

ASSESSMENT OF BREASTFEEDING KNOWLEDGE AMONG LIBYAN WOMEN

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Abstract

The current study is designed to explore the breastfeeding knowledge among Libyan women. This cross-sectional descriptive study used an online predesigned questionnaire targeting women's social media groups. A convenient sample of eight hundred and sixty women participated in the study. Participant knowledge level was scored. In addition to demographic data, women were asked about their knowledge of the proven benefits of breastfeeding. High Breastfeeding knowledge level in this study was seen in only one third of women 31.3% (269). 50.8% (437) of women in the study sample don't know that breastfeeding reduces the incidence of respiratory infections. Concerning breastfeeding benefits for mothers 71.9 % (618) of respondents are aware that breastfeeding lowers the risk of breast cancer. Two thirds of women (62.7%) reported that society and family members, such as mothers, sisters, and friends, were their main sources of breastfeeding information. Only 13.8% had heard from health centers for information. Programs to educate all women about the advantages of breastfeeding are urgently needed in order to increase their motivation to breastfeed their children in the future.

Keywords: Breastfeeding, High breastfeeding knowledge level, Low breastfeeding knowledge level.

INTRODUCTION

Exclusive breastfeeding for infants in the first six months is highly recommended by the American Academy of Pediatrics (AAP), with continued breastfeeding for a year or beyond while supplementary foods are introduced^[1]. Breast milk is the best nourishment for infants in the first months of life, since it provides them all the energy and nutrients they require.^[2] Breastfeeding is amongst the most impactful interventions for reducing under-five mortality. It is critical for achieving many of the newly announced Sustainable Development Goals by 2030, as it can improve child and maternal health, nutrition, economy, intelligence, and human capital while reducing inequalities^[3]. Lack of awareness of breastfeeding benefits and suboptimal breastfeeding, particularly in the first six months of life, is expected to cause 1.4 million deaths and 10% of disease burden in children under the age of five^[4]. On the other hand, mothers' knowledge and positive attitude are crucial to the breastfeeding process^[5]. Babies who are not breastfed at all are a 14 times greater likelihood of dying than those who are fed only breast milk^[6]. Awareness strategies for breastfeeding are the key to behavior changes that are critical to effective breastfeeding^[7]. A different study revealed that moms with higher breastfeeding knowledge and practice control had a higher prevalence of exclusive breastfeeding (EBF), and that women who knew more about EBF were 5.9 times more likely to practice it than their peers.^[8,9] This study aims to explore breastfeeding knowledge benefits among Libyan women.

MATERIALS AND METHODS

This cross-sectional research collected data from a convenient women sample of 860 who responded to a pre-designed online

questionnaire; disseminated through social media in February 2022. The questionnaire consisted of 19 closed-ended questions targeted at women aged; between 25 and 56. Though the participants were anonymous, they gave their agreement to use their data for medical research. Age, education level, occupation, marital status, and pregnancy experience are all socio-demographic factors considered. Collected data about breastfeeding information; on the recommended period for breastfeeding, also protection against diseases in both mothers and babies.

Scoring system for the level of knowledge

In this study, we introduced weightage by giving scores to the correct responses to the questions.

1. For 14 questions, the correct answer was scored "1" and the incorrect answer "0".
2. The total scores were converted to percentages for each participant. (A score out of 100 was calculated by dividing the actual score by the maximum score).
3. Total score <70% was considered "Low Breastfeeding knowledge Level".
4. Total score ≥70% was considered "High Breastfeeding knowledge Level."

Our study sample was scored according to the level of breastfeeding knowledge level, and divided into two groups: a high breastfeeding knowledge level (HBFKL), and a low breastfeeding knowledge level (LBFKL). Collected data coded and SPSS software version 26 was used for analysis. Descriptive statistics, including frequency and percentages, were calculated. The chi-Square test used to know the association between knowledge of breastfeeding with different attributes. The p-value < 0.05 was considered statistically significant.

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RESULTS

Eight hundred sixty women in total were invited to take part in this study. The ages of the women who took part in this study ranged from 15 to 56, with 56.4% (485) being between 26 to 45 years of age. 63% (542) of women in the study sample were married, and 55.9% (481) of them were mothers. 44.1% (379) of the women were unemployed and defined housewives. Considering their education level, 40.5% (348) of the women were bachelor's degree holders (Table 1).

Table 1. Socio-demographic characteristics

	No	%
Age		
15-25	335	39.0
26-45	485	56.4
46-56	40	4.7
Marital status		
Married	542	63.0
Single	292	34.0
Divorce	21	2.4
Widow	5	0.6
Employment status		
Housewife	379	44.1
Employee	249	29.0
Students	232	26.9
Education Level		
Prep school degree	49	5.7
High school	215	25.0
Diploma	224	26.0
Bachelor' degree	348	40.5
Postgraduate	24	2.7
Experienced motherhood		
Yes	481	55.9
No	379	44.1

Based on the study results, 25.9% (223) of the respondents in the study sample are familiar with the 10 steps of breastfeeding. Only 13.7% (118) of women are aware of WHO recommendations for exclusive breastfeeding, despite the fact that 73.3% (630) of women are aware that breastfeeding is a sufficient source of nutrition for infants in their first six months. 61.9 percent of women (541) know the advantages of colostrum. 46.5% (400) of women who participated in the study know breastfeeding's protective characteristics, and are aware that breastfeeding reduces the chances of diarrheal diseases in children. 37.4% (322) are aware that middle ear infections are less common among breastfed babies, and 42.9% (369) know that breastfeeding lowers the risk of respiratory infections. Nearly all of respondents 91.3% (785) are aware of the benefits of breastfeeding for mother and child's emotional bond. In terms of breastfeeding's benefits for mothers, 58.0% (499) are aware that it enhances weight loss. The information that breastfeeding mothers have a lower risk of breast cancer is held by 71.9% (618). Breastfeeding reduces the long-term risk of obesity, as known by 39.4% (339), and the fact that breastfeeding can be used as a form of contraception is recognized by 23.4% (2201) women.

Analyzing the level of knowledge of the respondents, this study revealed that only one third of women 31.3% (269) have high knowledge of breastfeeding (Figure 1). Our study sample was scored according to the level of breastfeeding knowledge level, and divided into two groups: a high breastfeeding knowledge level (HBFKL), and a low breastfeeding knowledge level (LBFKL). Studying the following demographic variables, the results revealed that HBFKL increases with mother age.

Table 2. Knowledge about breastfeeding among participated women

Knowledge	Correct Response No (%)	Incorrect Response No (%)	Do not Know No (%)
WHO recommendations of exclusive breastfeeding	118(13.7)	742(86.3)	0(0.0)
Breastfeeding as a method of contraception	201(23.4)	234(27.2)	425(49.4)
Colostrum benefits	541(62.9)	277(32.2)	42(4.9)
Breastfeeding strengthens the emotional bond between mother and child	785(91.3)	5(0.6)	70(8.1)
Breastfeeding is sufficient for the child for the first six months	630(73.3)	115(13.4)	115(13.4)
Breastfeeding reduces the risk of diarrhea in children	400(46.5)	84(9.8)	376(43.7)
Breastfeeding reduces the incidence of middle ear infections	322(37.4)	80(9.3)	458(53.3)
Breastfeeding reduces the risk of respiratory infections	369(42.9)	54(6.3)	437(50.8)
Breastfeeding helps the mother to lose weight	499(58.0)	196(22.8)	165(19.2)
Breastfeeding protectmothers from having breast cancer	618(71.9)	24(2.8)	218(25.3)
Breastfeeding reduces the risk of obesity in the long run	339(39.4)	130(15.1)	391(45.5)
Breastfeeding reduces the risk of bleeding immediately after birth for the mother	223(25.9)	81(9.4)	556(64.7)
Know the 10 steps for proper breastfeeding	327(38.0)	402(46.7)	131(15.2)

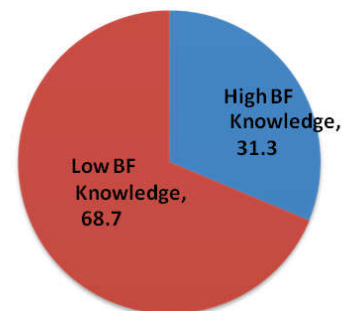


Figure 1. Level of breastfeeding knowledge among participated women

Table 3. Association between socio-demographic characteristics andbreastfeeding knowledge level among participated women

Variables	Breastfeeding knowledge		X ²	P-value
	HBFKL No (%)	LBFKL No (%)		
Age				
15-25	70(20.9)	265(79.1)	51.634	0.001
26-45	170(35.1)	315(64.9)		
46-56	29(72.5)	11(27.5)		
Marital status				
Married	188(34.7)	354(65.3)	10.146	0.017
Single	71(24.3)	221(75.7)		
Divorce	8(38.1)	13(61.9)		
Widow	2(40)	3(60)		
Employment status				
Housewife	118(31.1)	261(68.9)	13.744	0.001
Employee	54(39)	178(61)		
Students	97(23.3)	152(76.7)		
Education Level				
Prep school degree	12(24.5)	37(75.5)	11.516	0.042
High school	53(24.7)	162(75.3)		
Diploma	68(30.4)	156(69.6)		
Bachelor' degree	128(29.2)	220(63.2)		
Postgraduate	8(33.3)	16(66.6)		
Experienced motherhood				
Yes	178(37)	303(63)	16.655	0.001
No	91(24)	288(76)		

This result is highly statistically significant where the highest frequency seen in the 46 - 56 age group ($P= 0.001$). It also showed that knowledge is influenced by the level of their education. HBFKL in women in preparatory school was 24.5%, while that with the postgraduate holders was 33.3% ($P= 0.042$). Analyzing results on BF knowledge and marital status, single women were found to have the highest frequency of LBFKL (75.5%) that was statistically significant ($P= 0.017$). Results also revealed that 76.7% of students have LBFKL which was high significant difference ($P= 0.001$). Studying BF knowledge in relation to marital status revealed that a significant result was highest frequency of LBKFL seen in single women 75.5% ($P= 0.017$). The study showed that the frequency of breastfeeding knowledge is significantly low in students 76.7% ($P= 0.001$).

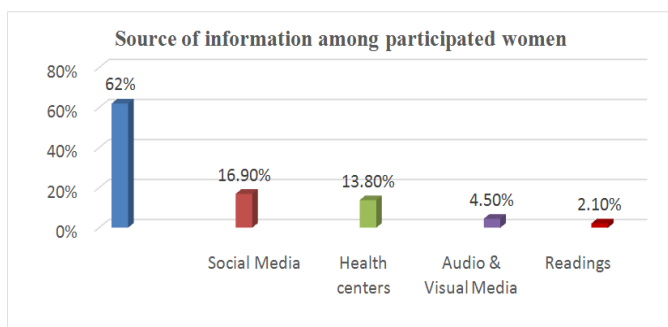


Figure 2. Source of information among participated women

Sixty-two percent of women (62.7%) stated “society and a family member which might be a mother, sister, or friend were their main sources of breastfeeding information. Only 13.8% of respondents professionally got information from health clinics; 16.9% received it from social media. 4.5% reported they got their information from audio or visual media (such as TV and radio) while, 2.1% reported they received their information from journals and books.

DISCUSSION

For proper growth, health, and normal development, infants must receive adequate nutrition.^[10] Breastfeeding has sufficient nutrition, and provides short- and long-term benefits for both the infant and the mother, including helping to protect the child from a variety of acute and chronic illnesses.^[11] Although almost all respondents know that BF is sufficient for babies in the first 6 m of age, only 13.7% know the recommendation for exclusive BF this differs from *Akinyinka MR et al* where 82.3% heard about exclusive BF^[12]. A Higher frequency of the respondents in this study were Bachelor' degree holders 40.5%, and about half of them have high school or diploma 51%. This is similar to the findings in the study conducted in Ekiti State where the majority in that study had a tertiary education.^[13] Mothers' prenatal preparation plays a significant role in the success of exclusive breastfeeding. However, because most women are unaware of the steps involved in breastfeeding, efforts must be made to educate them. *Edmond et al* concluded in a study done in rural Ghana that 22% of infants would be saved from death if all women started breastfeeding within an hour of giving birth^[14]. It is similar to *Gupta et al* study that found, starting breastfeeding within an hour of birth can prevent the deaths of 250,000 newborns annually^[15]. It is imperative that we explore all ways for persuading mothers to breastfeed their babies. The unique

beneficial properties of breast milk and the risks to those infants not breast fed is now well recognized.^[16] Breastfeeding reduces the risk of developing a number of childhood diseases, including diarrhea, pneumonia, and sudden infant death syndrome.^[17,18] Our study revealed that 73.3% of the mothers knew that breast milk is the best in the first six months, while about 50 % of respondents were unaware about the immunological benefits that protect babies against infectious diseases. It also revealed that the study sample possesses various degrees of knowledge regarding infants' and mothers' benefits of breastfeeding and its contraindications. An important finding in this study was that most mothers (62.7%) were more likely to seek the advice on breastfeeding from close friends and family members than from medical professionals. Similar results were found in *Mogre et al* study.^[8] Different unreliable information sources cannot guarantee the accuracy of this information, despite the fact that it may not be entirely incorrect.

Conclusion

In conclusion, this analysis revealed the lack of breastfeeding knowledge among women. The success of breastfeeding is significantly influenced by women's education. Every chance should be taken into account in order to enhance their knowledge of breastfeeding and eventually their breastfeeding practices. Given the growing number of working mothers, it is crucial that workplaces offer designated areas for nursing in order to support breastfeeding mothers.

Abbreviations

American Academy of Pediatrics (AAP), Breastfeeding (BF), World health organization (WHO), High breastfeeding knowledge level (HBFKL), Low breastfeeding knowledge level (LBFKL),

REFERENCES

1. American Academy of Pediatrics. Section on Breastfeeding. Breastfeeding and the Use of Human Milk external icon. Pediatrics. 2012; 129(3): e827-841. DOI 2011-3552. Accessed August 24, 2021.
2. WHO, Breastfeeding. Available at https://www.who.int/health-topics/breastfeeding#tab=tab_1
3. Sultania P, et al. *Breastfeeding Knowledge and Behavior Among Women Visiting a Tertiary Care Center in India*. Annals of Global Health 2019, 85(1): 64, 1–9. DOI:
4. World Health Organization. Infant and young child feeding: model chapter for textbooks for medical students and allied health professionals 2009.
5. Hamze L, Mao J, Reifsnider E. Knowledge and attitudes towards breastfeeding practices: a cross-sectional survey of postnatal mothers in China. Midwifery 2019; 74:68–75
6. UNICEF. 77 million newborns globally not breastfed within first hour of life –Delayed breastfeeding increases risk of newborn deaths by up to 80 per cent. July 2016
7. Mohapatra I, Roy A. Breastfeeding awareness and perception among antenatal mothers. *Journal of Education and Health Promotion*. 2018; 7: 60
8. Mogre V, Dery M, Gaa PK. Knowledge, attitudes, and determinants of exclusive breastfeeding practice among Ghanaian rural lactating mothers. *Int Breastfeed J*. 2016; 11:12.

9. Zhang Z, Zhu Y, Zhang L, Wan H. What factors influence exclusive breastfeeding based on the theory of planned behaviour. *Midwifery*. 2018; 62:177-82.
10. World Health Organization. The global burden of disease: 2004 update. Geneva, *World Health Organization*, 2008.
11. Leon-Cava N, Lutter S, Ross J, Martin L. Quantifying the benefits of breastfeeding: A summary of the evidence. Pan American Health Organization, Washington DC, 2002.
12. Akinyinka MR, Olatona FA, Oluwale EO. Breastfeeding Knowledge and Practices among Mothers of Children under 2 Years of Age Living in a Military Barrack in Southwest Nigeria. *Int J Mch Aids*. 2016;5(1):1-13.
13. Ijarotimi OS. Assessing exclusive breastfeeding, dietary intakes and body mass index (BMI) of nursing mothers on Ekiti State of Nigeria. *Nutrition Research and Practice*. 2010 Jun;4(3):222–228.
14. Karen M. Edmond, Charles Zandoh, Maria A. Quigley. Delayed Breastfeeding Initiation Increases Risk of Neonatal Mortality Pediatrics, (2006) 117 (3): e380–e386.
15. Gupta A, Arora V, Bhatt B. The State of World's Breastfeeding: India Report card 2006. International Baby Food Action Network (IBFAN), Asia Pacific. In dia. 2006.
16. Khan ME. Breast – feeding and Weaning Practices in India. *Asia Pac Popul J.*, 1990; 5(1): 71-88.
17. Holtzman O, Usherwood T. Australian general practitioners' knowledge, attitudes, and practices towards breastfeeding. *PLoS One*. 2018;13(2): e0191854.
18. Ogbo FA, Nguyen H, Naz S, Agho KE, Page A. The association between infant and young child feeding practices and diarrhoea in Tanzanian children. *Trop Med Health*, 2018;46:2.
