

# A Study to Assess the Effectiveness of Video Assisted Teaching Module on Knowledge of Postnatal Mothers Regarding Selected Neonatal Danger Signs in Sishu Bhawan, Cuttack, Odisha

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## Abstract

A pre experimental study was conducted on 50 postnatal mothers from Sishu Bhawan, Cuttack, Odisha on knowledge of postnatal mothers regarding selected Neonatal danger signs. The data were collected by purposive sampling technique by using multiple choice close ended questionnaires. The data were analyzed by using descriptive and inferential statistics. Area wise pre test & post test knowledge score revealed that in post test highest mean score was  $13.56 \pm 1.1$  with 90.4% where as lowest mean score is  $2.8 \pm 0.4$  with 93.3%. The effectiveness varies in mean percentage from 54.7 to 74.2%. Item wise comparison between pre test & post test reveals that there is effectiveness of VATM in increasing knowledge of the postnatal mothers on neonatal danger signs. The study findings revealed that there was highly significant difference in pre test and post test knowledge scores. It is obtained by paired 't' test. chi square test was calculated and found that there was significant association between post test knowledge scores with area of residence, education & occupation of the mothers at 5% level of significance where as no significant association was found between post test knowledge scores with age, mode of delivery, gestational age, Para & religion of the mother.

**Keywords:** Postnatal mothers, Neonatal danger signs

## Introduction

**“A new baby is like the beginning of all things-  
wonder, hope, a dream of possibilities”**

**-Eda j. Le Shan**

Baby is God's way of saying the world should go on. The birth of a baby is one of the most inspiring and emotional event that occur in one's life. The new human being not only affects the lives of the parents but also the other family members [1]. The transition from intrauterine to extra uterine life is truly dramatic and demands considerable and effective physiological alteration by the baby in order to ensure survival [2]. A healthy newborn is born at term between 38 to 42 weeks, cries immediately after birth, establishes independent respiration, quickly adopts with extra uterine environment. The newborn period includes the time from birth to 28 days of life. During this time

newborns must make many physiological and behavioural adaptations to extra uterine life. A newborn baby's survival depends on his ability to adapt to an extra uterine environment. The health of neonates has historically been of vital importance to all societies because of the fact that they are basic resources for the future of mankind. Birth of healthy newborn baby is one of the gifts of nature [2]. Newborn babies constitute the foundation of life healthy and sturdy babies are likely to evolve as strong adults, physically and mentally. They are the assets to tomorrow's world [3]. Neonatal outcomes are affected by maternal health and other factors such as care during pregnancy, childbirth and immediately after birth. Globally, about three-fourths of all neonatal deaths occur during the early neonatal period (0-7days) [4]. Proper care of the newborn babies forms the foundation for the subsequent life not only in terms of longevity or survival but also in terms of qualitative outcome without any mental and physical abilities. So maternal awareness for identification of danger signs is important [5,6].

### Objectives of the Study

1. To assess the knowledge of postnatal mothers regarding selected neonatal danger signs.
2. To assess the effectiveness of video assisted teaching module on knowledge regarding selected neonatal danger signs among postnatal mothers.
3. To find out the association between the post test knowledge scores with selected demographic variables.

### Hypothesis

**H1** – There will be a significant difference between pre and post-test knowledge scores of postnatal mothers regarding selected neonatal danger signs.

**H2** – There will be a significant association between post-test knowledge scores with selected demographic variables

### Materials and Methods

A pre experimental design was used to assess the effectiveness of video assisted teaching module on selected neonatal danger signs among postnatal mothers in Sishu Bhawan, Cuttack, Odisha. The data were collected from 50 postnatal mothers by purposive sampling technique by using multiple choice closed ended questionnaires. 50 closed ended questionnaires were used to assess the knowledge of the postnatal mothers. The data collected were analyzed by using descriptive and inferential statistics.

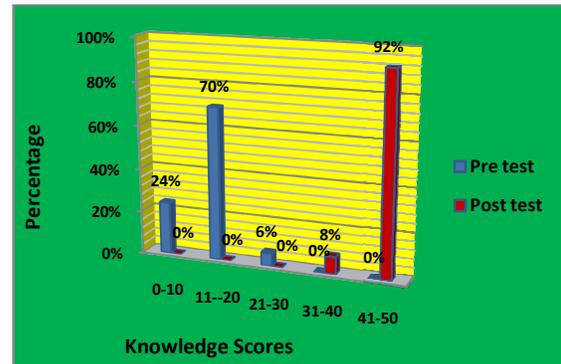
### Results

The findings revealed that the highest percentages (68%) of the postnatal mothers were in the age grouped 22-35 years. The highest percentage (62%) of the postnatal mothers had normal vaginal delivery. Most of the postnatal mothers (86%) had term baby. Also highest percentage (66%) of the postnatal mothers was Primipara. The maximum percentage (60%) of the postnatal mothers belongs to rural area. Majority percentage (82%) of the postnatal mothers was Hindu. The highest percentage (40%) of the postnatal mothers had secondary school education. Maximum percentage (80%) of the postnatal mothers was house wife.

**Table 1. Shows distribution of level of knowledge of pretest and post test knowledge scores of postnatal mothers regarding neonatal danger signs**

Level of Knowledge	Pre-Test		Post-Test	
	No	Percent	No	Percent
Very Poor	12	24%	0	0%
Poor	35	70%	0	0%
Average	3	6%	0	0%
Good	0	0%	4	8%

Excellent	0	0%	46	92%
<b>Total</b>	<b>50</b>	<b>100%</b>	<b>50</b>	<b>100%</b>



**Fig.1: Comparison of level of knowledge of pre test and post test knowledge scores of postnatal mothers regarding selected neonatal danger sign**

The knowledge level of postnatal mother shows that in pre test 24% postnatal mothers had **Very Poor** knowledge, 70% mothers had **Poor** knowledge and 6% mothers had **Average** knowledge. In post test 92% mothers had **Excellent** knowledge and 8% mothers had **Good** knowledge.

Area wise pre test & post test knowledge score reveals that in post test highest mean score is (13.56±1.1) which is 90.4% where as lowest mean score is (2.8±0.4) with 93.3%. The effectiveness varies in mean percentage from 54.7 to 74.2%.

**Table 2: Comparison between overall knowledge scores of pre test and post of the postnatal mothers regarding selected neonatal danger signs**

Groups	Mean	Sd	'T' Value	Table Value (P≤ 0.05)
Pre test	12.72	3.26	55.73	2.00
Post test	46.16	2.76		

The study findings reveal that there is highly significant difference in pre test and post test knowledge scores. It is obtained by paired 't'test.

**Table 3: Association between post test knowledge scores of the postnatal mothers regarding selected neonatal danger signs with their selected demographic variables.**

Demographic variables	Chi square value (χ <sup>2</sup> )	Df	Table value	Level of significance
Age of the mother in year	2.54	2	5.99	Not significant
Mode of	0.21	2	5.99	Not

delivery				significant
Gestational age	0.47	2	5.99	Not significant
Para of mother	0.08	2	5.99	Not significant
Area of residence	5.9	2	5.99	Significant
Religion	0.1	2	5.99	Not significant
Education of the mother	6.02	2	5.99	Significant
Occupation	4.15	1	3.84	Significant

The study findings reveal that the chi square test is calculated and found that there is significant association between post test knowledge scores with area of residence, education & occupation of the mothers at 5% level of significance where as no significant association was found between post test knowledge scores with age, mode of delivery, gestational age, Para & religion of the mother.

### Discussion

Level of knowledge among postnatal mothers on selected neonatal danger signs

The knowledge level of postnatal mothers was assessed by 5 point rating scale based on their secured scores. The scores in pre test depicts that maximum number of postnatal mothers (35) of 70% were secured score between 11-20 shows that poor level of knowledge and 0% of postnatal mothers were secured between 31-40 & 41-50 shows that no one had good & excellent knowledge.

In post test maximum (46) postnatal mothers with 92% were secured score between 41-50 depicts that excellent level of knowledge after implementing VATM but 0% secured score between 0-10, 11-20 & 21-30 which reveals that no one had very poor, poor & average knowledge after VATM.

Effectiveness of video assisted teaching module regarding selected neonatal danger signs among postnatal mothers

The overall pre test mean score was 12.72±3.26 whereas post test mean score was 46.16±2.76 with mean difference 33.44. The overall 't' value calculated is 55.73. It is higher than tabulated value (2.00) with df= 49 at 5% level of significance. It is inferred that postnatal mothers have higher post test knowledge after implementing VATM which shows effectiveness of VATM.

Association between post test knowledge scores of postnatal mothers with their demographic variables

Chi square was calculated to find out the association between post test knowledge scores of postnatal mothers with their demographic variables. It is found that there is significant association between post test knowledge scores among postnatal mothers regarding selected neonatal danger signs when compared to area of residence, education & occupation of the mother at 5% level of significance.

## Implications and Recommendations

### Nursing Practice

- The video assisted teaching module regarding neonatal danger signs will help the pediatric nurses to improve their knowledge.
- It will help to aware the staff nurses regarding different danger signs in newborn.
- The pediatric nurses can utilize this VATM in their practice and work field.
- It will help health care personnel, mothers as well as the family members to aware about neonatal danger signs & to provide early therapeutic care.

### Nursing Education

- The study can stress the significance of short term courses, workshops, seminars and in service education to provide nurses with current knowledge in the neonatal danger signs.
- The nurse educator should plan & instruct the nursing students to utilize the VATM so as to gain expertise and skill on neonatal danger signs and to teach the postnatal mothers and the clinical instructors can teach the students about neonatal danger signs.
- The nursing faculty can stress upon VATM to improve the student's knowledge as in this present study it has great importance to improve the knowledge of postnatal mothers.

### Nursing Administration

- Nursing administrator should provide necessary facilities and education to the staff nurses and students about neonatal danger signs as it is most important to reduce neonatal mortality and morbidity rate.
- The nurse administrator should plan workshops, conferences, seminars etc. for the students & staffs about neonatal danger signs.
- The administrator should also plan & provide programmes & opportunities for mothers who are unaware about neonatal danger signs.

### Nursing Research

- The effectiveness of the study in the research field is verified by the utility of nurses in clinical settings.
- The findings of the study can help the professional nurses and nursing students to

develop enquiring in knowledge and skill by providing a base.

- The findings of this study can be utilized as evidence based practice in clinical practice as well as in teaching field.

**Keeping in view the findings of the present study, the following recommendations were made:**

- A similar study can be under taken among staff nurses.
- A similar study can be conducted with a very large sample size for wide generalization.
- A similar study can be undertaken in other setting.
- A similar study can be under taken by considering control group.
- A similar study can be conducted among student nurses.

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