

CHAPTER 5

DISCUSSION

Many studies have been done in the area of childbirth preparation. Studies have evaluated effect of childbirth preparation on childbirth preparedness, childbirth experiences, and maternal-neonatal outcomes, separately. This section, have described the main analysis of this study with reference to the results of other researchers. The findings have been discussed with reference to the objectives and hypothesis of the study.

Objectives of the study were:

1. Explore childbirth preparedness and childbirth experiences among primigravidae in selected health center.
2. Develop and implement a need based Comprehensive Childbirth Preparation Package for primigravidae.
3. Assess the efficacy of comprehensive childbirth preparation package on childbirth experiences among primigravidae by comparing childbirth experiences between experimental and control groups.
4. Assess the efficacy of comprehensive childbirth preparation package on selected maternal-neonatal outcomes among primigravidae by comparing maternal-neonatal outcomes between experimental and control groups.

Childbirth preparedness among primigravidae

The present study is an exploratory phenomenological study to explore the childbirth preparedness. Study was conducted among fifteen primigravidae in 28–34 weeks of

gestation. Primigravidae were selected by purposive sampling and in-depth interview was conducted on birth preparedness. Content analysis was done to explore, conceptualize, and analyze the in-depth meaning of childbirth preparation. The major themes emerged were “preparation of childbirth,” “fear related to childbirth,” “awareness related to childbirth,” and “expectation related to childbirth.” The subthemes emerged under the theme of ‘preparation of childbirth’ were psychological preparation, physical preparation, and role preparation. Theme of “fear related to childbirth” had sub-themes of fear of pain, fear of adverse outcomes, fear of medical intervention, and fear related to not receiving professional support. The sub-themes under “awareness of childbirth” and “expectation of childbirth” were information about childbirth preparation, source of information, myth and superstition, natural vaginal delivery, and safety of baby, respectively. The findings of study were bolstered up by the similar study for exploration of childbirth preparedness, birth fear, and expectation from eighteen primigravida between 36–40 weeks of gestation. Collection of data was done through semi-structured interview guide through in-depth interview and focus group discussion in community hospitals. Four categories emerged “ambivalent pregnancy feelings,” “dependence on traditional childbirth counseling,” “inadequate prenatal childbirth instructions,” and “inconsistent roles of birth companion.”¹²³

Similar studies were conducted to systematically identify the key components that make up the risk of childbirth. Semi-structured interviews were conducted on 10 pregnant women. Interviews were analyzed using the subject analysis of each group. Six themes were identified: “fear of harm or stress to the body,” “fear of inability to cope with the pain,” “fear of harm to self in labor and postnatally,” “fear of being done to,” “fear of not having a voice in decision-making,” and “fear of being abandoned and alone.”¹²⁵

A qualitative phenomenological approach was taken to investigate birth expectations and sources of primiparas. Seven primiparas were selected by targeted sampling and a semi-structured, face-to-face interview was conducted. The results of the transcript analysis were bifurcated into major two main themes: birth expectations of women and the sources of information. Five sub-themes emerged from the first theme that were type of childbirth, labor pain, support resources, emotions of women, and expecting healthy baby. The second major topic was “formation of expectations.”¹²⁶

Descriptive phenomenological study conducted to explore the experiences and priorities of antenatal women having fears and worries related health of baby and labor process. Semi-structured interviews were used to collect data from 10 pregnant women between 18–34 years of age. The major themes emerged were lack of knowledge, interaction with health-care professionals, spirituality and fear of labor pain, and relationship with partner.¹²⁷ The section concluded that present study findings were congruent with findings of other studies in terms of childbirth preparation, fear, expectation, traditional counseling, and poor instruction on childbirth process.

Childbirth experiences among primiparous mothers

Findings of the present study discussed themes generated on exploration of childbirth experiences among 10 primiparous mothers. Major themes emerged were low self-esteem and self-blame and unrealistic childbirth expectations. Sub-themes under low self-esteem are guilt, low confidence, mixed feelings, and novel experience. The sub-theme of unrealistic childbirth expectation was unfamiliar environment, pain, and medical intervention. Many other studies have also explored childbirth experiences.

An exploratory survey conducted to explore experiences of primiparous mothers regarding natural childbirth problem. Data collection was done using semi-structured interviews among 18 primiparous women. Data was collected with 72 hours of childbirth. Data was analyzed through content analysis and major themes generated were “fear of stress of labor pain,” “lack of awareness,” and “lack of information” about the labor process.¹²⁸ The study concludes that it is crucial to inform women about stages of childbirth to improve their childbirth experiences.

Qualitative study was conducted among 12 primiparous mothers selected through purposive sampling to explore childbirth experiences. Data were collected by semi-structured interview, 150 codes, 19 sub-categories, and 6 categories. The categories were “intense need for social support,” “the need for prior preparation for pregnancy,” “fears & worries,” “the necessity of the availability of the needed infrastructure & requirements in the health center,” “falling in love with the baby,” and “seeking information from appropriate sources.” Study concludes on the need of counseling for primigravida women in order to enable them to go through the childbirth process smoothly.⁸⁸

Qualitative study conducted to explore new mothers’ experiences of birth and care during delivery. Survey was done among 39 women through in-depth interview, and data was thematically analyzed. Themes emerged were “unexpected birth process,” “expectations and reality,” “coping with birth,” and “role of health-care staff.” The participants explained about their unexpected birthing process, experience of care received by health-care professionals. The study focused on importance of childbirth preparation, role of professionals on childbirth experiences.¹²⁹

Efficacy of Comprehensive Childbirth Preparation Package on childbirth experiences among primigravidae

Comprehensive childbirth preparation package effect on childbirth planning and knowledge

Present study indicates that the primigravidae who were exposed to the comprehensive childbirth preparation program had significantly more knowledge regarding labor process and childbirth preparedness than who were not exposed. The findings are in conformity with the study directed to assess the efficacy of childbirth education in Malawi where a structured experimental design was used to evaluate birth preparation program. Prenatal women in 30 weeks of gestation were allocated to treatment and comparison groups. The comparison group went to a regular maternity hospital and the intervention group was enrolled to training program. Results revealed the mean scores before and after the test for the comparison groups in domains were not different ($p > 0.05$), whereas significant difference was observed ($p < 0.05$) in mean scores of the treatment group. Results revealed effective childbirth preparation knowledge the intervention group received from the childbirth preparation program and that they were satisfied with it.¹³⁰

The above study results are also being supported by a similar study conducted to develop, implement, and assess a childbirth educational program. Mixed method approach was adopted and the study was conducted in multiple phases. Primigravidae were allocated to intervention and comparison groups by simple random allocation. Level of birth knowledge was assessed for 6-weeks. The results reflected difference in knowledge between groups. Significant increase in knowledge in the treatment group over a 6-week period ($p < 0.01$) was observed as compared to the comparison group. The

study concludes that the maternity education program organized for primigravidae is linked with a significant increase in knowledge of prenatal, childbirth, and postnatal issues.¹³¹

Comprehensive childbirth preparedness program effect on childbirth fear

In the experimental group of this study post-test scores of birth fear were 74.8 ± 10.9 and 87.9 ± 4.5 in both groups, respectively. The average difference was -13.1 . Significant difference was observed between groups ($p = 0.001$). The comprehensive childbirth preparation package was powerful in decreasing the risk of birthing in primigravidae. Above findings were similar to single blinded, randomized controlled study conducted to investigate the effectiveness of prenatal education on childbirth fear, childbirth self-efficacy. Study was conducted among (120) primiparas who were allocated to treatment ($n = 60$) and control ($n = 60$) groups. Study findings showed that the intervention group had significantly lower postnatal fear in comparison to the other group ($p \leq 0.001$). Conclusion of study was that prenatal education has significant benefits for women during pregnancy.¹³²

Similar study was done to assess the benefits of prenatal education on childbirth anxiety, maternal self-confidence, and secondary delayed stress disorders in 90 pregnant women in Turkey. The experimental group ($n=44$) received prenatal education, and comparison group ($n=46$) was exposed to routine treatment. In intervention receiving group, self-efficacy at birth was high, use of contraception was large, and there was lower risk of complications during childbirth at $p < 0.05$.¹³³

Efficacy of comprehensive childbirth preparedness program on labor and birth experiences

In the present study, experimental group post-test score of labor and birth experience was 113.9 ± 5.7 and in the control group the mean score of labor and birth experience was 85.9 ± 6.5 . The mean difference was 28. The findings of the study suggest highly significant difference at $p \leq 0.001$. The results of this study were consistent with the quasi-experimental study conducted among 260 pregnant women divided into an intervention group that received the birth plan for delivery and a control group that received routine care. The study aimed to assess birth expectations, satisfaction, and maternal-neonatal outcomes. The result highlighted that the group receiving the birth plan had a higher-level and positive birth experience, and better birth outcome than the group not receiving the birth plan ($p < 0.001$).¹³⁴

Another quasi-experimental pre-test–post-test control was performed on 40 primiparas aged 18–35 years and gestational age 35 weeks. The first 20 women were sequentially assigned to the intervention group and the next 20 women were assigned to the control group. The findings revealed that there was no difference in the expected birth values between the experimental group (57.10 ± 15.88) and the control group (58.80 ± 14). On the other hand, the birth experience score in comparison group was (38.00 ± 11.85) and in the group receiving intervention was (65.25 ± 18.85) and was statistically significant at the 0.001 level. This study suggests that women’s childbirth experience can be improved through childbirth preparation.¹²³

Efficacy of comprehensive childbirth preparation package on selected maternal-neonatal outcomes among primigravidae

The present study showed that comprehensive childbirth preparation package has an

effect on maternal neonatal outcome. Study findings revealed that in the experimental group 74.5% women had term labor and 45.4% women in control group had term labor. 36.3% women in control group had pre-term labor as compared to 18% women in experimental group with a significant difference ($p = 0.007$). Rate of caesarean section was 34.5% in control and 21.8% in experimental group with a significant difference ($p = 0.05$). 92.7% and 72.7% women in experimental and control group had spontaneous labor, respectively. Most of the primigravidae in control group had induced labor 27.2% as compared to 7.2% in CCBPP group ($p = 0.05$). The positive delivery outcome in this study shows that there is a significant difference between the experimental and control groups ($p = 0.04$). A significant difference was found in weight of newborn and Apgar score between both groups ($p = 0.0$) and ($p = 0.03$), respectively. Studies assessing the effectiveness of childbirth preparation in relation to the knowledge of prenatal women regarding childbirth preparation, anxiety during pregnancy, and labor outcome, also supported the results of this study. Randomized control study was done on 100 primigravida women. The group receiving treatment had higher level of knowledge about childbirth preparation ($p \leq 0.001$) and a significantly low level of fear of childbirth ($p \leq 0.001$). The study also found that the birth weight of newborns after caesarean section increased by 50% and 12% between groups.¹³⁶ Study to assess efficacy of childbirth preparation on birth outcomes among primigravid mothers. The findings were in congruence with the present study that showed that childbirth preparation course had positive effect on maternal-neonatal outcome.

Primigravidae receiving CCBPP had spontaneous onset of labor (89%) than women in control group (70.3%) with a significant difference ($p = 0.02$) and the women in experimental group had earlier initiation of breastfeeding in experimental group than

those in control group ($p \leq 0.01$). The results of this study are consistent with that of Farahat et al., who found that women receiving treatment had higher degree of positive birth experience and better birth outcomes than primigravidae in non-receiving group ($p \leq 0.001$).¹³⁵

Efficacy of comprehensive childbirth preparation in terms breastfeeding self-efficacy

The breastfeeding self-efficacy mean score in intervention group was 60.8 while in control group was 45.7 and significant difference ($p = 0.00$) was found between both groups. The findings of present were similar to a study conducted to assess effect of childbirth education on the perception of childbirth and breastfeeding self-efficacy and the obstetric outcomes among nulliparous women compared with control group. Women in intervention group had significant positive birth-related perceptions ($p = 0.00$) and experienced lower pain ($p = 0.016$) and a breastfeeding self-efficacy of higher level.¹³⁶

Related findings were also supported by another randomized control trial. Prenatal teaching on breastfeeding types and techniques and problems related to breastfeeding showed average self-efficacy (SD) in breastfeeding at 119.3, 128.3 and 133.8. Findings of the study showed breast feeding self-efficacy is 105.4 in experimental group and 24.7 in control groups on 15th day after teaching, 2nd day of delivery and 4 months after delivery. Difference in self-efficacy of breastfeeding between groups on 15th day after teaching, 2nd day of delivery, and 4th month of delivery was significant ($p \leq 0.001$). The occurrence of breastfeeding problems at 15th day post-treatment ($p = 0.008$), 2nd day of delivery ($p \leq 0.001$), and 4th month after delivery ($p \leq 0.001$) was

significant ($p \leq 0.001$)¹³⁷

Strengths

1. The major strength of the study is the need-based intervention. The comprehensive childbirth preparation package was developed after assessing the need of the population through exploratory approach.
2. Another significant strength of the trial was quantitative approach, i.e., a randomized control trial to establish better cause-effect relation. Concealed allocation was done to allocate participants in intervention and comparison group.
3. The study was also registered in CTRI.
4. The study was conducted among under privileged population in rural areas of Uttar Pradesh having deprived accessibility to health services.

Limitations

1. Present study was conducted in only one setting, i.e., Dadri Community Health Center, Gautam Buddha Nagar, Uttar Pradesh. While generalizing the study findings, one must consider that data was collected from a single setting.
2. Due to the nature of intervention, blinding was not possible. The researcher however made sure that CCBPP was not provided in front of the comparison group.
3. Maximum data collection tools were self-reported questionnaire and researcher did not influence or interfere the samples while they were responding to the questionnaire.
4. The actual behaviors, coping and other responses of participants during labor was

not observed.

Summary

This chapter included the discussion on findings of the study as per objectives. The findings of the study were discussed and compared with studies done in similar sample. It also highlighted the strength and limitations of the study.