



A STUDY TO ASSESS THE EFFECTIVENESS OF EDUCATIONAL INTERVENTIONAL PACKAGE ON KNOWLEDGE REGARDING MINOR DISORDERS OF NEWBORN AMONG POSTNATAL MOTHERS ADMITTED IN SELECTED HOSPITAL OF MEHSANA DISTRICT

Yamini Chaudhari¹, Ms. Rekha B.², Ms. Priyanka Vishat³, Mr. Rajesh Joshi⁴

¹MSC Nursing student, Ratnaprabha Nursing Institute, Vadnagar

²Associate Professor, Ratnaprabha Nursing Institute, Vadnagar

³Assistant Professor, Ratnaprabha Nursing Institute, Vadnagar

⁴Principal, Ratnaprabha Nursing Institute, Vadnagar

ABSTRACT

Introduction: Newborn period encompasses the first four weeks of extrauterine life. Neonate are from birth to under four weeks of age that is less than 28 days, is called neonate or newborn. First week of life less than 7 days or less than 168 hours is known as early neonatal period. Late neonatal period extends from 7th to less than 28th day. It is an important link in the chain of events from conception to adulthood. The physical and mental well-being of an individual depends on the correct management of events in the perinatal period. The morbidity and mortality rates in newborn are high. In India, almost 7 out of 100 babies do not see their first birthday and nearly 65 percent of these infant deaths occur in the neonatal period, namely, the first four weeks of life. The current neonatal mortality rate in India is 45 per 1000 live births. **Objective:** 1) To assess the pretest knowledge of postnatal mothers regarding selected minor disorders of newborn. 2) To assess the effectiveness of educational interventional package on selected minor disorders of newborn among postnatal mothers. 3) To determine the association between pretest knowledge scores on selected minor disorders of newborn with their selected demographic variables. **Methodology:** Quantitative approach was considered the most suitable, as the purpose of pre-experimental design is to gather data. Present study was selected hospitals at Mehsana Dist. **Result:** Result shows that prior to the administration of educational interventional package, 62% of the sample had poor knowledge (score: 0-12) regarding minor disorder of new born among postnatal mother. While average (score: 13-18) was observed in 38% of the sample and 00 % have good knowledge (score 19-25). In the post-test there was marked improvement in the knowledge of the sample with majority (74%) gained good knowledge and (26%) gained average knowledge. Result reveals that mean score on pre-test knowledge is 7.94 ± 3.37 and mean percentage is 31.76%, median is 8.00 and mode is 8.00. Whereas in post-test mean score is 17.90 ± 2.80 and mean percentage is 71.60, median is 20.00 and mode is 20.00 which reveals the difference in mean percentage is 39.84%. The pretest mean score on Knowledge is 7.94 ± 3.37 and posttest mean score is 17.90 ± 2.80 respectively. The 't' value is 20.26 which is greater than the table value 1.678. Hence the research hypothesis H1 is retained at $p \leq 0.05$ level. Thus, it becomes evident that planned teaching is effective in improving the knowledge regarding minor disorder of new born among post-natal mothers. The Chi-square value shows that there is a significance association between the knowledge and demographic variables such as education and there is a no significance association between the knowledge and demographic variables the calculated chi-square values were less than the table value at the 0.05 level of significance. **Conclusion:** The main conclusion drawn from this present study was that the knowledge of post-natal mothers was below average knowledge in pre - test. Post natal mothers were above knowledge after the administration of educational interventional package on minor disorder of new born in posttest. So, it was clearly stated that to acquire maximum level of knowledge, effective educational interventional package is essential.

KEYWORDS- Postnatal Mothers, Educational Interventional Package, Newborn

INTRODUCTION

Newborn period encompasses the first four weeks of extra uterine life. Neonate are from birth to under four weeks of age that is less than 28 days, is called neonate or newborn. First week of life less than 7 days or less than 168 hours is known as early neonatal period. Late neonatal period extends from 7th to less than 28th day. It is an important link in the chain of events from conception to adulthood. The physical and mental well-being of an individual depends on the correct management of events in the perinatal period. The morbidity and mortality rates in newborn are high. In India, almost 7 out of 100 babies do not see their first birthday and nearly 65 percent of these



infant deaths occur in the neonatal period, namely, the first four weeks of life. The current neonatal mortality rate in India is 45 per 1000 live births.

Globally the neonatal mortality has declined to some extent (from 33 deaths per 1000 live births in 1990 to 21 in 2012) because of the successful public health intervention. However, this progress is not enough. Currently, the leading causes of neonatal deaths in the world are infection, (diarrhea), prematurity. In India the neonatal mortality rate is 39 per thousand live births. The neonatal deaths caused by infection are 33%, asphyxia 21% and prematurity 15%, 75% of deaths occur within 7 days of birth in which 40% deaths occur in the first day of life. Neonatal deaths during the first week of life are due to inadequate and inappropriate care during pregnancy and childbirth or during the first critical hours after birth. After the first week, the major causes of neonatal deaths are infection, diarrhea, preterm births, poor feeding practices. These are some of the contributing factors to neonatal mortality.

OBJECTIVES

1. To assess the pretest knowledge of postnatal mothers regarding selected minor disorders of newborn.
2. To assess the effectiveness of educational interventional package on selected minor disorders of newborn among postnatal mothers.
3. To determine the association between pretest knowledge scores on selected minor disorders of newborn with their selected demographic variables.

HYPOTHESIS

H₁: There will be significant difference between the pre and posttest knowledge of postnatal mothers regarding minor disorders of newborn.

H₂: There will be significant association between the posttest knowledge score of minor disorders of newborn with the demographic variables of postnatal mothers.

RESEARCH METHODOLOGY

Research Design

Research design is investigator's overall plan for obtaining answer of the research question. Investigator made decisions about full nature of the intervention as a part of the research design. Research design used for the proposed study was Pre experimental One Group Pretest posttest Research Design.

VARIABLES UNDER STUDY

- **Independent Variable:** The independent variable in this study was educational interventional package on knowledge regarding minor disorders of newborn among postnatal mothers admitted in selected hospital of Mehsana district.
- **Dependent Variable:** The dependent variable was the Knowledge regarding minor disorder of new born among post-natal mothers.

SETTING OF THE STUDY

The study was conducted in selected hospitals at Mehsana District.

Population and Sample:

The population for this study comprised postnatal mothers admitted in selected hospital of Mehsana district. A sample consists of a subset of units that compose the population. 50 sample Investigator had adopted non-probability sampling technique to select the samples.

Criteria for Selecting the Sample

Inclusive Criteria: Mothers those, who are willing to participate in the study, who are primi para postnatal mothers available at the time of data collection, who can understand Gujarati and English language

Exclusive Criteria: included Mothers those, who are not willing to participate in the study, who are having other complications like postnatal psychosis, postpartum hemorrhage and ICU cases.

Development of the Tool

The development of tool is step by step procedure in order to make tool. Investigator came across some studies that used Structured Knowledge Questionnaire on knowledge regarding minor disorder of new born among Post natal mothers. A review of research and non-research literature, expert's opinion and investigator's experience was the basis for the construction of tool for data collection for present study. The investigator selected following tools for the data collection. Investigator developed a Structured Knowledge



Questionnaire to assess the effectiveness of educational interventional package on knowledge regarding minor disorders of newborn among postnatal mothers admitted in selected hospital of Mehsana district. Development of Structured Knowledge Questionnaire:

Structured questionnaire focused mainly on the assess the effectiveness of educational interventional package on knowledge regarding minor disorders of newborn among postnatal mothers admitted in selected hospital of Mehsana district. Total 25 items had been formulated. It was prepared in Gujarati as well as in English. The participant was expected to illustrate their appropriate response according to questions. The time has been allotted for a Structured Knowledge Questionnaire was 30 minutes.

Data Collection Procedure

Data collection is the gathering of information needed to address of research problem. Before starting data collection, formal permission has been obtained from the concerned authorities of selected hospital. The investigator had addressed her to the samples and the objectives of this research study. Informed consent was obtained by each sample. The Questionnaire were distributed to all the samples and collected on completion by investigator. The researcher thanked all the respective authorities and samples for their cooperation.

The main study data collection was done after obtaining formal permission. The data were collected as per the permission Also, investigator had explained about the purpose of the study, the need for filling questionnaire accurately and honestly to the samples. The Questionnaire was distributed among the samples and was collected by the researcher on completion. Data collection was processed every day. Investigator had found that all the samples and informant gave good cooperation during data collection process.

Data Analysis Plan

Statistical analysis is the method of rendering quantitative information meaningfully and intelligently. Moreover, statistical procedure enables the investigator to reduces, summarize, evaluate, interpret and communicate numerical information in a meaningful way.

The investigator planned to analyze data by using descriptive and inferential Statistics. All the data has been analyze by using frequency distribution, percentage and was presented in the form of the tables and graphs. Chi Square test has been used to find association between selected demographic variables and Knowledge.

Ethical Considerations

As per ethical committee of Hemchandracharya North Gujarat University (HNGU) Research proposal was conducted after approval of dissertation committee. The written permission was obtained from selected hospitals at Mehsana district.

RESULT

Result shows that prior to the administration of educational interventional package, 62% of the sample had poor knowledge (score: 0-12) regarding minor disorder of new born among postnatal mother. While average (score: 13-18) was observed in 38% of the sample and 00 % have good knowledge (score 19-25). In the post-test there was marked improvement in the knowledge of the sample with majority (74%) gained good knowledge and (26%) gained average knowledge. Result reveals that mean score on pre-test knowledge is 7.94 ± 3.37 and mean percentage is 31.76%, median is 8.00 and mode is 8.00. Whereas in post-test mean score is 17.90 ± 2.80 and mean percentage is 71.60, median is 20.00 and mode is 20.00 which reveals the difference in mean percentage is 39.84%. The pretest mean score on Knowledge is 7.94 ± 3.37 and posttest mean score is 17.90 ± 2.80 respectively. The 't' value is 20.26 which is greater than the table value 1.678. Hence the research hypothesis H1 is retained at $p \leq 0.05$ level. Thus, it becomes evident that planned teaching is effective in improving the knowledge regarding minor disorder of new born among post-natal mothers. The Chi-square value shows that there is a significance association between the knowledge and demographic variables such as education and there is a no significance association between the knowledge and demographic variables the calculated chi- square values were less than the table value at the 0.05 level of significance.



Table 1: Frequency & Percentage distribution of Samples Based on Demographic Data

Demographic Variable		F	%
Age	18-21 year	12	24%
	22-25 year	20	40%
	26-29 year	16	32%
	above 29 years	2	4%
Education status	No formal	25	50%
	Primary	10	20%
	Higher secondary	9	18%
	Graduate	6	12%
Occupation	House wife	23	46%
	self-employee	13	26%
	professional	7	14%
	Labour	7	14%
Monthly income	Less than 10000	9	18%
	10001-20000	27	54%
	20001-30000	7	14%
	30001 and above	7	14%
Religion	Hindu	38	56%
	Muslim	10	20%
	Christian	2	4%
Number of children	One	37	64%
	Two	12	24%
	Three	1	2%

Table: 2 Frequency and percentage distribution of knowledge of post-natal mothers

Level of Knowledge	Pretest		Posttest	
	F	%	F	%
Poor	31	62%	00	00%
Average	19	38%	13	26%
Good	00	00%	37	74%

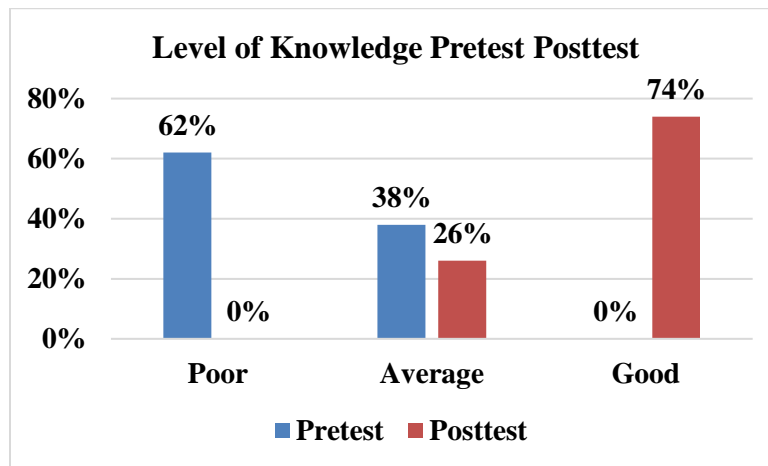


Table-2 shows that prior to the administration of educational interventional package, 62% of the sample had poor knowledge (score: 0-12) regarding minor disorder of new born among postnatal mother. While average (score: 13-18) was observed in 38% of the sample and 00 % have good knowledge (score 19- 25). In the post-test there was marked improvement in the knowledge of the sample with majority (74%) gained good knowledge and (26%) gained average knowledge.



Table: 3 Effectiveness of educational interventional package on knowledge regarding minor disorder of new born.

Knowledge	Mean	SD	df	Paired 't'
Pretest	7.94	3.37	49	20.26
Post test	17.90	2.80		

***Significant at $p \leq 0.05$ level; Table value = 1.678**

The above table 3 reveals that the pretest mean score on Knowledge is 7.94 ± 3.37 and posttest mean score is 17.90 ± 2.80 respectively. The 't' value is 20.26 which is greater than the table value 1.678. Hence the research hypothesis H1 is retained at $p \leq 0.05$ level. Thus, it becomes evident that planned teaching is effective in improving the knowledge regarding minor disorder of new born among post-natal mothers.

Table 4 Association between selected demographic variables and the knowledge score of post-natal mother's minor disorder of new born among.

Demographic variables	df	Chi square	Table Value	Sig.
Age	3	0.26	7.81	NS
Education	3	8.19	7.81*	S
Occupation	3	4.12	12.59	NS
Monthly income	3	1.98	7.81	NS
Religion	2	3.33	5.99	NS
No of children	2	4.81	5.99	NS

DISCUSSION

The present study is addressed to assess the effectiveness of educational interventional package on knowledge regarding minor disorder of new born among post-natal mothers admitted in selected hospitals at Mehsana District.

In this study 50 Samples participated. In relation to the findings of the study it was planned teaching Program on knowledge regarding minor disorder of new born among post-natal mothers admitted in selected hospitals at Mehsana Dist. The mean Post Test knowledge score (17.90) was higher than Mean Pre Test knowledge score (7.94) with the mean difference of 10.00. Association of selected Demographic Variables with the knowledge score was computed using Chi Square test and it showed that there is significant association between them.

Hence it was proved that the educational interventional package on regarding minor disorder of new born was effective in increasing knowledge among post-natal mothers.

CONCLUSIONS

The main conclusion drawn from this present study was that the knowledge of post-natal mothers were below average knowledge in pre - test. Post natal mothers were above knowledge after the administration of educational interventional package on minor disorder of new born in posttest. So it was clearly stated that to acquire maximum level of knowledge, effective educational interventional package is essential.

REFERENCES

1. P. Ghai, Piyush gupta, V.K.Paul, Ghai essential pediatrics, 6th edition published by Dr. OP Ghai, Publication, CBS publishersand distributors, (2006), page. No: 136
2. Reeder, Martin, Koniak-Griffin, Maternity Nursing, Family, Newborn and women's health care, 19th edition ,published by Wolters Kluwer, Indian publication, Lippincott, Williams and Wilkins, (2015), Page no:480 to 481
3. Parul Datta, Pediatric Nursing, 3rd edition, Jaypee brothers medical publishers,(2014), Page no: 64, 73 to 74, 96.
4. Ruby L. Wesley, Nursing Theories and models,2nd edition, Minnie B.Rose senior publisher, Trade and Textbooks, springhouse corporation, 1994, Page. No:46 – 53
5. Venkatalakshmi N. Knowledge Of Postnatal Mothers Regarding Minor Disorders Of New Born. Narayana Nursing Journal. 2014;3(3):39-40.
6. Cizmeci MN, Kanburoglu MK, Akelma AZ, Tufan N, Tatli MM. A descriptive study of transient neonatal feeding intolerance in a tertiary care center in Turkey. Journal of Obstetric, Gynecologic, & Neonatal Nursing. 2014 Mar;43(2):200-4.
7. Candy D, Paul S. Go with the flow: in childhood constipation. The journal of family health care. 2011;21(5):35-7.



8. Krzenień G, Szmigielska A, Jankowska K, Roszkowska-Blaim M. Congenital chloride diarrhea mimicking meconium ileus in newborn. *Medycyna wieku rozwojowego*. 2013;17(4):320-3
9. Şıklar Z, Oçal G, Bilir P, Ergur A, Berberoglu M. "Maternal/Neonatal" Iodine Status in Patients with Prolonged Physiological Jaundice. *Experimental and clinical endocrinology & diabetes*. 2009 Jul;117(07):312-5.