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Research Article

KNOWLEDGE, ATTITUDE, AND PRACTICES OF MOTHERS TOWARD STARTING OF COMPLEMENTARY FEEDING FOR THEIR INFANTS

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ABSTRACT

Objectives: The feeding practices in the early age of pediatrics regarded as a key intervention to improve child health. Furthermore, the optimal nutrition during the first two years of infancy can effectively lower the morbidity and mortality in addition to decrease the risk of future chronic disease. This study aimed to assess infant feeding practices among Iraqi mothers. Method: A cross-sectional study was done on a convenient sample of mothers in Baghdad – Iraq. Data collection was done by using a validated questionnaire specifically designed for this study. Result: Most participated mothers prefer to start feeding their infants at the age of 6 months and continue milk feeding up to 2 years. Regarding practices, 19% of mothers inaccurately stopped breast/ bottle feeding during diarrheal episodes. 43% misused appetizer drugs or multivitamins to enhance child feeding. Less than 40% of participating mothers start giving egg white, honey, nuts and vegetable soup earlier than the recommended time. Conclusion: This study reveals a good level of knowledge about starting of feeding for most participating mothers although there are some practices which followed by the small proportion of mothers that necessitate educating the parents about the proper feeding practices.

Keywords: knowledge, Infants, Feeding practices, complementary feeding.

INTRODUCTION

The feeding practices in the early age of pediatrics regarded as a key intervention to improve child health. [1]World health organization (WHO) and The United Nations Children's Fund (UNICEF) are initially recommending exclusive breastfeeding (during the 1st six months of life) which regarded as a cornerstone to provide full requirements of nutrition during the early six months of infancy [2]. Subsequently, adequate complementary feeding of children should be started from 6 months to 2 years of age is particularly important to ensure optimum growth, development, and prevent infant undernutrition [3]

Furthermore, the optimal nutrition during the first two years of infancy can effectively lower the morbidity and mortality in addition to decrease the risk of future chronic disease.[4]

On the other hand, parents' feeding practices can play a crucial role in children's taste preferences, eating habits, nutrition, and subsequent weight status 5. Nevertheless, most pediatrics do not receive optimal feeding in their early age however these complications which resulted from some practices in the infants feeding can be minimized if the parents especially the mothers have a good knowledge about the correct practices of feeding[6].

Many studies were conducted in developing countries to assess infant feeding practices [7], but none was done in Iraq. Therefore, this study aimed to assess infant feeding practices among Iraqi mothers.

SUBJECT AND METHOD

A cross-sectional study on a convenience sample of 320 mothers who have a child with an age between six months and two years was done in Baghdad, Iraq from January 2018 to May 2018.

As the previous questionnaires that focus on infant feeding practices such as the Child Feeding Questionnaire(CFQ)[7] did not measure some practices followed by Iraqi mothers that included in this study for that, we designed a specific questionnaire according to sociodemographic characteristics of Iraqi community.

The questionnaire consists of two parts; the first part intended to collect the demographic data the age of the mothers and her child, educational level, occupation and number of children for each participated mother. The second part consisted of ten questions that designed to measure the knowledge, attitude, and some practices of Iraqi mothers regarding early infants and young children feeding.

The questionnaire was validated by the Scientific and Ethical Committee in the College of Pharmacy, Baghdad University and was carried according to Declaration of Helsinki guidelines. Then the validated questionnaire was distributed among 25 mothers to test its reliability by Cronbach's alpha test which showed a value of 0.768 which indicates the consistent reliability of the survey. Finally, Test and retest reliability was performed using Pearson's correlation and showed significant positive correlations for the ten questions.

The correlation coefficient (R) value range was (0.688-1.0) for all the involved items which indicate that all items provide consistent scores. Verbal consent was obtained from all participants included in the study. The authors informed the participants about the purpose of the survey at the beginning of each interview. Meanwhile, the respondents were informed that their participation was voluntary, and they were allowed to withdraw themselves at any point of time during the meeting.

Statistical analysis

Data input and analysis was done using Statistical Package for Social Sciences software version 16 SPSS v.16. Discrete variables were presented as numbers and frequencies. Pearson correlation coefficient was used to assess the correlation for test-retest validation and correlation between some variables. Fisher's exact test was used to test the difference between proportions.

Table 1: Demographic data of the participating mothers n=320

Age of Participants (No.) %	**Below 20-year-old**	**Age 20-40 year-old**	**Age > 40 year-old**
	(45) 14%	(295) 81%	(16) 5%
Education (No.) %	**Primary school**	**High school**	**Bachelor Degree**
	(18) 6%	(73)23%	(229)71%
Number of children (No.) %	**One child**	**More than one child**	
	(172) 54%	(148) 46%	
Employment status	**Employee**	**Housewife**	
	(126)39%	(194)61%	

Table 2: Distribution of participants n=320 based on their knowledge about the best age to start certain types of food

Type of food	No. % of mothers who use it correctly	No. % of mothers who use it incorrectly	P- value
Cerelac	(160)50%	(160)50%	1
Egg white	(195)61%	(125)39%	p=0.0001 **
Honey	(218)68%	(102)32%	p=0.0000 **
Nuts	(198)62%	(122)38%	p=0.0000 **
Vegetables soup	(202)63%	(118)37%	p=0.0000 **

* Significant. p<.05 significant at alpha=0.05. ** p<.01 significant at alpha=0.01

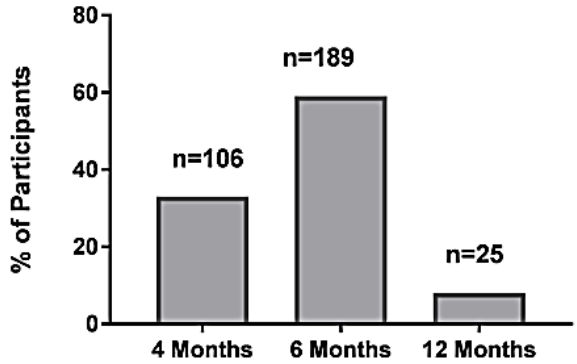

Figure 1. Distribution of participants (%) (n=320) based on their knowledge about the appropriate age to start complementary feeding to their infants.

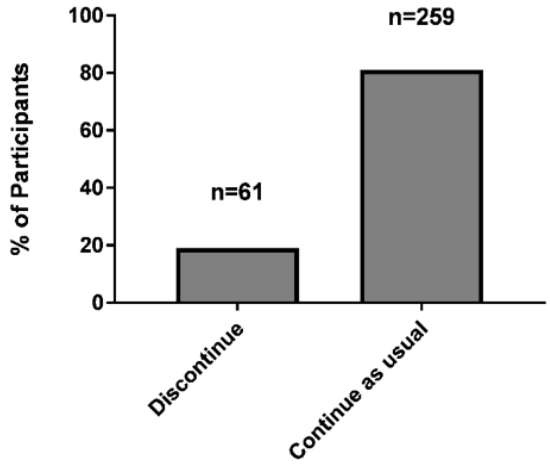

Figure 2. Distribution of participant % (n=320) based on their attitude about giving milk during diarrhea

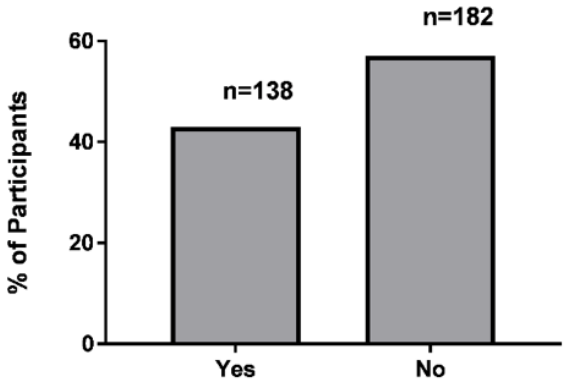

Figure 3. Distribution of participant % (n=320) based on their attitude about increasing appetite by using appitizers or multivitamins.

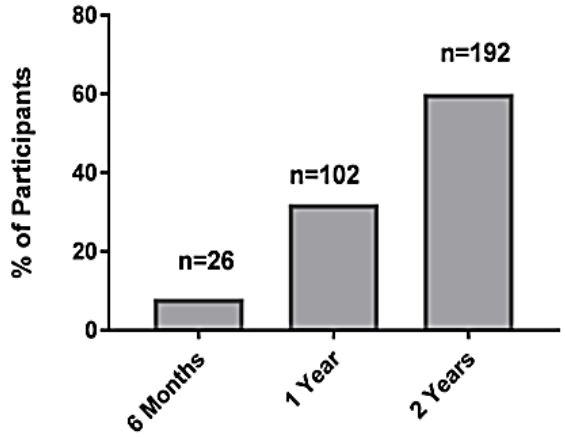

Figure 4. Distribution of participants % (n=320) based on their knowledge about the best time to wean their infants.

RESULTS

The questionnaire administered to 320 mothers in Baghdad community. In this study, most participated mothers were in the age range of 21-40; 71% of mothers with a bachelor degree. 61% of mothers were none employed. Further details are given in table 1.

Most participated mothers prefer to start feeding their infants at the age of 6 months. Further details are given in Fig. 1.

It was noted that 81% of mothers actually would continue giving milk, whereas 19% of them would instead stop (Fig. 2). Regarding the use of any appetizer drugs or multivitamins to increase the appetite of their infants. 43% would use whereas 57% would not (Fig.3).

Concerning weaning time 8% of the participant said at the age of 6 months, 32% at the age of 1 year while 60% would wait till two years old (Fig.4).

Another part of this study was asking the mothers when they began to give some types of food such as Cerelac, egg white, honey, nuts, and vegetable soup. From table 2 we can notice that 50% of participants would give Cerelac under six months, 47% and 3% would give it from 6-12 months and more than one year respectively. 39% of them would start giving egg white before 1years old. Regarding honey administration, 7% of the mothers would begin providing honey before six months, while 25% and 68% would wait 6-12 months and after one year respectively. 62 % of participant answered that they would give nuts after 1-year-old while 35% and 3% would give it from 6-12 months and before six months respectively. 37% of participants would provide vegetable soup before six months while 61% and 2% would start from 6-12 months and after one year respectively.

DISCUSSION

Infants and young children feeding practices and its influence on child health, future eating habits and weight of the child do not take its priorities in medical studies in Iraq. This study demonstrated that the higher percentages of mothers participated were well educated this can be explained since well-educated mother participated in these studies because they are more intrigued by enhancing their insight about her child wellbeing. This outcome will interpret the subsequent results obtained in this study which indicates a good knowledge of higher percentages of participants about feeding practices. Previous similar studies also suggest that there are variances in feeding practices depending on maternal education. [8]

Most of the participants are not employed although they are well educated this can give them more time to concentrate on her child and consequently effect on feeding practices. Similar results also concluded in a study performed in Bangladesh 2 which showed that employment of parents could influence the starting time of complementary foods by the recommended age.[9]

In the present study, although 59% of participants started complementary feeding after six months as WHO recommends. Nevertheless, one-third of them began feeding early before the recommended age. This improper concept is seen in many studies worldwide which estimated that only 34.8% of infants entirely depends on breastfed for the first six months, while the majority is receiving other food or fluid in the early months.[2]

The previous result can be attributed to lack of adequate awareness and skills or support from health professionals, so they follow this malpractice. [10] Increasing the infant's appetite can be tricky especially if they find food unappealing or are struggling to eat, the mothers were asked if they used any appetizer drugs or multivitamins to increase the appetite of their infants.

Worldwide, cyproheptadine[11]and herbal medications [12]can be used as an appetizer by prescription to improve feeding behaviors and weight gain in young age pediatrics. However, In Iraq, these medications widely misused for this purpose which may lead to many unwanted side effects, and its abuse may lead to disturbances in the immunity of persons taking it, especially in children. [13] This study revealed that more than (40%) of participants used these medications without prescription to improve their child appetite. This indicates a low level of awareness of many mothers about the misuse of these medications.

One of the erroneous ideas followed by many mothers is discontinuing breastfeeding during diarrheal episodes as they assumed that breast milk would aggravate diarrhea. This study demonstrated that this wrong concept followed by (17%) of participants. This result similar to that found in McLennan JD et al. where (3 %) of participants believe breastfeeding should be discontinued. [14]

Although white egg and honey should be avoided before one year since it's the most common sources of allergic reactions [15], nevertheless this study showed clearly that more than half of participants start egg white below one year. Honey in other hand given to infants before one year by more than forty percent of participants.

The suboptimal timing of complementary feeding also has been previously reported in Mihrshahiet al. study. [16]

The strength of this study is in its aim that concentrate for the first time in Iraq on measuring the degree of knowledge, attitude in addition to some practices regarding infant feeding. The limitations, on the other hand, are the limited number of participants besides the convenient and non-randomized sample.

CONCLUSION

This study reveals a good level of knowledge about the infants and young pediatrics feeding practices for most participants although there are some mistaken concepts were followed by the small percentage of mothers which necessitate educating the parents about the proper feeding practices.

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