



KNOWLEDGE, ATTITUDE AND PRACTICE OF BREASTFEEDING AMONG MOTHERS IN HAIL AND ALJOUF CITIES, NORTHWESTERN SAUDI ARABIA.

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ABSTRACT

Background: inappropriate practice or limited awareness of breastfeeding may lead to undesirable consequences. The aim of this study was to evaluate practice, knowledge and attitude to breastfeeding and to assess factors associated with breastfeeding among mothers in Hail and Aljouf. **Methods:** A cross sectional study using a questionnaire was carried out between 26 October 2016 and 1 April 2017. A total of 500 women with children since birth up to 10 years of age from two different city in the north of Saudi Arabia were randomly selected. Knowledge and attitude towards breastfeeding was collected

by a questionnaire. **Results:** A total of 500 women whose education was mainly university (64.1%), High school (18.8%), above university (6.4%), intermediate (5.6%), uneducated (3%) and primary (2%) were included in the study. Most of the mothers (85.2%) n= 415 aware about breast-feeding were (14.8%) n=72 are not aware about it. **Conclusion:** This study revealed that there has been a marked increase in the awareness and the attitude of breast-feeding in Hail and Aljouf cities.

KEYWORDS: Breastfeeding; Knowledge, Practice, Attitude, Hail, Aljouf, Saudi Arabia.

INTRODUCTION

Breastfeeding is the nutrition of babies with mother's milk either directly from the breast or pumping out to a bottle.^[1] It is optimal or best choice for feeding almost of all infants. WHO and UNICEF recommend the initiation of breastfeeding within the first hour of birth and continued as often and as much as the baby wants.^{[5][6]} During the first few weeks of life

newborn typically express demand for feeding every two to three hours, the duration of a feeding is usually ten to fifteen minutes on each breast, While in the older children feed less often.^[7] Mothers should supply their infants for at least the first six months of life, after that initiation to give them some food with continued breastfeeding until one to two years.^[9] There are some cases when it's better not to breastfeed.^[3] During these two years of child's life, breastfeeding lowers morbidity and mortality, reduces the risk of chronic diseases and helping to control health care costs.^{[8][2]} Also, it provides all the necessary nutrients, growth factors and immunological components which the healthy term infant needs.^[10] Virtually all mothers can breastfeed, provided they have accurate information, and the support of their family, the health care system and society at large.^[2] Factors that might influence breastfeeding include race, maternal age, maternal employment, level of education of parents, socio-economic status, insufficient milk supply, infant health problems, maternal obesity, smoking, parity, method of delivery, maternal interest and other related factors.^[12] Numerous barriers to breastfeeding are lack of knowledge, social norms, poor family and social support, embarrassment, lactation problems, employment and child care and barriers related to health services.^[13] A study of a British researcher interested in the study the level of health in the Gulf States that the rate of breastfeeding in Saudi Arabia, not to exceed 12% and 80% of children, their mothers stop breast feeding them of the first month. Breastfeeding offers many benefits to nutrients to help infants to grow into strong and healthy toddlers. Some of the nutrients in breast milk also help protect infants against some common childhood illnesses and infections. It may also help maternal health. Certain types of cancer may occur less often in mothers who have breastfed their babies.^[3] Exclusive breastfeeding is defined as feeding the infant only breast milk, with no supplemental liquids or solids except for liquid medicine and vitamin/mineral supplements.^[11] The mother's milk is also one of the important sources of energy and nutrients for children aged between 6 months and 23 months. It can provide half of the energy needs or more than that for children aged 6-12 months, and one-third of the energy needs of children aged 12-24 months. The mother's milk as well as an important source of energy and nutrients during infection, as it limits the death rates of children suffering from malnutrition.^{[12][13]} In an estimated 35% of all deaths of children under five years of age, under-nutrition is the underlying cause of death. Including underweight, suboptimal breastfeeding, and vitamin and mineral deficiencies. The proportion of underweight children in developing countries declined from 28% to 17% between 1990 and 2011. Although this rate of progress is close to the rate required to meet the relevant target, significant variations persist between and within regions.^[14] Although, the practice of breast-

feeding is influenced by various social, cultural and religious beliefs, maternal infant feeding attitude has been shown to be a stronger independent predictor of breastfeeding initiation. In addition, maternal positive attitudes toward breastfeeding are associated with continuing to be breastfeeding longer and have a greater chance of success.^[1] On contrary, negative attitudes of women toward breastfeeding is considered to be a major barrier to initiate and continue to breastfeeding While, a number of studies have assessed knowledge, attitude and practice of breastfeeding in different parts of the world; such studies are limited among Saudi mothers. Thus the present study was developed to examine the infant feeding practices, knowledge and attitude towards breast-feeding among Saudi mother in Hail and Aljouf cities.

METHODS

2.1. Study setting and population

This was a pilot cross-sectional conducted among Hail and Aljouf Districts, northwestern Saudi Arabia during the months of October to April 2016 - 2017. The target group of the study was mothers at Hail and Aljouf cities, who had at least one child aged ten years or younger at the time of the study with emphasis on their experience with the last child. The sample size of the study was 500 mothers within the period of fertility.

2.2. Study instrument

Questionnaire was used as screening tool used in the present study was prepared. Besides personal and socioeconomic data, the resulting self-administered questionnaire included questions addressing knowledge (importance of breast milk and its constituents, preference of breast milk over artificial milk, general knowledge of breastfeeding benefits), questions addressing attitude (general attitude towards adoption of breast feeding, reasons for adopting breastfeeding, reasons for stopping breastfeeding, questions addressing practice (time of commencement of breastfeeding after delivery, duration of breastfeeding, difficulties in initiating breastfeeding, age at which breastfeeding was stopped and attending classes related to breastfeeding during pregnancy).

2.3. Ethical Approval

The study received the approval of Ethical Committee, College of medicine, Hail University, KSA.

2.4. Data collection

Five hundred questionnaires were collected by paper and website. We distribute the questionnaire to all the mothers who matched the criteria of having one child or more below the age of ten years, with clear understanding of the voluntarily basis of their participation. Their knowledge, attitude and practice of breastfeeding were assessed from their responses.

2.5. Analysis Data

Data entry and statistical analysis were performed using the Statistical Package for Social Science (SPSS) program (version 22), for windows. Frequency and range verifications were carried out initially to detect errors in the data entry. Then detected errors were corrected by reverifying the original data forms. Descriptive analysis approach was used to determine the socio-demographic factors. Knowledge about breastfeeding assessment included 6 questions. A score of 1 was given to the right response and 0 to the false response. For each subject, a maximum score of 6 could be calculated. The knowledge level score was categorized into 2 levels indicated by poor knowledge (0-3) and Good knowledge (4-6). Thus, the higher the score is, the higher is the level of knowledge among medical students. To evaluate mothers' awareness we had resource to the question "Do you have previous breastfeeding information?" and we used the question "Do you think breastfeeding is important?" to evaluate the attitude of respondents regard breastfeeding.

RESULTS

Demographics of the studied subjects

Table 1: Demographic characteristics of surveyed mothers, Hail city (n=500)

		Frequency	Percent (%)
Age	14-24	65	13,0
	25-34	274	54,8
	35-45	156	31,2
	>45	5	1,0
	Total	500	100,0
	Educational level		
	Uneducated	15	3,0
	primary	10	2,0
	Intermediate	28	5,6
	High School	94	18,8
	University	320	64,1
	Above University	32	6,4
	Total	499	100,0
Function			

	Housewife	211	42,5
	Student	47	9,5
	employee	236	47,5
	Other	3	0,6
	Total	497	100,0
Number of children			
	1	288	57,9
	2	153	30,8
	>2	56	11,3
	Total	497	100,0

Table 1 shows the demographics of the study sample. Subjects were 500 mothers from Hail City (KSA). Most respondents (n=274, 54,8%) were aged between 25 and 34 years old, while almost third of participants (31,2%) were between 35 and 45 years old, while 13% were in the 14-24 years old range and 1% were aged more than 45 years old (Figure 1). According to educational level, the majority (64,1%) had university degree (Figure 2). Almost half of participants (47,5%) were employees, while 42,5% were housewives (Figure 3). The majority of surveyed mothers (n=288, 57,9%) had one child, while near the third (30,8%) had 2 children, while 11,3% had more than 2 children (Figure 4).

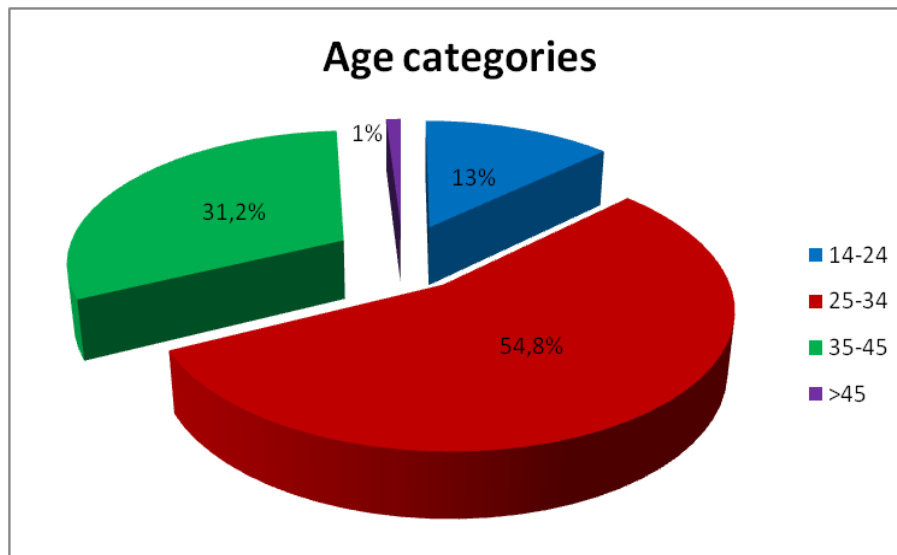


Figure 1: Distribution of sample by age categories.

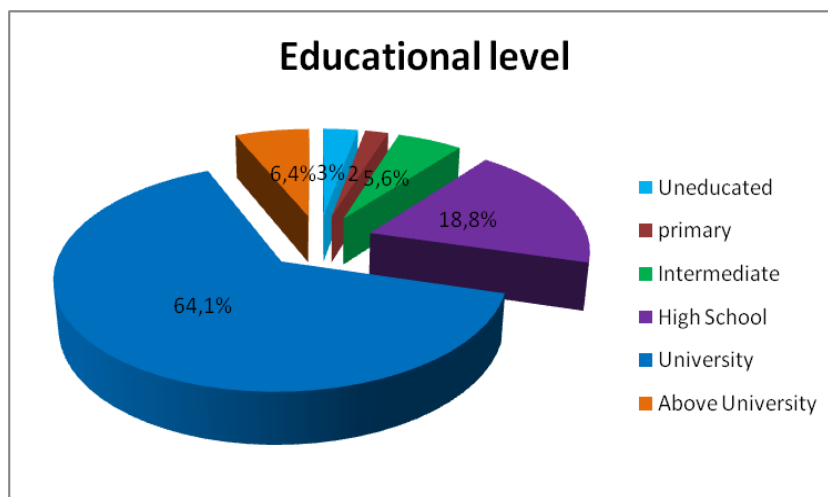


Figure 2: Distribution of sample by educational level.

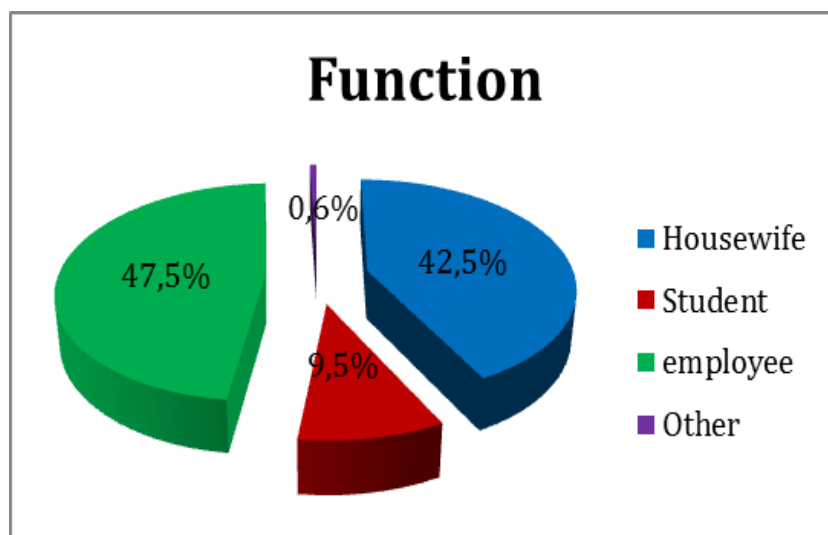


Figure 3: Distribution of sample by function.

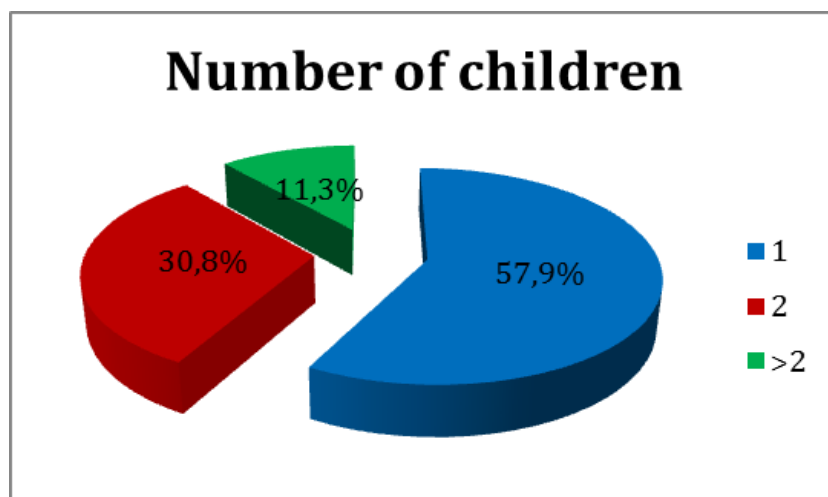


Figure 4: Distribution of sample by number of children.

Knowledge about breastfeeding

The results of the knowledge items about breastfeeding are presented in table 2. Out of participants, less than the quarter (24,5%) knew that the baby should be breastfed the first hour after birth, while the rest of mothers thought that newborn should be fed after the first hour. Only 12,8% correctly answered that they should breastfeed more than 8 times per day, also only a proportion of 41% agreed that breastfeeding should take between 10 to 15 min at least, while most of them believed that a breastfeeding duration less than 10 min would be sufficient. A minority of 11,9% have breastfed their children between 1 to 2 years, while almost the three-quarter (71,7%) have breastfed their infant less than 6 months; Furthermore, the great majority have added artificial food before one year. Four hundred and fifty two (91,3%) participants agreed that breastfeeding is benefic for both mother and child. Overall, knowledge about breastfeeding revealed that only 5,8% had an adequate level of knowledge, while the vast majority (94,2%) presented a poor level of knowledge about breastfeeding (Figure 5).

Table 2 Knowledge about breastfeeding

		Frequency	Percent (%)
When was the first breastfeeding?	The first hour after birth	104	24,5
	1-24 hours	155	36,5
	After more than 24 hours	166	39,1
	Total	425	100,0
How many times a day do you breastfeed?			
	Less than 4 times	175	41,6
	4-8 times	192	45,6
	>8 times	54	12,8
	Total	421	100,0
What is the period of breastfeeding?			
	Less than 10 mn	207	49,3
	10-15 mn	172	41,0
	>15 mn	41	9,8
	Total	420	100,0
How long did you breastfeed?			
	Less than 6 months	302	71,7
	6 months - 1 year	64	15,2
	1 - 2 years	50	11,9
	>2 years	5	1,2

	Total	421	100,0
When did you add artificial food?			
	Before 3 months	281	60,6
	3-6 months	91	19,6
	6 months - 1 year	71	15,3
	>= 1 year	21	4,5
	Total	464	100,0
You think breastfeeding is important:			
	Only for child	36	7,3
	Only for mother	7	1,4
	For both	452	91,3
	Total	495	100,0

Table 3: Level of knowledge of mothers about breastfeeding

Level of knowledge	Frequency	Percent (%)
Poor	471	94,2
Good	29	5,8
Total	500	100,0



Figure 5: Distribution of sample by level of knowledge about breastfeeding

Awareness about breastfeeding

Table 4: Awareness about breastfeeding

		Frequency	Percent (%)
Do you have previous breastfeeding information?			
	Yes	415	85,2
	No	72	14,8
	Total	487	100,0
If yes, What is your source of information?			
	Social Media	103	25,8
	During the study	68	17,0
	Society	170	42,5
	Medical staff	54	13,5
	Other	5	1,3
	Total	400	100,0

Table 4 shows the awareness on breastfeeding among the surveyed mothers: out of 400 participants, 85,2% of women had previous breastfeeding information compared to 14,8% that reported not having information about the health benefits of breastfeeding. The frequent sources of information were the society (42,5%), social media (25,8%), while only 17% of participants acquired information during the study or through medical staff (Figure 6).

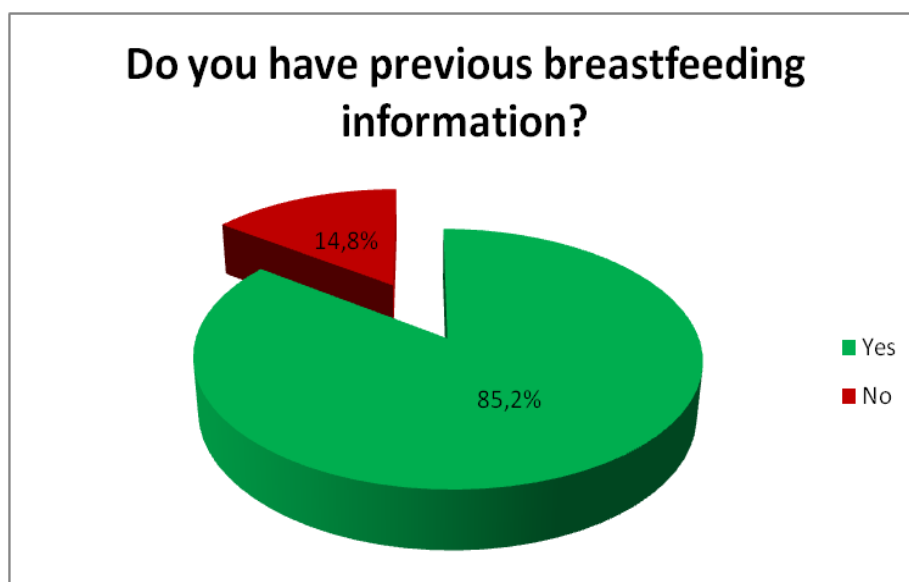
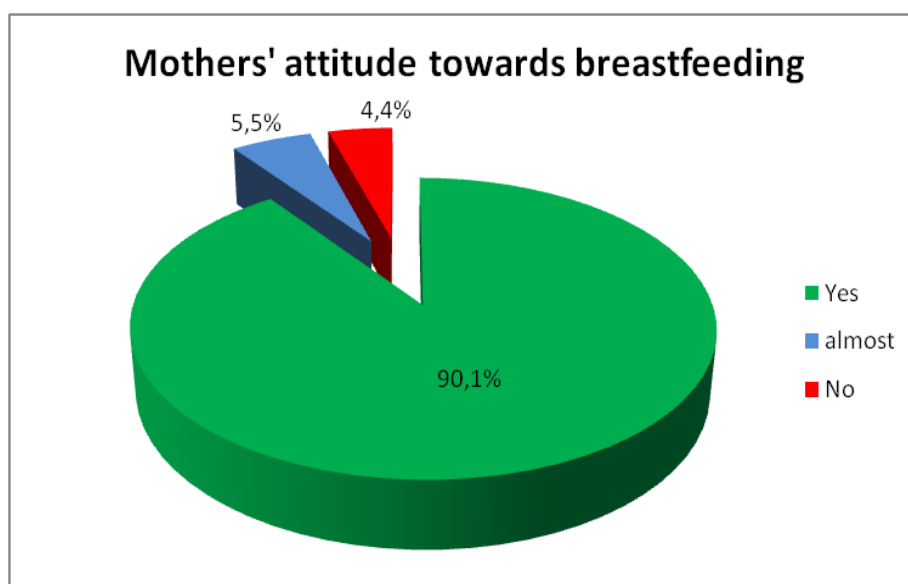


Figure 6: Distribution of sample by having information about breastfeeding.

Attitude towards breastfeeding**Table 5: Attitude of mothers regard breastfeeding**

Do you think breastfeeding is important?	Frequency	Percent (%)
Yes	446	90,1
almost	27	5,5
No	22	4,4
Total	495	100,0

Concerning attitude of the mothers regard breastfeeding, the importance of breastfeeding has been asserted by the vast majority of mothers (90,1%), while 4,4% of Saudi women did not shown an interest toward breastfeeding (Figure 7).

**Figure 7: Distribution of sample by attitude of mothers regard breastfeeding.**

The World Health Organization recommends that breastfeeding be initiated within one hour of birth. Exclusive breastfeeding for the first six months of life improves the growth, health and survival status of newborns and plays a role in determining the optimal health and development of infants.^[16,17] This study show that most of participants age group was 25-34 n=274 (54.8%), then 35-45 age group was n=156 (31.2%). 14-24 group age was n=65 (13%) after that more than 45 age group n=5(1%), shows most of women breast feeding 320 (64.1%) have university education, followed by 94 (18.8%) have high school education level. Above university were 32(6.4%), then intermediate 28 (5.6%) after that illiterate 15(3%). Few primary (2%). The number of women who having one child were 288 (57%) then who have only two children were 153 of participant (30.8%), women breast feeding have more than 2 children were 56 (11.3%).

The occupation of participants most was 236 (47.5%) employee follows by 211(47%) house wife, after that was student 47 (9.5%), Other 3 (0.6%).

In this study shows the number of participants who had first breast feeding was more than 24 hours 166 (139.1%), 155 (36.5%) were between 1 hour to 24 hours was the first time then the first hour after the birth of baby was 104 (24.5%). Most participant breast feed their babies 4 to 8 times was 192 (45.6%) then less than 4 times was 175 (41.6%) and More than 8 times was 54 (12.8%).

Most participants breast feed their babies less than 10 minutes were 207 (49.3%) but another were breast feeding between 10 to 15 minutes 172 (41%) and (9.8%) 41 were breast feeding about more than 15 minutes.

We find that most of the participants breast feed their babies for less than 6 months were 302 (71.7%), who breast feed for 6 months to one year 64 (15.2%), breast feed for one to two years were 50 (11.9%) and more than two years 5 (1.2%). Our study shows most participants were introducing artificial food for their babies before 3 months 281 (60.6%) then 3 to 6 months 91 (19.6%). 6 months to one year were 71 (15.3%) after that more than one year 21 (4.5%).

In our study we found that most of women who thinks that breast feeding is important for both mother and child 452 (91.3%), who think that is important for the child only were 36 (7.3%) and only important for mother 7 (1.4%). The importance of breast milk explained by medicals for participants was 60% but 40% did not get any source of education about encouraging breast feeding.^[15]

The level of knowledge of mother who having poor knowledge about breast-feeding were 471 (94 .2%), were 29 (5.8%) have good knowledge. Unlike the study in Hail in 2014 participants' general knowledge was limited^[15]

The attitude of most of mothers toward breast feeding were positive by 446(90.1%) but there who thought that their attitude was almost positive were 27 (5.5%). a negative or not good attitude toward breast feeding were 22 (4.4%). In a study in Hail in 2014 reveled attitude of mothers to breastfeeding was positive by 88.3%.^[15]

CONCLUSIONS

This study revealed that there is marked increase in the rate of knowledge, attitude and practice of breastfeeding among women in Hail and Aljouf cities, Saudi Arabia. Such findings should be useful to health professionals when attempting to help mothers overcome breastfeeding barriers.

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