But, I didn't listen to her. I was more influenced by my friends who told me formula and breast milk are the same. Now I know they are not the same.

The findings point to women's different levels of awareness about breastfeeding as recommended by international health organizations, with obvious gaps in certain communities. As one respondent noted, it was the professional support that she received that helped her continue with breastfeeding:

The conversations, like ours, encourage me to breastfeed in the future. Such conversations between patients and health care professionals are really important. If someone is nicely and calmly talking and advising, it also has a positive influence on breastfeeding. Hospitals should remind mothers over and over again about the importance of breastfeeding. Also, they should remind mothers about the Qur'an sayings in order to encourage them to breastfeed.

Another respondent observed that there was a distinct lack in the ability of hospitals to provide breastfeeding information at the present time; she had to look outside of the health care system to get this information. She stated:

One of my teachers in my school asked me if I was breastfeeding my baby or not, she told me that she was a breastfeeding specialist. Usually back in her

country, health care providers are visiting mothers six weeks postdelivery to teach them about breastfeeding. She visited me at home and taught me different positions to feed my baby and how to use pillows to be more comfortable. However, I think if she saw me right after delivery, it would be easier for me to follow her instruction.

These quotes alluded to the possibility that if professional support for breastfeeding was available in hospitals, it would have been easier for this woman, as well as others, to benefit from breastfeeding instruction. Another study respondent stated:

It was very difficult to breastfeed my first baby because I didn't know how to breastfeed and I couldn't hold my breast and feed my baby. However, the nurses in the hospital tried to help me.

When I was putting my breast in my baby's mouth, he was not taking it. He was crying a lot and his face was becoming red as he was unable to breathe. It was scary. So, I stopped breastfeeding. I tried hard to breastfeed, but then I gave up and started bottle-feeding.

I had milk and he took a bit of it and then he refused to take it. I think he got used to the bottle because the formula was sweeter compared to breast milk.

During that time, I had depression and I felt that there was no milk in my breast or it was not enough for my baby. No matter how much I fed her, she still continued crying and my mother blamed me that I was not able to breastfeed my baby properly. In addition to that, my visitors always said that she was very thin and maybe the milk was not enough for her. I was not experienced and all these suggestions led me to have mild depression.

This clearly shows mothers' frustration with the challenges that exist in Qatar hospitals and community, as discussed in the introduction section.

### **Social Support Including Parental, Spousal, Cultural, and Religious Values Regarding Breastfeeding**

On a social level, shifts in the awareness and use of breastfeeding among Qatari women are evident as most of the women in the study were clearly aware of the need to breastfeed and some felt that they had the social support to do so. Family members, especially mothers, are strong supporters of breastfeeding. Women in this study demonstrated that they felt that breastfeeding, especially in the early months of infancy, has a history of multiple physiological, psychological, and emotional benefits for the developing child (Lawrence 1989; Slusser and Lange 2002; Forster et al. 2003; Gartner 2005; Lawrence and Lawrence 2005). A participant mentioned:

My mother encourages breastfeeding. As I have already mentioned, she had breastfed all of us. So, she is always encouraging me by saying breastfeed your baby like this, and do this and do that. Due to her encouragement and support I feel happy and relaxed while breastfeeding my baby.

According to participant responses, social support, including parental, spousal, cultural, and religious values regarding breastfeeding, was also a major factor in the choice as to whether to breastfeed or not. Many respondents noted that their mothers and mothers-in-law were pivotal forces in encouraging them to breastfeed, or to prevent them from breastfeeding. As respondents noted:

My mother also encourages me to breastfeed, and she calls me from my home country. She texts me to ask if I breastfeed or not.

...I mean, my mother, she really values breastfeeding. Even if I complain to my mother that I do not have enough milk, she will advise me to eat food that increases the milk production.

The husband's encouragement is another salient factor. As noted by respondents:

My husband is 100% encouraging the breastfeeding and this encourages me more to breastfeed my babies.

My husband provides me nutritious meals, encourages me to breastfeed and he also provides me a restful environment to breastfeed.

It was also evident that lack of social support had a negative influence on mothers:

To be honest, my friends told me to bottle-feed my first child so I don't lose my breast firmness. I was young and wanted to stay beautiful. I listened to them.

My husband encouraged me to breastfeed, but all my friends were formula feeding their kids. They told me it was impossible to work and breastfeed at the same time. I didn't know if I could do anything else. I thought I should have stayed home to breastfeed my child. So, I started giving him formula.

I had to go back to work two months after delivery. I was not able to focus, everything was overwhelming. My husband had to work and we didn't have any family member around or even a maid to help us. I decided to formula feed my child so I didn't have to struggle.

Nonetheless, what was even more evident in responses was that the development of an interest in breastfeeding was aligned with social and religious norms. Although many respondents were aware of a general negativity about breastfeeding among

their generation, they pointed out that older Qatari women were likely to provide them with encouragement. Many respondents noted that the practice of breastfeeding was also discussed in the Qur'an, which gave them an incentive to participate for religious reasons. As three women claimed:

Yes, it is mentioned in the Qur'an that a lady should breastfeed her baby for 2 years. I think it has influenced me to breastfeed my child. My mother always used to remind me this.

Allah Almighty has given women breast milk to provide health to her child and to herself. The bases of beliefs and values of Arabs have come from our religion, Islam. Allah has provided breast milk to women, which means that it is something beneficial. Breastfeeding contains necessary ingredients like vitamins and all other nutritious elements. These ingredients are not added by humans. These ingredients are inside your body and blessed by Allah Almighty. Even we don't know what breastfeeding consists of. Allah Almighty has said in the Holy Qur'an that a mother should feed her baby for two years and it is a clear indication to breastfeed babies. The things mentioned by Allah Almighty are something we can't deny and is surely beneficial for a child. I have strong believes that anything mentioned in the Holy Qur'an can't be doubted about. That is why I support breastfeeding, and I try to breastfeed all my children.

Despite these claims, there is also a clear indication from many respondents that even with the support of Allah Almighty breastfeeding is not a skill that can be learned quickly on one's own. Strong professional support and encouragement is necessary when the art of breastfeeding has been diminished within women's own families, due to the increased reliance on formula feeding in some communities in Qatar.

### **Economic Ability or Necessity, Including Work and Time Constraints, as well as Home Help or Care**

The evidence showed that economic ability or necessity, including work and time constraints, as well as home help or care, were also factors in choosing to breastfeed or not. Participants reported that many Qatari women are constrained by having to return to work, and in that case it is not possible for them to be able to always breastfeed. One respondent stated that she was able to pump and save her milk in the refrigerator, but that it was not always possible. Most of the working women, however, did try to keep giving their babies breast milk the majority of the time. Some participants were also concerned, however, that the psychological stress of their jobs would be passed on to their infants via breastfeeding. Work also meant that many women were over-tired at the end of the day, which made breastfeeding more difficult. Nonetheless, because of time inflexibility and the necessity of breastfeeding indoors due to cultural constraints, working mothers often had to resort to a combination of breast and formula feeding. As one respondent noted:

I had to go back to work forty days after giving birth. I was still sore, I couldn't even sit properly. I had lack of sleep; I was not able to think straight. It was so difficult to go back to work. I pumped my milk for a few days, but I didn't have much knowledge about that and I never felt I had enough for my baby. It was also difficult to come home from work when I was very tired and started thinking about pumping and restoring milk. The maternity leave is too short. I was not even recovered from the birth itself when I was back to work. I think it should be at least 6 months. I am sure many mothers will breastfeed their children if they have longer maternity leaves.

The participants also reported that the decision to breastfeed would also depend on whether or not a woman had access to servants in the home, who would more likely be responsible for childcare. Formula may, in those instances, be more prevalent. Whereas, women who could not afford home care or the cost of formula would be more likely to breastfeed.

The challenge in addressing issues linked to breastfeeding seems to point to differing belief systems based on socioeconomic values. What is evident from the respondents' answers to questions is that there is an understanding that people who have more economic resources are more likely to use formula, for the main reason that they can afford to do so. As noted by the respondents:

With the availability of servants, mother's interest in outside activities, with comfortable lifestyle everything has become easier. So, they prefer formula feeding to breastfeeding.

No, I don't think economic status has influence on breastfeeding, but if you ask me if the economic status has influence on artificial feeding, then I will tell you "yes." In the countries like Africa, some other Asian countries, yes, economic status may influence breastfeeding, but a country like Qatar, everything is available here and the population isn't poor.

I can say that sometimes economic status has an influence on a few Arab women's decision to breastfeed or not. If a mother is able to buy expensive artificial feeding, which is believed to have all-important nutrition, then why should she make herself tired by breastfeeding?

What this demonstrates is that there is a higher level of social status connected with the idea of

using formula. This is because of the fact that only the wealthier in the country are able to afford formula milk and assistance, such as daycare or servants, to take care of children that would necessitate feeding children formula. In this way, there is a need to recognize the complexity of trying to change some women's minds on the value of breastfeeding since they may potentially give up social status by eliminating the practice of using formula. While this is not seen to be the case in every community in Qatar, it is noted by some respondents to be very likely in Doha and some of the other major urban centers.

As of 2007, oil and natural gas revenues had enabled Qatar to attain the highest per capita income in the world. Economic status has had huge positive influence on the community's growth and development, quality of life, and health care services. On the other hand, financial improvements have had some negative influences on the Qatar population. One of the most important and most evident is lifestyle. The Qatari population has rapidly moved toward a more modern and unhealthy lifestyle, leading to higher rates of diabetes and obesity.

Breastfeeding is another area of concern. The better financial status has enabled families to remove themselves from the traditional practices and follow the formula feeding practices. Formula feeding has been associated with being rich and fashionable and breastfeeding has been looked at as a necessity for poor families, difficult and undesirable. As breastfeeding has been somewhat of a taboo, not many efforts have been put into promoting it among the younger generation in schools and universities, public places, the me-

dia, or even health care agencies. As mentioned above, this trend is changing as breastfeeding has been recognized as one of the areas of focus for health care officials. As such, recently more open and visible promotion is being conducted in the country.

#### **Personal Challenges Connected to Perceptions of Pain, Perceptions of Body Image and Body Changes Linked to Breastfeeding**

Finally, personal challenges connected to perceptions of pain, perceptions of body image and body changes linked to breastfeeding were also factors in the breastfeeding choice. There were conflicting levels of understanding about the effects of breastfeeding on a woman's body; some women correctly asserted that breastfeeding would help women get back into physical shape after giving birth, while others were concerned that it would ruin their figures (or stated that their female relatives had told them so). Pain was a factor, in that many women had difficulty breastfeeding at first due to physical issues, but most respondents carried on nonetheless. It was noted that a fear of pain might be a factor for some women. A mother stated:

I started breastfeeding right after birth, but it was very painful. Every time, I felt that the baby is biting me. I stopped it because I was scared of the pain. With my second baby, I learned if the baby has a proper latch, breastfeeding is not, and shouldn't be, painful. I wish someone helped me the first time.

Many of my friends told me not to bother with breastfeeding. They told me it would damage my figure and it's difficult. I thought it was much better to get my maid to bottle-feed the baby at night instead of getting up and feeding him myself.

#### **Discussion and Recommendations**

Similarly to the findings from other studies, women in this study felt that breastfeeding, especially in the early months of infancy, has a history of multiple physiological, psychological, and emotional benefits for the developing child (Lawrence 1989; Slusser and Lang 2002; Forster et al. 2003; Gartner 2005; Lawrence and Lawrence 2005). Thus, there is an increasing interest in returning to breastfeeding after years of formula prevalence. At the same time, this does not necessarily mean that all women were actually taking on the practice of breastfeeding for themselves. Many of the women in this study were well-informed about the value of breastfeeding but they were also thoughtful about the benefits and challenges of this method of childcare. They presented the difficulties that they would face in breastfeeding, including social, professional, economic, and practice-based challenges. Social support seemed to be one of the most significant factors in choosing this route. As noted by participants, they were more likely to breastfeed, or know other women who breastfeed, if their parents, husbands, and work schedules provided them with the means to do so. Similarly to a study by Reeves and colleagues (2006), the present study found that mothers have identified the father's support as a very important factor in continuing breastfeeding, whereas the decision to discontinue breastfeeding was mainly due to the need to return to work or school. Many participants were buoyed by the fact that there is support in the Qur'an for breastfeeding, which allows women to generate support for their interest in breastfeeding among members of their community. At the same time, there were also difficulties which were noted by the respondents in taking on breastfeeding prac-

tices in their communities on a broader social level. The challenge in addressing the issues noted by the respondents were significant in specific populations and areas, and when women were confined by their job schedules. Wyatt (2002) supported this fact by reporting that due to lack of preparation and support many women stop breastfeeding soon after they go back to work; therefore, the number of breastfeeding after returning to work is disappointingly low. The challenge these women were facing was linked to the fact that there was a distinct lack of value placed on breastfeeding when there were easier alternatives available to them. In addition, a portion of women in the study also suggested that there was a difficulty in reconciling the association between formula feeding and wealth in certain parts of Qatari society, due to the fact that only women who had the economic means were likely to formula feed.

Many working mothers suggested that short maternity leave is one of the main reasons that they could not continue breastfeeding even after initiating it at the hospital. Mothers recognized longer maternity leave, having access to daycare at the work place, and being able to use a private room to pump their milk at work would all help them breastfeed for longer. Many studies confirm the positive effects of such breastfeeding friendly policies and facilitation. According to Meek (2001), on-site childcare, pumping at work, efficiency at breast milk expression, adequate break time to nurse or pump, private place for milk expression and storage at work, flexible scheduling, and support of colleagues are all factors that can significantly increase the breastfeeding rates among working mothers. To support mothers, it is important to educate them and the employers on the benefits

of breastfeeding. It is also necessary for the governments to develop and implement breastfeeding policies at any work place.

To this end, participants suggested that the disconnection between common practice and the needs of children should be addressed within a hospital environment because this was the only way to be able to provide women with information that counters social trends and belief systems. This is because not all women will get the social support and information they need through their female relatives and friends. Participants suggested that not all women grasped the true benefits of breastfeeding either for their babies or themselves, and recommended that further communication about these should be prioritized by hospitals and health authorities. If there was no community-based discourse about breastfeeding, or tradition within women's families to make it a priority, then there was also a lack of ability which women presented in these interviews. Women expressed a need for professional support, whether directly through training at a hospital, or indirectly through information sessions or other means, in order to ensure that they had the tools they needed to be able to achieve the goal of breastfeeding on their own at home over a long term. Women wanted to feel confident in making sure that they were providing their children with the best nutrition and schedule possible, and this was not an easy task to accomplish without clear information. According to Porteous (2000), the professional support has an important role in increasing the duration of breastfeeding among the mothers who identified themselves without support.

Participants were also able to suggest to the researchers viable means by which to engage the Qa-

tari female population in advancing their knowledge of breastfeeding. Suggestions included prenatal classes at the hospitals where doctors could provide clear and concise information, and challenge existing normative values in some communities where formula feeding is more common, including teaching extended family members about its value. Responses indicated that many women were likely to search the Internet to find answers for their questions regarding breastfeeding's importance and benefits, and demonstrated that Qatari health websites, especially those linked to hospitals and women's birth centers, would likely help improve matters. Other suggestions included magazine articles and advertising, as well as television programs and advertising. Finally, participants suggested that girls' school education programs should cover the topic of breastfeeding, especially in relation to its Qur'anic recommendation on breastfeeding.

Some women also demonstrated that on an economic level it is sometimes difficult for women to take the time they need to breastfeed, especially if they have a financial obligation to their family. Findings demonstrated that women with additional financial resources were more able to breastfeed. At the same time, the fact that more economically secure women are often better able to breastfeed has meant that it is socially desirable to be able to afford formula among some women, as indicated in the study. Culturally and religiously, however, women are more inclined to value breastfeeding, especially because of religious incentives to do so. A study reported that by understanding and supporting Islamic beliefs of breastfeeding, clinicians can help mothers to initiate healthy feeding practices of infants as

breastfeeding has a religious basis in Islam and it is recommended that the mother breastfeed her offspring for 2 years if possible (Shaikh and Ahmed 2006).

Despite these positive steps towards a greater social acceptance of breastfeeding, most women feel that there are not enough professional support systems in place. Even when they are available, many women are not aware of these supports. Women who are in favor of breastfeeding because of their awareness of its need and benefit still struggle to commit to practice due to limited social support and/or professional instruction. Because there has been a decrease in breastfeeding practice among the women of Qatar, there is a lack of social support and knowledge regarding breastfeeding in many communities. One of the mothers stated:

The important thing is to encourage women during pregnancy and prepare her for that, especially prime mother. So, before her delivery, there should be classes to educate mothers about the benefit of breastfeeding and show the mother how to breastfeed her baby. This will help her to be ready emotionally and physically for that.

One of the challenges pointed out by the participants in this study was that much depended, as well, on the woman's individual level of education and the culture in which she had been raised. For this reason, one of the suggestions which was mentioned frequently as a point of connection for all women was support in the Qur'an for breastfeeding. Because of the fact that this would be a common place in which to start the education process, it was raised as an opportunity for hospital administrators to begin the discussion with new moth-

ers. As mentioned earlier, a study has emphasized strongly on adding Islamic teaching in encouraging mothers to initiate breastfeeding (Shaikh and Ahmed 2006).

Participants emphasized that that professional support was one of the major factors in making decisions to breastfeed or not. Therefore, they recommended:

We should advertise about breastfeeding in hospitals. We should also advertise about the benefits of breastfeeding. We should convey the messages about breastfeeding to friends, relatives, and especially to those mothers who have delivered for the first time. We should tell them about the benefit of breastfeeding. We should encourage mothers to give maximum time to practice breastfeeding. Mothers should be informed that breastfeeding is best for her and her baby. She should think what benefit in harming the health of her child is. I was encouraged by nurses and doctors at hospital who were forcing me to breastfeed. My family members supported and encouraged me to breastfeed.

The health care professionals, such as a doctor, can spend a few minutes during mother's antenatal visits in explaining the benefits of breastfeeding. He can give her information about why and how it is beneficial and healthy for the baby and how it can help in the child's growth and development. After knowing all this information she is the one who decides whether she wants to breastfeed or no. She is responsible for her decision afterwards.

We can give them all the information about breastfeeding. We can discuss such topics in magazines and books. By these ways, we should convey this message that breastfeeding is beneficial for the health of baby and mother. We should distribute such magazines and books in the hospitals.



What this means is that without specific information from professional instructors, such as nurses and doctors with breastfeeding knowledge, many Qatari women are not able to gain an interest in the practice because of a lack of knowledge regarding breastfeeding techniques and its benefit for the infant's health. The result was that turning to formula was a better solution for them because of the fact that they feared that their children would starve without it. The focus of most of the respondents was a clear lack of education programs in hospitals that would provide them with specific sets of instructions and which would be able to help them practice the skills associated with breastfeeding in a safe environment where they would not have to fear for their infants' survival. It was clear that many individuals had had to learn how to breastfeed on their own and had come up with their own methods of making sure that their baby would feed, which was both frustrating and discouraging. Combined with postpartum depression, this would be a very difficult situation for many women, as indicated above. It would often mean that in the first, crucial months of life their babies were relying just as much on formula as on breast milk, even when the mother was able to breastfeed. This presents a significant level of disconnect between the recommendations of the leading global health care organizations and the actual Qatari women's practices, even when they themselves were committed to providing breast milk to their infants. The difficulty was, therefore, not in the level of commitment in many cases but instead in the ability of the women to actually put their commitment into practice due to their lack of knowledge.

What this demonstrates is that due to a lack of clear information on how to breastfeed, there is an

intrinsic risk to Qatari women's children. Women in this community are aware of the benefits, but seem, in many cases, to lack the basic skill set that they need to effectively feed their children without an overt reliance on formula in the short term. This means that during the most crucial period of child-care women are likely to need assistance.

Personal challenges, such as the perception of pain and body image, also seem to significantly influence women's decision on breastfeeding. Research indicates that women with higher degree of body image satisfaction are more likely to engage in breastfeeding (Huang, Wang, and Chen 2004), and postpartum body image dissatisfaction is linked with a lower likelihood of breastfeeding (Walker and Freeland-Graves 1998). Some studies have shown that mothers who are highly concerned about their body image and weight are more likely to make a decision during pregnancy not to breastfeed their babies and follow their decision in the postpartum period (Foster, Slade, and Wilson 1996; Barnes et al. 1997; Waugh and Bulik 1999). Similar to our findings, some mothers decide to formula feed their babies because of pain, discomfort, and tiredness (Murphy 1999; Bailey and Pain 2001; Schmeid and Lupton 2001; Lee 2007a; 2007b; Miller, Bonas, and Dixon-Woods 2007; Stapleton, Fielder, and Kirkham 2008). Other studies report that mothers recognize formula feeding as a valuable, easy, and convenient method that provides them the opportunity to "get back to normal" and "having freedom" (Earle 2002; Lee 2007a; 2007b).

These issues point to the fact that there is a need for health care organizations to step in and provide support, and for public health initiatives to be initiated in order to raise awareness about breast-

feeding among the population of Qatari women. This means that more work needs to be done in order to provide options for training on breastfeeding techniques to younger mothers. The study demonstrates that there are a number of options available to increase awareness of breastfeeding among mothers-to-be which could be pursued both in person through training and coaching, and through awareness-raising campaigns online, in magazines, and in hospitals. The health care providers need to be trained and knowledgeable about the mothers' opinion of breastfeeding and the influencing factors to be able to have open and non-judgmental discussions with the mothers in order to help them.

In the end, all these won't be successful if the breastfeeding and mothers' friendly legislations and policies are not established in the health care agencies and the community. The BFHI has shown positive results. Merewood and colleagues (2003) found that the BFHI has been linked to improved breastfeeding rates in U.S. hospitals. In a study of a neonatal unit, it was seen that the "breastfeeding initiation rate increased from 34.6% (1995) to 74.4% (1999)," that "[a]mong 2-week-old infants, the proportion receiving any breast milk rose from 27.9% (1995) to 65.9% (1999)," and that "the proportion receiving breast milk exclusively rose from 9.3% (1995) to 39% (1999)" (Merewood et al. 2003:166). Reasons for the improvement in breastfeeding were directly attributed to the support structure and the introduction of baby-friendly policies, which had a direct effect on a new mother's willingness to breastfeed. To achieve BFHI, the "Ten Steps to Successful Breastfeeding" policy should be implemented in the health care agencies. The steps include: developing breastfeeding policies,

training the health care staff, promoting breastfeeding by educating mothers, helping mothers to initiate breastfeeding in the first 30 minutes after birth, showing the breastfeeding methods to the mothers, promoting exclusive breastfeeding, practicing rooming-in, encouraging breastfeeding on demand, providing no artificial soothers and establishing support groups in the community for breastfeeding mothers. Although health care agencies in Qatar are working towards obtaining BFHI status, so far none of them have achieved this goal.

Some studies provide proof that BFHI policies cannot be successful by themselves and other factors should be implemented in the community, as well as in the health care agencies, to increase this strategy's success rate. Kramer and colleagues (2007) suggest that along with the BFHI, a highly centralized system of breastfeeding promotion and support should ensure that all mothers receive the necessary support for breastfeeding. This study also emphasizes that prolonged postpartum hospital stay allows mother to gain confidence in breastfeeding and establish good breastfeeding practices before leaving the hospital, which could increase breastfeeding success.

Other studies argued that particular attention should be paid to the community leadership development as a foundation for sustaining breastfeeding efforts. To be successful, an integrated and comprehensive breastfeeding support system must be constructed and measured not only through continued financial stability but also by the capacity of the community leaders, hospitals, insurance companies, and the health care providers to accept ownership for protecting, promoting,

and supporting breastfeeding (Slusser and Lange 2002). Similarly, Demirates (2012) indicates that supportive strategies for breastfeeding can influence and benefit mothers. Strategies were categorized in five groups: collaboration with community and family members, confidence building, appropriate ratio of staffing levels, development of communication skills, and “closing the gaps.” He also argued that governments, hospital, and community management, key persons locally in religious and educational settings, midwives and nurses themselves should take action for policy change. A Turkish study also confirms the above finding. The study concludes that traditional beliefs should be understood by health care professionals, the community programs should be developed to explore and address such practices and incorporate them into women’s education where appropriate, and women should be educated and trained in breastfeeding. Professionals also need to be trained how to establish linkages between tradition and modern health promotion messages to encourage the new ways of doing in the community (Ergenekon-Ozelci et al. 2006).

Maternity leave of only 40-60 days, not having access to breastfeeding rooms in the workplace, shopping centers and even health care centers, lack of access to day cares at the work place, and lack of support for staff to follow the existing breastfeeding policies at the hospitals and other health care agencies are some of the issues that need to be addressed and improved. The National Health Strategy (NHS) 2011-2016 has been developed in Qatar as the guideline for health care providers and other sectors. This document identifies what improvements are required in the health care sector. Qatar’s ultimate goal is to im-

prove the health care system to a comprehensive system that could provide health care services to the whole population. This document specifically emphasizes improving the preventive health care for women and children. In the women and child health section of this document, prenatal health and breastfeeding have been recognized as areas that require improvement. The goals of the women and child health section of the Qatar National Health Strategy are: exclusive breastfeeding and complementary feeding education, enhancement of prenatal care services, improved postpartum services, childhood vaccination coverage, domestic violence victim support services, maternity leave policy, and women’s health screening and IVF regulation. This document, along with the research conducted in the area of breastfeeding, could help layout a culturally appropriate plan to develop intervention plans to improve the breastfeeding practices in the state of Qatar.

### Summary and Conclusion

As mentioned above, the goal of our study was to find ways to effectively promote breastfeeding practices among Qatari women by investigating factors affecting the ways in which Qatari national and non-national Arabic women decide to engage in breastfeeding practices and their knowledge of breastfeeding. With the results of this study it is evident that, due to a rise in awareness of the benefits of breastfeeding, there is potential for the percentage of Qatari women who take on breastfeeding to go up over the long term with the proper support systems in place. Nonetheless, this will require a commitment within hospitals and other health care organizations to increase commitment to meet WHO recommendations

and support for Qatari mothers to breastfeed. It is important to provide Qatari women with explicit and detailed instructions, bedside coaching and follow-up aftercare, so that they might be better prepared to take on this important role in their children’s lives. Without this commitment from the Qatari health care system, it is less likely that women will be able to take on the challenge of breastfeeding. Health care professionals need to participate actively in the promotion of breastfeeding and to alleviate the current gap in social knowledge around breastfeeding practice so that it can be re-incorporated into the lives of Qatari women. Over the long term, it is hoped that once again this knowledge will be adopted by the community so that more women will be able to gain the social support they need to feed their children successfully without a need for formula.

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