

A Study to Assess the Effectiveness of the Structured Teaching Programme on Knowledge Regarding Prevention and Management of Neonates with Hyperbilirubinemia among Mother of Newborn Admitted in HSK Hospital of Bagalkot

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Abstract:-

➤ Introduction

Becoming the mother is very happy movement for the woman. The mother should maintain her health during the pregnancy to get a healthy baby. The gift which a mother can give to her baby is health. The structure teaching program was carried out to assess knowledge regarding prevention and management of NEONATES with HYPERBILIRUBINEMIA among mother admitted in selected hospital of BAGALKOT the study was conducted by our researchers. The neonatal jaundice effects one In two infants globally the jaundice is result of accumulation of bilirubin as fetal hemoglobin is metabolized by the immature liver.

➤ Objectives

To assess the knowledge of mother's regarding prevention and management of hyperbilirubinemia. Evaluate the structured teaching programme on prevention and management of hyperbilirubinemia among mother's admitted at HSK hospital. To identify the associate post test knowledge of mother with selected socio-demographic areas among mother's admitted in HSK hospital Bagalkot.

➤ Methods

The research design adopted for the study was pre-experimental research design method. The research approach selected for the study was one group pre-test research approach. Non probability convenient sampling was used for the study. 30 mothers of newborns were selected for the study. The tool used for the data collection was structured knowledge

questionnaire which has two sections. Section-A provides about socio-demographic data and Section-B deals with the knowledge regarding prevention and management of neonates with hyperbilirubinemia among mother of newborn. Collected data was analyzed by using descriptive and inferential statistics in terms of frequencies, percentage, mean, standard deviation, chi-square values, correlation co-efficient and 't' test.

➤ Results

The higher percent of respondents (36.6%) found in the age group of below 20 years, 73.3% were Hindu, 53.3% were from nuclear family, 70% were having urban residence 40% of them were having secondary school education and 66.67% of them were housewife's. During pre-test (80%) majority of the mother's of newborn were having poor level. In the post-test, all the mothers showed improvement in their knowledge regarding prevention and management of neonates with hyperbilirubinemia among mother of newborn, 56.67% were having very good level of knowledge, 3.37% of them were having average level of knowledge and 40% of them having good knowledge and none of them were possessing very poor level of knowledge. This shows that the structured teaching programme was effective in improving the knowledge regarding prevention and management of neonates with hyperbilirubinemia among mother of newborn. This chi-square value of the post-test level of knowledge were significant association between ages, religion, type of family, residence, educational status and occupational status of the mother. The findings of the study concluded that mothers of newborns had

inadequate level of knowledge regarding prevention and management of neonates with hyperbilirubinemia among mother of newborn. The structured teaching programme was effective in improving the knowledge of the mothers.

➤ *Interpretation and Conclusion*

The findings of the study concluded that mothers of newborns had inadequate knowledge there regarding prevention and management of neonates with hyperbilirubinemia among mother of newborn. STP was highly effective in improving the knowledge of mothers of newborn regarding prevention and management of neonates with hyperbilirubinemia among mother of newborn.

Keywords:- Mothers, Prevention And Management, Neonates, Hyperbilirubinemia, Newborn Effectiveness, Structured Teaching Programme.

I. INTRODUCTION

“When my daughter was born she had jaundice, she was small, round and yellow. We called her Melony.”

-Milton Jones

New born babies contributes the foundation of a nation. Healthy babies are like to evolve as physically and mentally strong adults with enhanced quality of human resource development. Almost one in every three babies in the world dies before they are four weeks of life. Fifty percent of neonatal deaths occur within first one week of life and majority of them within the first twenty four hours¹. In India 26 million children born each year; among 12 million children die during the first four weeks. Neonatal jaundice is one of the most common neonatal problems. Nearly 65-70% of neonates have visible jaundice in the first few days of life. The word jaundice is derived from the French word jaundice meaning yellow when it is said a baby is jaundiced, it simply means that the color of skin appears yellow, which is often seen in the first few days after birth. The yellow color is due to the bilirubin that is produced when red bloods cells get old and are broken down by the body. When there is excessive red blood cell breakdown, the bilirubin level in the blood goes up and it also gets deposited in the tissues imparting a yellow color to the skin². Jaundice is the commonest abnormal physical finding during first week of life. In all newborn babies red blood cells are breaking down at relatively high rate. One of the by-products of this process is bilirubin. Since all babies experience high levels of amounts of bilirubin can cross the blood brain barrier, where it may cause neurological damage, hearing loss and even seizure and death³. Incidence of jaundice varies with ethnicity, geography and sex.

II. RESEARCH METHODOLOGY

The study is aimed to evaluate the effectiveness of structured teaching program on knowledge regarding prevention and management of neonates with hyperbilirubinemia among mother of newborn admitted in HSK hospital of Bagalkot .

➤ *Research Approach*

As evaluative approach using pre-test (O₁) and post-test (O₂) without a control group was adopted for this study in order to accomplish the objectives study is the mothers who are admitted in HSK hospital bagalkot .

➤ *Sample*

The same for the present study composed of 30 mothers who are admitted in HSK hospital bagalkot .

➤ *Sampling Technique*

Sampling defines the process of selecting the group of people or other elements with which to conduct the study. Convenience technique method was adopted to select the samples for the present study based on inclusion criteria.

➤ *Development and Description of the Tool:*

The data collections technique was structured knowledge questionnaire keeping in this mind structured knowledge questionnaire was selected and developed on prevention and management of hyperbilirubinemia . The tool was prepared on the bases of objective of the study.

➤ *Reliability of the Tool*

This is done by critically evaluating questions based on difficulty index and discriminative index. The reliability index was $r = 0.89$ r: Reliability co-efficient of the half test.

➤ *Data Collection*

After obtaining the prior permission from the principal of Sajjalashree institute of nursing sciences and formal permission from Dean of HSK hospital Navanagar Bagalkot Karnataka the main study was conducted. The main study was conducted. The investigator given self introduction explained the purpose of the study, subject's willingness to participate in the study was ascertained. The subjects are assured anonymity and confidentiality of the information provided by them and written informed consent was obtained

III. RESULTS

“BE VOICE, NOT AN ECHO” ALBERT EINSTEIN

The purpose of analysis is to reduce the data to intelligible and interpretable forms so that the relation of problems can be studied and tested. The interpretation of tabulated data can bring to light these real meaning of the finding of the study, analysis and interpretation of data for present study is based on data collected from 30 mothers of newborns.

➤ Objectives

- ❖ Assess the knowledge of mother’s regarding prevention and management of hyperbilirubinemia.
- ❖ Evaluate the structured teaching programme on prevention and management of hyperbilirubinemia among mother’s admitted at HSK hospital.
- ❖ To identify the association of post test knowledge of mother with selected socio-demographic areas among mother’s admitted in HSK hospital Bagalkot.

➤ Organization of Findings

In this study the data was organized, tabulated, analyzed and interpreted by means of statistical tables and graphs and is organized under the following headings.

Section I: description of socio demographic characteristics of the sample. The demographic data will be analyzed using frequency and percentage.

Section II: Assessment of knowledge of mother regarding prevention and management of hyperbilirubinemia.

Section III: evaluation of the structured teaching programme among mother’s regarding prevention and management of hyperbilirubinemia in newborn.

Section IV: association between post test knowledge of mother with selected socio-demographic areas among mother’s regarding prevention and management of hyperbilirubinemia among newborns.

The section distributed the sample as follows:

- ✓ Distribution is knowledge scores of sample regarding prevention and management of hyperbilirubinemia among newborns.

SECTION I: Description of socio demographic characteristics of the sample.

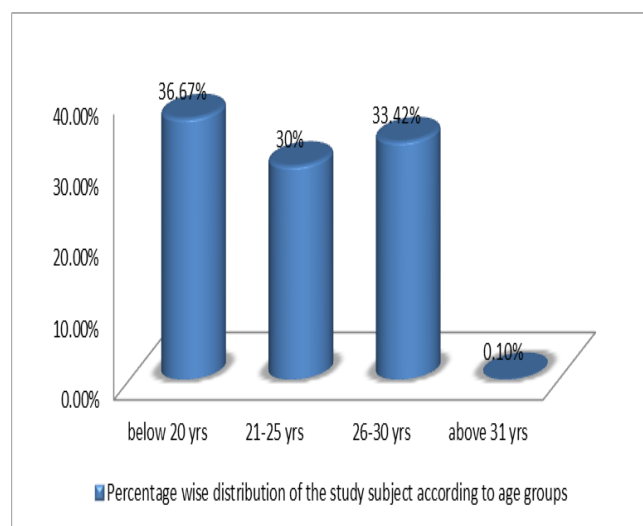


Fig 1:- Percentage Wise Distribution of Study Subject According to Age

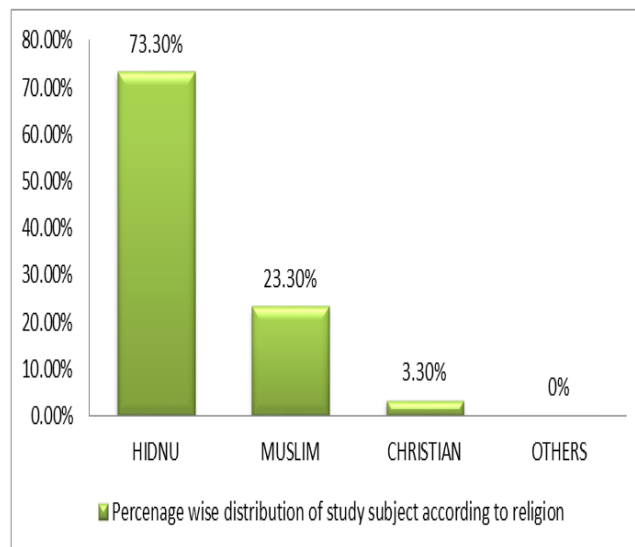


Fig 2:- Percentage wise distribution of study subject according to religion

Percentage wise distribution of study subject according to age reveals that majority (36.64%) of sample was below 20 yrs, least above 30 years (0.1%) and rest of the samples were between 21-25 years and 26-30 years percentage distribution is (30%) and (33.43%) respectively (figure 1)

Percentage wise distribution of study subject according to religion reveals that majority (73.3%) of sample was Hindu, least Christian (3.3%) and rest of the samples were Muslims (23.3%) (Figure 2).

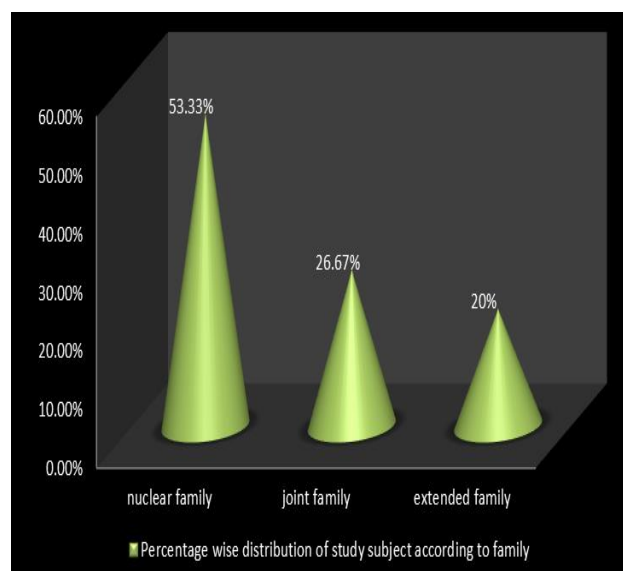


Fig 3:- Percentage wise distribution study subjects according to family

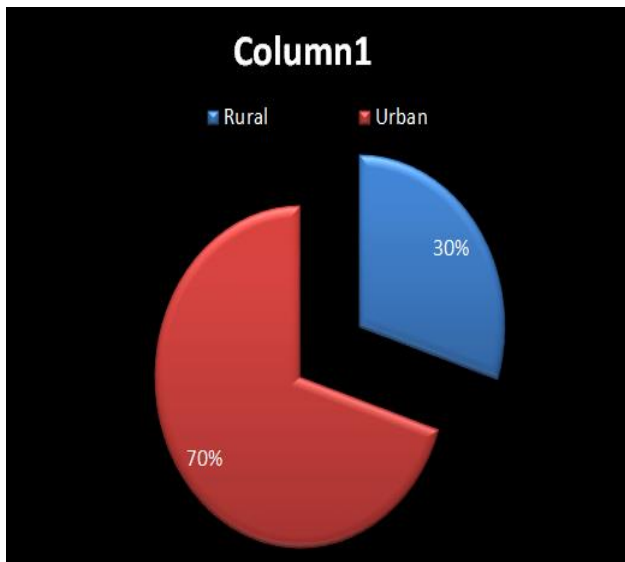


Fig 4:- Percentage wise distribution of study subjects according to residence

Percentage wise distribution of study subject according to type of family reveals that majority (53.33%) of sample were belongs to nuclear family, least were extended family (20%) and rest of the samples were belongs to joint family (26.67%) (Figure 3).Percentage wise distribution of study subject according to residence reveals that majority (70%) of sample were belongs to Urban and rest of the samples were belongs to Rural (30%) (Figure 4)

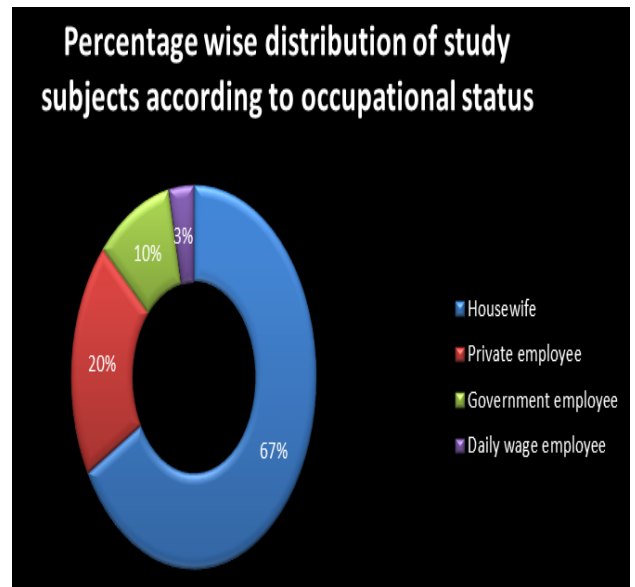


Fig 6:- Percentage wise distribution of study subjects according to occupational status

Percentage wise distribution of study subject according to educational status reveals that majority (40%) of sample were Housewife, least self employee (0%) and rest of the samples were private employee, government employee and daily wage workers is (20%),(10%),(3,33%) respectively. (figure 6).

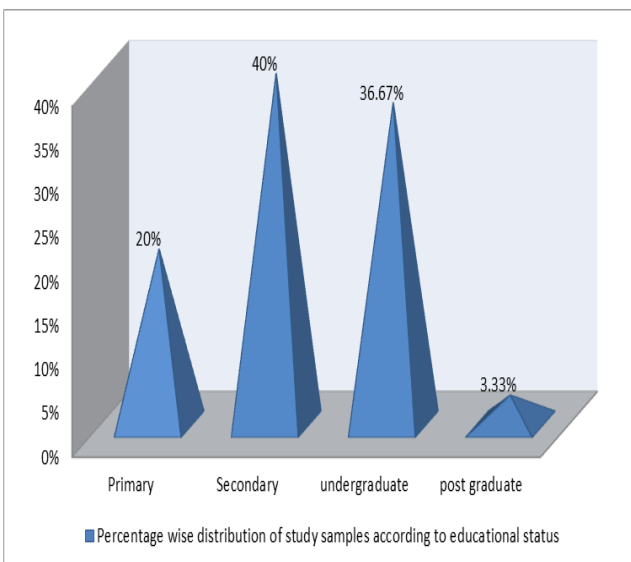


Fig 5:- Percentage wise distribution of study samples according to educational status

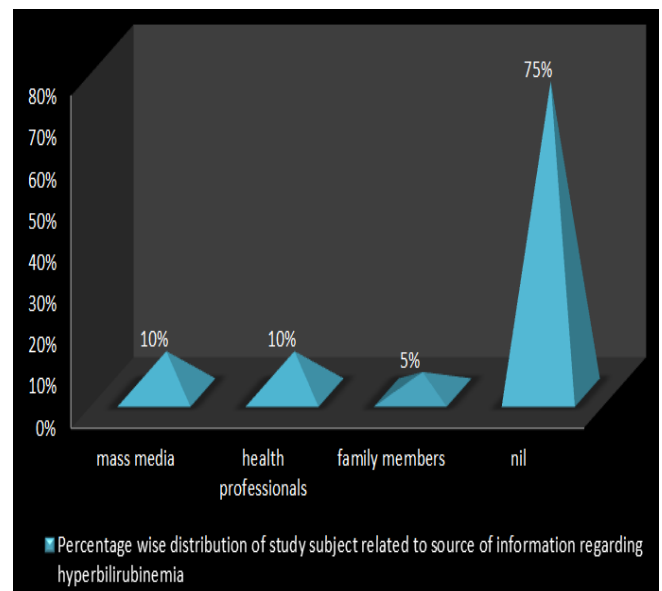


Fig 7:- percentage wise distribution of study subject related to sources of information reveals that majority (70%) of sample were have no any information, least from family members (5%) and rest of the samples from mass media (10%) and health professionals (10%) respectively (figure 5.7)

SECTION II: Assessment of knowledge of mother regarding prevention and management of hyperbilirubinemia

Part I: Percentage wise distribution of study subject according to the level of knowledge in pretest.

Test	Levels Of Knowledge	Number	Percentage(%)
Pre-Test	Very good	0	0%
	Good	0	0%
	Average	0	0%
	Poor	6	20%
	Very Poor	24	80%

Table 1:- Percentage wise distribution of study subject according to the level of knowledge in pretest.

Table 1 depicts that pre test knowledge score mothers regarding prevention and management of neonates with hyperbilirubinemia. In this study majority of the mothers 24(80%) had very poor level of knowledge and 6(20%) of them had poor level of knowledge regarding prevention and management of neonates with hyperbilirubinemia

PART II: Comparison of knowledge score of mothers regarding prevention and management of hyperbilirubinemia before and after STP.

Level of Knowledge	Pre Test		Post Test	
	No of Respondent	Percentage	No of Respodent	Percentage
VERY GOOD	0	0	17	56.66
GOOD	0	0	12	40
AVERAGE	0	0	1	3.34
POOR	6	20	0	0
VERY POOR	24	80	0	0
TOTAL	30	100	30	100

Table 2:- Comparison of knowledge score of mothers regarding prevention and management of hyperbilirubinemia before and after STP.

Table 2 reveals that pre test knowledge score mothers regarding prevention and management of neonates with hyperbilirubinemia. In this study majority of the mothers 24(80%) had very poor level of knowledge and 6(20%) of them had poor level of knowledge regarding prevention and management of neonates with hyperbilirubinemia. After STP subjects had very good knowledge followed by 56.66%, had good knowledge 40%, had average knowledge 3.34% knowledge regarding prevention and management of neonates with hyperbilirubinemia.

SECTION III: Evaluate the effectiveness of STP on knowledge regarding prevention and management of hyperbilirubinemia in newborns.

SECTION IV: Association between post test knowledge score and selected socio-demographic variables.

H2-There will be significant association between the knowledge and selected demographic variables among mothers of newborns.

S.I. NO	Socio Demographic Variable	DF	Chi square	T value	Level of Significant	Association
1	Age	1	0.889	3.84	0.05	N
2	Religion	1	0.001	3.84	0.05	N
3	Type of Family	1	3.229	3.84	0.05	N
4	Residence	1	0.233	3.84	0.05	N
5	Educational Status	1	2.143	3.84	0.05	N
6	Occupational Status	1	0.312	3.84	0.05	N

Table 3:- Association between post test knowledge score and selected socio-demographic variables.

Table 3: summarize that the finding presented in the table reveals that there was no significant association between knowledge and selected demographic variables of mothers of newborns like age, religion, type of family, residence, educational status, occupational status.

IV. CONCLUSION

The study was conducted on the mother's who are admitted in HSK hospital BAGALKOT and the knowledge regarding the care of HYPERBILIRUBINEMIA by the mother's after the structure teaching program the knowledge level in the mother we improved and so we come to the conclusion that the study was effective in the hospital and according to the calculation also the study was positive so this education can be implemented in all hospital and reduce the rate of HYPERBILIRUBINEMIA among the NEONATES

SUMMARY

This chapter deals with the analysis and interpretation of findings of the study. The data gathered were summarized in master sheet and both descriptive and inferential statistics were used for analysis. Findings reveals that the post test mean 24.13 was higher than pretest knowledge score 5.36. T test was used to analysis the effectiveness, which showed that the gain in knowledge.

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