

Knowledge, attitude and practice study on breastfeeding among mothers in Ajman, UAE

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ABSTRACT

Objective: Assess the knowledge, attitude and practice of breastfeeding among women attending the Gulf Medical College Hospital and Research Center in Ajman, UAE

Materials and Methods: A cross sectional study was conducted between February 2012 and April 2012. The study included 332 mothers who had at least one child under 5 years of age and who attended GMCHRC during the study period. A validated, pilot-tested, self-administered questionnaire was used which included statements dealing with information on knowledge, attitude and practice of participants with regard to breast feeding in addition to demographic data. To assess knowledge and attitudes of participants, the percentage of correct responses for each question was considered. Inadequate knowledge [gap in the knowledge] or attitude was identified if < 60% of participants had correct response for each question. Data were analyzed using the SPSS software version 19. Chi square test was done to find the significance of association between variables with less than 0.05 level of significance.

Results: Adequate knowledge about most of breast feeding facts and benefits was identified, except for the statements that lactation helps losing weight that was gained during pregnancy, the hormones released during breast feeding help in bringing back the uterus to its normal physiology after child birth, and the ideal duration of exclusive breastfeeding is six months. More than 60% of the participants responded positive to all attitudes questions except the one on their willingness to attend classes for education on breast feeding [77.9% of the participants did not want to attend]. Only 46% of the participants exclusively breastfed their babies in the first six months. Higher proportion of women who had received antenatal education during their pregnancy exclusively breast fed their babies, but the association was not statistically significant. A higher frequency of exclusive breastfeeding was observed with low parity. Higher frequency of breast feeding was noticed among women who had not experienced any difficulties in breastfeeding ($P > 0.05$) and who had not sought medical advice on problems during breast feeding ($p < 0.05$). Family and friends were identified to be the main source of information with regard to breastfeeding (reported by 74.7%).

Conclusion: Participants had adequate knowledge with regard to the benefits of breast feeding and those who received antenatal education practiced exclusive breast feeding. For the majority the source of information was family and friends.

Key words: breast feeding, knowledge, attitude, UAE

INTRODUCTION

Breast feeding is an instinctual practice instilled within women of the past, present and hopefully in generations to come. The benefits of breastfeeding are numerous. However, many women do not choose to practice breastfeeding due to lack of knowledge, inability to do so and/or personal choice¹. Knowledge on breastfeeding provides the framework for proper development of the child and makes it a healthy process. Women who are adequately informed of the benefits

provided by breastfeeding are more likely to opt for it².

Attitude towards nursing is an essential component in determining the mode of feeding. A positive outlook towards breastfeeding will promote methods which are beneficial to both mother and child. It will not only ensure the physical wellbeing of the child but also helps cultivate a strong emotional bond between them³. Although experts believe that breast milk is the best nutritional choice for infants⁴,

breastfeeding may not be possible for all women. For many women, the decision to breastfeed or formula feed is based on their comfort level, lifestyle, and specific medical considerations that they might have⁵.

World Health Organization recommends that exclusive breastfeeding should continue for six months⁶. It defines exclusive breastfeeding as the practice of feeding only breast milk (including expressed breast milk) and allows the baby to receive vitamins, minerals or medicine. Water, breast milk substitutes, other liquids and solid foods are excluded⁷. Nursing of infants provides an extensive array of positive outcomes for the mothers. This includes contraceptive properties which provide a natural spacing between successive births; it acts as a natural family planning tool⁸. There also has been an affirmative association with decreased incidence of breast cancer. Furthermore it aids women in attaining their pre-pregnancy weight. Also, oxytocin, a critical hormone released during nursing causes the involution of the uterus⁹.

Normally, infants are breast fed exclusively for the first six months of life⁵. Breast milk provides optimum nutrition and confers other essential properties associated with immunity, maturation, and intelligence. The wide spectrum of immunological protection provided ranges variably from anti-infective properties, anti-allergic to protection against various infections⁹. Breast milk also provides the vital components for maturation of GIT and aids in absorption⁵. Numerous studies have been conducted to elucidate a relationship between intelligence and breastfed babies; these studies concluded positive association with neurological development and breast milk exposure¹⁰. Certain proteins that make up a fraction of the milk are known to produce sleep inducing effect; furthermore, hormones such as prolactin and oxytocin are known to be calming agents¹¹. There is also an element of assistance to the society through decreased health care costs as the incidence of ill health in nursed newborns is reduced⁵.

MATERIALS AND METHODS

This cross-sectional study was conducted among mothers who had at least one child under the age of 5 years who visited the Outpatient Departments of OBG and Pediatrics. According to previous KAP studies that focused on breastfeeding, the percentage of women who had knowledge was considered for estimating the sample size. The sample size derived was 336 mothers with children under five years old and then adjusted to 350 mothers for convenience¹²⁻¹⁴. A self-administered questionnaire, prepared by the research team, and validated by two pediatrics and one public health specialists, was used as a tool for data collection. The questionnaire included in addition to demographic data, information on knowledge [12 questions about facts regarding breastfeeding], attitude [five attitudes questions] and practice of participants with regard to breast feeding. For the practice domain, inquiry about the participants breast feeding practice with the last child and whether the breast feeding in the first six months was exclusive or not. The WHO definition of exclusive breast feeding was used as a criterion to categorize groups⁷. History of difficulties experienced by women in breast feeding of the last baby was also inquired about. A pilot study was conducted amongst 10 mothers comparable to those in the study population, to test for feasibility of the study and to check for the understanding of the data collection tool. Modification of the questionnaire was done accordingly. After obtaining approval from the hospital administration a setting with little distraction was arranged for data collection. The study was approved by the Ethics Review Committee of GMU. The objectives were explained to the participants who enrolled only after getting their informed consent. Data collection was done by female members of the research team on account of the sensitive nature of some of the questions. The research team ensured confidentiality of the information and anonymity of the participant. Data from the questionnaires were entered onto a Microsoft Excel spreadsheet and analyzed using the

Statistical Package for the Social Sciences (SPSS) program version 19. The results were then presented in frequency tables, figures and texts. Chi-square test was used to test the significance of association between variables. The Research Division of GMU helped the research team in data analysis

To assess knowledge and attitudes of participants, the percentage of correct responses for each question was considered. If < 60% of participants had correct response for any question, it was considered as inadequate knowledge [gap in the knowledge] or negative attitude.

RESULTS

The study included 332 participants. The distribution of participants by education level showed that 79.1% of the mothers had college or higher level of education, with 12.3% having completed only secondary school.

The percentage of women who had completed only primary school was 6.4%, while those with less than primary education, amounting to 2.1 % of the participants, were provided assistance by the researchers to complete the survey. The participants' knowledge on facts regarding breast feeding can be seen in Table 1.

Table 1. The participants' knowledge on facts regarding breastfeeding

Knowledge	Correct Response		Incorrect Response		No. of participants who did not answer
	No.	(%)	No.	(%)	
Protection for baby	305	92.7	24	7.3	3
Ideal food for the baby	230	69.7	100	30.3	2
Promotes mother-baby relation	295	89.7	34	10.3	3
Lactation helps lose weight gained during pregnancy	189	57.6	139	42.4	4
Hormones released during breast feeding slows the recovery of the uterus	99	30.3	228	69.7	5
Protection against cancer	221	67.4	107	32.6	4
Breast feeding should be stopped after 6 months	237	72.5	90	27.5	5
Drugs can be excreted in breast milk	198	60.4	130	39.6	4
Smoking can affect breastfeeding	289	88.1	39	11.9	4
Alcohol can affect breastfeeding	294	89.4	35	10.6	3
Duration of exclusive breastfeeding	56	16.9	275	83.1	1
Ideal time for weaning	273	83.2	55	16.8	4

Table 2. The participants' attitudes towards breastfeeding

Attitude	YES		NO		Number of participants who did not answer
	No.	(%)	No.	(%)	
Plan of feed before birth	226	68.1	106	31.9	0
Attended classes on breastfeeding	73	22.1	257	77.9	2
Plan on breast feeding in the future	301	95.3	15	4.7	16
Spread the benefits of breastfeeding	317	95.8	14	4.2	1
Take part in a breastfeeding campaign	232	70.5	97	29.5	3

Table 3. Breast feeding practices of the participants*

Practice	Number of participants	Percentage
Exclusively breastfed the 1 st 6 months of age	152	46
Not exclusively breastfed the 1 st 6 months of age	179	54

*Missing information for one participant

Table 4. Distribution of the participants by antenatal education and exclusive breastfeeding practices in the first six months

Education		Exclusively breastfed		Not exclusively breastfed		Total [100%]	p value
		Number	Percentage	Number	Percentage		
Antenatal education	Yes	35	48	38	52	73	0.647
	No	115	45	141	55	256	
Total		150		179		329	

*Missing information for 3 participants

Table 5. Distribution of participants by exclusive breastfeeding practice in the first 6 months and the parity

No: of children	Exclusively breastfed		Not exclusively breastfed		Total [100%]
	Number	Percentage	Number	Percentage	
1-2	97	48	106	52	203
3-4	36	40	53	60	89
≥5	10	45	12	55	22
Total	143		171		314*

*Missing information for 19 participants

Table 6. The relationships between breast feeding practice and history of having difficulties in breastfeeding and seeking of medical advice on problems during breast feeding

Difficulties in breastfeeding		Breast fed before				Total No [100%]	p value
		Yes		No			
		No.	%	No.	%		
Experience any difficulty in breastfeeding	Yes	57	58	41	42	98	NS
	No	149	66	76	34	225	
Total		206	64	117	36	323*	
Sought medical advice on problems during breast feeding	Yes	52	54	45	46	97	≤0.01
	No	153	69	70	31	223	
Total		205		115		320**	

Table 7. Distribution of the participants by their main sources of information on breastfeeding

Sources	Number of participants	Percentage (%)
Media(internet , TV etc)	168	50.6
Family and friends	248	74.7
Doctors and healthcare professionals	173	52.1
Lectures	59	17.8

Table 1 shows that most of the participants had adequate knowledge about facts and benefits of breast feeding. Inadequate knowledge was found regarding the facts that lactation helps losing weight gained during pregnancy, the hormones released during breast feeding help in bringing back the uterus to its normal physiology after child birth, and the ideal duration of exclusive breastfeeding is six months. The participants' attitude towards breastfeeding is shown in Table 2.

Table 2 shows adequate proportion of the participants who showed a positive attitude towards breastfeeding with the exception of their attendance of classes on breast feeding [77.9% of the participants did not want to attend]. The participants' breast feeding practices are shown in Table 3.

Table 3 shows that the majority, i.e. 54% of the participants, did not exclusively breastfeed their babies. The distribution of the participants by antenatal education and exclusive breastfeeding practices can be seen in Table 4.

Higher frequency of exclusive breastfeeding was practiced by women who received antenatal education during their pregnancy, but the association was not statistically significant.

Table 5 shows higher frequency of exclusive breastfeeding with seen in mothers with low parity

Higher frequency of breast feeding was noticed among women who had not experienced any difficulties in breastfeeding ($P > 0.05$) and who had not sought medical advice on problems during breast feeding ($p < 0.05$).

Table 7 shows that the primary source of information on breast feeding for about 75% of the participants was the family and friends, followed by doctors and health care professionals (about 52%).

DISCUSSION

This study was directed to assess the knowledge, attitude and practice of breastfeeding among mothers in Ajman. Exclusive breastfeeding has been recommended to be the sole source of

nutrition and energy for infants up to six months of age¹⁵, and although it is becoming an increasingly common practice globally, only 38% of children are exclusively breastfed in the first six months¹². In 2011, Al Wasl Hospital in Dubai was declared to be a baby friendly hospital by the UNICEF. This facilitated the increase in percentage of exclusive breastfeeding at birth to 92.2% and breastfeeding at the age of three months to 52.9%¹⁶.

This study shows that 54% of the participants did not exclusively breastfeed their babies in the first six months of age. This can be explained by lack of knowledge regarding the required time for baby to be exclusively breastfed, which was noticed with more than 83% of the mothers. Similarly, a KAP study in Somalia concluded that exclusive breastfeeding is not practiced commonly and there seemed to be a lack of accurate knowledge on complementary feeding practices¹⁷.

This study provides evidence that antenatal education is associated with better breast feeding practice. According to a KAP study in India, the majority of the mothers (52%) did not receive any advice on breastfeeding during antenatal period and only 17% received advice from health care workers¹⁸⁻¹⁹.

With regard to attitude, although most of the participants had a positive attitude towards breast feeding, many mothers were unwilling to attend antenatal classes on breastfeeding. We need to increase awareness of women regarding the importance of breast feeding. The role of doctors and healthcare professionals to provide information and educate patients regarding breastfeeding needs to be increased to ensure correct breast feeding knowledge and practices.

CONCLUSION

Inadequate knowledge was found regarding the facts that lactation helps losing weight gained during pregnancy, the hormones released during breast feeding help in bringing back the uterus to its normal physiology after child birth, and

the duration of exclusive breastfeeding.

Assessment of attitude demonstrated that most mothers showed a positive approach towards breastfeeding. However, 77.9% of the participants showed negative attitude by not attending classes on breastfeeding.

Assessment of practice showed that 54% of participants did not exclusively breastfeed. Variables such as parity, antenatal education, having problems in breastfeeding were identified to have an effect on the breast feeding practices of the participating mothers.

The study highlights the need for initiating a campaign that aims to educate the mothers and enhance the knowledge of breastfeeding.

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