



## OPTIMAL BREASTFEEDING PRACTICES; MOTHERS' KNOWLEDGE AND PRACTICES.

Rameeza Kaleem<sup>1</sup>, Rehan Ahmad Khan Sherwani<sup>2</sup>, Muhammad Adnan<sup>3</sup>, Tayyaba Rahat<sup>4</sup>

1. Assistant Professor & Head  
Department of Preventive Paeds,  
Sir Ganga Ram Hospital,  
Lahore, Pakistan.
2. College of Statistical and Actuarial  
Sciences,  
University of the Punjab New  
Campus, Lahore, Pakistan.
3. PHRC Research Centre,  
Fatima Jinnah Medical University,  
Lahore, Pakistan.
4. PHRC Research Centre,  
Fatima Jinnah Medical University,  
Lahore, Pakistan.

**Corresponding Author:**

Dr. Rameeza Kaleem  
Assistant Professor,  
HOD Preventive Paeds,  
Sir Ganga Ram Hospital,  
Lahore, Pakistan.  
rameezakaleem@gmail.com

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**ABSTRACT... Background:** Breastfeeding is a common practice in Pakistan but the reported rates of optimal breastfeeding are quite low. A baseline data about maternal knowledge and practices was required for the effective implementation of Infant and Young Children Feeding (IYCF) strategy in the settings. Therefore, the study was aimed to assess the existing knowledge and practices of the mothers about optimal breastfeeding practices. **Study Design:** Cross sectional study. **Setting:** Pediatrics OPD of Sir Ganga Ram Hospital, Lahore. **Period:** November and December 2015. **Methods:** Mothers (n=100) having children less than 2 years of age. Optimal breastfeeding practices recommended by the WHO were used as a gold standard to compare with the mothers' knowledge and practices. Data was collected by using interviewer administered questionnaire; and analyzed by using Statistical Package for Social Sciences (SPSS) version 21. **Results:** Mean age of the mothers was  $27.06 \pm 4.67$  years. Other characteristics included urban background 94%; literate 81%; and housewives 96%. Mean monthly income of the family was  $20840 \pm 13850$  PKR. Only 34% mothers were counseled about optimal breastfeeding practices during antenatal care visits. Assessment of mothers' knowledge revealed that 57% were known to initiate breastfeeding within 1hr of birth; 93% replied that colostrum must be given to the child; and 75% said that exclusive breastfeeding period is upto 6 months of age. Mothers' practices in comparison to their knowledge were disappointing because only 29% mothers started breastfeeding within 1hr of birth; 71% mothers fed colostrum to their child; and 34% exclusively breastfed their child upto the age of 6 months. Inferential statistics showed statistically significant difference between mothers' knowledge and their practices ( $p < 0.05$ ). **Conclusion:** Two-third of mothers had not received any counseling about breastfeeding practices during antenatal care visits. Though, mothers' had better knowledge about breastfeeding but the practices were suboptimal. **Policy Message:** Mothers need continuous counseling and support to make their knowledge translated into practices.

**Key words:** Optimal Breastfeeding, Exclusive Breastfeeding, Maternal Knowledge, Practices.

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### INTRODUCTION

Feeding practices have great impact on the nutritional status, growth and development, health, and survival of infants and young children.<sup>1</sup> According to WHO fact sheet, 5.9 million children under the age of five years died in 2015. The reasons for more than half of these early deaths were the preventable or treatable conditions including malnutrition, diarrhea, pneumonia, and malaria. Along treatment, exclusive breastfeeding is the simple intervention that can prevent from these fatal diseases.<sup>2</sup> Breastfeeding protects against many illnesses and infectious diseases

including diarrhea,<sup>3</sup> pneumonia,<sup>4</sup> and neonatal sepsis.<sup>5</sup> Therefore, WHO and UNICEF recommend initiation of breastfeeding within the first hour of life and exclusive breastfeeding upto the age of six months.<sup>2</sup> Various studies have been carried out to assess the mothers' knowledge and their practices regarding breastfeeding. Commonly reported malpractices include delayed initiation of breastfeeding, colostrum deprivation, feeding pre-lacteal foods, formula milk supplementation and early introduction of complementary feeding.<sup>6,7</sup>

Though breastfeeding is a common practice in Pakistan but the reported rates of optimal breastfeeding are quite low. Pakistan Demographic and Health Survey (PDHS) 2012-13 reported that 18% mothers started breastfeeding within one hour of birth; 38% children under 6 months were exclusively breastfed; and 75% newborns were given pre-lacteal feed.<sup>8</sup> A variety of programs to improve nutritional status of both the mother and the children are being run by the government and the non-government organizations. A national strategy on Infant and Young Children Feeding (IYCF) has also been drafted. It was important to obtain baseline data about maternal knowledge and practices for effective implementation of the strategy in a tertiary healthcare facility. Therefore, the study was aimed to assess the existing knowledge and practices of the mothers about optimal breastfeeding practices. Depending on the information gathered in the setting, need based counseling sessions of mothers might be planned.

## METHODOLOGY

Ethical approval of this cross sectional study was obtained by the Institutional Ethical Review Board, Sir Ganga Ram Hospital, Lahore. A total of 100 mothers having children aged  $\leq 02$  years who visited Pediatrics OPD of Sir Ganga Ram Hospital, Lahore during November and December 2015 were enrolled. Recommendations regarding optimal breastfeeding practices by the WHO were used as a gold standard to compare the mothers' knowledge and practices. Data was collected by using interviewer administered questionnaire and was analyzed by using Statistical Package for Social Sciences (SPSS) version 21. Qualitative variables were presented as frequency (percentage) and quantitative variables as mean (standard deviation). Chi Square and Student's t-test were used for the comparison of qualitative and quantitative variables, respectively. P value  $< 0.05$  was considered significant.

## RESULTS

The mean age of mothers ( $n = 100$ ) was  $27.06 \pm 4.67$  years; and mean monthly income of the family was  $20840 \pm 13850$  PKR. Other demographic characteristics included urban background 94%;

literate 81%; and housewives 96%. There were 93% mothers who had visited healthcare facility at least one time for antenatal care. of them only 34% mothers had been counseled about optimal breastfeeding practices (Table-I).

Residence	Urban	94%
	Rural	06%
Education	Literate	81%
	Illiterate	20%
Occupation	House Wife	96%
	Job	04%
Antenatal visits during last pregnancy	Yes	93%
	No	07%
Counselling about Breastfeeding	Yes	34%
	No	66%

**Table-I. Demographic characteristics and antenatal care of the mothers**

Mothers' knowledge about breastfeeding was assessed by asking questions based on WHO recommended breastfeeding practices. There were 57% mothers who told that breastfeeding should be initiated within one hour of birth; and 23% said that it should be started within 2-4 hours. Among 93% mothers who responded that colostrum must be given to the child, only 74% could tell the benefit of colostrum. 75% mothers replied that exclusive breastfeeding period is upto 6 months of age; and 5% said that it is upto 4 months of age. Mothers who answered that breastfeeding should be continued upto 2 years of age were 84%; who said upto one year of age were 4%; and who didn't know were 12% (Table-II).

Should breastfeeding be started within 1hr of birth?	Yes	57%
	No	43%
Should colostrum be given to the child?	Yes	93%
	No	07%
Should exclusive breastfeeding be continued upto 6 months of age?	Yes	75%
	No	25%
Should pre-lacteal foods be given during first 6 months of age?	Yes	50%
	No	50%
Should breastfeeding be continued upto 2 years of age?	Yes	84%
	No	16%

**Table-II. Mothers' knowledge about optimal breastfeeding practice**

There were only 29% mothers who started breastfeeding within 1hr of birth. Of remaining mothers 4% never breastfed; 27% started breastfeeding during 1-24hrs; and 40% started during 1-30days. Nearly 71% mothers fed colostrum to their children. The mothers who exclusively breastfed their children were only 34%. Other included predominant breastfed (17%), partial breastfed (36%), and exclusive formula milk (13%). Main reasons to use formula milk were insufficient milk (56%) and feeling discomfort (17%). Among 51% mothers who used pre-lacteal foods, honey (61%) was the commonest followed by ghutti (20%). Family ritual (73%) was the main reason for using these pre-lacteal foods (Table-III).

Have you started breastfeeding within 1hr of birth?	Yes	29%
	No	71%
Have you given colostrum to your child?	Yes	73%
	No	27%
Have you continued exclusive breastfeeding upto 6 months of age?	Yes	34%
	No	66%
Have you given pre-lacteal foods during first 6 months of age?	Yes	51%
	No	49%
Have you continued breastfeeding upto 2 years of age?	Yes	75%
	No	25%

**Table-III. Mothers' practices about optimal breastfeeding practices**

Inferential statistics showed statistically significant difference between mothers' knowledge and practices ( $p < 0.05$ ). Not only the mothers' knowledge about initiation of breastfeeding, colostrum feeding, and exclusive breastfeeding was poor but the practices were also at the worst ( $p < 0.001$ ) (Table-IV).

	Knowl- edge	Prac- tice	p-value
Initiate breastfeeding within 1hr of birth	57%	29%	<0.001*
Colostrum feeding to the child	93%	73%	<0.001*
Exclusive breastfeeding upto 6 months of age	75%	34%	<0.001*
Pre-lacteal foods during first 6 months of age	50%	49%	0.887
Breastfeeding upto 2 years of age	84%	75%	0.115

**Table-IV. Translation of mothers' knowledge into practices**

## DISCUSSION

Breastfeeding practices are important determinants of the nutritional status of children and have profound effects on the maternal and child health status of a country. The risk of under-five mortality can be reduced by improving the nutritional status of children. The Maternal, Neonatal and Child Health (MNCH) Program in collaboration with WHO and UNICEF is working for the improvement of the health status indicators in the country. Despite all efforts, feeding practices in Pakistan are suboptimal and have unfavorable effects on child health.

The findings of present study were not so different from the report of Pakistan Demographic and Health Survey (PDHS) 2012-13.<sup>8</sup> Low percentages for early initiation of breastfeeding and exclusive breastfeeding; and high frequency for giving pre-lacteal foods were obtained in both studies. Salma et al.<sup>9</sup> reported that only 6.9% mothers initiated breastfeeding within one hour; and 8.8% mothers didn't give pre-lacteal foods. These proportions were quite lower than of the present study. However Sumera et al.<sup>10</sup> reported that 54% mothers initiated breastfeeding early and 65% mothers didn't give pre-lacteal foods. The findings were comparable to the results obtained in the study.

In India, Vijayalakshmi et al.<sup>11</sup> reported that 36.9% initiated breastfeeding within 1hr and 27% mothers were exclusively breast feeders. Although, these percentages were quite low but little better than of present study. In another study from India, Ekambaram et al.<sup>12</sup> reported that 36% mothers initiated breastfeeding within 1hr and 47% exclusively breastfed which were also higher than of proportions obtained in the study. However, Ekambaram stated frequency (17%) about receiving breastfeeding counseling was lower than of frequency (34%) calculated in the study. Katepa-Bwalya et al.<sup>13</sup> from Zambia reported that 30.1% respondents practices exclusive breastfeeding and 8.9% mothers gave pre-lacteal feeds. Exclusive breastfeeding practices were little lesser but comparable to present study; however frequency for introduction of pre-lacteal

foods was much better than of present study. Adhikari et al.<sup>14</sup> concluded that two-thirds (66.4%) of children in Nepal were breastfed within the first hour after birth which is 2-times greater than of frequency obtained in the study. Sharma et al.<sup>15</sup> have also concluded that early initiation of breastfeeding to reduce the rates of newborn mortality is the lowest in South Asian region.

Not only the developing but also the developed countries face problems related to optimal breastfeeding practices i.e. early initiation within 1hr after birth and exclusive breastfeeding upto the age of 6 months. Demographic and health surveys from Latin America and the Caribbean clearly indicated that frequency for early initiation was at the lowest in Paraguay (23.1%) and Ecuador (26.4%). Similarly, percentage for exclusive breastfeeding practices was 20.3% in Mexico and 29.7% in Honduras.<sup>16</sup>

It is evident from present study that two-third of mothers had not received any counseling about breastfeeding during antenatal care visits at tertiary healthcare facility. Though, mothers' had better knowledge about breastfeeding but the practices were suboptimal. It shows that their knowledge is not being translated into practices and it might be due to lack of counseling and support for mothers. Therefore, it is suggested that counseling sessions of mothers about optimal breastfeeding practices should be integral part of antenatal care in the settings. Furthermore, healthcare providers must be provided trainings about Infant and Young Child Feeding (IYCF) practices on regular basis.

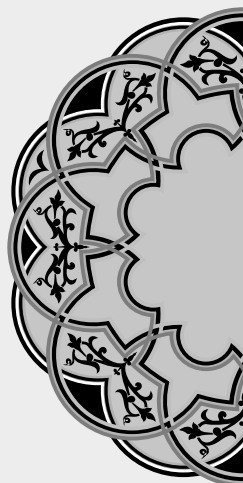
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*“Direction is so much more important than speed, many are going nowhere fast.”*

**Unknown**

#### AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author-s Full Name	Contribution to the paper	Author=s Signature
1	Rameeza Kaleem	Study Design, Literature Review, Data collection, Manuscript Writing	
2	Rehan Ahmad Khan Sherwani	Concept, Supervision, Critical Review of Manuscript	
3	Muhammad Adnan	Literature Review, Proof Reading	
4	Tayyaba Rahat	Literature Review, Data Analysis	