Original research article

"Effectiveness of Structured teaching programme on level of knowledge regarding prevention of neonatal death among antenatal mothers"

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ABSTRACT

Newborn babies have amazing abilities, yet they are completely depended on others for feeding, warmth and comfort. Newborn is a continuum of the fetal life and a very important transient time to adopt extra - uterine life. Hence, an experimental study was conducted to assess the effectiveness of structured teaching programme on level of knowledge regarding prevention of neonatal death among antenatal mothers in selected community health centre of Kanpur, UP. In this study 40 antenatal mothers were selected by convenience sampling technique from community health centre, Chaubeypur, Kanpur and their knowledge level was assessed using self structured knowledge questionnaire. The major finding of the study concluded that there was a significant difference between the mean pre test and mean post test knowledge score at $p<0.05$ level. Overall, Structured Teaching Programme is effective in improving the level of knowledge among antenatal mothers regarding prevention of neonatal deaths.

Keywords: Level of knowledge, Antenatal mothers, structured teaching programme, Neonatal deaths.

1 Introduction

The current neonatal mortality rate in India is of 39.1 per 1000 live births compared to 36 per 1000 live birth of global scenario, which accounts for nearly two thirds of infant's mortality and half of under five mortality. Over one third of all neonatal deaths occur in first day of life, almost half within 3 days and nearly fourth in the first week.[1]

The first week of life is the most crucial period in the life of an infant. This is because the newborn has to adapt itself rapidly and successfully to an alien external environment. The risk of death is greatest during the first 24-48 hours after birth. Newborn morality is one of the most neglected health problems in the developing world, there are estimated 4 million neonatal deaths worldwide each year. [1]

Nearly 26 million babies are born in India each year, this account for 20% of global birth, of these, 1.2 million die before completing the first four weeks of life. This accounts for nearly 30 percent of the total 3.9 million neonatal deaths worldwide. [2]

The challenges of reducing neonatal mortality require solutions through research to inform program innovation and action-oriented policies designed to improve newborn health.

. In all these above program, the mother plays a vital Role. The community health nurse can educate the mothers regarding essential new born care and regarding antenatal care and postnatal care and also about importance of institutional deliveries. [3]

2 Objective of Studies

i. To assess the level of knowledge regarding prevention of neonatal death among antenatal mothers before and after administering structured teaching programme.
ii. To evaluate the effectiveness of structured teaching program on level of knowledge regarding prevention of neonatal death among antenatal mothers.
iii. To determine association between the level of knowledge among antenatal mothers with their selected demographic variables.

3 Hypotheses

$\mathbf{H_1}$: There is significant difference between the level of knowledge regarding prevention of neonatal death among antenatal mothers before and after structured teaching program.

$\mathbf{H_2}$: There is significant association between the pre-test levels of knowledge among antenatal mothers with their selected demographic variables.

4 Material and Methods

Research approach: An evaluative research approach was used in this study.

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Research design: Pre- experimental, one group pre-test post- test design was used in this study.
Setting of the study: The study was conducted at Community Health Centre, Chaubeypur, and Kanpur.
Population: The population of present study consists of antenatal mothers who visited Community Health Centre, Chaubeypur, and Kanpur.
Sampling and sample size: Non probability convenience sampling technique was used to select 40 antenatal mothers in Community Health Centre, Chaubeypur, and Kanpur.

5 Variables

Research variables: Structured teaching programme is an independent variable and level of knowledge is dependent variable in this study.
Demographic variable: age, type of family, number of children, educational status, income, previous information, source of information.
Sampling criteria
Inclusion criteria

- Antenatal mothers between of the age of 18-39 year of age.
- Antenatal mothers who are willing to giving consent.
- Antenatal mothers who can read and write in Hindi

Exclusion criteria

- Antenatal mothers with sensory deprivation
- Antenatal mothers who are not available at the time of data collection

6 Development and Description of tools used in the study

Self structured knowledge questionnaire regarding knowledge about neonatal deaths was used for data collection. The tool consists of two sections:
Section A: Demographic variables
Section B: Self structured knowledge questionnaire

7 Data collection procedure

The final study was conducted in the month of May 2018 after getting administrative approval. Written permission was obtained from Community Health Officer, Chaubeypur, purpose of the study was explained to the subjects. The subjects were assured about anonymity and confidentiality of the information provided by them and informed consent was taken from those who were willing to participate in the study. A total of 40 antenatal mothers were selected and Self structured knowledge questionnaire was used assess the pre test level of knowledge after which structured teaching programme was administered followed by assessment of post- test level of knowledge after a week.

8 Plan for data analysis

The data analysis was planned to include descriptive and inferential statistics.

a) Descriptive statistics

- To describe the demographic data and level of knowledge among antenatal mothers by frequency and percentage distribution.
- To compute mean and standard deviation for the pre and post test knowledge among antenatal mothers.

b) Inferential statistics

1. Paired‘t’ test to assess the effectiveness of structured teaching programme regarding prevention of neonatal death among antenatal mothers.
2. Chi-square test was used to analyze the association between pre-test levels of knowledge among antenatal mothers with their selected demographic variables.

9 Data analysis and Major Findings of the study

Section I: Demographic data

- Most of the antenatal mothers 47.5% (19) were in the age group of 18-25 years.
- 67.5% (27) antenatal mother belonged to joint family.
- Educational status of majority antenatal mothers 40% (16) is high school and 40% (16) is intermediate.
- 100% (40) of the antenatal mothers are house wife.
- Majority antenatal mothers have (62.5%) 1-2children.
- 100 % (40) antenatal mothers have information about prevention of neonatal death.
- Previous source of information for 37.5% (15) antenatal mothers was health personnel.

Section II: Level of knowledge regarding prevention of neonatal death among antenatal mothers

- In pre- test 52.5% (21) antenatal mothers had poor knowledge, 47.5% (19) antenatal mothers had average knowledge and none of them had good knowledge.
- In post- test 82.5% (33) antenatal mothers had average knowledge, 17.5% (07) antenatal mothers had good knowledge.

Table 1: Pre- test and post- test knowledge score of antenatal mothers regarding neonatal death N= 40

Level of Knowledge	Pre- test		Post-test	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Poor knowledge	21	52.5	0	0
Average knowledge	19	47.5	33	82.5
Good knowledge	0	0	7	17.5
Total	40	100	40	100

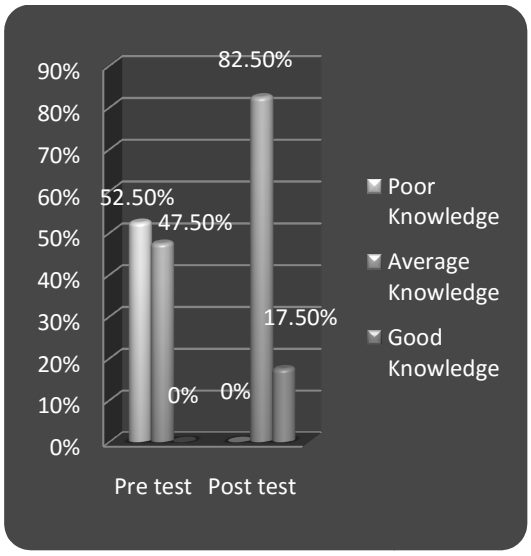

Figure 1: Cylindrical diagram showing the knowledge level in pre- test and post - test

Section III: Comparison of level of knowledge regarding prevention of neonatal death among antenatal mothers by using paired t-test.

- Mean knowledge score regarding prevention of neonatal death among antenatal mothers in pre test was10.275±3.1 and in post test was 17.50±2.88. Difference between mean score of pre-test and post test was statistically significant at p<0.05 level.

Table 2 Comparison of level of knowledge regarding prevention of neonatal death among antenatal mothers

Subjects	Pre-test/ post-test	Mean	Standard deviation	't' value (Cal.)	't' value (Tab.)	df	Inference
Antenatal mothers	Pre-test	10.275	3.1	15.40*	2.02	39	S**
	Post-test	17.50	2.88				

*significant at p< 0.05 level

** S- Significant

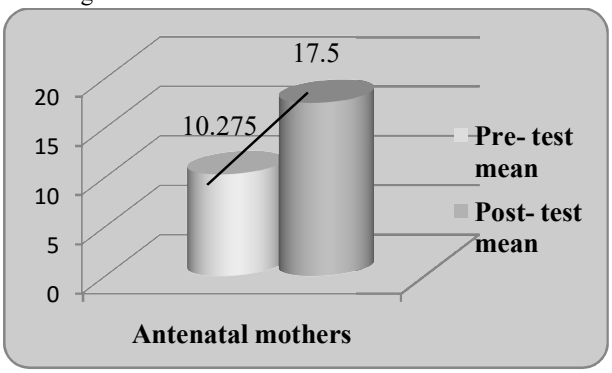

Fig 2: Cylindrical diagram showing the mean pre test and post test knowledge scores of antenatal mothers

Section-IV: Association of knowledge with their selected demographic variables by using chi square test.

There was no significant association between knowledge score and selected demographic variables like age, type of family, educational status, number of children, occupation, information about prevention of neonatal death, previous source of information at 0.05 level of significance.

10 Conclusion

From the findings of the present study, it can be concluded that

- On the basis of knowledge mean score of antenatal mothers before STP was 10.27± 3.1 and after STP was 17.5± 2.88.
- There was a significant difference between the level of knowledge before and after administering STP at p< 0.05 level.
- Hence, the STP was found to be effective in increasing the level of knowledge regarding prevention of neonatal death among antenatal mothers.

11 Recommendations

This study can be replicated by using other experimental designs and randomization in selection of samples.

- The same study can be done in other geographical area
- The same study can be done on larger population to generalize the findings.
- A similar study can be done using any other intervention.