

## Original Article

# Factors Influencing the Mother's Decision to Breast-Feed in Ahmadi Region, Kuwait

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## ABSTRACT

**Objective:** To identify the factors influencing a mother's decision to breast-feed and her knowledge about the benefits of breast-feeding.

**Method:** A descriptive study was conducted in Ahmadi Governorate. A total sample of 1200 mothers, whose babies less than two years old, were selected from labor rooms and post-natal wards in Adan Hospital as well as from Preventive Health Centers in Ahmadi Governorate. Data were collected by interviewing the mothers using a standard questionnaire.

**Result:** The majority of mothers in the study sample (95%) thought of breast-feeding before delivery. However, little

more than two third of them (70%) practised breast-feeding. Past personal experience, medical and social support, mother's knowledge and belief about the benefits of breast-feeding significantly affected their decision to breast-feed.

**Conclusion:** The opinion of mothers in Ahmadi Region was favourable towards breast-feeding. These findings suggest that intervention efforts during pregnancy should focus on providing knowledge and support from the health care providers as well as social support from family to encourage breast-feeding practice.

KEY WORDS: attitude, breast-feeding, knowledge, practice

## INTRODUCTION

Breast-feeding confers crucial advantages for the health of infants and mothers alike<sup>[1-5]</sup>. Medical researches have highlighted the previously unappreciated benefits of breast-feeding, which are more evident during the first months of life<sup>[2-6]</sup>. Breast-feeding promotion is an important component of child survival strategies, and the World Health Organization recommends that infants are exclusively breast-fed for at least 4-6 months<sup>[7]</sup>. Byers suggested that women who have breast-fed for longer periods have a lower risk of developing premenopausal breast cancer than women who have breast-fed only for short periods or who have not breast-fed<sup>[8]</sup>. Despite the overwhelming evidence of the superiority of breast milk over infant formula, the prevalence of breast-feeding in Kuwait is among the lowest in the Gulf<sup>[9]</sup>. Socio-cultural factors such as ethnicity and social class are assumed to play a part in women's decision making about infant feeding<sup>[10-11]</sup>. Previous research on the decision to breast-feed had predominantly used surveys to examine the socio-demographic variables and attitudes associated with breast-feeding<sup>[12-14]</sup>. A lower attitude score was found to be consistently associated with

young mothers, low social class and low educational level<sup>[12-14]</sup>. The decision to breast-feed is usually made before conception and delivery<sup>[15-16]</sup>. Examining the factors influencing the woman's decision to breast-feed, Hoddinot and Cusson found that previous exposure to breast-feeding models positively influenced attitudes, knowledge and intentions towards breast-feeding among teenage students in the USA<sup>[11-17]</sup>. Other factors which influence a woman's decision to breast-feed are support from health care providers or family members and perceptions about the benefits of breast-feeding<sup>[18-21]</sup>.

However, there is a lack of research on the maternal knowledge and attitudes related to breast-feeding, specially in the Gulf countries<sup>[22-27]</sup>. The purpose of this study was to explore the factors affecting women's decision to breast-feed and the knowledge about the benefits of breast-feeding, among mothers with children less than two years of age in Ahmadi Region.

## MATERIAL AND METHODS

### Study Population

The study was conducted in Ahmadi Governorate (Adan Hospital and Primary Health

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Care Centers) between September 2000 and February 2001. The target population was a sample of 1200 mothers with infants less than two years old. This sample was about 8% of the estimated under-2-year-old population in Ahmadi Region. The mothers were selected from the labor room and post-natal wards in Adan Hospital (in Ahmadi Region) and from those attending the preventive health centers for vaccination of children. Selection of subjects was done systematically by inviting every third mother. A committee of Ahmadi Health Region gave the ethical approval, and permission was sought and obtained verbally from participating mothers. The interviews were carried out by a well-trained group of nurses. Only 1% of interviewed mothers refused to be interviewed.

### Study Tool

The questionnaire had four sections.

Section 1 included seven questions on socio-demographic characteristics of the mother (age, education, monthly family income, nationality, number of children, child's sex and birth order).

Section 2 included eight questions about their knowledge of breast-feeding benefits and about the source of their knowledge. The mother was considered to have knowledge about breast-feeding benefits, if she could answer at least four questions correctly out of seven.

Section 3 included two questions about breast-feeding attitude (e.g., "In your opinion what is the best food for infants?" and "Did you think of breast-feeding before delivery"?). There was one question on practising breast-feeding after delivery. Section 4 contained questions on breast-feeding support. These included whether the mother received any medical help or social support. One question was to specify the medical help, if it was from the doctors or nurses of the antenatal clinic in the hospital or polyclinic or from the nurses of the labor room and the postnatal wards. Another question was to identify the social support, whether it was from the husband, female family member or friends. The response for these questions allowed more than one choice.

A one-month pilot study on 50 subjects preceded the actual work. During the pilot, questionnaire and interviewing teams were assessed and modified accordingly.

### Analysis

Statistical analysis was done using SPSS programme. Descriptive analyses included frequencies and percentages. Associations between categorical variables were tested with the Chi square test. All tests were assessed at the 5 % level of significance.

## RESULTS

More than two thirds (71%) of the participants were Kuwaitis and more than half (52.2%) were in the age group of 20-29 years old. In addition, less than half (41.4%) of the mothers reported having received a secondary level of education, (Table 1).

The results (Table 2) showed that the large majority (94.3%) of the study sample had knowledge about the benefits of breast-feeding. Most (96.4%) believed that breast-feeding was the best infant's food, and most (95.2%) thought of breast-feeding before delivery. However, only two thirds of them (69.9%) practised breast-feeding after delivery.

**Table 1**

Characteristics of 1200 mothers included in the study

Characteristic	No.	%
<b>Age (years)</b>		
15 - 19	90	7.5
20 - 29	626	52.2
30 - 39	443	36.9
40 +	41	3.4
<b>Nationality</b>		
Kuwaiti	848	70.7
Non-Kuwaiti (Arabs)	352	29.3
<b>Monthly Family Income (KD)</b>		
200	105	8.8
201 - 400	256	21.3
401 - 600	444	37.0
>600	384	32.0
Don't know	11	0.9
<b>Education</b>		
Not educated	57	4.8
Primary school	72	6.0
Intermediate	315	26.3
Secondary (high school)	497	41.4
University	259	21.6

**Table 2**

Frequency distribution of issues related to breast-feeding

	No.	%
Thought of breast-feeding (BF) before delivery	1142	95.2
Practiced BF	839	69.9
Past experience with BF	1020	85.0
Had information about the benefit of BF	1132	94.3
Believe that BF is best	1157	96.4
Received medical help	870	72.5
Received social support	734	61.2

BF = breast feeding

Table 3 showed that past experience, receiving medical help and social support as well as the mothers' knowledge and beliefs about the benefits of breast-feeding were significantly related to the decision to breast-feed ( $P < 0.05$ ). No socio-demographic factors showed any relationship to the mother's decision to breast feed. Most (86.3%)

**Table 3**

Characteristics of mothers who thought of breast-feeding (BF) before delivery

	Thought of breast feeding				Test of significance	
	Yes (n = 1142)		No (n = 58)		Chi square	P-value
	No.	%	No.	%		
Practice BF after last delivery	822	71.98	17	29.31	$X^2_1=47.78^*$	< 0.001
Past experience with BF	985	86.25	35	60.34	$X^2_1=29.06^*$	< 0.001
Had information about BF	1088	95.27	44	75.86	$X^2_1=38.90^*$	< 0.001
Believed that best way of feeding is BF	1115	97.64	42	72.41	$X^2_1=101.63^*$	< 0.001
Received medical help**	839	73.47	31	53.45	$X^2_1=11.10^*$	< 0.001
From nurses in post natal ward	277	24.26	12	20.69	$X^2_1=0.38$	> 0.536
From doctors in antenatal care clinics	169	14.80	12	20.69	$X^2_1=1.50$	> 0.221
From nurses in antenatal care in hospitals	169	14.80	7	12.07	$X^2_1=0.33$	> 0.566
From nurses in labor room	159	13.92	4	6.90	$X^2_1=2.32$	> 0.128
From nurses in antenatal care clinics	463	40.54	16	27.59	$X^2_1=3.86^*$	< 0.049
Received social support**	707	61.91	27	46.55	$X^2_1=5.48^*$	< 0.019
Husband	172	15.06	4	6.90	$X^2_1=2.94$	> 0.086
Female family member	569	49.82	25	43.10	$X^2_1=1.00$	> 0.318
Friends	104	9.11	8	13.79	$X^2_1=1.43$	> 0.231

\* = Significant p&lt; 0.05

Allowed more than one choice \*\*

**Table 4**

The source of the mother's knowledge about the benefits of breast-feeding among those who thought of breast -feeding

Source of knowledge	Thought of breast feeding				Test of significance	
	Yes (n = 1142)		No (n = 58)		Chi square	P-value
	No.	%	No.	%		
Socially acquired information	751	65.76	32	55.17	$X^2_1=2.73$	> 0.98
Nurses	558	48.86	18	31.03	$X^2_1=7.03^*$	< 0.008
Doctors	152	13.31	4	6.90	$X^2_1=2.01$	> 0.156
TV	143	12.52	6	10.34	$X^2_1=0.24$	> 0.624
School	64	5.60	2	3.45	$X^2_1=0.49$	> 0.482

\* = Significant p&lt; 0.05

of those who thought of breast-feeding had experience of breast-feeding. Almost three fourths (73.5%) of the same group received help from the medical team including doctors and nurses. The nurses in antenatal clinics were the main source of medical help for less than half (40.5%) of those who thought of breast-feeding, ( $P < 0.05$ ). In addition, more than half (61.9%) of those who thought of breast-feeding received social support from the husband, female family member or friends. The female family members were the main source of support for more than half (52%) of those who thought of breast-feeding, ( $P < 0.05$ ).

Table 4 shows that the main source for knowledge on the benefits of breast-feeding among those who thought of breast-feeding was from the nurses (48.9%), ( $P < 0.05$ ).

## DISCUSSION

Although the vast majority of women in this study had good knowledge and beliefs about the benefits of breast-feeding and thought of breast-feeding before delivery, slightly less than three

quarters practised it after delivery. This means that there are other factors that could influence the mother's decision to breast-feed after delivery. Diong found that the most important factors to influence mother's choice to breast-feed was the belief that it was good for the baby, while the mothers who chose to bottle feed their babies were influenced by the belief of insufficient milk production, and the mother's occupation<sup>[21]</sup>.

Although the study results did not show any difference in the decision to breast-feed when considering socio-demographic characteristics, some studies on practice breast-feeding showed that adolescent mothers are less inclined to breast-feed their babies<sup>[28,29]</sup>. Other studies showed that infant feeding choices can differ by ethnicity<sup>[11,30,31]</sup>. Baisch *et al* found that adult white women held more positive attitudes towards breast-feeding than adult black women<sup>[31]</sup>. Many other studies found that maternal knowledge was positively associated with the mother's decision to breast-feed in the future<sup>[23,32]</sup>. Bella found that knowledge was the only significant predicting factor for deciding to

breast-feed in the future among Saudi female students in Dammam college<sup>[27]</sup>.

Almost three fourths of those who thought of breast-feeding received help and encouragement from the medical team, and the main medical help was from the nurses in the antenatal clinics. A confirming result was shown by Wiemann *et al* who found that most African American teens chose bottle feeding due to lack of encouragement for breast-feeding by the health care providers<sup>[18]</sup>. In addition, the study results showed that those who thought of breast-feeding received social support from the female family members. Similar results were found by Robinson *et al* where family support was reported to influence the decision for breast-feeding<sup>[19]</sup>.

Unfortunately, doctors often have negative attitudes towards breast-feeding. This could be explained by the fact that medical schools, in the past, did not include breast-feeding in their curricula. Also, many health professionals are over-exposed to advertisements for infant formula. There is a need for training courses on breast feeding counselling for health care providers to increase their knowledge and clinical and counselling skills in support of breast-feeding<sup>[33]</sup>. Moreover, pediatricians in particular, are required to have an educational program to encourage and manage breast-feeding among mothers<sup>[34]</sup>.

Our study results showed that the main source for knowledge on the benefits of breast-feeding among those mothers who thought of breast-feeding, was the nurses. Ray and Estke however, showed that infant's grandmothers provided more breast-feeding information than any other source<sup>[35]</sup>. Despite the health benefits associated with breast-feeding, the media rarely present positive information on breast-feeding<sup>[36]</sup>. The mass media have a powerful impact on public perceptions of health issues. Therefore, health professionals and policy makers should be aware of the patterns in media coverage and the cultural background within which women could make decisions about infant feeding.

#### Limitations of the study

Limiting the study to women attending hospital, antenatal care or vaccination centers in the Ahmadi governorate, will affect the generalization of the results. The study design (cross-sectional) does not explain any causal relationship between any of the factors involved in the study. We did not explore the influence of fathers' opinion and knowledge in the study because of the difficulty of interviewing the couples together at the same time.

#### CONCLUSION AND RECOMMENDATIONS

This study showed that the opinions of women in Ahmadi area are in favour of breast-feeding. However, they did not seem to be encouraged to breast-feed. Past experience and support from medical and social teams and mother's knowledge and beliefs were the most important factors that may influence a decision to breast-feed. There is a need for promoting education programs on breast feeding for health care providers and the public, especially the pregnant women and her family, in order to increase the practice of breast-feeding. There is also a need for emphasizing the same issues through mass media. School curricula should be revised to include relevant information on breast-feeding.

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