

## Original Research Article

# Assessment of knowledge and healthcare providers' role in promoting lactation in United Arab Emirates

Sabrina Ait Gacem<sup>1</sup>, Moayad Jamal Al-Shahwan<sup>1\*</sup>, Nageeb A. G. M. Hassan<sup>1</sup>, Fetta Djessas<sup>2</sup>

<sup>1</sup>College of Pharmacy and Health Sciences, Ajman University, Ajman, UAE

<sup>2</sup>Medical Services Department, Ajman University, Ajman, UAE

**Received:** 23 January 2017

**Revised:** 31 January 2017

**Accepted:** 04 March 2017

### \*Correspondence:

Dr. Moayad Jamal Al-Shahwan,

E-mail: moyad76@hotmail.com

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## ABSTRACT

**Background:** This study was performed to assess mothers' knowledge and awareness level regarding maternal medication intake during lactation and health care providers' role in promoting lactation.

**Methods:** This study is a cross-sectional, questionnaire based survey study and a convenient sample of (820) breastfeeding mothers in Ajman and Sharjah, United Arab Emirates (U.A.E.) participated in the study. The results were analyzed using the Statistical Package for the Social Sciences (SPSS) version 20. Descriptive statistics were used to summarize the data concerning the demographic characteristics and breastfeeding knowledge. Categorical variables (such as nationality and educational level) were described by using frequency, percentages, bar chart and pie chart.

**Results:** The current study revealed a (72%) of maternal knowledge compared to (60.4%) four years ago and the most identified encouraging factor for the initiation of lactation stated by the respondents was their own decision followed by family support (58.4%, 39.8% respectively). The health care providers' role was positively improved (58.4%) as observed in the current study compared to (52.1%) four years ago in UAE.

**Conclusions:** An improvement was observed in terms of knowledge among breastfeeding mothers in the UAE compared to previous years as well as healthcare providers' role which was also positively improved. Pharmacists were observed to have a low impact on the initiation of lactation, but on the other hand it was found that they had a significant role in terms of assessing maternal medication safety during lactation.

**Keywords:** Breastfeeding, Healthcare providers, Knowledge, Lactation, Maternal medication, Pharmacists

## INTRODUCTION

There is a widespread agreement of the great benefits of breastfeeding for mothers and infants which were proven with vast evidence as breastfeeding is considered the best source of nutrition for an infant and women who are adequately informed of the benefits provided by breastfeeding are more likely to opt for it.<sup>1,2</sup> By understanding the mother's knowledge and perception regarding breastfeeding and by supporting breastfeeding as the normative way to feed an infant, the healthcare

provider can play a powerful role in improving health outcomes; as it was proven in previous studies that education and encouragement provided by healthcare providers resulted in an enhanced initiation and duration of lactation.<sup>3</sup>

A healthcare provider who believes in the value of breastfeeding should take the time to explore alternative therapies, or if nursing must be interrupted in the rare cases where that are proven, the healthcare provider should encourage the mother to continue expressing her

milk to maintain her supply and return to breastfeeding as soon as possible.<sup>4</sup> The Pharmacists' abilities should be improved to effectively promote widespread breastfeeding as they can be a key component in the promotion and support of breastfeeding due to their frequent interaction with expectant and new parents by providing knowledge on medication safety during lactation and the effects on milk excretion.

In this study, we aimed to assess mothers' knowledge and awareness level regarding maternal medication intake during breastfeeding and evaluate the health care providers' role in promoting lactation.

## METHODS

This cross-sectional, questionnaire based survey study was conducted over the period of November 2015 to April 2016 and it was carried out in Ajman and Sharjah, U.A.E.

A convenient sample was used comprising a total of (820) breastfeeding mothers in Ajman and Sharjah. Participants were from different nationalities and different age groups, regardless of their income or educational level. A self-administered bilingual questionnaire was used as a tool to collect data from the participants. It was distributed to mothers matching with the specified inclusion criteria in female community gatherings and assemblies as well as waiting rooms in some primary health care centers.

### *Inclusion and exclusion criteria*

Lactating mothers willing to participate and understand English or Arabic from any age group (with or without) diseases were enrolled. The breastfeeding mother also must be a resident of Ajman or Sharjah only. Pregnancy, Language barrier and lactating mothers from other emirates were not enrolled in this study.

### *Pre-testing and validation of the questionnaire*

Prior to the study, the questionnaire was validated by subject experts for its content and relevance. Furthermore, it was field-tested several times on a pilot sample of 50 mothers to clarify any ambiguities and to determine the reliability of the questionnaire.

### *Ethical considerations*

Prior to the administration of the questionnaires, the intentions of the survey were explained and participants were encouraged to participate without any undue pressure. Participation was voluntary and all respondents joined in with no incentives and signed the informed consents to take part of this study. The research assured that anonymity would be maintained and ethical principles would be followed. The participant's personal

information will be kept in a closed closet for a certain period of time with full privacy.

## Statistical analysis

The results were analysed using the Product and Service Solutions, initially known as Statistical Package for the Social Sciences (SPSS) version 20. Descriptive statistics were used to summarize the data concerning the demographic characteristics and breastfeeding knowledge. Categorical variables (such as Age groups, nationality and educational level) were described by using frequency, percentages, bar chart and pie chart.

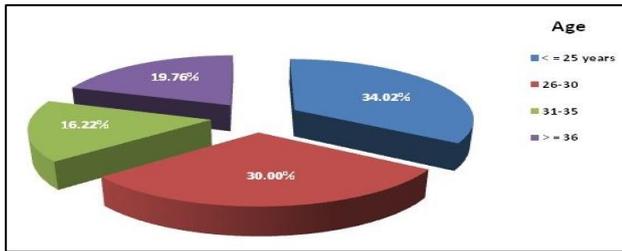
## RESULTS

Eight hundred and fifty 850 questionnaires were distributed to lactating mothers. Eight hundred and twenty 820 were returned making the response rate of 96.5%. The survey was conducted over the period of November 2015 to April 2016. The following figures and tables summarize the general characteristics of the participants and the results interpreted from the questionnaire.

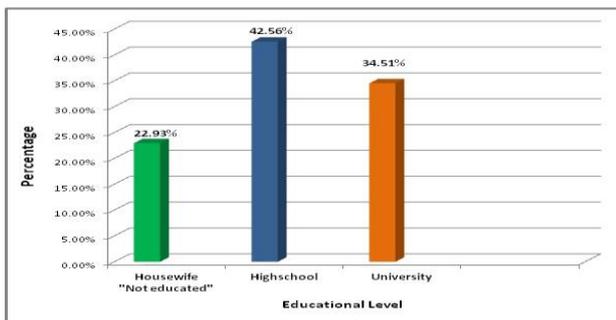
**Table 1: Demographic and social characteristics.**

Variable (n=820)	No. (%) of mothers
<b>Age group</b>	
≤25	279 (34%)
26-30	246 (30%)
31-35	133 (16.2%)
≥ 36	162 (19.8%)
<b>Nationality</b>	
UAE	263 (32.1%)
Arabs	356 (43.4%)
Asian and other	201 (24.5%)
<b>Educational level</b>	
Housewife	188 (22.9%)
High school	349 (42.6%)
University	283 (34.5%)
<b>Family income</b>	
Low	34 (4.1%)
Medium	717 (87.4%)
High	69 (8.4%)
<b>How many children do you have</b>	
<3	490 (59.8%)
≥3	330 (40.2%)
<b>How many children did you breastfeed</b>	
<3	505(61.6%)
≥3	315(38.4%)
<b>Do you work (employee)</b>	
Yes	309 (37.7%)
No	511 (62.3%)
<b>Do you smoke</b>	
Yes	15 (1.8%)
No	805 (98.2%)

It was observed that the majority of respondents were Arabs and ≤25 years old from medium family income and most of them are non-smokers (Table 1).



**Figure 1: Distribution of participants according to age group.**



**Figure 2: Distribution of participants according to educational level.**

**Table 2: Breastfeeding mother’s knowledge and awareness and healthcare providers’ role.**

Knowledge and healthcare providers’ role	No. (%) of mothers
<b>Who did encourage you to breastfeed?</b>	
Family	326 (39.8%)
Own decision	479 (58.4%)
Pharmacist	54 (6.6%)
Lactation consultant	191 (23.3%)
Doctor	215 (26.2%)
<b>Do you think that some medications can be excreted in breast milk and affect the breastfeeding baby?</b>	
Yes	590 (72%)
No	230 (28%)
<b>Are you aware of the drugs which should be avoided during lactation?</b>	
Yes	334 (40.7%)
No	486 (59.3%)
<b>Have you ever gone to a pharmacy to get help regarding a lactation condition?</b>	
Yes	465 (56.7%)
No	355 (43.3%)
<b>Did the pharmacist ask you if you’re lactating before giving the medications?</b>	
Yes	634 (77.3%)
No	186 (22.7%)

The results of the distribution of participants according to age group showed that (34%) of respondents were less than 25 years old, (30%) belong to the age group (26-30), (16.2%) belong to the age group (31-35) and (19.8%) were less than 36 (Figure 1). The results also revealed that (42.6%) of respondents had a high school level, (34.5%) had a university level and (22.9%) were housewives (Figure 2). The results in Figure 2 show that (42.6%) of respondents had a high school level, (34.5%) had a university level and (22.9%) were housewives.

In terms of knowledge, it was revealed by this study that the majority of participants showed high knowledge towards breastfeeding. Five hundred and ninety 590 (72%) believed that taking some medications might affect their breastfeeding baby and (56.7%) of them went to a pharmacy to get help regarding lactation issues (Table 2).

**DISCUSSION**

The results regarding the awareness level of mothers on the effect of medications and its availability in breast milk showed that (72%) of breastfeeding mothers enrolled in this study believed that some medications can be excreted in their breast milk and some might affect their breastfeeding baby. The current study results were positively improved and similar to the results observed four years ago in a knowledge, attitudes, and practices study (KAP study) held in Ajman U.A.E. in 2012 which revealed that 60.4% of participants agreed that drugs can be excreted in breast milk which reflects an improvement in terms of knowledge among breastfeeding mothers in UAE compared to previous years.<sup>5</sup> Present study also showed that (40.7%) of respondents reported that they were advised and informed on breastfeeding and were aware of the medications which should be avoided during lactation which was higher than a result observed by a KAP study held in India in 2010 as it was reported that only (17%) received advice from health care workers while the majority of the mothers (52%) did not receive any advice on breastfeeding.<sup>6,7</sup>

In the current study when respondents were asked to identify what encouraged them to initiate lactation the following results were interpreted: (58.4%) reported that it was their own decision to initiate it, (39.8%) mentioned family encouragement as the second factor and (26.2%) reported the doctor’s role as the third factor, (23.3%) lactation consultants and (6.6%) for pharmacists.

The health care providers’ role in the initiation of lactation represented a total of (56.1%) in the current study, which is similar to the results observed four years ago in the KAP study held in Ajman U.A.E. in 2012 as doctors and healthcare professionals’ support represented at that time (52.1%) which is similar to our findings of (56.1%) with some improvement. On the other hand, a different result was interpreted in a recent study on the practices of breastfeeding among Arab mothers living in the United States held in South Eastern Michigan United

States of America (USA) in 2015 which revealed that only (35.4%) of Arab mothers living in USA have been influenced by health care professionals to initiate breastfeeding.<sup>8</sup>

Present study results revealed that respondent's (own decision) to initiate breastfeeding represented the highest percentage (58.4%) followed by the family encouragement (39.8%) as a second factor and this could be explained as most of the respondents were educated as the results showed that: only (22.9%) of respondents were not educated while the educated respondents represented a total of (77.1%=42.6% high school, 34.5% university) and these results were consistent with the results of the study that was carried out in USA in 2015 which revealed that the primary reason cited for initiating breastfeeding was based on their own decision because of its health benefits for the baby which was parallel to present findings as it is the main influencing factor.<sup>8</sup> This could be for the same reason stated previously as in their study held in USA the majority of participants were also educated as well, as (72.2%) of them had a university level and 22.4% had high school level or less which would explain the main influence to initiate lactation as for self-reading and education to make their own decision to breastfeed.

The influence of the family was interestingly very similar as the study held in USA which revealed that (39.2%) of Arab mothers reported that their family support (mother, sister and/or husband) had influenced their decision to breastfeed, which was consistent with present study results that showed (39.8%) influence of family on the decision to breastfeed.

Although present study revealed that only (6.6%) of mothers said that pharmacists influenced their decision regarding the initiation of lactation, but on the other hand it was also revealed that pharmacists played a significant role in terms of assuring maternal medication safety during lactation as the results showed that (77.3%) of respondents recalled that they were asked by the pharmacist if they were lactating before dispensing the medications and pharmacies are frequently visited by mothers to seek help or to be provided with lactating equipments as it was reported that (56.7%) of respondents have visited a pharmacy for such a purpose.

### **Limitations**

The limitations in the present study were that a self-administered questionnaire was used, instead of the face to face interviews and it was conducted only in two emirates Ajman and Sharjah.

### **CONCLUSION**

In conclusion, an improvement was observed in terms of knowledge as well as the healthcare providers' role

compared to previous years in the UAE. It was also revealed that the most identified encouraging factor for the initiation of lactation was their own decision followed by family support. On one hand, pharmacists were observed to have a low impact on the initiation of lactation, but on the other hand it was found that they had a significant role in terms of assessing maternal medication safety during lactation. The current study results could be used in developing educational programs and initiating campaigns that will enhance the breastfeeding knowledge among mothers.

### **ACKNOWLEDGEMENTS**

Authors would like to thank Mr. Ammar Jairoun and Mrs. Sabaa Al-himiari for their precious help and for their assistance and valuable remarks.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: The study was approved by the Institutional Ethics Committee*

### **REFERENCES**

1. Chingman K, Susan C. Factors influencing the practice of exclusive breastfeeding among Hong Kong Chinese women. *J Clin Nurs.* 2010;19(17):2434-45.
2. Marsha W. Breastfeeding management for the clinician: Jones and Bartlett learning using the evidence beyond 48-72 hours infant challenges. 2nd ed. Sudbury, MA; 2009:381.
3. Guise JM, Palda V, Westhoff C. The effectiveness of primary care-based interventions to promote breastfeeding: Systematic evidence review and meta-analysis for the US Preventive Services Task Force. *Ann Fam Med.* 2003;1:70-8.
4. DiGirolamo AM, Grummer LM, Fein SB. Do perceived attitudes of physicians and hospital staff affect breastfeeding decisions. *Birth.* 2003;30:94-100.
5. Syed A, Satti M. Knowledge, attitude and practice study on breastfeeding among mothers in Ajman. *UAE Gulf Med J.* 2012;1:200-6.
6. Maheswari E, Vishnu BB, Mohamed AP. Knowledge, attitude and practice of breastfeeding among postnatal mothers. *Curr Pediatr Res.* 2010;14:119-24.
7. Su LL, Chong YS, Chan YH. Antenatal education and postnatal support strategies for improving rates of exclusive breastfeeding. *BMJ.* 2007;2:335-596.
8. Afnan H, Cowdery J, Karshin C. Practices of breastfeeding among Arab mothers in United States. *World J Med Sci.* 2015;12:183-8.

**Cite this article as:** Gacem SA, Al-Shahwan MJ, Hassan NAGM, Djessas F. Assessment of knowledge and healthcare providers' role in promoting lactation in United Arab Emirates. *Int J Res Med Sci* 2017;5:1510-3.