

A Quasi Experimental Study to Assess the Effectiveness of the Role of Structured Education Management on Knowledge Regarding Feeding Issues in Pre-Term Babies Among Mothers in SAIMS Hospital, Indore City

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ABSTRACT

Background: Preterm infants may engage in long pauses after 3-5 sucks during a sucking activity or they may not be able to initiate sucking spontaneously. Another sucking pattern that can be seen in preterm infants is dysfunctional sucking. In addition to immaturity features, neurological problems can also be a contributing factor for dysfunctional sucking pattern. The rate of dysfunctional and irregular sucking patterns in preterm infants was reported to be 50%. Moreover, it was reported that the aspiration rate was higher in preterm infants compared to term infants, and dysphagia was seen at a rate of 26% in preterm infants. Difficulties in transitioning to oral feeding in preterm infants often continue after discharge.

Objectives. To assess the pre-test knowledge score regarding feeding issues in pre-term babies among mothers of selected hospitals of Indore. 2. To assess the effectiveness of the planned education program on knowledge regarding feeding issues in preterm babies among hospitals of Indore mothers of selected. 3. To find out the association between pre-test knowledge score regarding feeding issues in pre-term babies among mothers with their selected demographic variables.

Methodology: A quantitative evaluative approach was used for the study. the size of the population included in the study was 30 mothers of preterm babies. They were chosen by a process of selecting a portion of the population to obtain data. The study was conducted on 30 mothers of preterm babies in SAIMS hospital at Indore. They were given a structured knowledge questionnaire for evaluating their response to assess the effectiveness of the structured teaching programme on knowledge regarding feeding issues in preterm babies.

Results: The existing knowledge regarding Danger sign of newborn among mothers of newborn was shown by pretest score and it is observed that most of the newborn mothers 6(20%) were poor (0-5) 20%knowledge, some mothers 23(76.67%) were average (06-15) some mothers 02(6.67%) were good (16-30), And post test score was observed that the mothers were 01(3.33%) were poor (0-05) knowledge, mothers 16(53.33%) were average (06-15),8 mothers (26.67%) were good (16-30).

Interpretation And Conclusion: The participants were given a structured knowledge questionnaire of 30 questions for assessing the knowledge and skills other than the demographic variable such as Age, gravida, family income, educational status, previous history of preterm birth, congenital abnormalities, and

maternal health. The score was observed by the investigator. The knowledge gain (mean Standard Deviation) pre-test score was 7.7 ± 2.44 (Mean = Standard Deviation) while in knowledge regarding Danger signs of newborn illness at SAIMS hospital Indore (M.P.). Hence, it is confirmed from the tables of section-II that there is an in significant difference in the mean of test scores, which partially fulfills the first and second objective of the present study. The knowledge in (mean Standard Deviation) post-test score was 14.8 ± 3.52 while in knowledge regarding Danger sign of newborn illness at SAIMS hospital, Indore (M.P.). Hence, it is confirmed from the tables of section-II that there is a significant difference in the mean of test scores, which partially fulfills the first and second objectives of the present study.

KEYWORDS: Assessment, structured education management on feeding issues in preterm babies among mothers.

INTRODUCTION

Breastfeeding is the closest thing the world has to a magic bullet for child survival. In developing countries, optimal breastfeeding-starting within one hour of birth, exclusive breastfeeding (no additional foods or liquids, including water) for the first 6 months of life, and continued breastfeeding until age 2 or longer has the potential to prevent more than 800,000 deaths in children under age 5 and 20,000 deaths in women every year.

The general immaturity in the behavior and reactions of preterm infants is also recreated in their feeding. Late preterm infants are born between 34 and 36 weeks of gestation. They constitute the largest subset of premature infants and may experience some of the same difficulties and issues as extremely premature infants. An increasing amount of evidence indicates that late preterm infants are more likely to experience feeding issues that may persist through childhood. Owing to their lower orometer tone, poor sucking-swallowing-breathing coordination, and disturbed sleep-wake cycles, they have prolonged nasogastric tube feeding and delayed oral feeding independence. In addition, late preterm newborns have an immature gastrointestinal function, with a higher incidence of gastroesophageal reflux than their full-term counterparts. All these variables impede the successful initiation and continuation of breastfeeding, resulting in its early cessation. Hence, the breastfeeding rates of late preterm infants are lower than those of full-term infants despite the widely acknowledged health benefits for infants and mothers. Moreover, feeding difficulties are among the most common reasons for hospital readmission of these infants after discharge.

BACKGROUND OF THE STUDY: -

Preterm infants may engage in long pauses after 3-5 sucks during a sucking activity or they may not be able to initiate sucking spontaneously. Another sucking pattern that can be seen in preterm infants is dysfunctional sucking. In addition to immaturity features, neurological problems can also be a contributing factor for dysfunctional sucking pre term. The rate of dysfunctional and irregular sucking pre term in preterm infants was reported to be 50%. Moreover, it was reported that aspiration rate was higher in preterm infants compared to term infants, and dysphagia was seen at a rate of 26% in preterm infants. Difficulties in transitioning to oral feeding in preterm infants often continue after discharge.

Assumptions of the study: -

Although mothers have high levels of knowledge and practice about feeding preterm infants and have positive attitudes, they still have anxiety. Therefore, feeding counseling services during the growth process of the infant will reveal positive results for both mothers and infants.

Hypothesis: -

1. There is a significant difference between the mean pre-test and post-test knowledge scores regarding feeding issues in preterm babies among mothers
2. There is a significant association between pre-test knowledge scores regarding feeding issues in preterm babies among mothers with selected socio-demographic variables

Delimitations: -

The study will be conducted only in selected hospitals of Indore city

The study will focus only on mothers of pre-term babies and will not include fathers or other caregivers.

The study will use a pre-experimental design and will not include a control group.

REVIEW LETERATURE:

Singh et al. (2020) conducted a study on "Impact of Planned Teaching Programme on Knowledge and Practice of Mothers regarding Feeding Issues in Preterm Babies". This study evaluated the impact of a planned teaching programme on the knowledge and practice of mothers regarding feeding issues in preterm babies. The study used a quasi-experimental design and included 50 mothers of preterm babies. The results showed a significant improvement in the knowledge and practice of mothers regarding feeding issues in preterm babies after the planned teaching programme.

Chen et al. (2018) conducted a study "Planned Teaching Programme for Improving Knowledge and Practice of Mothers regarding Feeding Issues in Preterm Babies: A Randomized Controlled Trial. This study evaluated the effectiveness of a planned teaching programme on improving the knowledge and practice of mothers regarding feeding issues in preterm babies. The study used a randomized controlled trial design and included 150 mothers of preterm babies. The results showed a significant improvement in the knowledge and practice of mothers regarding feeding issues in preterm babies after the planned teaching programme.

Population The population of the study consists of mothers of preterm babies admitted to the selected hospitals of Indore city.

Sample and Sample Size

A sample is a small proportion of the population selected for observation and analysis .

The sample comprised of 30 mother whose children are admitted In pediatric unit

Sampling Techniques

The sampling technique used in this study will be non-probability convenience sampling, where mothers of preterm babies will be selected based on their availability and willingness to participate.

Development of Tool

A structured questionnaire will be developed to assess the mothers' knowledge regarding feeding issues in preterm babies. The questionnaire will consist of multiple-choice questions and will be validated by experts in the field.

Effectiveness of planned teaching programme in terms of gain in knowledge:-

The section deals with analysis and interpretation of data in order to evaluate the veness of planned health teaching in terms of gain in knowledge

Table 2 Frequency and percentage distribution of pre-test knowledge score

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S. No.	Pre Test score	Frequency	Percentage
1.	Poor (0-5)	6	20%
2.	Average (6-15)	23	76.7%
3.	Good (16-30)	2	6.67%

The table 1.2 depicts that majority 76.7% of the subject has a average knowledge and 20% has very poor knowledge.

Table 3 Frequency and percentage distribution of post test knowledge.

S. No.	Pre Test score	Frequency	Percentage
1.	Poor (0-5)	1	3.33%
2.	Average (6-15)	16	53.33%
3.	Good (16-30)	8	26.67%

This table depicts that majority 26.67% of the subject has very good knowledge and 53,33% had average knowledge and 3.33% has poor knowledge.

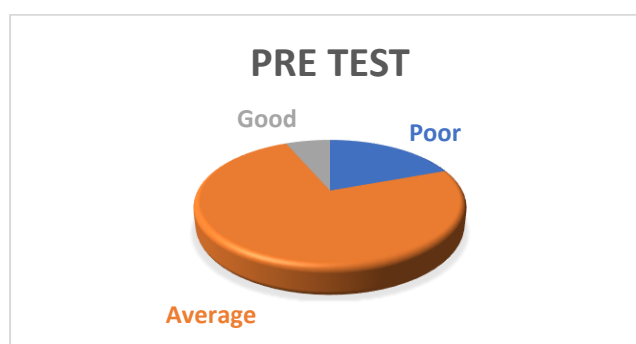


Figure :- Pie Chart showing pre-test knowledge score.

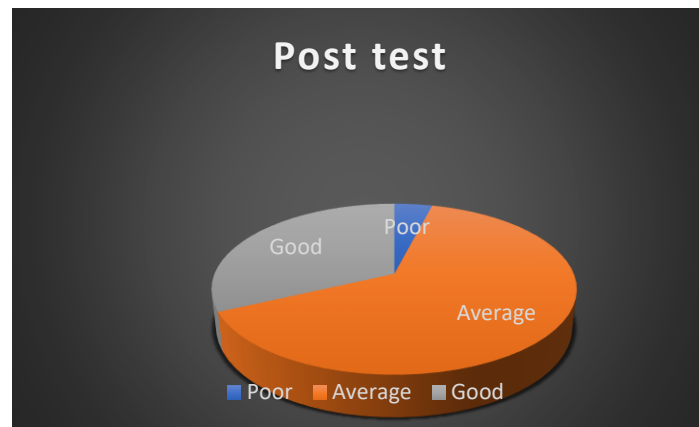


Figure:- Pie chart showing Post-test knowledge score.

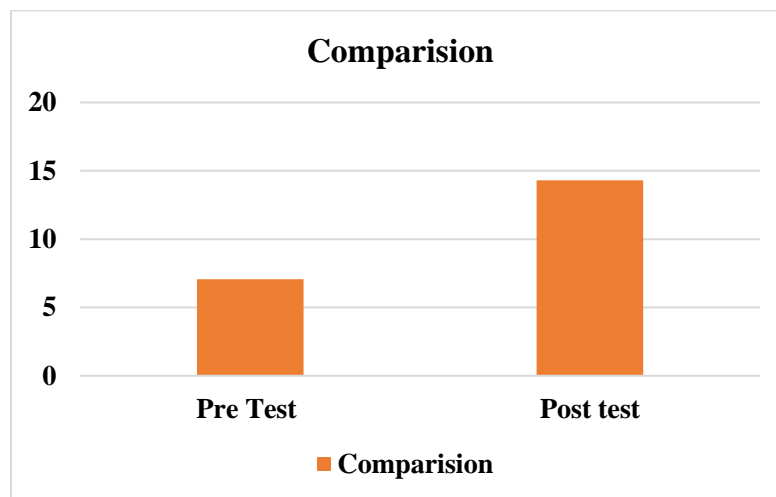


Figure:-Bar diagram showing comparison between pre-test and Post-test mean score

Discussion

The study revealed that preterm babies experienced feeding issues, including difficulty latching, sucking, and swallowing. The mothers of these babies reported stress, anxiety, and feelings of inadequacy. The study's findings suggest that preterm babies require individualized feeding plans and support from healthcare professionals.

Summary

This study aimed to explore the experiences of mothers with preterm babies who encountered feeding issues. The study found that preterm babies faced challenges with feeding, and their mothers experienced emotional distress. The study highlights the need for personalized feeding plans and support for mothers of preterm babies.

Conclusions

The study concludes that feeding issues are a significant concern for preterm babies and their mothers. The findings emphasize the importance of providing individualized feeding plans and emotional support to mothers of preterm babies.

Recommendations

1. Individualized feeding plans: Healthcare professionals should develop personalized feeding plans for preterm babies.
2. Emotional support: Mothers of preterm babies should receive emotional support and counselling to manage stress and anxiety.
3. Breastfeeding support: Healthcare professionals should provide breastfeeding support and guidance to mothers of preterm babies.
4. Education and awareness: Healthcare professionals should educate mothers about feeding issues in preterm babies and provide resources for support.

Implications

The study's findings have implications for healthcare practice, policy, and research. The study highlights the need for:

1. Improved healthcare services: Healthcare services should prioritize individualized feeding plans and emotional support for mothers of preterm babies.
2. Increased awareness: Healthcare professionals and the general public should be aware of the feeding issues faced by preterm babies and their mothers.
3. Future research: Further research is needed to explore the long-term effects of feeding issues on preterm babies and their mothers.

Limitations

The study had several limitations:

1. Small sample size: The study's sample size was small, which may limit the generalizability of the findings.
2. Single hospital setting: The study was conducted in a single hospital setting, which may not represent the experiences of mothers and preterm babies in other settings.
3. Lack of longitudinal data: The study did not collect longitudinal data, which may limit the understanding of the long-term effects of feeding issues on preterm babies and their mothers.

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