

# Impact of maternal education and source of knowledge on breast feeding practices in Rawalpindi city

## Abstract

**Objective:** The objective of the study was to determine the impact of maternal education and source of knowledge on breast feeding practices of women in Pakistani setting.

**Study Design:** This was a cross sectional comparative study.

**Place and duration of study:** The study was conducted during August to October 2011 in residential localities of Rawalpindi city.

**Materials and methods:** Data included results from 235 mothers conveniently sampled using a preformed questionnaire from various residential localities of Rawalpindi. Participants were assured of confidentiality of the data. Confidence level was set at 95% with margin of error 0.05 and power of the study at 80%. Data analysis was performed through SPSS version 17.0 and consisted of both descriptive and inferential statistics.

**Results:** All participant 100% knew about importance of breast feeding. There was a significant impact of education and source of knowledge on breast feeding practices. There was significant difference between practices of first feed amongst different educational groups with breast milk as first choice for higher educated group while prelacteal feed (Honey and Ghutti) by other two groups ( $P < 0.001$ ). Mothers with higher levels of education and those who had received guidelines on breastfeeding from a health professional show better knowledge and breast feeding practices.

**Keywords:** breast feeding, maternal education, knowledge

Volume 1 Issue 5 - 2018

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**Received:** September 18, 2018 | **Published:** October 1, 2018

## Introduction

A healthy start in life is the most precious gift one can make to a newborn. Milk is such unique gifted complex which is ideal food for the healthy growth and development of infant. Breastfeeding is the natural way to enhance immunity as well. There is no substitute to the human milk. Today with modernization, new formula milk has been introduced. These are a good alternative for specific situation but these cannot be the best alternative for proper development of the child. Breastfeeding leads to the better immunity to fight infectious diseases and it is easily digestible. Colostrum, the initial milk, is very important from medical point of view. Epidemiological data has proven various benefits of breast feeding and risk associated with early cessation of breast feeding.<sup>1-4</sup> It is evident from the studies that 1.5 million lives could be saved each year if infants were fed according to recommended breastfeeding practices. The recommended duration of breastfeeding has critical effect in the long run. Studies shown that if proper duration is followed then maximum benefits are achieved. It has equal benefits for mother and the child. Even there is reduction of childhood obesity and cardiovascular diseases when duration of breastfeeding is followed properly.<sup>5</sup> Breast milk has important function in promoting sensory and cognitive development against chronic and infectious diseases. The breast milk is not only decreasing the incidence of diarrhea and respiratory diseases but also helping quick recovery after the infections.<sup>6</sup> Breast feeding is also providing benefits to the mothers like decrease in reduction of the ovarian and breast cancers as later is increasing day

by day. Breast feeding is the natural way of reducing the risk and making mother healthy in the long term.<sup>7</sup> Education plays an important role in initiation of breastfeeding. In one of the study of Bangladesh, 49.5% of women with higher education levels were keen to give their child colostrum as well as they had better knowledge regarding breastfeeding as compared to illiterate women.<sup>8</sup> Education leads to better understanding of the relationship between the breast milk and its duration. Various factors like socioeconomic status, mode of delivery, cultural aspects and maternal education are likely to affect the breast feeding practices.<sup>9</sup> Culture also has an influence on breastfeeding practices. In few of the cultures, infants are being withheld for breast milk for 48 hour reason being, the initial milk is considered dirty or not real milk. In Asia, initially infants are given honey or gutti instead of mother initial milk. The main reason behind this practice is the lack of education and awareness about breast feeding. In one of the study in Lebanon, women believed that they might transfer their abdominal cramps to the newborn. That was the reason of avoiding the exclusive breastfeed. It has been found that mothers who are better educated are more likely to have knowledge of breast feeding and are more likely to practice it.<sup>10</sup> In one of the study done by Victor Mogre, among different factors maternal level of education was one of the determinant of practicing exclusive breast feeding. It was also proposed, that along with health messages, proper counselling by the health professional should be done to educate the mothers.<sup>11</sup> Counselling which is done at the first level of contact in the community has impact. The staff involved are the local and

peers that can guide the mother in the way most effective to them. The objective of the study was to determine the impact of maternal education and source of knowledge on breast feeding practices of women in Pakistani setting.

### Materials and methods

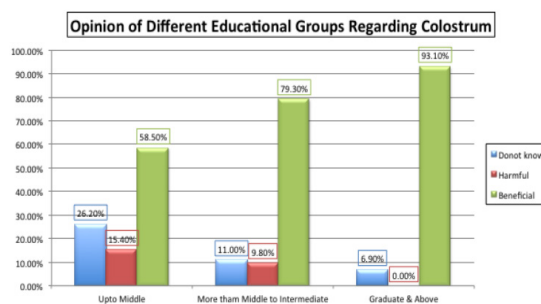
This was a cross sectional comparative study conducted during August to October 2011. Data included results from 235 mothers conveniently sampled using a preformed questionnaire from various residential localities of Rawalpindi. Participants were assured of confidentiality of the data. Consent was taken from the participants. Confidence level was set at 95% with margin of error 0.05 and power of the study at 80%. Data analysis was performed through SPSS version 17.0 and consisted of both descriptive and inferential statistics.

### Results

Amongst the respondents, 88(37.4%) of women were having higher education (with a graduate degree or above) and 107(45.5%) of mothers were above middle to intermediate and 42(17%) were middle and below. 67(28.4%) of higher education group were employed as compare to 6.1% and 3.1% of above middle to less than graduation group and group educated up to middle level ( $P<0.001$ ). All 100% knew about importance of breast feeding. In higher educated group, 100% showed preference for breast milk in contrast to approx. 93% for other groups but 25% of respondents in this group preferred the duration to be less than 18 month. Choice of alternate for breast feeding was cow & buffalo milk by lesser educated groups while powdered milk by higher educated group ( $P<0.003$ ). There was no difference in opinion regarding time of initiation of breast feeding in different educational groups but practice of early initiation was better in lesser educated group ( $P<0.04$ ). There was significant difference between practices of first feed amongst difference educational groups with breast milk as first choice for higher educated group while prelacteal feed (Honey and Ghutti) by other two groups ( $P<0.001$ ). All groups had similar pattern in introduction of top feed. Lesser educated groups had opinion that it is harmful to breast feed during pregnancy while highly educated group had vice versa opinion ( $P<0.001$ ). Breast feeding practices were compared between different educational groups through Analysis of variance and mean squares of 9.292 were found as compare to 32.460 between groups ( $P<0.05$ ). Graduate group depicted better scores of breast feeding as compare to other groups by Tukey Post Hoc Analysis ( $P<0.05$ ). 40% of illiterate women had no source of advice regarding breast feeding and while 6% of these women sought proper guidelines from a doctor. 46.9% of women with higher education sought breastfeeding advice from doctors. The advice from doctor was positively associated with better practices (Figure 1) (Table 1)

**Table 1** Comparison between breast feeding scores of different educational

	Sum of squares	df	Mean squares	F	Significance
Between groups	97.381	3	32.46	3.493	0.016
Within groups	2146.517	231	9.292		
Total	2243.898	234			



**Figure 1** Showing opinions of different educational groups regarding colostrums.

### Discussion and recommendation

Breast feeding is one of the oldest known practice and universally endorsed solution for the prevention of early malnutrition and diarrheal diseases leading to Infant and child mortality and morbidity. Culture also play a significant role in the breastfeeding practices. As education changes the perception of the individual, it can also effect the thinking of the mother regarding her duties to breastfeed her child. Owing to feeding practices, large number of infants and children are admitted in hospitals to seek curative services. The number increases in the rural settings as compared to the cities. Treatment burden of patients in indoor as well as outdoor, bed occupancy, staff commitment, repeated admission and loss of precious working hours by parents lead to colossal financial impact. As Pakistan is a developing country, prevention is the best strategy to avoid infectious disease in infants. That also can be achieved by the implementation of female education and maternal knowledge about breastfeeding by the primary healthcare providers. The study identifies that there is significant impact of maternal education over knowledge and practices of breast feeding, females with graduation and above degrees thought exclusive breast feeding as beneficial (93.1%). Thus placing importance of education to the positive breast feeding practices. These results are consistent with the results shown by other studies that knowledge and practice are better in privileged and educated groups.<sup>12</sup> Moreover, advice of breast feeding by the health care provider has positive impact on the breast feeding opinions and practices.<sup>13</sup> Primary healthcare level can significantly increase the awareness regarding breastfeeding and its proper duration. It will provide the opportunity for the mother to take care of their infants in proper way with adequate scientific knowledge.<sup>14</sup> The LHV and LHWs are trained to deliver breast feeding practices but its impact can be enhanced and sustained by increase in literacy rate of the women.

WHO has emphasized at the importance of breast feeding practices<sup>15,16</sup> and education makes its implementation easier, as a literate woman will understand the advantages. Pakistan has to increase literacy rate especially of females. Education not only makes females to get livelihood but it significantly contribute to the managing their domestic duties which includes taking care of their family. Education increases awareness about health and positively influence health seeking behavior.<sup>17</sup> In implementation of better breast feeding practices, sources of breastfeeding information are very important. This study revealed the source of advice were doctors for literate women and only 45 illiterate women got advised from doctors and health facility According to Ochola<sup>18</sup> 56% mothers received information from the health facility and 44% received it from

relatives. The counseling session were delivered in health facility by the community health workers/ doctors. In another study conducted in Nigeria,<sup>19</sup> it was found that 55.2% mothers got information from the government and that only (2.3%) received breastfeeding education from the media which was consist with study done in Ghana.<sup>20</sup> we need to increase the awareness through properly utilizing our health facility at all levels of health care. Hence, it is imperative that commitment should be shown at the level of government to improve maternal education while community level interventions can be carried out by local NGOs to improve the maternal education. Perception of women can be improved regarding breast feeding through standard guidance by health care providers, LHWs and community midwives. Peer groups can be involved to support breast feeding mother through informal health education and support during breast feeding. In short, a collaborative approach is needed to implement the recommended breastfeed to get the desired long term health benefits.

## Conclusion

There was a significant impact of education and source of knowledge on breast feeding practices. Mothers with higher levels of education and those who had received guidelines on breastfeeding from a health professional show better knowledge and breast feeding practices.

## Acknowledgements

Rukhsana Roshan, involved in literature review, development of study design and data collection tool, data analysis, Sadia Sajjad involved in article writing, literature review and proofreading, sarah tanvir involved in data collection and analysis.

## Conflict of interest

This study has no conflict of interest to declare by any author.

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