

Effect Of Structured Teaching Module (STM) Regarding Essential New Born Care Among Primi Gravida Mothers in Selected Urban Region in Maharashtra

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Abstract—Essential new born care plays a vital role in reducing neonatal morbidity and mortality. Primigravida mothers often have inadequate knowledge regarding newborn care, making health education an important strategy to improve their knowledge and practices. Objective: To assess the effect of (STM) on essential new born care among primi gravida mothers Method: A quantitative Pré experimental research design with Non probability purposive sampling A total of 181 primigravida mothers (181 in pre -test and post-test).

Baseline knowledge was assessed using a Structured Interview Schedule (SIS). A post-test was conducted after seven days using the same tool.

Results: 39.23% of Primigravida Mother had average level of knowledge score and 60.22% of Primigravida Mothers had good level of knowledge score Minimum knowledge score in pre-test was 12 and maximum knowledge score in pre-test was 22. Mean knowledge score in pretest was 18.77 ± 1.52 mean percentage of knowledge score was 62.57 ± 5.09 . 14.36% of Primigravida Mother had average level of knowledge score, 81.22% of had good level of knowledge score and of had good level of knowledge score and 3.87% of Primigravida Mothers had very good level of knowledge score.

Minimum knowledge score in post-test was 12 and maximum knowledge score in post-test was 28. Mean knowledge score in post-test was 21.19 ± 2.32 mean percentage of knowledge score was 70.47 ± 7.62 Conclusion: Thus, it was concluded that the SIS on essential new born care as a method of teaching was effective among primi gravida mothers in selected urban region in Maharashtra.

Index Terms—Health education, primigravida mothers, knowledge, essential new born care, urban regions.

I. INTRODUCTION

Essential new born care (ENC) is a comprehensive strategy designed to improve the health of newborns through interventions before conception, during pregnancy, during delivery, and the immediate postnatal period. It is a single most cost-effective intervention to reduce neonatal mortality and morbidity both in developed and developing countries¹ Neonatal mortality rates are basic indicator of a countries socioeconomic status and quality of health care² As the first 28 days of neonatal periods are the most venerable time for infant death, newborn during this period needs a careful attention to improve their survival³

II. OBJECTIVE

To assess the effect of (STM) on essential new born care among primi gravida mothers in selected urban region in Maharashtra.

III. METHODS

Study design and Setting: pre-experimental research design with one group pre-test and post-test with randomized shall be used to collect data before and after on health education on essential new born care among primi gravida mothers A study at selected urban regions, Maharashtra. Inclusion criteria: Primi gravida mothers who shall give consent to participate in the study. Primi gravida mothers available at the time of data collection. Exclusion criteria: who are not willing to participate.

Research approach and design: A quantitative approach and pre-experimental one-group pre-test and post-test design were used. The study design was represented as O1 X O2, where O1 was the pre-test, X was the structured health education intervention and O2 was the post-test. **Setting and sample:** The study was conducted among primi gravida mothers in urban region of Maharashtra. A total of 181 primi gravida mothers were selected using Non probability purposive sampling. **Intervention:** The structured health education covered the introduction, definition, incident, component and factors influencing of essential new born care. The health education intervention approximately 40–45 minutes.

Data collection:

Pre-test knowledge and practice were assessed before the intervention. The health education programme was then administered. After seven days, the same knowledge questionnaire and were used for post-test assessment. It is vital that health systems are equipped with necessary supplies, at least heating source, resuscitation bags and mask, and mucus devices. Equally important is that the staff members are competent enough to Essential newborn care in secondary-level facilities. provide essential newborn care to maximize gains from proven evidence-based and cost-effective interventions to combat the burden of neonatal morbidity and mortality in India. The overall purpose of the assessment was to ascertain the current situation of ENC so as to find out the strengths and weaknesses in the quality of newborn care service provision, and the findings would inform programme managers to strengthen the newborn care delivery in their service area. The ENC components included in the assessment were resuscitation, warmth, breastfeeding, and prevention of infections.⁴ Every year, over 130 million babies are delivered worldwide; 40 million of them are delivered at home without the help of a skilled birth attendant, which has a great risk for mothers and new born. In approximately 2.6 million births occur annually. Of these, 73%, or 1.83 million, occur at home without the help of a skilled birth attendant, which contributes to the low utilization of Essential Newborn Care Practice (ENCP)⁵

Data analysis:

Frequency, percentage, mean and standard deviation were used for descriptive analysis. Paired t-test and

correlation analysis were used for inferential analysis, and chi-square test was used to assess associations with demographic variables. The software used in the analysis were SPSS 24.0 and Graph Pad Prism 7.0 version and $p < 0.05$ is considered as level of significance.

IV. RESULT

Demographic profile most participant was in the 35.90% of Primigravida Mothers were in the age group of 18.24 years, 37.60% of Primigravida Mothers were Non graduate 34.30% of Primigravida Mothers had monthly family income of below 15000 Rs, 53% of Primigravida Mothers were from joint families and 55.80% of them were from nuclear families. 71.30% of Primigravida Mothers were private employees. Pre-test: that 14.36% of Primigravida Mothers had average level of knowledge score, 81.22% of had good level of knowledge score and 3.87% of Primigravida Mothers had very good level of knowledge score. Minimum knowledge score in post-test was 12 and maximum knowledge score in post-test was 28. Mean knowledge score in post-test was 21.19 ± 2.32 mean percentage of knowledge score was 70.47 ± 7.62 . Minimum knowledge score in post-test was 12 and maximum knowledge score in post-test was 28. Mean knowledge score in post-test was 21.19 ± 2.32 mean percentage of knowledge score was 70.47 ± 7.62 .

Graphical Representation:

This table shows the comparison of pretest and post-test knowledge scores of Primigravida Mothers regarding essential new born care in selected urban region in Maharashtra. Mean, standard deviation and mean difference values are compared and student's paired 't' test is applied at 5% level of significance. The tabulated value for $n=181-1$ i.e., 180 degrees of freedom was 1.96. The calculated 't' value i.e., 11.72 are much higher than the tabulated value at 5% level of significance for overall knowledge score of Primigravida Mothers which is statistically acceptable level of significance.

Hence it is statistically interpreted that the Structured Teaching Module (STM) regarding essential new born care among Primigravida Mothers in selected urban region in Maharashtra was effective. Thus, the H1 is accepted.

This section deals with percentage wise distribution of Primigravida Mothers with regards to their demographic characteristics. A convenient sample of 181 subjects was drawn from the study population, who were from selected hospitals of the city. The data obtained to describe the sample characteristics including age, educational status, per capita monthly family income, type of family, religion and occupation respectively.

Table 1: Percentage wise distribution of Primigravida Mothers according to their demographic characteristics.

n=181

Demographic Variables	No of primigravida mothers	Percentage (%)
Age(yrs.)		
18-24 yrs	65	35.9
25-31 yrs.	56	30.9
32-38 yrs.	60	33.1
38-45 yrs.	0	0
Qualification		
Illiterate	68	37.6
Primary	82	45.3
Higher Secondary	8	4.4
Graduation	23	12.7
Post Graduation	0	0
Per capital monthly family income (Rs)		
Rs 15000 and below	62	34.3
Rs 20001-30000	96	53.0
Rs 30001-40000	22	12.2
≥40001 Rs	1	0.6
Type of family		
Joint Family	80	44.2
Nuclear Family	101	55.8
Religion		
Hindu	73	40.3
Christian	27	14.9
Muslim	21	11.6
Buddhist	60	33.1
Others	0	0
Occupation		
Private Employee	129	71.3
Govt Employee	1	.6
Self-Employee	32	17.7
Housewife	19	10.5

Table 2: Assessment with level of pre-test knowledge n= 181

Level of pre-test knowledge	Score Range	Level of Pre-test Knowledge Score	
		No of primigravida mothers	Percentage
Very Poor	0-6	0	0
Poor	7-12	1	0.55
Average	13-18	71	39.23
Good	19-24	109	60.22
Very Good	25-30	0	0
Minimum score		12	
Maximum score		22	
Mean knowledge score		18.77±1.52	
Mean % Knowledge Score		62.57±5.09	

The above table shows that 39.23% of Primigravida Mother had average level of knowledge score and 60.22% of Primigravida Mothers had good level of knowledge score.

Minimum knowledge score in pre-test was 12 and maximum knowledge score in pre-test was 22. Mean knowledge score in pretest was 18.77±1.52 mean percentage of knowledge score was 62.57±5.09.

Table 3: Assessment with level of post-test knowledge

n= 181

Level of post-test knowledge	Score Range	Level of Post test Knowledge Score	
		No of primigravida mothers	Percentage
Very Poor	0-6	0	0
Poor	7-12	1	0.55
Average	13-18	26	14.36
Good	19-24	147	81.22
Very Good	25-30	7	3.87
Minimum score		12	
Maximum score		28	
Mean knowledge score		21.19±2.32	
Mean % Knowledge Score		70.47±7.62	

The above table shows that 14.36% of Primigravida Mother had average level of knowledge score, 81.22% of had good level of knowledge score and 3.87% of Primigravida Mothers had very good level of knowledge score.

Minimum knowledge score in post-test was 12 and maximum knowledge score in post-test was 28.

Mean knowledge score in post-test was 21.19 ± 2.32 mean percentage of knowledge score was 70.47 ± 7.62 .

Table 4: Significance of difference between knowledge score in pre and post-test of Primigravida Mothers

n=181

Test	Mean	SD	Mean Difference	t-value	p-value
Pre-Test	18.77	1.52	2.42 ± 2.78	11.72	0.0001 S, $p < 0.05$
Post Test	21.19	2.32			

This table shows the comparison of pre-test and post-test knowledge scores of Primigravida Mothers regarding new born care from selected hospital of the city. Mean, standard deviation and mean difference values are compared and student's paired 't' test is applied at 5% level of significance. The tabulated value for $n=181-1$ i.e., 180 degrees of freedom was 1.96. The calculated 't' value i.e., 11.72 are much higher than the tabulated value at 5% level of significance for overall knowledge score of Primigravida Mothers which is statistically acceptable level of significance. Hence it is statistically interpreted that the Structured Teaching Module (STM) on knowledge regarding new born care among Primigravida Mothers from selected hospital of the city was effective. Thus, the H_1 is accepted.

V. DISCUSSION

This study possesses several strengths, including its comprehensive analysis of behavioural and clinical risk factors for essential new born care the use of appropriate statistical tests, and an adequate sample size. Inclusion of comparisons with other studies also increases the validity of the findings.

There are some drawbacks, however. Cross-sectional design excludes making inferences about causality, and reliance on self-reports may be susceptible to recall or reporting bias. Also, since the research was

conducted in a special geographic location, the results cannot be fully generalized to other populations.

VI. CONCLUSION

The study concluded that women had inadequate baseline knowledge and practice regarding essential new born care. Following structured teaching modules, there was a statistically significant improvement in knowledge and preventive practice. Health education is therefore an effective, simple and cost-effective nursing intervention that can be incorporated into community health nursing services to promote preventive health behaviour and early recognition of essential new born care.

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