

EFFECTIVENESS OF INTEGRATED BREASTFEEDING EDUCATION TO OVERCOME CHALLENGES DURING BREASTFEEDING AFTER CAESAREAN DELIVERY

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Abstract

Background: Undertaking a caesarean section has become more common way of delivering in recent years. Breastfeeding problems after caesarean may require some instructions and interventions to achieve breastfeeding success. **Objectives:** The present study aims to assess the effectiveness of integrated breastfeeding education to overcome challenges during breastfeeding after caesarean delivery in selected hospital at SMCH. **Materials and methods:** The quantitative approach with descriptive study was conducted in SMCH. A total of 30 participants were selected using purposive sampling technique based on the inclusion criteria, the demographic and clinical data was collected by structured knowledge questionnaire and the knowledge was assessed and participants were followed till 1 week and the level of knowledge assessed after imparting integrated breastfeeding education. **Results:** The results of the present study revealed that, in the pretest 22(73.33%) had inadequate knowledge and 8(26.67%) had moderately adequate knowledge and in the post test, 24(80%) had adequate knowledge and 6(20%) had moderately adequate knowledge. The pretest mean score of knowledge was 9.30 ± 1.64 and post test mean score was 16.83 ± 1.94 . The mean difference score was 7.53. The calculated paired 't' test value of $t = 29.312$ was statistically significant at $p < 0.001$ level. This clearly shows that after the administration of Integrated Breast Feeding education to overcome challenges during breast feeding administered among caesarean mothers the level of knowledge had significantly increased among them. the demographic variable type of marriage ($\chi^2 = 4.802$, $p = 0.028$) had shown statistically significant association with post test level of knowledge among mothers to overcome challenges during breast feeding after caesarean delivery at $p < 0.05$ level. The other demographic variables had not shown statistically significant association with post test level of knowledge among mothers to overcome challenges during breast feeding after caesarean delivery at $p < 0.05$ level.

Keywords: Challenges, Breastfeeding, Caesarean Delivery, Integrated Breastfeeding Education.

INTRODUCTION

Health of the women has been considered as the vital importance to all societies because the women are the basic resources for the future of human kind.¹ Women health depends up on breastfeeding.² Majority of mother's facing breastfeeding problems after the caesarean delivery.³ The physical and emotional contact that nursing mothers experience with their babies fills many women with joy and fulfilment.⁴ One of the reasons why so many mothers who breastfed their first kid prefer to breastfeed the subsequent children may be due to these satisfying experiences.⁵ Women are the primary caretakers of children's in every country of the world.⁶ Women who give birth naturally or via caesarean have the same hormonal shift that prompts a woman's breasts to start producing milk.⁷ Caesarean birth (C-section) involves making incisions in the abdomen and uterus to deliver the baby surgically.⁸ A C - section might be planned ahead of time if you develop pregnancy complications or you've had a previous C - section and aren't considering a vaginal birth after caesarean (VBAC).⁹ Often, however, the need for a first - time C - section doesn't become obvious until labour is underway.¹⁰ World Health Organization in (2009) Stated that caesarean section (c - section) rate in Canada is 27.1 %, well above the 5–15 % of deliveries.¹¹

Breast feeding is essential for optimal growth, development and health of neonates and infants.¹² According to the World Health Organization (WHO) and the United Nation's International Children's Emergency Fund (UNICEF), breastfeeding should be initiated within one hour after delivery.¹³ In addition to promoting early initiation of breastfeeding for all neonates, both organizations recommend sustaining exclusive breastfeeding through six months of age.¹⁴

Early initiation of breastfeeding increases the chances of a successful continuation of breastfeeding. Breastfeeding is associated with reduced infant and under-5 mortality and morbidity, protects the neonate from infection and promotes ideal nutrition with lower acute and severe malnutrition.¹⁵

Objectives:

- To assess the pretest and posttest level of knowledge overcome challenges during breastfeeding after caesarean delivery.
- To assess the effectiveness of integrated breastfeeding education to overcome challenges during breastfeeding after caesarean delivery.
- To associate the posttest level of knowledge to overcome challenges during breastfeeding after caesarean delivery with selected demographic variable

METHODS AND MATERIALS

The Quantitative research approach was adopted for this study to accomplish the objectives using descriptive research design. A sample of 30 postnatal mothers who undergone caesarean in Saveetha Medical College and Hospital, Thandalam, Chennai, who have fulfilled inclusive criteria were selected for the study. The samples were selected by purposive sampling technique method. Inclusion criteria: Women who had caesarean delivery, Caesarean mothers who are willing to participate in the study. Exclusion criteria: **Caesarean** mothers who are not willing to participate in the study. After obtaining the ethical clearance from the Institutional Ethical Committee of Saveetha Institute of Medical and Technical Science and a formal permission from the

Departmental head of Obstetrics and Gynaecology, SMCH, the study was conducted. The purpose of the study was explained clearly in depth to each of the study participants and consent was obtained from them.

RESULT AND DISCUSSION

Section A: Description of Demographic Variables of Caesarean Mothers

The data shows that most of the caesarean mothers, 12(40%) were aged between 31 – 40 years and had higher secondary education, 20(66.7%) were working privately, 22(73.3%) were Hindus, 24(80%) were non-vegetarian, 24(80%) had an income of 10000 – 20000, 21(70%) had non-consanguineous marriage and 24(80%) had no previous knowledge.

Section B: Assessment of Level of Knowledge among Mothers to Overcome Challenges during Breastfeeding after Caesarean Delivery

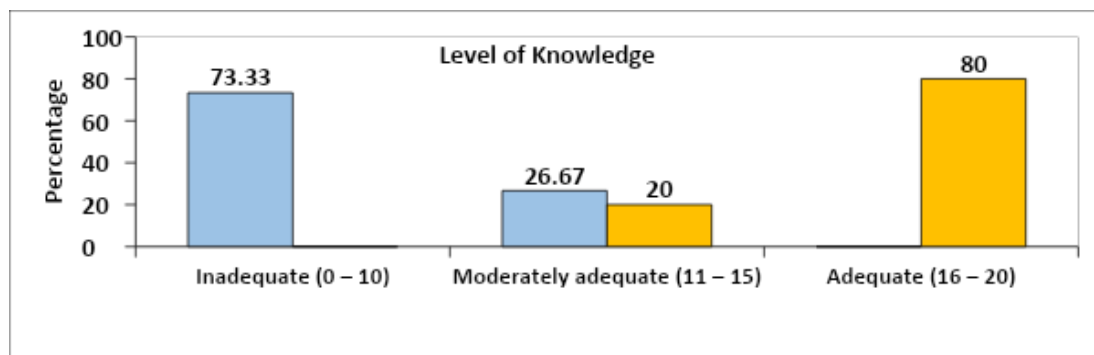


Figure 1: Percentage Distribution of Pretest and Posttest Level of Knowledge among Mothers to Overcome Challenges during Breast Feeding after Caesarean Delivery

The above figure shows that in the pretest 22(73.33%) had inadequate knowledge and 8(26.67%) had moderately adequate knowledge and in the post test, 24(80%) had adequate knowledge and 6(20%) had moderately adequate knowledge.

Section C: Effectiveness of Integrated Breastfeeding Education to Overcome Challenges During Breastfeeding After Caesarean Delivery

Table 1: Effectiveness of Integrated Breastfeeding Education to Overcome Challenges During Breastfeeding After Caesarean Delivery

Test	Knowledge		Mean Difference score	Paired 't' test & p-value
	Mean	S.D		
Pretest	9.3	1.64	7.53	t = 29.312 p=0.0001, S***
Post Test	16.83	1.94		

The data depicts that the pretest mean score of knowledge was 9.30 ± 1.64 and post test mean score was 16.83 ± 1.94 . The mean difference score was 7.53. The calculated paired 't' test value of $t = 29.312$ was statistically significant at $p < 0.001$ level. This clearly shows that after the administration of Integrated Breast Feeding education to overcome challenges during breast feeding administered among caesarean mothers the level of knowledge had significantly increased among them

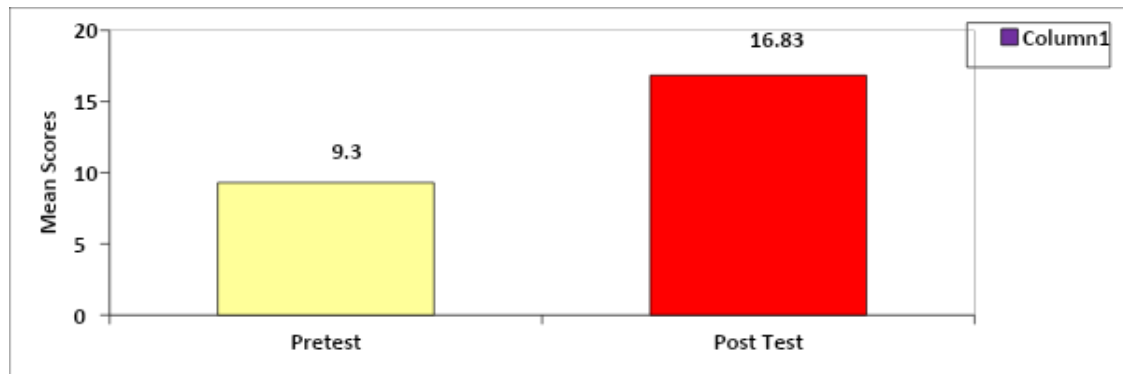


Figure 2: Effectiveness of Integrated Breast feeding to education overcome challenges during breastfeeding after caesarean delivery

Section D: Association of Level of Knowledge among Mothers to Overcome Challenges during Breastfeeding after Caesarean Delivery with Selected Demographic Variables.

Table 2: Association of Level of Knowledge among Mothers to Overcome Challenges during Breastfeeding after Caesarean Delivery with Selected Demographic Variables.

Demographic Variables	Frequency	Chi-Square Test
		Knowledge
Age in years		$\chi^2=0.427$
20 – 30	11	d.f=2
31 – 40	12	p=0.808
>40	7	N.S
Occupation		$\chi^2=3.438$
Housewife	2	d.f=3
Private	20	p=0.329
Government	4	N.S
Business	4	
Type of marriage		$\chi^2=4.802$
Consanguineous	9	d.f=1
Non-consanguineous	21	p=0.028
		S*

*p<0.05, S – Significant, N.S – Not Significant

The data shows that the demographic variable type of marriage ($\chi^2=4.802$, $p=0.028$) had shown statistically significant association with posttest level of knowledge among mothers to overcome challenges during breast feeding after caesarean delivery at $p<0.05$ level. The other demographic variables like religion, education, previous knowledge, dietary pattern ,occupation and income had not shown statistically significant association with posttest level of knowledge among mothers to overcome challenges during breast feeding after caesarean delivery at $p<0.05$ level.

Hence the research hypothesis H_1 that stated earlier “**There will be significant difference between the pretest and post test level of knowledge to overcome challenges during breastfeeding after caesarean delivery**” was accepted. The findings of the study was found to be consistent with the study findings conducted by **Tseng JF, et al., (2020)** conducted a study to evaluate the effect of the intervention on first-time mothers' breastfeeding self-efficacy and attitudes. First-time mothers with a singleton pregnancy (12-32 weeks' gestation) and their support partners were selected by convenience sampling (N = 104) and allocated by block-randomization to

an intervention or control group. A 3-week breastfeeding intervention program was developed based on self-efficacy theory. The intervention group received the breastfeeding program; the control group received standard care. The findings revealed that 93 mothers completed the study. Data were compared for the self-efficacy intervention group (n = 50) with the control group (n = 43). The intervention group had significantly higher breastfeeding self-efficacy at 36 weeks' gestation (mean difference (MD): 7.3, $p < .001$), and postpartum at 1-week ($p < .001$), 1-month ($p < .001$) and 3-months ($p < .01$) with MD: 6.7, 7.9, and 8.1, respectively; differences in scores from baseline were also significantly greater from 36 weeks' gestation to 3-months (MD from 9.1~9.9, $p < .001$) and 6-months postpartum (MD: 7.0, $p < .05$). Infant feeding attitude scores significantly improved from 36 weeks' gestation to 6-months postpartum for the intervention group (MD from 3.5~7.4, $p < .05$). Rates for exclusive and predominant breastfeeding postpartum were significantly higher for the intervention group vs control ($p < .02$) at 1-week (98% vs. 86%), 1-month (100% vs. 90.7%), and 3-months (94% vs. 76.7%). Odds ratio (OR) postpartum for exclusive and predominant breastfeeding was greater for the intervention group at 3-months (OR = 4.7, 95% Confidence interval (CI), 1.2 -18.6; $p = .05$) and for exclusive breastfeeding at 6-months (OR: 2.82, 95% CI 1.0-8.1; $p = .05$). The study concluded that the breastfeeding education intervention improved breastfeeding self-efficacy, infant feeding attitudes, and exclusive breastfeeding rates. The breastfeeding education program could be effective for sustaining breastfeeding in new mothers.¹⁶

CONCLUSION

Based on the findings of the current study, it was evident that there was significant effect of integrated breastfeeding education on our study participants. Therefore, Integrated breastfeeding education should be given to all caesarean mothers by the midwifery nurse to overcome the challenges during breastfeeding after caesarean delivery.

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Conflict of Interest

Authors declare no conflict of interest.

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