Original Article

Practices and barriers regarding infant and Young Child Feeding among mothers, of age 0-23 months at a tertiary care hospital in Islamabad, Pakistan

Nadia Junaiid, Saima Hamid, Sundas Ali, Shemaila Saleem, Fouzia Hanif, Ayesha Haider

Federal Medical Dental College, Pakistan Institute of Medical Sciences, Health Services Academy, Islamabad and University of Lahore, Pakistan

Objectives: To assess the knowledge, attitude and practices about Infant and Young Child Feeding (IYCF) among mothers with children 0-23 months of age.

Methodology: This mix cross-sectional analytical study was conducted in Pakistan Institute of Medical Sciences from April 1, to June 30, 2016 and included 400 mothers selected for interview using non probability convenience sampling technique. Pre-tested structured questionnaire was used for data collection and analysis was done using SPSS version 21.

Results: Only 56% mothers had sufficient knowledge regarding IYCF whereas attitude and practices were found in 72% and 36%, respectively. Mothers did not continue breast feeding due to busy routine, lack of public feeding corners and lack of knowledge about breast feeding techniques. Statistically significant association was found between knowledge of mothers regarding IYCF and mother's age, education, occupation, monthly house hold income and parity ($p \leq 0.001$). Focus group discussion results revealed the first feed introduced to baby was "Ghutti", (honey, dates). Mothers did not exclusively breast feed their child due to influences and advice regarding top feed they received from in-laws. Feed introduced to infants other than breast feed were reported as water, juice, goat's milk, and green tea.

Conclusion: It is suggested that Health education programs should be framed to bring behaviour change regarding IYCF. (Rawal Med J 202;45:470-473).

Keywords*:* IYCF, knowledge, attitude, practices, Islamabad.

INTRODUCTION

During first two year, the baby relies on natural passive immunity developed as the antibodies passed to them from the mother via breast milk. More than one third of child mortality occurs due to inadequate nutrition of the child leading to various physical, mental and cognitive defects.[1] Breastfeeding has been declining worldwide and mothers often depend on bottle-feeding, with complementary feeding (CF) starting either way too early or late.[2] The main reason of poor IYCF practices have been a direct consequence of urbanization, women have become a huge part of workforce so that combined efforts both inside and outside their homes lead to exhaustion, and they shorten the period of breastfeeding or rely on baby formulas.[3]

In developing countries like Pakistan, females get married very early effecting their education, so most of the young mothers do not have knowledge regarding breast feeding. Even if aware of advantages of breastfeeding, they may not be familiar with the correct method.[4] In European region, IYCF knowledge was found to be sufficient but and practices are affected because most of women are either single parents or busy with their jobs, resulting in poor nutrition of children in-spite of higher socioeconomic status.[5,6] An Eastern Mediterranean study observed that women depended more on sugar or glucose water and pre lacteal feeds (58%), and various reasons identified were traditional practices (61%) and advice by mothers and mother-in-laws (58.3%).[7]

A study from Bangladesh showed that women had lesser knowledge regarding exclusive breast feeding (EBF) and IYCF practices, and source of knowledge for them were their mothers-in-law. Majority (75%) were unaware about immediate

breastfeeding of newborn, 54% had no knowledge of colostrum feeding, and 90% had no knowledge about EBF for the first 6 months.[8] This study was conducted to determine knowledge and practices of mothers regarding IYCF and barriers to exclusive breastfeeding to help mothers improve IYCF practice and EBF.

METHODOLOGY

This mix cross-sectional analytical study was conducted in Pakistan Institute of Medical Sciences from April 1, to June 30, 2016. Sample size was calculated on the basis of 38% prevalence of EBF mothers by WHO sample size calculator. The calculated size was 362 at 5% level of significance. However, keeping in mind 10 per cent refusals, sample size came out to be 398, and thus, 400 mothers were selected for interview using non probability convenience sampling technique. Mothers with children 0-23 months of age were included in this study. Mothers who had chronically ill child, had congenital anomalies, and low birth weight babies were excluded from the study.

Regarding knowledge of IYCF, 10 questions were asked from the mothers. Out of a total score of 10, minimum and maximum scores were recorded as 2 and 9, respectively. Mean score regarding knowledge of IYCF among mothers was 5.65±1.73. Knowledge was found sufficient. Five questions were asked from the mothers to assess the attitude of them regarding IYCF. Out of total score minimum score was 1, while maximum was 5. Mean attitude score was found as 3.92±1.22. Good attitude was found in 288(72%) of the mothers, while attitude of 112(28%) was found as not good. Five questions were asked relevant to IYCF practices, mean score among mothers was found as 2.06±1.20 with minimum and maximum as zero and five. Good practices were found in 36% of the mothers while in 64% practices were found as not good.

Pre-tested structured questionnaire [5,6] was used for data collection and analysis was done using SPSS version 21. Approval was obtained by Ethical Review Board (ERB) of the Health Services Academy, Islamabad and informed consent was taken and confidentiality of the participants was fully maintained.

RESULTS

Socio-demographic characteristics of mothers, infants and family are shown in Table 1. . Knowledge of mothers regarding IYCF is shown in Table 2. Attitude of mothers regarding IYCF is shown in Table 3. Table 4 shows practices of mothers regarding IYCF.

Table 1. Socio-demographic characteristics of mothers, infants and family.

Socio-demographic characteristics of mothers.		
Variable	**Groups**	**Percentage**
Age in years	<20	9
	21-24	21
	25-29	43
	>30	27
Parity	≤2	47
	3-4	23
	>4	30
Education	Illiterate	17
	Primary & Middle	22
	Matric	41
	Graduate & above	20
Socio-demographic characteristics of the Infants and children		
Age in months	<5	31
	>5-11	25
	>11-17	33
	<17-24	11
Gender	Male	54
	Female	46
Socio-demographic characteristics of the family		
Family Type	nuclear	45
	extended	55
Monthly Income (PKR)	<15,000	57
	>15,000	43

Table 2. Knowledge of mothers regarding IYCF.

Knowledge of mothers	Duration of BF	Percentage
Initiation of Breast feeding (BF)	Within one hour	56
	1-3 hours	26
	>3 hours	15
	Don't know	3
Duration of EBF (in months)	<6months	25
	6 months	53
	>6 months	15
	Don't Know	7
Start of Child CF (in months)	<6months	22
	6 months	56
	>6 months	22
	Don't Know	0
Knowledge Colostrum & Its benefits	Yes	28
	No	72
EBF	Yes	41
	No	59
BF during Illness	Yes	98
	No	2
Quantity of Child Feeding	Yes	
	No	
Consistency of Child Feeding	Yes	65
	No	35
BF control Family size	Yes	74
	No	26

Table 3. Attitude of mothers regarding IYCF.

Variables	Agree (%)	Neutral (%)	Disagree (%)
Feeding rapidly and forcing meal	18	10	72
BF cuts family expenses	99	0	1
Feeding variety of food	22	25	53
Responsive feeding (eye to eye contact)	90	10	0

Table 4. Practices of mothers regarding IYCF.

Variable	Percentage
Initiation of BF after birth	
Immediately	42
Within 1 hr	41
Within a day	14
After one day	03
Colostrum to newborn	
Yes	82
No	18
Pre-lacteal feeds:	
Yes	73
No	27
EBF for first six month	
Yes	25
No	75
Bottle feeding	
Yes	70
No	30

DISCUSSION

We found knowledge regarding IYCF among mothers was satisfactory; 56% of the participants. In Jimma Arjo town Ethiopian study, 91.6% mothers had knowledge about appropriate IYCF practices.[9] On the contrary, it is better than the study in Mizan Amen Town Ethiopian study, where only 37.4% mothers had knowledge about IYCF practices.[7]

A study conducted in Yemen showed inadequate knowledge about breastfeeding practices.[10] The reasons behind these differences are because of differences in socio-demographic characteristics of study participants, cultural habits and geographic location. Lowest practice score was found in the richest per capita income group, so we can say that better economic status does not positively affect IYCF knowledge, attitude and practice. In present study, knowledge of mothers regarding IYCF was found statistically significant with attitude and practices of mothers. In the Yemen study, significant association was found between mothers' knowledge and attitude toward breastfeeding with their education, occupation and habits.[10]

Respondents of present study reported that on the average, the first feed introduced to baby was "Ghutti" (it is a religious first meal of sweet taste for a newborn). Pre lacteal feed introduced to infants were reported as water, juice, goat's milk, and kehwa (a traditional herbal tea). According to a study done in Egypt, 58% of the newborns received pre lacteal feeds – commonly, sugar or glucose water.[11] Participants of present study gave reason for this practice that it was a cultural norm and that they had to practice it. It was also due to the advices they had received from their in-laws, especially mother in law.

Identified complementary food (CF) offered to infants in present study were soft foods like bananas, mashed eggs, boiled potatoes, rice kheer, suji Ki kheer (semolina mixture), soup, porridge, sago dana and khichri (mixture of rice and pulses). These findings are similar to a study conducted in West Bengal, India.[12] Based on studies, it is apparent that mothers are unaware of basic health facts. The sources of their knowledge are usually elder women in the family.

CONCLUSION

We found that only 50% of mothers in this study had knowledge and positive attitude towards IYCF. Their practices need improvement. Counselling of mothers about importance of EBF and IYCF by healthcare professionals, briefing expecting mothers about right method of breast feeding and ensuring availability of cost effective complementary foods may be helpful.

Author contributions:
Conception and design: Nadia Junaid, Saima Hamid,
Collection and assembly of data: Shemaila Saleem, Ayesha Haider
Analysis and interpretation of the data: Sundas Ali, Ayesha Haider
Drafting of the article: Nadia Junaid, Saima Hamid
Critical revision of the article for important intellectual content: Sundas Ali, Fouzia Hanif
Statistical expertise: Nadia Junaid, Sundas Ali
Corresponding author email: Fouzia Hanif: biochemistry.iimc@gmail.com
Conflict of Interest: None declared
Rec. Date: Nov 4, 2019 Revision Rec. Date: Dec 5, 2019 Accept Date: Feb 16, 2020

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