

## Mothers' Knowledge and Attitude toward Exclusive Breastfeeding

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Received: 17/Apr/2019 Revised: 3/May/2020 Accepted: 17/May/2020

### Abstract

**Introduction:** Exclusive breastfeeding protects infants from diseases in the first 6-months of life. Awareness and attitude affect breastfeeding performance. This study assessed maternal awareness and attitude toward breastfeeding in Alzahra Hospital, a baby friendly, in Rasht, Iran.

**Objectives:** To determine knowledge and attitudes of mothers on various aspects of breastfeeding and factors related to them among mothers under postpartum, Alzahra educational, medical and research center.

**Materials and Methods:** This descriptive cross-sectional study was conducted on 384 post-natal mothers. It was done by sampling and simple random in post-partum unit of Alzahra Hospital, Rasht. A questionnaire consisting of 3 main parts; demographic information, knowledge and attitude, was used in the study. Attitude and knowledge scores were also calculated. Data were analyzed by Man-Whitney, Kurskal-Wallis and Spearman Correlation Coefficient tests, using SPSS-software in version 21.

**Results:** In this study, 32.6% had good levels of knowledge about breastfeeding and majority of them (39.1%) had an average knowledge. All of mothers had positive attitude, but 20.3% of mothers had more positive attitude and most of individuals (67.2%) were in the intermediate state and the rest had a more negative attitude. In the multivariate analysis in the regression logistic model attitude status ( $P < 0.0001$ ), experience of breastfeeding ( $P = 0.006$ ), breastfeeding training ( $P = 0.004$ ), income ( $P = 0.03$ ) and mother's job ( $P = 0.001$ ) were anticipating factors of high knowledge, and the status of knowledge ( $P = 0.043$ ), mothers' education ( $P = 0.004$ ), natural delivery compared to cesarean section ( $P = 0.008$ ), type of infant's feeding ( $P = 0.0001$ ) were anticipating factors related to positive attitude status. Also, a significant poor positive relationship was found between age and the score of knowledge ( $r = 0.158$ ,  $P = 0.002$ ) and attitude ( $r = 0.128$ ,  $P = 0.062$ ).

**Conclusion:** A significant number of mothers had moderate knowledge about breastfeeding, which necessitates intervention programming, especially for mothers with low levels of education.

**Key words:** Attitude / Awareness / Lactation / Puerperium

Journal of Guilan University of Medical Sciences\ Volume 29, Issue 2, (No 114), Pages: 1-13

**Please cite this article as:** Mansour Ghanaei M, Kazemnezhad Leili E, Amin A, Asgari ghalehbin S M. Mothers' Knowledge and Attitude toward Exclusive Breastfeeding. J of Guilan University of Med Sci 2020; 29(2):1- 13.

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**Extended Abstract**

amount of attitude, Mann-Whitney's tests and Kurskal-Wallis tests were used.

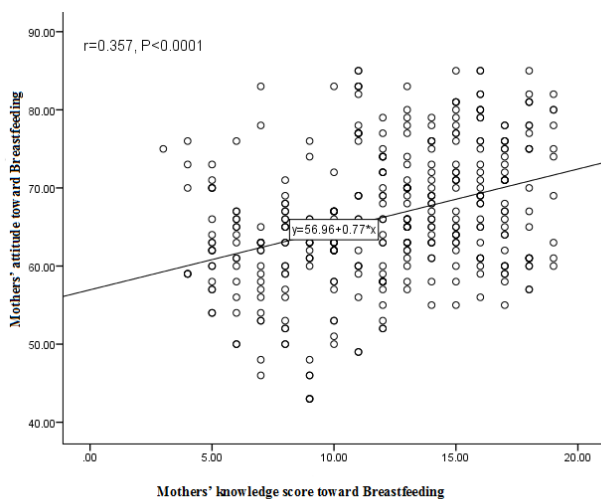
Logistic regression model was used to determine the predictors of awareness and attitude. The level of significance of the tests in this study was considered with  $P < 0.05$  and the significance as bilateral significance as well as statistical significance in the study.

**Results:** The average score of awareness ( $12.06 \pm 4.02$ ) of 19 scores can be obtained by measuring awareness tools (minimum 3 and maximum 19). 109 cases (28.4%) had poor, 150 (39.1%) had average and 125 (32.6%) had good awareness with a 95% confidence interval; generalization to the community of mothers was equal to 37.2-78.0%.

Therefore, after calculating the average score and standard deviation, the attitudes of individuals were divided into 3 different groups of negative attitude (12.5%), intermediate (67.2%) and more positive (20.3%).

Since the attitude score distribution ( $P = 0.018$ ) and awareness ( $P = 0.005$ ) did not follow the normal distribution according to the one sample Kolmogorov-Smirnov test, Spearman's correlation coefficient was used to determine the correlation between the awareness and attitude scores and the direction of communication.

Spearman's correlation coefficient ( $r = 0.357$ ,  $P < 0.0001$ ) showed a weak direct correlation between mothers' awareness and breastfeeding attitudes (Figure 1).



**Figure 1- Scatter plot correlation between mothers' awareness and attitude towards breastfeeding**

According to the regression linear equation obtained, by increasing one score in awareness, the average attitudes score will increase by 0.77.

**Introduction:** World health organization (WHO) and United National children's fund (UNICEF) recommended Exclusive Breastfeeding (EBF) in the first 6-months of life to protect infants from diseases (1).

The rate of EBF estimates 37-38% in the world (2). World health Assembly (WHA) had determined a universal goal for increasing of EBF to 50% by 2025 (3). The Health Agency aims to increase primary breastfeeding to 82%, EBF to 46% by 3 months and 26% by 6 months (4,5).

In Iran demographic and health surveys (DHS) and Integrated Monitoring and Evaluation System (IMES) reported EBF till the end of 6-months 44%, 27%, respectively (6).

**Objectives:** This study assessed maternal awareness and attitude toward breastfeeding on various aspects of breastfeeding and factors related to them among mothers in postpartum Alzahra educational, medical and research center, Rasht, Iran.

**Materials and Methods:** This descriptive cross-sectional study was conducted on 384 post-natal mothers. It was done by sampling and simple random in post-partum unit of Alzahra Hospital, Rasht, Iran. The used questionnaire consisted of 3 main parts; demographic information, knowledge and attitude. Attitude and knowledge scores were also calculated.

The validity of the attitude assessment and awareness tool was verified to measure the Content Validity Ratio (CVR) and Content Validity Index (CVI) (according to the Lawshe table).

The CVI index for questions' assessment of attitude and awareness was more than 0.8. The reliability of the sensitization tool and Sanchez's approach was determined by test-retest method.

The Pearson correlation coefficient was ( $p = 0.0001$  and  $r = 0.995$ ), and the test-retest reliability was 97.6% (indicating the high reliability of this tool).

Cronbach's alpha level was 0.714 for the internal stability of the assessment questions and Richardson 20's  $\alpha$  level was 0.762 for the internal stability assessment.

After collecting the information, the data entered the SPSS software (version 21). The average score and 95% confidence interval were used to determine the level of awareness and attitude.

Spearman's correlation coefficient was used to evaluate the correlation between awareness score and attitude score due to non-compliance with normal score distribution.

In order to compare the amount of scores according to individual and social variables as well as the independent variables studied, and considering lack of distributed normality of the level of awareness and the

monthly household income increase (OR: 2.57)), Maternal Employee Employment (OR: 265.2), and Maternal Freelance Job (OR:14.5), the chance of a high awareness score increases on average.

**Conclusion:** In the present study, higher awareness is the predictive factor of positive attitude and vice versa. And there is a weak direct correlation between the score of awareness and attitude, so that by increasing a score in awareness, an average of 0.77 attitude score will rise.

In our study, the mother's decision to breastfeed her baby was a predictor of her positive attitude toward others.

Also in this study, the mothers' awareness score was significant in terms of the type of infant nutrition, so that the average score was higher in mothers who decided to breastfeed with both types of milk.

Considering the correlation of factors such as education, economic status, breastfeeding experience, more breastfeeding training, type of delivery and mothers' jobs, with awareness and attitude, it can be concluded that health education programs authorities should pay special attention to this group of people in our region.

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Age-related correlation coefficient with a score of awareness (P=0.002, r=0.158) and also with attitude score (P=0.012, r= 0.128) had a weak, positive, direct and significant relationship. Older mothers had both higher awareness and higher scores.

Since the distribution of the awareness score and the attitude score did not follow the normal distribution, we used Mann-Whitney test and the multivariate qualitative Kurskal-Wallise test to compare them in terms of two-state qualitative variables.

Maternal attitude score by job (P=0.004), maternal education (P<0. 001), spouse's job (P=0.004), mode of delivery (P<0.0001), place of residence (P<0.0001) and nutrition (P<0.0001) were statistically significant.

As the mother's education develops, the chances of getting a high grade point average increase (OR: 3.36).

The chance of a high score on the average attitude of mothers with a vaginal delivery is lower than a cesarean delivery (OR: 0.257). Mothers who have decided to breastfeed have a higher attitude than mothers who have considered either formula or both (OR: 16.2).

With an increase in attitude (OR: 46.03), breastfeeding experience (OR:17.85) and breastfeeding training during pregnancy (OR: 11.27), and the average