Original Research Article

Attitude and awareness on importance of breastfeeding among childbearing women in a rapidly developing country

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ABSTRACT

Background: Health authorities in United Arab Emirates passed a law giving all the mothers the right to breastfeed their children even during the working hours. The objective of this study is designed to explore the degree of awareness among mothers in childbearing period on breastfeeding importance and practices.

Methods: A cross sectional explorative questionnaire-based survey included 400 mothers from multi health centres in 3 emirates of United Arab Emirates as follows: Abu Dhabi 100 samples, Dubai 100 samples and Sharjah 200 samples, who were in their childbearing period and had a minimum of one child during the study period between July 2016 and November 2016.

Results: Total 54.5% of mothers were above 30 years of age. 48% were local and 52% were non-local. 80% were familiar with the advantages of breastfeeding. 84.8% believed that exclusive breastfeeding up to 6 months is important and 41% had breastfed their children exclusively. 76% had the skin-to-skin contact with their baby and 43.5% had started breastfeeding within the first hour after birth, of them, 10% had delivered by caesarean section. 82% were roaming in with their baby during hospital stay and 81% had practiced demand breastfeeding. 89.9% of mothers had received the support they needed for breastfeeding from hospital staff. 56% had not used pacifier during the hospital stay and 56% had used bottle-feeding. 55% of mothers were employed, 72% of them had the intention to continue exclusive breastfeeding for a minimum of 6-month period.

Conclusions: Attitude and awareness on breastfeeding are encouraging. Educational efforts, workshops and public awareness should be enhanced and maximized.

Keywords: Breastfeeding, Exclusive breastfeeding, Breastfeeding knowledge

INTRODUCTION

In the 20th century gender equality in workplaces and educational institutes lead to the involvement of huge number of breastfeeding mothers. According to the world health organization (WHO) it is recommended to exclusively breastfeed the infant up to six months of age and up to 2 years of age and beyond with proper complimentary food.1 The United Arab Emirates health authorities consider breastfeeding as one of the most important topics that the public should be aware of and therefore, they celebrate the National Breastfeeding Week in November and passed a law giving all the mothers the right to breastfeed their children during the working hours.2

Breast milk is considered to be the best meal for an infant and breastfeeding has many short and long-term benefits.
not only for the breastfed child but for the mother too. Recent available data revealed that breast milk improves the Gastrointestinal motility and growth, it contains agents that has antimicrobial activity, the lipid content of the milk improves host defenses and the carbohydrates facilitates the growth of Bifidobacterium and lactobacillus species.

The milk also contains White blood cells mostly neutrophils and macrophages which lead to less episodes of acute illnesses like gastroenteritis, hospitalization for diarrhea, respiratory illnesses, otitis media, UTI and sepsis. The long-term benefits of breast milk showed better cognitive functioning and intelligence in addition to reduced overall risk of childhood cancers, childhood obesity, allergic diseases and diabetes type 1 development.

The aim of this study is to explore the public awareness about exclusive breastfeeding importance in childbearing age women, identification of factors that can affect choice of breastfeeding, effectiveness of antenatal, natal and postnatal counselling on exclusive breastfeeding as well as recognition of barriers that preclude exclusive breastfeeding.

METHODS

This cross sectional observational study was performed in several well baby and pediatric clinics in different hospitals across UAE, specifically in Abu Dhabi, Sharjah and Dubai through a self-administered questionnaire. The questionnaire was designed to cover various aspects of breastfeeding i.e. Maternal condition prior to birth, delivery method and perceived difficulties, breastfeeding method and education of mothers regarding importance of breastfeeding. A pilot study was done prior to distribution of the questionnaires. Mothers who had children below 2 years of age, could understand English or Arabic and consented to participate in this study were included and those who were not meeting the inclusion criteria were accordingly excluded. Total 400 participants were enrolled in the study after exclusion of invalid questionnaires. Mothers voluntarily participated in this study and a consent form was provided. Data collection was done between July-November 2016.

Statistical analaysis

SPSS 22 program was used for analysis of data. For this study, \( P \leq 0.05 \) was considered statistically significant.

The Ethics Committee waived requirements for an ethical approval procedure.

RESULTS

400 questionnaires were distributed among 3 emirates in UAE: (Abu Dhabi 100 samples, Dubai 100 samples and Sharjah 200 samples).

More than half of the mothers (54.5 %) were above 30 years of age. 40.3% of participants had only one child. 59.8% of mothers had higher education college degrees. Table 1 summarizes the demographic data of the participants.

Table 1: Participants’ demographics.

| Characteristic            | Frequency | Percent |
|---------------------------|-----------|---------|
| Location                  |           |         |
| Sharjah                   | 200       | 50.0%   |
| Dubai                     | 100       | 25.0%   |
| Abu Dhabi                 | 100       | 25.0%   |
| Age group                 |           |         |
| Less than 30              | 176       | 44.7%   |
| More than 30              | 218       | 55.3%   |
| Nationality               |           |         |
| Local                     | 193       | 48.3%   |
| Other GCC                 | 20        | 5.0%    |
| Non-GCC                   | 119       | 29.8%   |
| Non-Arab                  | 68        | 17.0%   |
| Number of children        |           |         |
| 1                         | 161       | 40.5%   |
| 2                         | 95        | 23.9%   |
| 3                         | 67        | 16.8%   |
| 4                         | 42        | 10.6%   |
| 5+                        | 33        | 8.5%    |
| Age of breastfeeding (baby (in months)) | |   |
| 0-3                       | 127       | 32.1%   |
| 3-6                       | 94        | 23.7%   |
| 6-9                       | 61        | 15.4%   |
| 9-12                      | 47        | 11.9%   |
| >12                       | 67        | 16.9%   |
| Gender of breastfeeding baby |        |         |
| Male                      | 225       | 57.3%   |
| Female                    | 168       | 42.7%   |
| Educational level         |           |         |
| No formal Schooling       | 8         | 2.0%    |
| Primary School            | 6         | 1.5%    |
| Middle School             | 7         | 1.8%    |
| High School               | 80        | 20.1%   |
| College/Higher Ed.        | 239       | 60.1%   |
| Post-Graduate             | 58        | 14.6%   |
| Occupation                |           |         |
| Student                   | 14        | 3.5%    |
| Housewife                 | 186       | 47.1%   |
| Self-employed             | 5         | 1.3%    |
| Employed                  | 189       | 47.8%   |
| Type of Job (among employed) |        |         |
| Full Time                 | 158       | 81.4%   |
| Part Time                 | 25        | 12.9%   |
| Temporarily on leave      | 11        | 5.7%    |

Total 79.1% of children were born as full-term babies. 64.3% of deliveries were by normal vaginal.
Table 2: Participants delivery and breastfeeding details.

| Characteristic                        | Frequency | Percent |
|---------------------------------------|-----------|---------|
| Received Education on breastfeeding   |           |         |
| Through gynecologist                  | 149       | 37.3%   |
| Through lecture                       | 80        | 20.1%   |
| Noo                                   | 170       | 42.6%   |
| Duration of pregnancy                 |           |         |
| Pre-term                              | 72        | 18.3%   |
| Early-term                            | 158       | 40.2%   |
| Full-term                             | 141       | 35.9%   |
| Late-term                             | 17        | 4.3%    |
| Post-term                             | 5         | 1.3%    |
| Mode of delivery                      |           |         |
| Vagina                                | 257       | 64.9%   |
| Normal                                | 30        | 19.1%   |
| With Vacuum                           | 12        | 7.6%    |
| With forceps                          | 17        | 10.8%   |
| With episiotomy                       | 98        | 62.4%   |
| C-section                             | 139       | 35.1%   |
| Delivery experience                   |           |         |
| Traumatic                             | 115       | 29.1%   |
| Not good                              | 28        | 7.1%    |
| Normal under circumstances            | 193       | 48.9%   |
| Was my best                           | 59        | 14.9%   |
| Skin to skin contact after birth      |           |         |
| Done                                  | 304       | 77.2%   |
| Not done                              | 90        | 22.8%   |
| Initiation of breastfeeding (hours)   |           |         |
| Within first hour                     | 174       | 43.9%   |
| One to six                            | 126       | 31.8%   |
| Six to nine                           | 36        | 9.1%    |
| Nine to twelve                       | 25        | 6.3%    |
| > Twelve                              | 35        | 8.8%    |
| Mother and baby rooming-in            |           |         |
| Yes                                   | 328       | 82.4%   |
| No                                    | 70        | 17.6%   |
| Breastfeeding on demand               |           |         |
| Yes                                   | 327       | 82.8%   |
| No                                    | 68        | 17.2%   |
| Support received from hospital staff to breastfeed |
| Yes                                   | 359       | 90.2%   |
| No                                    | 39        | 9.8%    |
| Pacifiers                             |           |         |
| Used                                  | 171       | 43.3%   |
| Not used                              | 224       | 56.7%   |
| Bottle                                |           |         |
| Used                                  | 264       | 66.7%   |
| Not used                              | 132       | 33.3%   |
| Importance of breastfeeding            |           |         |
| Low importance                        | 10        | 2.5%    |
| Moderate importance                   | 47        | 11.9%   |
| High importance                       | 339       | 85.6%   |

Table 3: Variables significance levels.

| Variable                                             | P-value (significance level) |
|------------------------------------------------------|-------------------------------|
| Female newborn                                        | p=0.0001                      |
| Being housewife                                       | p=0.003                       |
| Temporary Leave after delivery                        | p=0.0001                      |
| Normal Vaginal Delivery                               | p=0.0001                      |
| Pleasant experience after delivery                    | p=0.049                       |
| Roaming in with newborn                               | p=0.06                        |
| Breastfeeding on demand of newborn                    | p=0.0001                      |
| Not using pacifier                                    | 0.05                          |
| Not using bottle for feeding                          | 0.0001                        |
| Being educated about breastfeeding after delivery     | 0.0001                        |
| Having breastfed previous infants                     | 0.0001                        |
| Believing in high importance of breastfeeding         | 0.0001                        |
| Having preterm or post term newborn                   | 0.03                          |

Among normal vaginal deliveries, episiotomy was performed in 24.3% of case 48.3% of mothers believed that their delivery was under normal circumstances while 28.8% described it as a traumatic experience.

In 76% of cases skin to skin contact was done after delivery. 43.5% of mothers had started breastfeeding within first the hour. 82% of mothers were roaming in with their baby during their hospital stay and 81% of them were breastfeeding on demand. 89.9% of mothers received support they needed for breastfeeding from hospital staff. 56% of mothers had not used pacifiers during the hospital stay, while 66% have been using bottles. 58.8% were given contact information or references at hospital in case of problems in breastfeeding. 41% of mothers had breastfed their other children exclusively.

Total 84.8% of mothers believed breastfeeding exclusively is very important. 80% of them had acceptable knowledge regarding advantages of breastfeeding based on scoring system used. Table 2 Summarizes the breastfeeding histories of the participants.

Less difficulty in breastfeeding was reported among mothers who were given information through their gynecologists and more difficulty was reported when they weren’t educated. In addition, mothers that were given references to contact with in case of difficulty in breastfeeding, reported less difficulty.

Mothers who had given education by their gynecologists had more information about breastfeeding than mothers receiving the information through other methods and those who were living in Sharjah had higher information about breastfeeding in comparison to other emirates. Locals were the most educated about breastfeeding and...
the higher was the breastfeeding education measured by the scoring system, the higher was the perceived importance of breastfeeding exclusively.

Table 3 provides the P-values for correlations between exclusive breastfeeding and other variables.

| Statement                                         | Strongly disagree | Disagree | Don’t know | Agree  | Strongly agree |
|---------------------------------------------------|-------------------|----------|------------|--------|----------------|
| Increases immunity of baby                        | 0.8% (n=3)        | 1.8% (n=7) | 5.3% (n=21) | 16.9% (n=67) | 75.3% (n=298) |
| Helps development of teeth                        | 1.3% (n=5)        | 0.8% (n=3) | 9.3% (n=37) | 18.2% (n=72) | 70.5% (n=279) |
| Decreases risk of diabetes and obesity            | 1.5% (n=6)        | 1.0% (n=4) | 15.2% (n=60) | 17.7% (n=70) | 64.6% (n=256) |
| Improves bond between mother and baby             | 1.0% (n=4)        | 0.0% (n=0) | 3.8% (n=15) | 16.5% (n=65) | 78.7% (n=310) |
| Helps preventing allergies, asthma, cancer        | 1.0% (n=4)        | 1.8% (n=7) | 14.6% (n=58) | 16.4% (n=65) | 66.2% (n=262) |
| Has everything baby needs exclusively             | 1.3% (n=5)        | 0.8% (n=3) | 10.2% (n=40) | 14.8% (n=58) | 73.0% (n=287) |

**DISCUSSION**

To our knowledge, present study is the first study of its kind in our region and it aims at discussing breastfeeding in our community, its epidemiology, knowledge and the practices related to it. Moreover, barriers to breastfeeding were questioned in our study. Authors found that more than the third of our study population were breastfeeding exclusively, almost another third were breastfeeding with formula, much lower percentage relied on artificial milk only, and very low number tend to add water/tea with the breast milk. Nonetheless, few percentages of mothers have been using mixed methods.

Many reasons contributed to the success of exclusive breastfeeding including delivery experience, practices related to breastfeeding, and knowledge and perception about breastfeeding. Normal vaginal deliveries that were without delivery assisted devices were followed by more exclusive breastfeeding and mothers that had pleasant experience after delivery were more likely to breastfeed exclusively. This is consistent with a study done in Australia that revealed that women who had a cesarean section experienced a significant delay in initiating breastfeeding compared with women giving birth vaginally, with or without instrumental assistance. Practices contributed significantly, where roaming in, breastfeeding on demand and avoidance of using pacifiers increased the chance of exclusive breastfeeding. Knowledge played a major role in promoting breastfeeding, as we observed that the higher was the breastfeeding education measured by scoring system, the higher was the perceived importance of breastfeeding exclusively and the higher the chance of breastfeeding. A study found that educating women about the benefits of breastfeeding and educating them about efficient techniques to overcome anticipated barriers had positive influence the duration of the breastfeeding.

The positive trend towards breastfeeding didn’t exclude the existence of barriers that preclude breastfeeding. Among mothers that had failed in breastfeeding exclusively not having enough milk was the most common cause. Gatti L, stated in her paper that the insufficient milk supply is a common reason to stop breastfeeding.

Per our paper, the other barriers were being so busy at work/university, unsolvable problems, embarrassment, health problems in the baby or the mother and last but not the least, the lack of social support contributed to the problem. A study done by Dagher et al, showed the hazard for breastfeeding cessation by 6 months was: higher for women who returned to work at any time during the 6 months postpartum versus those who did not return, lower for professional workers, higher among single than married women, higher for every educational category compared to graduate school, and higher for those with no family or friends who breastfeed. Amy brown in a study in 2016 concluded that characteristics...
associated with introversion and anxiety may prevent women from seeking support or challenging negative attitudes of others at this critical time.\(^8\) Another study in South Brazil showed significant correlation between maternal health and risk of breastfeeding cessation.\(^9\)

Authors are aiming from this study to shed light on the barriers that preclude breastfeeding and have recommendations to support breastfeeding. There has been an approach that was applied in AUB which was complex intervention targeting new mothers’ breastfeeding knowledge, skills and social support within a Social Network and Social Support theory framework will increase exclusive breastfeeding rate and duration among women, which showed positive effects in increasing the rate of breastfeeding.\(^10\)

This study may suffer from some limitations including relatively small sample size.

**CONCLUSION**

In conclusion, raising breastfeeding awareness among child bearing aged females is of need. Education should start even before conceiving. Multiple factors affect exclusive breastfeeding. Multidisciplinary approach is essential to support exclusive breastfeeding and solve barriers that preclude exclusive breastfeeding.

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