

Breastfeeding Practices among Malay Academicians in Malaysia

Normadiyah Daud, Nadhirah Nordin, Rahimah Embong, Mohd
A'Tarahim Mohd Razali and Normila Norudin, Nor Hafizi Yusof,
Wan Mohd Khairul Firdaus Wan Khairuldin

Faculty of Islamic Contemporary Studies, Universiti Sultan Zainal Abidin, Gong Badak
Campus, 21300 Kuala Terengganu, Terengganu, Malaysia.

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Abstract

Breastfeeding is essential to the life of a child. Through it, a child becomes healthier and smarter because of the nutrients in breastmilk provide the best source for a baby's proper growth and development. Unfortunately, not many babies are fully breastfed despite the recommendations from Islam and the Ministry of Health Malaysia. A major factor to this hindrance is the mother's employment outside the home. This study investigates the extent to which female academics are able to provide breastmilk to their children. This study is quantitative and utilises SPSS 18.00 software to analyse the data. The method for collecting the data is survey and interviews with experts in relevant fields. A total of 140 of the 180 respondents were chosen from three local universities in Kuala Terengganu, Malaysia. The findings reveal that the respondents were willing to give breastmilk up to one year. The findings also show that there is an increased awareness among mothers to breastfeed. These changes may occur due to the mother's maturity, experience and knowledge. A positive environment that encourages breastfeeding and the technological advancements may also be contributing factors to the improved statistics of breastfeeding.

Keywords: Breastfeeding, Academicians, Malay, Kuala Terengganu, Malaysia

Introduction

Breastfeeding is essential to the life of a mother and child. Full breastfeeding provides benefits to the child and the mother; it makes the mother and child healthier and active. It is also the right of the child to receive breastmilk and the mother's obligation to fulfil it. Every child is entitled to the best source of nutrition for his growing health and mind which can be found in a mother's milk (Rida 2005; al-Shirazi n.d; Zaydan 2003; Sayyid Qutb 1992; al-Mawardi 1996).

However, there are challenges to breastfeeding especially for mothers who must leave home in order to work. Thus, the new-born is left in the service of a nanny or certified

nurseries where they are no longer being supplied with breastmilk. They are given formulated milk instead whose nutrition value is generally lower than that of breastmilk. This is an unfortunate circumstance for both mother and child. It is therefore important that an alternative is sought which would allow a mother to simultaneously work and breastfeed her child.

This study focuses on full breastfeeding as practiced among the highly educated women in Kuala Terengganu, Malaysia. The focus group is university academics employed in three of Kuala Terengganu higher institutions. This study assesses the extent to which the women are able to fully breastfeed their child even while working and it is hoped that the findings may become a source of reference for other working women.

Literature Review

Studies related to breastfeeding from the Islamic perspective have long been dominated by scholars such as Zaydan (2003) who described, in-depth, the complex debate amongst jurists (fuqaha) and mufasssireen on matters pertaining to individuals involved in breastfeeding such as the mother, father and child. An explication of the milk kinship forged via breastfeeding is found in Al-Mawardi's study (1996). With regards to the jurists' debate on rules, conditions, duration and breastfeeding entitlement, these are elaborated at length in the book of fiqh from various schools of thought. Among the books are al-Mudawwanah by al-Asbahi (n.d) and Hashiah al-Dusuqi written by al-Dardir (n.d) of the Maliki School, the book al-Mughni al-Sharbini Muhtaj al (1978) of the Shafi'i School, the book al-Mughni by Ibn Qudamah (1983) of the Hanbali School and al-Mabsut by al-Sarkhasi (n.d) from the Hanafi School. Apart from the books of fiqh, the mufasssireen also discussed the issue of breastfeeding based on the commands of Allah found in Surah Al Baqarah, verse 233. al-Alusi (1987) in Ruh al-Ma'ani, Rida (2005) in his Tafsir al-Manar, al-Qurtubi (1988) in tafsir al-Jami ' li Ahkam al-Qur'an and Sayyid Qutb (1992) in Fi Zilal Qur'an.

There have been many studies in the past on the advantages of breastfeeding from the scientific perspective. Hutchins (1979) wrote in Child Nutrition and Health that animal milk, despite their protein and mineral salts, contains a protein called kazein. Kazein is a mixture of amino acids that are not compatible with the infant's kidney. Furthermore, Abdul Hakim (1999) wrote that breastmilk have superior qualities that is incomparable to any other type of milk. Despite the modern technologies' attempt at imitating breastmilk's nutritious value, none of them can come close as a substitute. In a study from McGill University Canada, Lucas et.al (1992) found that breastfeeding can increase the baby's IQ compared to formula milk. Brinton (1995) found that mothers who frequently gave birth and provided breastmilk to the baby has even reduced the risk of breast cancer by 4.3% for each 12-month lactation period and 7% in each delivery. This evidence is further supported in the article Breast - Feeding Lowers Risk Cancer ([www. cnn.com](http://www.cnn.com)) that reported that breastfeeding women have lower risks of breast cancer. The statement was based on 47 studies conducted in thirty countries (Study: Breast – Feeding Lowers Canser Risk, 2002). Greeggi's research in Italy (2000) focused on the factors that led to disease ovarian cancer. He found that breastfeeding infants could also reduce a woman's risk of contracting the cancer.

Due to the above mentioned advantages, mothers now have a positive reaction to breastfeeding, including working mothers. However, there are various constraints to it especially when a mother works and breastfeeds at the same time. In Thailand, Yimyam et al. (1999) found that many urban career women in Thailand were unable to sustain breastfeeding due to the many challenges faced. Slusser et al. (2004) studied the expressing

of breastmilk in the workplace, focusing on the frequency and duration. The findings showed that the employers' failure to provide breastfeeding facilities, such as a refrigerator for milk storage and a comfortable lactation area, were among the factors that discouraged working women from breastfeeding.

With regards to work constraints, research by Pathamnathan in Breastfeeding—a study of 8750 Malaysian infants (1978) found that breastfeeding was more popular in rural villages than in urban cities. The study on 8750 infants found that 77% of the babies in the village were fed with breastmilk compared to the infants in the city (47%). Various factors that limited breastfeeding among urban women included work. On the other hand, mothers in the village were mostly full-time homemakers which meant they were able to breastfeed exclusively. A recent study on breastfeeding is Rahmah M Amin's work (2011) from UKM Medical Centre entitled Work related determinants of breastfeeding discontinuation among employed mothers in Malaysia. The study, conducted in four health clinics in Selangor, Petaling Jaya, sampled 290 working women and children aged 3-12 months. The research found that after three months of delivery, 51% (149) respondents have stopped breastfeeding.

It has been proven that a mother's milk has many advantages; however due to the constraints faced by working mothers, these women are unable to provide full breastmilk. This study aims to investigate the ability to fully breastfeed among female respondents who represent the educated women in the country. The findings may offer solution for other working women who share the same predicament.

Research Methodology

Data collection

This study involves an analysis of data obtained from 140 Surveys. Although the researchers initially distributed 180 Surveys, only 140 Surveys were returned. The data from the Surveys were analysed using SPSS version 14.00 through the descriptive statistic means. The findings involve frequency, percentage and mean. The results are presented in tables followed by a discussion. In addition to the surveys, an interview with an expert in the field of Islamic Family Jurisprudence, Sya Norul Madihah Syed Hussin, was included. The data obtained from the interview is intended to strengthen the interpretation of the data.

Selection of the sample

The respondents from Terengganu were selected for this study because records show that for the years 2011 and 2012, the Terengganu population had the highest rate of exclusive breastfeeding of infants aged four months until age two. Terengganu is also number one compared to the other states of Malaysia with a population that have successfully implemented exclusive breastfeeding for children ages four months, with 69.1% (in 2011) and 67.6% (in 2012), and for ages six months at 45.9% (in 2011) and 47% (in 2012) from the breastfeeding statistics (Nutrition Division, Ministry of Health Malaysia 2012). The sample of this study is further narrowed to the Kuala Terengganu district based on the success of maintaining its top position as having the highest rate of exclusive breastfeeding for infants aged four months to six months in 2012 (Nutrition Division, Ministry of Health Malaysia 2012).

Empirical Findings

Demographic and socio-economic characteristics

To review the implementation of breastfeeding practices among the academics of Kuala Terengganu, a demographic analysis was conducted to obtain the respondents' general profile. The demographic information is presented into two main parts; namely their personal information and employment background.

Table 1 show that a majority of the respondents (55.7% or 78 respondents) were between the ages of 31-40. This is followed by respondents aged between 25-30, and 40 years and above; each respectively at 19.3% (27 respondents). The number of respondents aged 50 years and above is only 5.7% (8 respondents) from the sample. The respondents' number of children is fairly small. Table 1 show that almost half of the respondents had between 1-2 children (at 49.3%, which is 69 respondents). Having examined the factors, it was found that most of the respondents got married at the age of 30. On the other hand, the number of respondents with 3-4 children was quite small (at 39.9%, which is 53 respondents). Only 12.9% (18 respondents) of the 140 respondents had more than five children.

With regards to the level of education, the respondents were mostly Master's and PhD holders. Table 1 show that a majority of the respondents (70.7% or 99 respondents) had graduated with a Master's degree, followed by a PhD at 23.6% (33 respondents) and a Bachelor's degree at 5.7% (8 respondents). Most of the respondents with a Bachelor's degree were from UiTM and UniSZA. The UMT lecturers, on the other hand, were all Master's degree and PhD holders.

Table 1 reveals that most of the respondents are from UniSZA with 42.9% (60 respondents), followed by UMT with 39.3% (55 respondents), and UiTM—as a branch operating on a small campus in Kuala Terengganu—with a relatively small number of lecturers with 17.9% (25 respondents). From this table, it also shows that 77.1% (108 respondents) are academic lecturers, followed by 15.7% (22 respondents) who are senior lecturers, and 2.9% (4 respondents) are Associate Professors. Only one (0.7% respondent) is a Professor.

As for their specialisation, most of the respondents were in accounting and business, which is fitting because all three participating universities have the aforementioned faculties (www.unisza.edu.my; www.umt.edu.my; www.uitm.edu.my, June 1, 2012). Table 1 shows that 22.1% (31 respondents) are from the fields, followed by the Social Sciences and Health Sciences, respectively at 12.3% (17 respondents). This is followed by respondents from the Language field with 10.7% (15 respondents), and respondents from the field of Manufacturing Technology at 1.4% (2 respondents) only.

Table 1.

Socio-economic demographic profile of the subjects

Demographic and socio-economic characteristics	Frequency	Percentage	Total(N=140) 100%
Age			
25-30 years	27	19.3%	140 (100%)
31-40 years	78	55.7%	
41-50 years	27	19.3%	
Number of children			
1-2 respondents	69	49.2%	140(100%)
3-4 respondents	53	37.9%	

5 and above	18	12.9%	
Level of education			
Bachelor	8	5.7%	140(100%)
Master's	99	70.7%	
PhD	33	23.6%	
Participating universities			
UniSZA	60	42.9%	140 (100%)
UMT	55	39.3%	
UiTM Kuala Terengganu	25	17.8%	
Designation			
Lecturer	108	77.1%	140 (100%)
Senior Lecturer	22	15.7%	
Head of Department	4	2.9%	
Dean of the Faculty	1	0.7%	
Associate Professor	4	2.9%	
Professor	1	0.7%	
Specialisation			
Islamic Studies	14	10%	140 (100%)
Social Sciences	17	12.3%	
Health Sciences	17	12.3%	
Information Technology	11	7.7%	
Accounting and Business	31	22.1%	
Engineering	3	2.1%	
Food Sciences	7	5.0%	
Language	15	10.7%	
Law	6	4.3%	
Biotechnology	7	5.0%	
Mathematics	7	5.0%	
Visual Drawing	3	2.1%	
Manufacturing Technology	2	1.4%	

Source: Survey in 2012

Duration of full breastfeeding in accordance with the number of children

Based on the above statistics, a majority of the respondents had between 1 to 4 children. As not many of the respondents had more than four children, this study is limited to respondents who have up to four children.

Table 2 shows that for their first child, most of the respondents (35.0% or 49 respondents) were eager to provide breastmilk up to the age of 1-5 months. For breastfeeding up to 6-12 months, there were 30.0% (42 respondents), and for breastfeeding beyond 18 months, only 13.6% (19 respondents) were able to do so. For the first child, 12.9% respondents (18 respondents) were able to exclusively breastfeed their one month old (and

below) baby. While for babies who were breastfed for 13-18 months was 8.6% (12 respondents).

Table 2

Full breastfeeding schedule for the first child

No.	Age of Full Breastfed First Child	Frequency	Per cent
1	Under a month	18	12.9%
2	1-5 Months	49	35.0%
3	6-12 Months	42	30.0%
4	13-18 Months	12	8.6%
5	Above 18 Months	19	13.6%
Total		140	100%

Source: Survey 2012

For the second child, Table 3 shows that 116 respondents have a minimum of two children. Similar to the first child scenario, a majority of the respondents (40.5% or 47 respondents) fully breastfed their baby within the first 1-5 months. This is followed by breastfeeding babies aged between 6-12 months (26.7% or 31 respondents). For the second child, mothers who fully breastfed for less than a month were quite few in number with 8.6% (10 respondents). For the 18 month period of breastfeeding, approximately 13.8% (16 respondents) did so. Lastly, babies who received breastmilk in full until the age of 13-18 months were 10.3%.

Table 3

Statistics for full breastfeeding of the second child

No	Age of Full Breastfed Second Child	Frequency	Per cent
1	Under a month	10	8.6%
2	1-5 Months	47	40.5%
3	6-12 Months	31	26.7%
4	13-18 Months	12	10.3%
5	18 Months	16	13.8%
Total		116	100%

Source: Survey 2012

Similar to the first and second child scenarios, the period most popular for full breastfeeding occurs when the baby is one year old or younger. There were 79 respondents with a minimum of three children. For babies aged 1-5 months, 39.2% (31 respondents) were breastfed, whilst aged 6-12 months 31.6% (25 respondents) were breastfed. On the other hand, 15.2% babies were breastfed for more than 18 months. Lastly, the number of respondents who breastfed for less than a month to her third child was 7.6% (6 respondents). The details are shown in Table 4.

Table 4
Statistics for full breastfeeding of the third child

No	Age of Full Breastfeed For Third Child	Frequency	Per cent
1	Under a month	6	7.6%
2	1-5 Months	31	39.2%
3	6-12 Months	25	31.6%
4	13-18 Months	5	6.3%
5	18 Months	12	15.2%
Total		79	100%

Source: Survey 2012

There were 39 respondents with four children. The trend for full breastfeeding is also similar where many breastfed their children up to the age of one. Based on Table 5, 35.9% (14 respondents) gave breastmilk to children up to the age of 5 months, and 25.9% (10 respondents) continued to breastfeed until the baby reached a year old. Meanwhile, 17.9% (7 patients) breastfed their infants aged 13-18 months and above 18 months. For breastfeeding child below the age of a month was only 2.6% (1 respondent).

Table 5
Statistics for full breastfeeding of the fourth child

No	Age of Exclusive Breastfed of Fourth Child	Frequency	Per cent
1	Under a month	1	2.6%
2	1-5 Months	14	35.9%
3	6-12 Months	10	25.6%
4	13-18 Months	7	17.9%
5	18 Months	7	17.9%
Total		39	100%

Source: Survey 2012

The findings revealed that the respondents were willing to prolong the breastfeeding period, with a majority willing to do so for a year. For example, for the first child, 65% (91 respondents) were fully breastfeeding. Similarly, for the second child, 66% (78 respondents) fully breastfed their child up to a year. The shortest breastfeeding period among the respondents is a month and below. The normal period is until the baby is one year old, and the longest period is 18 months old or beyond.

An important fact to be highlighted from the findings is that the breastfeeding period by female academics is considered high compared to earlier studies. For example, Juwita Shaaban in her work on women who breastfeed in Bachok, Kelantan (2000), conducted on 260 infants born in 1977-1988, showed that 71% of the infants received full breastmilk within the first 4-6 months only. Meanwhile, 5.8% gave full breastmilk for more than 6 months. The remaining 23.1% were only able to breastfeed for less than 4 months.] A similar pattern was found in another study in Kelantan conducted by Balakrishnan and Hussein (1977). In their

article *Breastfeeding in Kelantan*, they sampled 461 mothers in Kelantan and found that 95% of mothers provided full breastmilk to infants aged less than 6 months.

The Institute of Population and Family and Community Development, and the Ministry of Women, Family and Community Development in 2004 reported that breastfeeding in Sarawak, the largest state of Malaysia, is 39.5% for babies aged below 6 months. Meanwhile, 16.4% gave breastmilk to children for 6-12 months. Only 10.3% were able to breastfeed for more than 19 months, while 2.4% were breastfeeding for 13-18 months.

However, interestingly, compared to some countries in the world, especially India, breastfeeding by the female academics sampled in this study were at a moderate level. According to Stein, et al., who conducted the study in India in 2004, they found that the Indians were very supportive of breastfeeding and breastmilk. On average, the mothers in India provided breastmilk to infants up to the age of three or four.

While the average respondents sampled in this study are shown to have successfully breastfed their children past the exclusive period, there is also the disappointing fact that there are still women who could only fully breastfed their babies for a month. This means that the baby were been given formula milk when they are only a month old. Although it is not large in number, it still means that there is a chance that the baby's health and development could be affected, and therefore should be avoided.

The findings also reveal an encouraging response by mothers who can breastfeed for nearly two years (for example going beyond 18 months) while being career women. For example, for the first child, 13.6% (19 respondents) were able to do so; for the second child, 13.8% (16 respondents); and for the third child, 15.2% (12 respondents) and 17.9% (7 respondents) for the fourth child.

These findings demonstrate that the more children the women have, the more awareness there is for breastfeeding. This awareness may arise from the mother's maturity, experience and knowledge. Other factors that also encourage breastfeeding are a positive environment along with the technological advancements that facilitate the process. For example, there are sophisticated instruments that are capable of maintaining the freshness of milk and its nutritious value, in particular for expressed milk. This would ensure that the baby, despite having a working mother, still receives his right for breastmilk.

This statement is supported by Pauzi (2009) who conducted a study on the implementation of breastfeeding among new-borns at the Hospital USM Kubang Kerian in 2009. Based on the findings, she stated that a positive breastfeeding experience is the reason given by the mothers who would want to continue to breastfeed.

The frequency of breastfeeding per day

The frequency of feedings per day is quite difficult to measure because a baby's desire for feeding is not the same with another. They feed as often as they could until satiated. However, this study was conducted to determine the average frequency of breastfeeding among the respondents. Having sought the frequency, it was found that the average frequency among 50% (70) of the respondents was 4-6 times a day. The second highest frequency was 7-9 times a day (24.3% or 34 respondents). However, there are those who milk as frequent as 10 times a day (21.4% or 30 respondents). They also remarked that that the infant feeding is more frequent with boys compared to girls. Only 4.3% (6 respondents) fed 1-3 times a day. The details are shown in Table 6.

According to the KKM breastfeeding guide, the baby, especially in the first 6 months, should be given milk at any time that is required until the baby is satiated. Among the signs

of a baby who is given sufficient milk is its urinating frequency, which is 6-8 times a day, bowel movement that occurs 3-4 times a day, the baby's smooth and supple skin, its active and few crying episodes, the baby's weight gain and solid body muscle (Jabatan Kesihatan Negeri Terengganu 2011).

Table 6
Frequency of feedings per day

No	Breastfeeding frequency in a Day	Frequency	Per cent
1	1-3 times	6	4.3%
2	4-6 times	70	50.0%
3	7-9 times	34	24.3%
4	10 more than times	30	21.4%
Total		140	100%

Source: Survey 2012

Milking method practiced while at work

Table 7 shows that the method used by 50% (70) of the respondents that allowed them to commit to breastfeeding while at work is to express their milk or to commute from work to home/nursery. However, none of the respondents practiced the third method, which is to use the service of a wet nurse, an older practice for giving breastmilk to a child.

The respondents' lack of interest to use the service of a wet nurse is representative of a worldwide problem. Although the respondents have sound knowledge regarding the milk kinship that is forged through the service of a wet nurse, they generally do not favour this practice. This view is shared by the respondents in Gaza, a study which was previously conducted in 2006 ('Abd. Zuhd, et.al, 2006). The findings showed that the people of Gaza fully understood how milk kinship may prohibit marriage, however, when asked for their approval to add family members by sharing breastmilk; the Gaza Muslim community was not willing to do so.

Table 7
Method used of full breastfeeding

No	Method	Frequency	Per cent
1	Expressing milk	70	50%
2	Commute to the nursery or home.	70	50%
3	Wet nurse	0	0%
Total		140	100%

Source: Survey 2012

Conclusion

New insights were found from the study. The findings show that the respondents were more motivated to give full breastmilk to babies for a year. For example, for the first child, 65% (91 respondents) of the respondents were fully breastfeeding the baby up to the age of one. For the second child, 66% (78) respondents. Nevertheless, the statistics for the handful of

mothers who can breastfeed for almost two years, for example above 18 months, even while working is also very promising. For example, for the first child, 13.6%, 13.8%; for the second child and third child at 15.2%; and 17.9% for the fourth child. The findings also show that there is a growing awareness for mothers to continue to breastfeed. These changes may be due to the mother's maturity, experience and knowledge. An environment that encourages breastfeeding and the technological advancements may also be the main factors that encourage breastfeeding. With regards to the frequency of breastfeeding, the highest is 4-6 times a day with 50% (70) of the respondents. The methods to sustain breastfeeding while working is to express milk (favoured by 50% of the respondents) and to commute from work to home/nursery with 50% respondents (70 respondents). Of the 140 respondents, only 53.6% (78 respondents) claimed to express milk.

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Corresponding Author

Normadiah Daud

Faculty of Islamic Contemporary Studies, Universiti Sultan Zainal Abidin, Gong Badak Campus, 21300 Kuala Terengganu, Terengganu, Malaysia

Tel: 09-6688076. E-mail: normadiah@unisza.edu.my

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