

## **Chapter 5**

### **Discussion**

The present study aimed at evaluating the influence of a comprehensive breastfeeding promotion program on breastfeeding self-efficacy, practices and outcomes among primigravid mothers. The study was carried out in two phases. In phase I, a cross-sectional survey was done to determine the breastfeeding knowledge, practices and problems of the postnatal mothers related to breastfeeding. The intervention comprehensive breastfeeding promotion program was developed on the basis of this need assessment survey. In phase II, an experimental approach was undertaken to test the effectiveness of the comprehensive breastfeeding promotion program (CBPP) on breastfeeding self-efficacy, practices and outcomes among the primigravid mothers.

The objectives of the study were to:

1. Assess the knowledge, practices and problems of postnatal mothers related to breastfeeding.
2. Develop a comprehensive breastfeeding promotion program for the primigravid mothers.
3. Evaluate the effectiveness of a comprehensive breastfeeding promotion program on breastfeeding self-efficacy among primigravid mothers.
4. Evaluate the effectiveness of a comprehensive breastfeeding promotion program on breastfeeding practices among primigravid mothers.
5. Evaluate the effectiveness of a comprehensive breastfeeding promotion program on breastfeeding outcomes among primigravid mothers.

6. Compare the breastfeeding experience of primigravid mothers in experimental and control group.

Based on the study's aims, the results along with the supportive literatures are discussed under the following headings:

- Breastfeeding knowledge of the postnatal mothers.
  - Practices of the postnatal mothers related to breastfeeding.
  - Problems of the postnatal mothers related to breastfeeding.
  - Effectiveness of a comprehensive breastfeeding promotion program on breastfeeding self-efficacy of the primigravid mothers.
  - Effectiveness of a comprehensive breastfeeding promotion program on breastfeeding practices of the primigravid mothers.
7. Effectiveness of a comprehensive breastfeeding promotion program on breastfeeding outcomes of the primigravid mothers.
  8. Breastfeeding experiences of the primigravid mothers.

### **Breastfeeding knowledge of the postnatal mothers**

The present study found that majority of the mothers [266(63.7%)] had average breastfeeding knowledge, [99(24.8%)] had poor breastfeeding knowledge, and only [46(11.5%)] mothers had good knowledge regarding breastfeeding.

A study was conducted at a tertiary care center in Karnataka among immediate postnatal mothers for the assessment of their breastfeeding knowledge. It was reported that out of 97 postnatal mothers, [61(62.9%)] mothers were knowledgeable about breastfeeding i.e., they secured >60% marks and [36(37.1%)] mothers had poor breastfeeding knowledge i.e., they secured <60% marks.<sup>130</sup>

Another study was done in Haryana's Panchkula district involving six villages among the postnatal mothers. The findings of the study showed out of 77 postnatal mothers, [30(39%)] of the mothers were having knowledge about breastfeeding.<sup>131</sup>

A cross-sectional study including 252 postnatal mothers was conducted in Riyadh. The mothers had attended the seven different primary health care centers to assess their breastfeeding knowledge and practices. Those mothers who had their last child between 4 months to 1 year were taken for the study. The mothers were selected from the well-baby clinics and informed consent was taken. A structured breastfeeding knowledge questionnaire containing 38 items was provided to the participants. The research showed that only 12.7% of mothers had excellent knowledge, 57.1% had good knowledge, and 30.2% had unsatisfactory breastfeeding knowledge.<sup>132</sup>

In the present study, the lowest knowledge score was noted on the breastfeeding promotion and techniques ( $0.98 \pm 0.49$ ) with mean% = 32.6. The highest knowledge score was observed on the benefits of breastfeeding ( $2.16 \pm 0.74$ ) with mean% = 54.0. The mothers had highest knowledge in the area regarding breastfeeding exclusivity [374(93.5%)] and the least knowledge was observed regarding initiation of breastfeeding after caesarean section [2(0.5%)].

A cross-sectional community based study was done in Bareilly, Uttar Pradesh among 528 lactating mothers to assess their breastfeeding knowledge and practices. A semi-structured questionnaire was distributed among the participants. The study showed that 48.10% mothers had knowledge regarding exclusive breastfeeding. 49.80% offered pre-lacteal feed to their infants and initiation of breastfeeding within one hour of birth was done by 43.4% mothers.<sup>133</sup>

Another study was done in Bankura, India among 400 mothers having children between six months to twenty-four months of age. Their knowledge regarding breastfeeding practices were assessed and it was found that 68% mothers had knowledge about exclusive breastfeeding. Only 23% were knowledgeable regarding breastfeeding initiation.<sup>134</sup>

The above studies highlighted that the breastfeeding knowledge of the postnatal mothers varies from 20-40% in different parts of the country. It is necessary to evaluate the breastfeeding knowledge of the mothers from the antenatal period so as to support them in areas where they are lacking and necessary interventions to be carried out for the initiation and maintenance of breastfeeding.

### **Practices of the postnatal mothers related to breastfeeding**

The World Health Organization (WHO) advises early establishment of breastfeeding, exclusivity and continuity. However, starting breastfeeding after the first hour following birth is frequently delayed, which raises the infant mortality rate.<sup>135</sup>

The current study concluded that only [1(0.3%)] mother initiated breastfeeding within 1 hour of birth. The most common reason for the delay was surgery (c-section).

A study was done in New Delhi among 57 mothers having children less than five years of age. The study findings revealed that only 49.60% mothers started breastfeeding their babies within one hour of life, surgery i.e., c-section, being the commonest reason for the delay.<sup>136</sup>

The present study showed that out of 400 mothers, colostrum was given by [228(57.0%)] mothers.

A study was done in Assam assessing the colostrum feeding among 400 mothers. The findings showed that 21% mothers residing in urban areas and 29.5% in rural areas had cast-away the colostrum.<sup>137</sup>

A cross-sectional research was carried out among fifty mothers of children with age less than two years in Kollam which reported that there was early initiation of breastfeeding in 60.0% of children and colostrum was given to 78.0% children.<sup>138</sup>

The present study showed that majority of the mothers [249(62.3%)] were offering mixed feeding (both formula as well as breastfeeds) to their infants. This was similar to a cohort study done in Maharashtra involving 150 mothers which reported that 111(74%) mothers used mixed feeding.<sup>139</sup>

The present study reported that out of 400 mothers, [88(22.0%)] mothers were giving breast milk to their babies and [63(15.7%)] mothers were offering formula feeding. The most common reason for breastfeeding cessation was inadequate breast milk.

A study was done in Kochi Kerala among 60 mothers to evaluate their breastfeeding practices. It was reported that [21(35%)] mothers could not breastfeed their children because of the perception of inadequate breast milk.<sup>140</sup>

In this study, majority of the mothers [330(82.5%)] were not taking any galactagogue for breast milk production, while only [70(17.5%)] were making use of it. A cross-sectional study was done in Kerala among 120 mothers with their children being less than 24 months of age. The study revealed that 58.10% mothers made use of galactogogues.<sup>140</sup>

The above studies highlighted that maternal knowledge and her level of education may also be important in promoting breastfeeding practices. Healthcare professionals should support and motivate mothers to help promote good breastfeeding practices. Mothers should be made aware about early breastfeeding initiation, duration, frequency, importance of colostrums and risks of formula feeding.

### **Problems of the postnatal mothers related to breastfeeding**

The present study revealed that mothers had one or the other problem related to breastfeeding from birth to six months post partum period such as feeling of tiredness/fatigue, latching difficulties, inadequate breast milk production, breastfeeding was too difficult or time consuming, sore nipples etc.

The results were comparable to a study done in Karnataka to assess the breastfeeding problems of the mothers in the postpartum period (6 months). The study revealed that 30.9% mothers had breastfeeding problems.<sup>141</sup>

A study was done in a hospital among 400 postnatal mothers to assess their breastfeeding problems and it was discovered that 88.5% of mothers had breastfeeding issues before to being discharged. It was found that breastfeeding problems were present in 88.5% of mothers before discharge. Poor posture and attachment (88.5%) as well as breast and nipple problems (30.3%) were the main breastfeeding issues. Up to six months postpartum, mothers reported problems like poor posture and attachment (70.30%), cracked nipples (17.80%), nipple deformity (15.0%) an engorgement (13.0%).<sup>142</sup>

The above studies highlighted that breastfeeding problem if not corrected can lead to breastfeeding failure. Thus, this addresses the need to take prompt step in resolving such problems in the immediate postpartum period and to discuss such issues from the antenatal period itself. Breasts examination can be performed in the antenatal period so as to correct nipple problems. Mothers should be advised about correct positioning and attachment so as to prevent latching difficulties after the birth of the baby.

### **Breastfeeding self-efficacy of the primigravid mothers**

Many studies have revealed that breastfeeding confidence in the mothers has been identified as a key factor influencing breastfeeding outcomes in later stage. The length of breastfeeding was strongly predicted by the mother's early postpartum breastfeeding self-efficacy. The findings of this study supported the idea that antenatal breastfeeding guidance can improve the breastfeeding self-efficacy of primigravid mothers. The present study concluded that the breastfeeding self-efficacy among primigravid postnatal mothers was very good in experimental group [39(78%)] than in control group [4(8%)]. In experimental group, good breastfeeding self-efficacy was found among [9(18%)] mothers while in control group it was [24(48%)] among primigravid mothers. In the experimental group, the moderate self-efficacy for breastfeeding was [2(4%)] compared to [16(32%)] in the control group. Poor breastfeeding self-efficacy was reported by only control group mothers [6(12%)].

A study was done in Shimla, Himachal Pradesh to determine the influence of breastfeeding self-efficacy program on the breastfeeding self-efficacy among 60 primigravid mothers. The study revealed that the experimental group's level of breastfeeding self-efficacy was much higher than that of the control group.<sup>143</sup>

Another study done in China among 74 primigravid mothers revealed that the intervention was effective in enhancing the breastfeeding self-efficacy of mothers.<sup>144</sup>

The present also identified a factor which majority of the primigravid mothers believed that they were uncertain or not at all confident about breastfeeding their baby in public, even in the presence or in front of other family members. A study done in Jaipur, Rajasthan also found out that mothers feel that breastfeeding in public is embarrassing and shortage of facilities at workplace also contributes to early cessation of breastfeeding and switching over formula feeds.<sup>145</sup>

The present study findings highlighted that there was enhancement of breastfeeding self-efficacy among primigravid mothers after the comprehensive breastfeeding promotion program. The effectiveness of therapies concentrating on enhancing breastfeeding self-efficacy has also been established in research studies to enhance breastfeeding self-efficacy and breastfeeding practices. Therefore, mothers should be supported from antenatal period to boost their breastfeeding confidence that can further improve the breastfeeding practices and outcomes.

### **Breastfeeding practices of the primigravid mothers**

The present study findings showed that compared to the control group, the experimental group's primigravid mothers' breastfeeding habits significantly increased on third day, at six weeks and at six months ( $p < 0.05$ ). Chi-square test was performed to find the association between the two groups. The results showed that with regard to breastfeeding practices of the mothers at different intervals of time, the experimental group had better breastfeeding practices than control group.



A study was done involving 342 districts to determine the influence of the MAA (“Mothers Absolute Affection”) program initiated by Government of India in 2016. The study revealed that the program was effective in enhancing the rate of exclusive breastfeeding by 9%, but there was a relative decline in early establishment of breastfeeding by -7%.<sup>146</sup>

A study was done in Shimla, Himachal Pradesh to determine the influence of breastfeeding self-efficacy program on breastfeeding practices among 60 primigravid mothers. According to the study, experimental group breastfeeding rates were considerably higher than control group rates on the third postpartum day ( $6.6\pm 0.8$  vs  $2.2\pm 0.9$ ) at  $p < 0.05$ .<sup>147</sup>

A systematic review was carried out to determine the influence of breastfeeding support program on the breastfeeding knowledge and practices of the mothers having infants between zero to six months. Among all the interventions, breastfeeding counseling and education support programs showed the most favorable influence on breastfeeding practices.<sup>148</sup>

The above studies highlighted that mothers’ breastfeeding needs should be assessed by the health care professionals and adequate help should be rendered to them so as to promote good breastfeeding practices. Families should be involved in taking care of the newborn and to support mothers emotionally.

### **Breastfeeding outcomes of the primigravid mothers**

The results of the current investigation revealed that the breastfeeding outcomes in terms of duration, exclusivity and continuity were considerably higher in the experimental group at six weeks and at six months.

A study was done in Karnataka to determine the influence of breastfeeding education on the breastfeeding outcomes among primigravid mothers. The education on breastfeeding education was imparted in local language published booklet to 60 primigravid mothers. The mothers were followed up at one week, at three months and at six months. The study revealed that the intervention improved the knowledge regarding breastfeeding of the mothers and also improved the breastfeeding outcomes at six months postpartum.<sup>149</sup>

A study conducted among 462 mothers in a private hospital in Rajkot reported 97% exclusive breastfeeding rate at 3 months which further got reduced to 62% at 6 months in the postpartum.<sup>150</sup>

A systematic literature including 195 studies on interventions to improve breastfeeding outcomes was carried out. It was found that the interventions like counseling and education when carried out in hospitals, communities and home settings have shown great improvements in the breastfeeding outcomes.<sup>151</sup>

The above studies highlighted that in order to encourage mothers to practice exclusive breastfeeding, proper information about the advantages of breastfeeding and a good approach must be provided to them even before they become pregnant so as to have better breastfeeding outcomes.

### **Breastfeeding experiences of the primigravid mothers**

According to the current study, more mothers in the experimental group [29(58%)] had very positive breastfeeding experiences than those in the control group [15(30%)]. The experimental group felt very positive regarding breastfeeding [24(48%)] than the control group mothers [16(32%)]. Majority of the mothers in both the groups believed that breastfeeding gives satisfaction to both the mother and the baby [31(62%)] and [14(28%)] respectively. Mothers in both the groups described their breastfeeding experience as joyful, happy, peaceful and satisfactory; while on the contrary some of the mothers described it as uncomfortable, busy and disappointing. The reason for describing the experience negatively included less support from the family members, return to work and switching over to formula feeds at an early period as a result of inadequate lactation.

A qualitative phenomenological study was carried out among 16 working mothers in Malaysia regarding their breastfeeding experiences. They were interviewed regarding their breastfeeding perceptions, challenges and support. The findings showed that continuing breastfeeding for longer durations and after work is a challenging task. Mothers need support from the family members as well as from work place in order to sustain breastfeeding.<sup>152</sup>

A qualitative descriptive study was done in Singapore among 10 primigravid mothers to explore their breastfeeding experiences. The study results revealed that primigravid mothers face challenges in initiating and maintaining breastfeeding. However, majority of them verbalized continuous help and support from their own mothers. Their overall breastfeeding experience was reported to be good and satisfactory.<sup>153</sup>

The above studies highlighted that breastfeeding general awareness; familial support and health care professionals support are necessary steps to raise successful breastfeeding standards.

### **Strengths of the Study**

1. Need based exploratory survey was done to assess the breastfeeding knowledge, practices and problems in different maternity hospitals on large sample size of 400, so the study findings can be generalized.
2. The randomized controlled trial was done to determine the influence of the comprehensive breastfeeding promotion program.
3. The comprehensive Breastfeeding Promotion Program (CBPP) was developed after the assessment of need in the first phase, extensive review of literature and incorporating the Breastfeeding Self-Efficacy Theory. It was prepared as an intervention part of the study by referring many government policies and guidelines regarding breastfeeding.
4. The comprehensive Breastfeeding Promotion Program was a multi-component program that included many teaching-learning activities such as correct breastfeeding techniques, signs of good latch, strategies to wake up the infant for breastfeeding, early feeding cues, expression of breast milk etc. The program also enhances the knowledge of the mothers as it discussed about the importance of colostrums, early initiation of breastfeeding, benefit of skin to skin contact, storage of expressed breast milk and general queries of mothers.
5. Direct observation of breastfeeding practices of the mothers with the required support was also provided on the third day postpartum.
6. Follow-up was done up to six months postpartum which is a long period to

evaluate the effectiveness of the program.

7. The study included primigravid mothers who need more preparation for child birth and continuous support for breastfeeding.

### **Limitations**

1. Actual breastfeeding practices of the mothers could not be assessed after their discharge from the hospital.
2. The information on breastfeeding practices and outcomes was collected using self-reported technique.

### **Summary**

According to the study's aims, the primary findings were discussed in this chapter. The findings were also correlated with different studies done in similar sample. It also covered the study's advantages and disadvantages.