



Effectiveness of breastfeeding self-efficacy program on breastfeeding self-efficacy and practices among lactating mothers

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Abstract

Breastfeeding self-efficacy is defined as a mother's confidence in her ability to breastfeed her child. So, improving mother's confidence of breastfeeding during the post-partum period. preparation can improve mothers breastfeeding confidence and thereby breastfeeding outcomes.

The aim of the study is to assess the effectiveness of breastfeeding self-efficacy programme on breastfeeding self-efficacy and breastfeeding practice among lactating mothers.

Methodology: A Non Equivalent control group design was used for the study. The study was conducted among 30 lactating mothers (first 15 in control group and next 15 in experimental group) attending IGIMS Hospital, Patna in Female and Child Ward background information, pre-test breastfeeding self-efficacy was measured using Breastfeeding self-efficacy scale and then breastfeeding self-efficacy programme was delivered to the mothers in the experimental group. The post-test breastfeeding self-efficacy and breastfeeding practice was measured three days postpartum. Briston Breastfeeding Assessment tool was used to measure breastfeeding practice.

Result: the present study revealed that 66.67% had moderate confidence level regarding breastfeeding self efficacy programme 33.33% had low confidence level and none of mothers had high confidence level regarding the same study, in pre-experimental group. in post-experimental group revealed that 60% had high confidence level regarding breastfeeding self efficacy programme 40% had moderate confidence level and none of mothers had low confidence level regarding the same study. in pre-control group revealed that 80% mothers had moderate confidence level regarding breastfeeding self efficacy programme 20% mothers had low confidence level and none of mothers had high confidence level regarding the same study. in post-control group, revealed that 33.33% mothers had low confidence level regarding breastfeeding self efficacy programme 66.67% mothers had moderate confidence level and none of mothers had high confidence level regarding the same study.

Conclusion: The results of the study suggested that breastfeeding self-efficacy can be improved through proper education and support Improving breastfeeding self-efficacy programme and practice.

Keywords: Breastfeeding self-efficacy, lactating mothers, breastfeeding practices, self-efficacy program, postpartum education

Introduction

Breastfeeding self-efficacy interventions are important for improving breastfeeding outcomes. However, the circumstances that may influence the effectiveness of the interventions are unclear, especially in the context of hospitals with suboptimal infant feeding practices. Self-efficacy of breastfeeding greatly affects the achievement of exclusive breastfeeding so that makes the success rate of exclusive breastfeeding in nursing mothers high. For first-time mothers to give birth and breastfeed their babies (Primigravida) and are at work, identification of the level of self-efficacy of breastfeeding becomes an influential thing. A good latch is vital for comfortable breastfeeding. Breast feeding self-efficacy is a potentially modifiable variable that has been shown to predict longer breastfeeding duration and increased exclusive of breastfeeding.¹

The concept of breastfeeding self-efficacy was introduced by Dr. Cindy Lee Dennis, it is concept on Bondura (1997) Social cognitive theory. The early feedings might best consist of approximately 5 to 10 minutes sucking on each breast while the nipples are accustomed to it. This frequent sucking stimulates the production and let- down of lactation and reduces the potential severity of engorgement. Therefore, it is essential that there be no missed feeling,

including those at night. The breastfeeding self-efficacy programme uses vicarious experience through teaching, video, demonstration and breastfeeding support to improve breastfeeding self-efficacy and thereby improving the breastfeeding practice.²

Breastfeeding self-efficacy is related to a mother's perception of breastfeeding her child, how much effort she should put into breastfeeding, and how she reacts to difficulties experienced during breastfeeding. It is stated that mothers whose self-efficacy level is high want to breastfeed more, resist difficulties and are self-confident (Dennis, 1999), In several studies, the presence of a positive relationship between the mother's self-efficacy and her breastfeeding success has been shown. Many researchers have developed breastfeeding education programs within the framework of self-efficacy theory (Blyth *et al.*, 2002, Nichols *et al.*, 2009, Dennis and Faux 1999, Dunn *et al.* 2006; Gregory *et al.*, 2008; Chan *et al.*, 2016, Tseng *et al.*, 2020 ^[3] .All evidence-based studies that include breastfeeding education interventions show that both one-on-one breastfeeding counselling and practices such as group education and peer counselling increase the rates of initiating and continuing breastfeeding (Bonuck *et al.*, 2014, Chan *et al.*, 2016; Kang *et al.*, 2008; Kim *et al.*, 2013; Lumbiganon *et al.*, 2016, Patel and Patel, 2016: Swerts *et al.*,

2019, Yilmaz and Aykut, 2019). One of the main goals in these educations should include ensuring that educated mothers' knowledge and skills affect their confidence in breast feeding, thus increasing breast feeding rates.⁴ In addition, lactation consultants, who provide private and paid services, also reach mothers who have given birth through one-to-one home visits, online or telephone. However, most of the hospitals do not have a standard breastfeeding education program in routine services. Although the content of the education modules recommended within the scope of the Baby-Friendly Hospital Initiative program is used in the educations, the method, time and duration of education, and materials used in educations vary (Dolgun *et al.*, 2016; Soyhan and Demirci, 2020).⁵

Statement of The Problem

“Effectiveness of breastfeeding self-efficacy program on breastfeeding self-efficacy and practices among lactating mothers”.

Objectives

1. Assess the breastfeeding self-efficacy program among lactating mothers before & after breastfeeding self-efficacy programme in control and experimental group.
2. Assess the practices of breastfeeding among lactating mothers before & after breastfeeding self-efficacy programme in control and experimental group.
3. Find out the association between the breastfeeding self-efficacy programme and practices among lactating mothers and their socio demographic variables of experimental group.

Hypothesis (H0)

H₀1-There will not be statically significant difference between the Effectiveness of Breastfeeding self efficacy, and the practices among lactating mothers in experimental group & Control group.

Methodology

Research approach: quantitative research approach

Research Design: Non-equivalent control group pre-test post -test design.

Group	Pre-test	Treatment	Post test
Experimental	O ₁	X ₁	O ₃
Control	O ₂	----	O ₄

Variables under study

Demographic variables: Age, Gender, Year of marriage, Marital status, Religion, Areas of residence, Father education & Mother education.

Independent Variables: self efficacy programme

Dependent Variables: Breastfeeding technique and practice.

Research Setting: The study is conducted in IGIMS Hospital, Patna.

Population: lactating mother admitted in female & child ward of IGIMS, Patna

Sample Size: Approximate sample size 30 lactating mothers

Sampling Technique: Purposive sampling technique was used to select the sample.

Sampling Criteria: The sample will be selected based on the following criteria

Inclusion Criteria

1. Lactating Mothers
2. Primigravida mothers in postnatal period.
3. Multiple pregnancy mothers during postnatal period

Exclusion Criteria

1. High risk mothers.
2. Mothers of babies with congenital defect such as (cleft lip/ cleft palate) oro dental problem.
3. Mothers of babies with oral thrush.
4. HPS Syndrome infants.
5. Mothers who are Unable to establish lactation.
6. Postpartum psychosis mothers.

Method of Data Collection

A detailed explanation was given to eligible participants including the nature of intervention and nature and frequency of data to be collected. Participation was based on their willingness and written informed consent was obtained from each participant prior to data collection. They were allowed to withdraw from the study at any time during data collection. On recruitment, background information was obtained with the help of a semi-structured interview schedule followed by measurement of breastfeeding self efficacy using Breastfeeding self-efficacy scale short form (BFSE-SF). The mothers in the experimental group then received breastfeeding self-efficacy programme along with routine care, while control group received routine care only. Routine care does not involve antenatal teaching on breastfeeding. The mothers may get assistance from nurses, doctors or paediatrician as they have some problems with breastfeeding. Post-test on breastfeeding self-efficacy and breastfeeding practice was done on third postnatal day in both groups. The data was analysed using appropriate descriptive and inferential methods.

Development and Description of Tool

Tool: -Consist of three parts-

Part I: Sow Demographic variables such as Age, sex, income level, level of education.

Part II: Consist of Tool to assess the Breast-feeding self Efficacy. (Questionnaire Rating

Part III: Consist of Tool to assess the Breast-feeding practice (Bristol breast feeding assessment tool)

Scoring method

Briston Breastfeeding Assessment tool was developed by Jenny Ingram to measure the breastfeeding practice. It measures breastfeeding practice under four domains; positioning. attachment, sucking and swallowing. All the domains are scored from 0, 1 and 2 as poor, moderate and good respectively.

Analysis & Interpretation

The data obtained is analysed through descriptive and inferential statistics, Statistical significance of effect of hot application on reduction of intensity of labour pain will be analysed using paired "" test and association between pre-test scores of labour pains with selected demographic variables will be analysed using Chi square test.

Content Validity

Content validity of the tool will be confirmed by the expert's opinion regarding the relevance of the item. The structure

tool regarding A study to Assess Effectiveness of hot application on Dimple of Venous on reduction of intensity of labour pain among primigravida mothers." will circulated among expert from various field of specialization such as lecturer of midwifery and obstetrical history.

Validity of Tool

Content validity of the tool will be determined by nursing 10 experts.

Ethical Consideration

Ethical clearance will be obtained formal the institutional ethics committee of IGIMS, Patna before conducting the study.

The study will be conducted after obtaining the formal written permission from the competent authority of Danapur Sadar Hospital, Patna, Bihar.

Pilot study

The pilot study is conducted for a period 1 week after obtaining the ethical clearance and the permission form the competent authority of IGIMS Hospital, Patna, Bihar, the sample size of the pilot study is 3 lactating mothers, after taking written consent from the lactating mothers is selected using purposive sampling technique.

- The purpose is to find out the feasibility and reliability.

- Reliability Co-efficient was calculated by Cronbach’s Alpha method and its reliability score is .70, it means the scale has higher applicability.
- Pilot study was conducted on lactating mothers.
- The sample consist of 3 lactating mothers. the time taken by each respondent for filling tool was 10-15 minutes.

Procedure of Data Collection

Data collection is the gathering of information needed to address research problem. Formal written permission was obtained by the competent authority of IGIMS Hospital, Patna-14 The data collection for the study was carried out from 19th September 2023 to 20 September 2023. Before commencing the task of data collection, the self structured tool was edited by the expert. Good rapport was established with the sample. they were assured that their response will be kept confidential and will be used for research purpose. Written consent was taken from the lactating mothers. The sample consist of 30 sample was selected on the basis of inclusion criteria by using Purposive sampling technique.

Plan of Data Analysis

Data analysis was by descriptive, inferential and statistical method.

Results

Table 1: Pre- Test Breastfeeding self-efficacy Confident level among lactating mothers in experimental group
N=15

S.No.	Self-efficacy Score Criteria	Item	Frequency (f)	Percentage (%)	Valid Percent	Cumulative Percent
1.	1-40	Low confident	5	33.33	33.33	33.33
2.	41-60	Moderate confident	10	66.67	66.67	100.0
3.	> 60	High confident	-	-	-	-

(66.67%) mothers having moderate confident level (33.33%) mothers having low confident level regarding the

breastfeeding self-efficacy program, and none of mothers having high confident regarding the same in a given study.

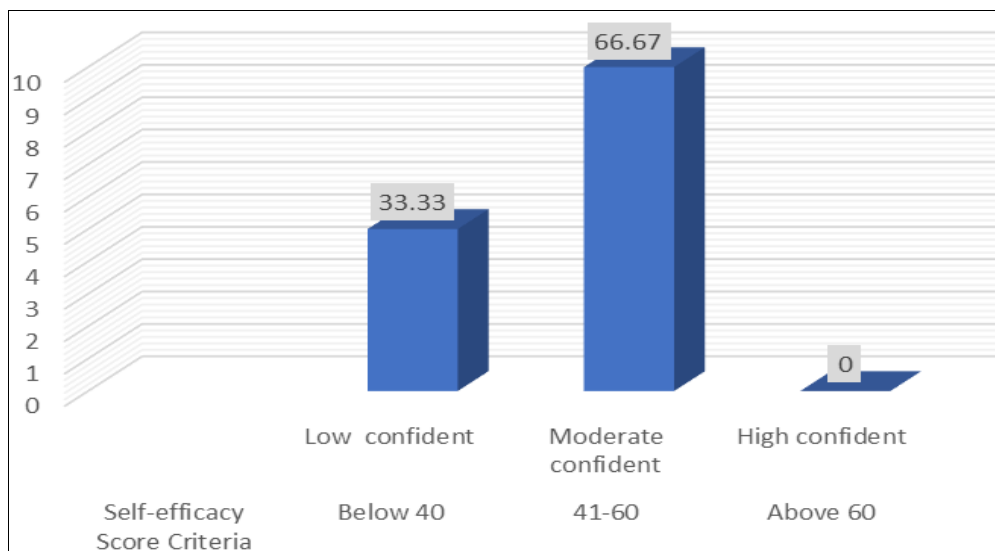


Fig I: Pre-Test Breastfeeding Self- Efficacy Confidece Level in Experimental Group

Table II: Pre-Test Mean, Median, SD and Mean Percentage of self-efficacy confident scores among lactating mothers in experimental group

Domain	Max Score	Range	Mean	Median	SD	Mean%
Self-efficacy confidence Scores	52	38	44.53	47.0	10.23	29.02

The mean score for the confident level of mothers was 44.53 with a mean % of 29.02 whereas a median and standard deviation was 47.0 and 10.23 respectively.

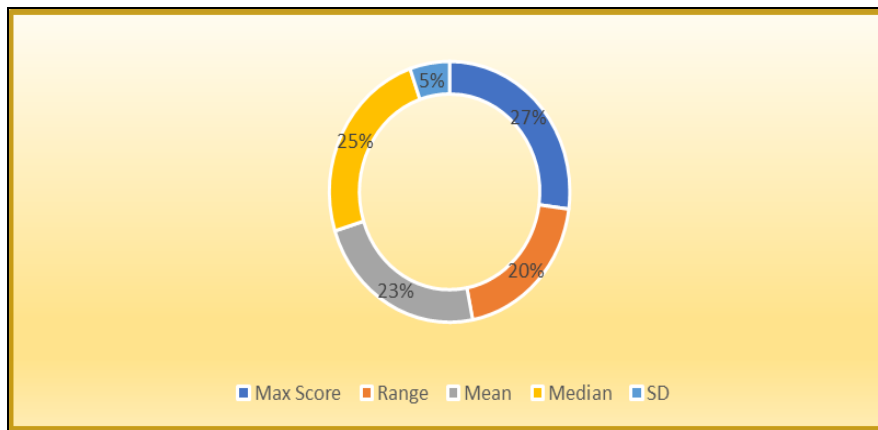


Fig 2: Pre-Test Self Efficacy Confidence Score in Experimental Group

Discussion

The finding of the present study revealed that 66.67% had moderate confident level regarding breastfeeding self efficacy programme 33.33% had low confident level and none of mothers had high confident level regarding the same study, in pre-experimental group.

The finding of the present study revealed that 60% had high confident level regarding breastfeeding self efficacy programme 40% had moderate confident level and none of mothers had low confident level regarding the same study, in post-experimental group.

The finding of the present study revealed that 80% mothers had moderate confident level regarding breastfeeding self efficacy programme 20% mothers had low confident level and none of mothers had high confident level regarding the same study, in pre-control group.

The finding of the present study revealed that 33.33% mothers had low confident level regarding breastfeeding self efficacy programme 66.67% mothers had moderate confident level and none of mothers had high confident level regarding the same study, in post-control group.

Pre-test mean score for the confident level of mothers was 44.53 with a mean % of 29.02 whereas a median and standard deviation was 47.0 and 10.23 respectively.

Post-test mean score for the confident level of mothers was 43.06 with a mean % of 28.70 whereas a median and standard deviation was 43.0 and 4.81 respectively.

Comparison of breastfeeding self-efficacy between experimental and control group

The 't' value is 3.89 at $P < 0.05$ significant level between pre-experimental and control group. Hence, the 'p' value is greater than significance level of 0.05% which reveals that there is a significant difference between the pre-mean scores of the subjects. On other hand, the 't' value is 2.92 at $P < 0.05$ significant level between post-experimental and control group which reveals that there is a significant difference between the post mean scores of the subjects. So, the breastfeeding self-efficacy programme is very effective on breast feeding self-efficacy of the lactating mothers.

Conclusion

Structured teaching program significantly increases the knowledge regarding breastfeeding self efficacy programme and practice among lactating mothers. So, in future nurses can prepare an effective structured teaching program to reduce the fetal mortality rate.

Nursing implication

Nursing practice

The present study recommended the following Nursing Practice;

1. For establishing and maintaining the breastfeeding self efficacy programme and practice.
2. Nurses working in postnatal ward should ensure regarding breastfeeding self efficacy practice.
3. Nurses working in postnatal ward can encourage to mothers exclusive breastfeeding.
4. All the staff should be trained to implement the guideline of breastfeeding self efficacy programme and practice.

Nursing Education

The present study recommended the following implication in Nursing Education;

1. Function, physical setup and other requirements regarding the breastfeeding self efficacy programme and practice should be included in Nursing curriculum.
2. Nursing student and staff should be trained by organization of workshop or seminar for creating awareness regarding breastfeeding self efficacy programme and practice.
3. Written manual can be developed regarding guidelines and protocol for breastfeeding.

Nursing Administration

The present study has following implication in Nursing Education;

1. Nursing administration should formulate policies for postnatal ward and labour room in hospital.
2. Nursing administration should be developed protocols and policies regarding physical setup and guidelines for the breastfeeding self efficacy programme and practice.
3. Nursing administration should formulate policies regarding breastfeeding techniques.
4. Nursing administration can organize In-service training programme for the nurses to create awareness about breastfeeding self efficacy programme and practice.
5. Nursing administration can organize awareness programme within the hospital, to create awareness regarding breastfeeding self efficacy.

Recommendation for Further Research

On the basis of the present study the following recommendation have been made for further study:

- the study can be replicated on a large sample to generalize the findings.
- A similar study can be conducted by including practical aspect.
- A similar study can be done by using various teaching method.
- Based on study findings, intervention should be provided to all nursing students by workshop or seminar or in-service education to enhance the knowledge level.
- A similar study can be undertaken with control group design.

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