

## Knowledge and Attitude of Breastfeeding among Women in Al-Madina Al-Munawwarah, Saudi Arabia, 2017

\*Shireen Albouq , Raghad Alsubhi, Manal Othman , Rawabi Almutiri and AlaaAlraheili

College of Medicine, Taibah University, Al-Madina Al-Munawwarah, Kingdom of Saudi Arabia.

Corresponding author: Shireen Ghazi Albouq,mobile:+966530723334-E-mail: shireen.albouq@gmail.com

### Abstract:

**Background:** breastfeeding is considered to be beneficial for both babies and mothers. **Objective:** this study aimed to assess the knowledge and attitude of breastfeeding among women in Al-Madina Al-Munawwarah, Saudi Arabia. **Methods:** this was an analyticalcross-sectional study and it was carried out in Al- Madina, Kingdom of Saudi Arabia during the year 2017. Data were collected by electronic self-administered semi-structured questionnaire. **Results:** data were collected from 388 female. The majority of the respondents were above 36 years old (48.2%). More than half of our respondents 225 (58.0%) were unemployed and 277 (71.4%) had a college-level education or higher. 138 (35.6%) of the women were exclusively feeding their baby by breastfeeding, while the majority of the respondents 220 (56.7%) chose a mix of both breast and formula feeding. The percentage of women who received hospital education regarding breastfeeding was equal to the women who had not received the hospital education 194 (50.0%). 175 (45.1%) of the respondents reported that health problem is the most reason that preventing them from breastfeeding their babies. Mothers believed that breastfeeding helped them by preventing breast and ovarian cancer 308 (79.4%) and the majority of the respondents 334 (86.1%) believed that breastfeeding improved the immunity and protect from different illness. **Conclusion:** in spite of the low percentage of exclusive breastfeeding, all the mothers were certain about the importance of breastfeeding to them and to their babies. There is a significant opportunity to improve awareness among women regarding the importance of exclusive breastfeeding.

**Keywords:** breastfeeding, alternative feeding, maternity.

### Introduction:

Breastfeeding is considered to be beneficial for both infants and mother<sup>(1)</sup>. Despite many benefits of breastfeeding for mothers and infants, rates of the initiation of breastfeeding vary in many countries. Initiation in Europe, Australia and Saudi Arabia was higher than New Zealand, Canada and the USA with 74-99 % in Europe , 91-97% in Australia<sup>(2)</sup>, 91.6% in Saudi Arabia <sup>(1)</sup> , compared to approximately 80% in New Zealand (Maori and Pacific people had a lower rate), 69-83% in Canada , and 27-69% in the USA <sup>(2)</sup> . Exclusive breastfeeding (The infant received only breast milk for the first 6 months of life) in the Arab region has a pattern similar to western countries; where it was less than 35%. Educating the mothers during their antenatal visits can improve their attitude and practice of breastfeeding afterward<sup>(3)</sup>. Therefore, this study aimed to assess the knowledge and attitude of breastfeeding among women in Al-Madina Al-Munawwarah, Saudi Arabia.

### Material and Methodology:

This analytical cross-sectional study carried out in Al- MadinaAl-munawwarah, Kingdom of Saudi Arabia during the year 2017. Subjects of this study were women who had children living

in Al-Madina Al-Munawwarah, regardless of nationality and age with excluding the women who did not have children and who live in another city in Saudi Arabia. Data were collected by electronic self-administered semi-structured questionnaire, which included socio-demographic data, the knowledge and attitude of the women regarding breastfeeding and using alternatives.

### Statistical Analysis:

Data were tabulated by using Microsoft Office — Excel sheet entered and analyzed by using SPSS, version 20.0. Ethical Committee approval was obtained before starting the study.

### Results:

Data were collected from 388 female by using questionnaires which were filled electronically. The majority of the respondents were above 36 years old (48.2%). 348 (89.7%) were Saudi and 40 (10.3%) were non-Saudi. Regarding parity, 312 (80.4%) were multiparous, while 76 (19.6%) were primiparous. Most of the participants 237 (61.1%) had 3 or more children. More than half of our respondents 225 (58.0%) were unemployed and 277 (71.4%) had a college-level education or higher (**Table 1**).

<b>Table 1: frequency table for the distribution of maternal demographic data</b>		
<b>Demographic Data</b>	<b>Frequency</b>	<b>%</b>
<b>Age (n= 388 )</b>		
≤ 25	43	11.1
26 – 30	78	20.1
31 – 35	80	20.6
≥ 36	187	48.2
<b>Nationality</b>		
Saudi	348	89.7
Non Saudi	40	10.3
<b>Parity</b>		
Primiparous	76	19.6
Multiparous	312	80.4
<b>No of Children</b>		
1	73	18.8
2	78	20.1
≥ 3	237	61.1
<b>Income</b>		
< 5000 SR	66	17.0
5000 – 10.000 SR	180	46.4
> 10.000	142	36.6
<b>Educational Level</b>		
Illiterate	1	0.3
Elementary	8	2.1
Intermediate	19	4.9
High School	83	21.4
College or Higher	277	71.4
<b>Occupation</b>		
Employed	163	42.0
Unemployed or Housewife	225	58.0

268 (69.1%) of the women decided to breastfeed their babies before the baby was born, while 77 (19.8%) they were uncertain. 138 (35.6%) of the women were exclusively feeding their baby by breastfeeding, 30 (7.7%)

feeds their baby by using bottles formula, while the majority of the respondents 220 (56.7%) they choose a mix of both breast and formula feeding. (**Table 2**).

<b>Table 2: ways of selecting feeding type</b>		
	<b>Frequency</b>	<b>%</b>
<b>Women who plan to breastfeed before the baby was born (n=388 )</b>		
Yes	268	69.1
No	43	11.1
Uncertain	77	19.8
<b>How do women usually feed their babies (n=388 )</b>		
Breastfeeding	138	35.6
Bottles feeding	30	7.7
Both	220	56.7

Regarding the attitude of feeding among women, 322 (83.0%) of the participants feeds their baby in sitting position and 66 (17.0%) feeds their babies, while they were in a lying position. Almost all the participants 372 (95.9%) burp the baby immediately after breastfeeding (**Table3**).

**Table 3: attitude of feeding**

	Frequency	%
<b>Feeding position</b>		
Sitting	322	83.0
Lying	66	17.0
<b>Burping after feeding</b>		
Yes	372	95.9
No	16	4.1

As for feeding frequency, the results showed that 159 (41.0%) of the mother feed their babies whenever they cry, 145 (37.4%) feeding their baby every 2 hours (Table 4).

Table 4: feeding Frequency (N = 388)		
	Frequency	%
Whenever child cries	159	41.0
Every 2 hours	145	37.4
Every 4 hours	63	16.2
Elder's advice	5	1.3
Others	16	4.1

The percentage of women who received hospital education regarding breastfeeding was equal to the women had not received the hospital education 194 (50.0 %). Regarding the mothers who believed of breastfeeding and its importance, 370 (95.4%) of the respondents believed that breast-milk contains all the necessary substance needed for their babies and 347 (89.4%) believed that nutritional status of the mother can affect the importance of breastfeeding. A large percentage of respondents (95.4%) 370 believed that breastfeeding may protect the baby's tooth from decay (Table 5).

Table 5: mothers believes of breastfeeding and It's importance		
	Frequency	%
<b>breast-milk contains all the necessary substance needed for the baby</b>		
Yes	370	95.4
No	18	4.6
<b>nutritional status of the mother can affect the importance of breastfeeding</b>		
Yes	347	89.4
No	41	10.6
<b>breastfeeding may protect baby's tooth from decay</b>		
Yes	316	81.4
No	72	18.6

Regarding the reasons that prevent mothers from feeding their baby, the results of our study showed that 175 (45.1%) of the respondents reported that health problem is the most reason that preventing them from breastfeeding their babies and taking medication was the second most common reason 116 (29.9%), while the minority of the respondents said that cosmetics reasons, prolong working hours and lack of milk were the reasons 13 (3.4%) (Table 6).

<b>Table 6: Reasons that prevent mothers from breastfeeding.</b>		
	<b>Frequency</b>	<b>%</b>
<b>Presence of alternatives (N=388)</b>		
Yes	60	15.5
No	328	84.5
<b>Health problems (N=388)</b>		
Yes	175	45.1
No	213	54.9
<b>Difficult technique (N=388)</b>		
Yes	63	16.2
No	325	83.8
<b>Taking Medication (N=388)</b>		
Yes	116	29.9
No	272	70.1
<b>Cosmetics Reasons (N=388)</b>		
Yes	13	3.4
No	375	96.6
<b>Prolong working hours (N=388)</b>		
Yes	13	3.4
No	375	96.6
<b>Lack of Milk (N=388)</b>		
Yes	13	3.4
No	375	96.6
<b>None of the above (N=388)</b>		
Yes	28	7.2
No	360	92.8

<b>Table 7: type of bottles feeding used by the mother</b>		
	<b>Frequency</b>	<b>%</b>
<b>Type of bottles feeding(N=388)</b>		
Cow's milk	37	9.5
Commercial formula	217	55.9
Condensed milk	7	1.8
Not using bottles	120	30.9
Other	7	1.8

Regarding using alternatives, the majority use the commercial formula 217 (55.9 %), 37 (9.5%) used the cow's milk, while 120 (30.9%) of the respondents were not using bottles. **(Table7)**.Our results showed that 209 (53.9%) of the mother who used bottle feeding noticed differences between their children health who received breastfeeding and others who received bottles milk, 33 (8.5%) they didn't notice any change and 146 (37.6%) they didn't know if there was change in their children health or not. 300 (77.3%) of the participants were using herbal beside milk for their baby and 88 (22.7%) were not using herbal.

Table 8: problems during breastfeeding (N=388)		
	Frequency	%
<b>Pain</b>		
Yes	89	22.9
No	299	77.1
<b>Redness and hotness</b>		
Yes	28	7.2
No	360	92.8
<b>Mammary engorgement</b>		
Yes	78	20.1
No	310	79.9
<b>Sore /nipple cracks</b>		
Yes	135	34.8
No	253	65.2
<b>None of the above</b>		
Yes	152	39.2
No	236	60.8

The most common complaint reported by the respondents during breastfeeding was sore / nipple cracks by 135 (34.8%), followed by mammary engorgement 78 (20.1%)(Table 8) .

Table 9: mother's believed regarding the benefits of breastfeeding for mothers and babies.		
	Frequency	%
<b>Benefits of breastfeeding for Mother (N=388) :</b>		
<b>1. Helps to prevent breast/ ovarian cancer</b>		
Yes	308	79.4
No	80	20.6
<b>2.Reduce the risk of the spinal and hip fractures</b>		
Yes	46	11.9
No	342	88.1
<b>3.Helps in losing weight faster after delivery</b>		
Yes	196	50.5
No	192	49.5
<b>4.help to sleep better</b>		
Yes	61	15.7
No	327	84.3
<b>5.None of the above</b>		
Yes	20	5.2
No	368	94.8
<b>Benefits of breastfeeding for baby (N=388) :</b>		
<b>1.Improve the immunity and protection from illness</b>		
Yes	334	86.1
No	54	13.9
<b>2.Healthy growth</b>		
Yes	262	67.5
No	126	32.5
<b>3.Good brain development</b>		
Yes	224	57.7
No	164	42.3
<b>4.Easy digestion for baby</b>		
Yes	195	50.3
No	193	49.7
<b>5. Help to sleep better</b>		
Yes	122	31.4
No	266	68.6
<b>6.None of the above</b>		
Yes	4	1.0
No	384	99.0

Regarding the benefits of breastfeeding for mother and baby the analysis showed that mothers believed that breastfeeding helped

them by preventing breast and ovarian cancer 308 (79.4%) and 196 (50.5 %) reported that it helped in losing weight faster after delivery. As

for benefits of breastfeeding for baby, the majority of the respondents 334 (86.1%) believed that breastfeeding improved the immunity and protected from different illness, 262 (67.5%) respond that it also helped in healthy growth and good brain development 224 (57.7%)(Table 9).

#### **Discussion:**

The first two years of life are important stages for a child's growth and development and breastfeeding is considered the preferred method of feeding during that time especially exclusive breastfeeding for the first six months<sup>(4)</sup>. Therefore, this study aimed to assess the knowledge and the attitude of breastfeeding among women in Al-Madina Al-Munawwarah, Saudi Arabia. The data were collected from 388 female, 348 (89.7%) were Saudi and 40 (10.3%) were non-Saudi and the majority of them were above 36 years old (48.2%). More than half of our respondents 225 (58.0%) were unemployed and 277 (71.4%) had a college-level education or higher. In our study; 138 (35.6%) of the women exclusively breastfed their baby, 30 (7.7%) fed their baby by using bottles formula, while the majority of the respondents 220 (56.7%) chose a mix of both breast and formula feeding. Another research conducted in Saudi Arabia <sup>(2)</sup> reported that mixed feeding was the most frequent method of feeding in Saudi Arabia. The rate of exclusive breastfeeding was still at a lower rate compared to international standards <sup>(1)</sup>. Our result is also similar to a study conducted in Emirates <sup>(5)</sup> in which only 25% of the women were exclusively breastfed their baby. Low levels of exclusive breastfeeding were recorded in other countries<sup>(6,7,8)</sup>. Unlike a study conducted in Egypt, 82.5 % of the respondents were exclusively breastfed their babies and it was the most common type of feeding. The partial breastfeeding with formula was only 17.52 <sup>(9)</sup>. As for feeding frequency, our results showed that 159 (41.0%) of the mother fed their babies whenever they cry, 145 (37.4%) feeding their baby every 2 hours and that considered similar to the result of another study that showed 86.9 % of the participants breastfeed their babies on demand, while 8.8% breastfeed on specific intervals<sup>(9)</sup>. The present study showed that the percentage of women who received hospital education regarding breastfeeding was equal to the women had not received the hospital education 194 (50.0%). The literature review of medical research on breastfeeding practices

reported that approximately four-fifths of mothers received an education <sup>(10)</sup>. Similarly, another study conducted in Jeddah showed that only 56% of mothers received breastfeeding education <sup>(11)</sup> and other Saudi study reported similar results, they found that 44.2% did not receive breastfeeding education before, while 54.2% of women received education when they were in the hospital for delivery <sup>(2)</sup>. The results of our study showed that 175 (45.1%) of the respondents reported that health problem was the most reason which preventing them from breastfeeding their babies and taking medication was the second most common reason 116 (29.9%), while the minority of the respondents said that cosmetics reasons, prolong working hours and lack of milk were the reasons 13 (3.4%). Our result is concordant to another study <sup>(2)</sup>, in which the main reasons for discontinuing breastfeeding were: a health professional asked the mother to stop breastfeed for medical reasons (61.6%) or needed to take medicine (71.8). Mothers in other study said that the main reason for stopping breastfeeding was due to a new pregnancy <sup>(5)</sup>. This reason was also recorded by other studies for terminating breastfeeding <sup>(10,12,13)</sup>. The most common complaint reported by the respondents during breastfeeding was nipple cracks by 135 (34.8%), followed by mammary engorgement 78 (20.1%). Similar to the responses of another study that reported the obstacles encountered during breastfeeding were breast and nipple problems like breast engorgement, breast infection, inverted/short nipples and cracked/sore nipples (40%). <sup>(9)</sup> The analysis of our study results showed that mothers believed breastfeeding helps them by preventing breast and ovarian cancer 308 (79.4%) and 196 (50.5 %) reported that it helped in losing weight faster after delivery. One study reported that one of the women believed regarding the benefits of breastfeeding was that would help the mother to lose weight (17%) <sup>(14)</sup>. As for benefits of breastfeeding for baby, the majority of the respondents 334 (86.1%) believed that breastfeeding improves the immunity and protect from different illness, 262 (67.5%) respond that it also helped in healthy growth and good brain development 224 (57.7%). In accordance to a published research, mothers reported that breast milk protects baby from a wide range of diseases (54%)<sup>(14)</sup>. Moreover, 55.2% of women agreed that breastfeeding reduced the incidence of ear infections and

approximately 50% of women agreed that breastfeeding reduced the possibility of getting respiratory diseases <sup>(2)</sup>.

**Conclusion:**

In spite of the low percentage of exclusive breastfeeding, all the mothers were certain about the importance of breastfeeding to them and to the baby. There is a significant opportunity to improve awareness among women regarding the importance of exclusive breastfeeding.

**Conflict of Interest:**

None declared.

**References:**

1. **El Mouzan MI, Al Omar AA, Al Salloum AA, Al Herbish AS and Qurachi MM (2009):** Trends in infant nutrition in Saudi Arabia: compliance with WHO recommendations. *Annals of Saudi Medicine*, 29:20-23
2. **Callen J and Pinelli J (2004):** Incidence and Duration of Breastfeeding for Term Infants in Canada, United States, Europe, and Australia: A Literature Review. *Birth*, 31: 285-292.
3. **Al-Ahmadi G, Jabri M, Aziz M (2015):** Perception of Breastfeeding among Female Medical Students, Taibah University, Medina, Saudi Arabia 2012. *World Journal of Medical Education and Research*, 10:24-30.
4. **Kramer MS, Chalmers B, Hodnett ED, Sevkovskaya Z, Dzikovich I, Shapiro S et al. (2001):** Promotion of Breastfeeding Intervention Trial (PROBIT): a randomized trial in the Republic of Belarus. *JAMA.*, 285(4): 413-420.
5. **Radwan H (2013):** Patterns and determinants of breastfeeding and complementary feeding practices of Emirati Mothers in the United Arab Emirates. *BMC Public Health*, 13(1): 171.

6. **Marques NM, Lira PI, Lima MC, da Silva NL, Batista Filho M, Huttly SR, and Ashworth A (2001):** Breastfeeding and early weaning practices in northeast Brazil: a longitudinal study. *Pediatrics J.*, 108(4): e66.
7. **Awumbila M (2003):** Social dynamics and infant feeding practices in Northern Ghana. *Institute of African Studies Research Review*, 19(2): 85-98.
8. **Li R, Zhao Z, Mokdad A, Barker L and Grummer-Strawn L (2003):** Prevalence of breastfeeding in the United States: The 2001 national immunization survey. *Pediatrics J.*, 111(1): 1198-1201.
9. **Mahmoud NA, Megahed NM, Essam MM, Ibraheem MM, Belal Marrouf O and Hussein E (2014):** Assessment of knowledge and practice of proper breastfeeding among mothers attending-El-Shohada primary health care units, Ismailia City. *Int J Health Sci.*, 2(1): 70-8.
10. **Al Jassir MS, El Bashir BM, Moizuddin SK and Abu Nayan A (2006):** Infant feeding in Saudi Arabia: mothers' attitudes and practices. *East Mediterr Health J.*, 12: 6-13.
11. **Fida NM and Al-Aama JY (2003):** Pattern of infant feeding at a University Hospital in Western Saudi Arabia. *Saudi Medical Journal*, 24: 725-729.
12. **Wayland C (2004):** Breastfeeding patterns in Rio Branco, Acre, Brazil: a survey of reasons for weaning. *Cadernos de Saude Publica*, 20: 1757-1761.
13. **Haroun HM, Mahfouz MS and Ibrahim BY (2008):** Breast feeding indicators in Sudan: a case study of Wad Medani town. *Sudanese J Public Health*, 3(2): 81-90.
14. **Chua L and Win AM (2013):** Prevalence of breastfeeding in Singapore. *Statistics Singapore Newsletter*, 10:15.