

Abstract

Background: Breastfeeding is the most appropriate way of providing young infants with the nutrients needed for healthy growth and development. The World Health Organization (WHO) actively promotes breast milk as the best source of nourishment for infants and young children. Exclusive breastfeeding for up to 6 months has multiple benefits for both mother and child. Despite these recommendations, the rate of exclusive breastfeeding has not met the requirements in both developed and developing countries. Breastfeeding rates among infants born in 2015 in the US show that, 83.2% children were ever breastfed, 57.6% were breastfed for 6 months and 35.9% were breastfeeding at 12 months. Looking at the statistics among different states, Alaska (93.1%), Washington (92.4%) and Colorado (90.9%), had the highest breastfeeding rates. Comparatively, Southern states of Mississippi (63.2%) and Louisiana (67.0%) had the lowest rates. Additionally, in Louisiana, 39% of the infants were breastfeeding at 6 months, which decreased to 20.6% at 12 months. Only 20.2% were exclusively breastfed for up to 6 months. Adult, college-age women are an important demographic in which to identify existing misconceptions or negative perceptions that may act as a hindrance for breastfeeding in the future. The breastfeeding knowledge and attitudes of young adults should be identified before they become parents.

Objective: The purpose of this study is to measure the level of breastfeeding knowledge, attitude and intention of adult undergraduate and graduate females at a public, higher education institution at Southern United States.

Methods: A convenience sample of female adult students (n=1039) enrolled, were recruited to complete the 55-58 -item questionnaire. The questionnaire contained knowledge, attitude items and questions about breastfeeding intention. Kruskal-Wallis and Chi-Square tests were performed to compare differences in breastfeeding knowledge, attitude and intention among study participants.

Results: The mean knowledge and attitude scores were calculated to be 13.16 ± 2.48 and 64.19 ± 7.69 respectively. Similarly, majority (91.45%) of the participants had intentions to breastfeed their children in future.

Conclusion: Overall, good breastfeeding knowledge and a positive attitude were found among the female students. Although the results indicated a positive attitude, most students denied the fact that breastfed babies could be comparatively smarter than non-breastfed babies.

Background

•The World Health Organization (WHO) actively promotes breast milk as the best source of nourishment for infants and young children. Exclusive breastfeeding for up to 6 months has multiple benefits for both mother and child.¹

•Despite these recommendations, the rate of exclusive breastfeeding has not met the requirements in both developed and developing countries.²

•Many studies suggest that good knowledge and positive attitudes are the primary factors that give rise to the intention of a mother to breastfeed her child.³

•Young, college-age women are an important demographic in which to identify existing misconceptions or negative perceptions that may act as a hindrance for breastfeeding in the future.⁴

•The breastfeeding knowledge and attitudes of young adults should be identified before they become parents.⁵

•This study was conducted with a hope to address the gap in the existing literature, by examining the breastfeeding knowledge, attitudes, and intentions of young, adult females in the United States.

Methods

- This is a cross-sectional survey study that used convenience sampling.
- The questionnaire consisted of a 19-item knowledge section, a 17-item attitude section and one breastfeeding intention question with a total of 58 questions. The questionnaire was developed by the Principal Investigator (PI) under the supervision of a breastfeeding measurement scale expert.
- The knowledge items were intended to produce a score with a possibility of 0-19. Correct answers were scored as 1 and incorrect as 0.
- Similarly, the attitude scale used a 5-point Likert scale with 1 meaning “Strongly disagree” and 5 meaning “Strongly agree” which provided scores ranging from 17-85.
- The study population included 1,039 young female undergraduate and graduate students from the University of southern part of the US.
- The whole study population was divided into three groups: ones who don’t have kids but plan to have in the future (G1), who don’t have kids and don’t have plans for kids in the future (G2) and who already have children (G3).
- Breastfeeding intention was only measured among those who indicated they did not have children.
- An initial pilot study with five students, utilizing purposive sampling of the study population, was conducted.
- For the full study, PI went into different classes of the University and requested the students to complete the survey by accessing the survey link to Qualtrics.
- The dataset was found to be non-normal using a normality test, resulting in Kruskal-Wallis tests being performed to assess differences in knowledge and attitude between the three groups.

Results

- The mean age of the participants was 20.12 ± 3.12 years.
- The total mean knowledge score was found to be 13.2 ± 2.5 with a range of 4- 19.
- The mean attitude score of the entire sample was 64.2 ± 7.7. The range was from 30-85.
- Both knowledge and attitude scores were highest among participants who were 22 years and older.
- International students had slightly higher knowledge and attitude scores compared to U.S. citizens but there was no significant difference.
- Analysis of differences in knowledge and attitude scores among the three groups showed that the mean scores were highest in the group who already had children (G3) and the lowest was among the group that had no intention of having children in the future (G2).
- Looking at the intentions section, 91.45% of the participants reported they would breastfeed their children in the future.

Table 1. Mean knowledge and attitude scores by the three original subgroups of the sample

Grouping	Knowledge Score		Attitude Score	
	n (%)	Mean (S.D.)	n (%)	Mean (S.D.)
G1 – Childless, intending to have children	905 (90)	13.19 (2.4)	913 (89.9)	64.28 (7.6)
G2–Childless, no intention to have children	80 (7.9)	12.38 (2.7)	81 (8.0)	62.16 (7.9)
G3 – Already have children	21 (2.1)	15.00 (2.3)	21 (2.1)	68.52 (7.3)

Table 2. Comparison of knowledge and attitude score among two groups by their intention to breastfeed in future

Grouping and Future BF Intention	n (%)	Knowledge Score		Attitude Score	
		Mean (S.D.)	p-value	Mean (S.D.)	p-value
G1 + G2 (Childless)					
NO	82 (8.5)	11.5 (2.5)	0.003*	56.2 (7.5)	0.071
YES	878 (91.5)	12.3 (2.4)		64.9 (7.2)	
Just G1					
NO	63 (7.2)	11.7 (2.6)	0.007*	56.7 (7.5)	0.056
YES	818 (92.8)	13.3 (2.4)		64.9 (7.3)	
Just G2					
NO	19 (24.1)	10.9 (2.2)	0.018*	54.7 (7.4)	0.22
YES	60 (75.9)	12.8 (2.7)		64.5 (6.7)	

Conclusions and Implications

- Overall, good knowledge and a positive attitude were found among the female students regarding breastfeeding.
- Knowledge and attitude scores were higher among participants who were married, senior and graduate students and participants age 22 years and above.
- Similarly, a majority of participants reported they had plans to breastfeed their future children.
- Most of the participants denied the fact that breastfed babies might become comparatively smarter than formula-fed babies.
- Satisfactory results were obtained from this but there is also a lot to improve. The results of this study do not represent the views of all college students across the country.
- The questionnaire was self-reported by the participants, so they might have chosen options they found were more desirable or might have misinterpreted questions.

References

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