

# A Study to Assess the Effectiveness of Video-Assisted Teaching Module on Knowledge of Postnatal Mothers Regarding Selected Neonatal Danger Signs in Selected Communities of Gautam Buddh Nagar District, U. P

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**Abstract:** *Introduction-Neonatal Mortality is an emerging issue globally; the worldwide rate of neonatal mortality is 2.4 million where the risk of death is 30-times greater during the early neonatal period. The Neonatal period is counted from birth up to the first 28 days of life where neonates are at the greatest risk of being ill as changes are very rapid. Aims: To assess the effectiveness of the Video-Assisted teaching module on knowledge of post-natal mothers regarding neonatal danger signs. Methods: A Pre-experimental research design was conducted among 75 postnatal mothers at selected community of Gautam Buddh Nagar district; U. P. samples were selected using the Purposive Sampling technique. The data was collected administering structured questionnaire. The Video-assisted teaching module was administered as an intervention. Result: The study showed that the overall mean score of pre and post-test varied from 15.45 to 18.75. Association was found with parity, Education, Occupation, and Family monthly income. Conclusion: The study result showed improved level of knowledge level among postnatal mothers after intervention. Thus, Video assisted teaching module was effective.*

**Keywords:** Video-Assisted Teaching Module (VATM), Knowledge, Neonatal danger signs, Postnatal mothers

## 1. Introduction

Neonatal mortality is the current public health issue around the world. India is also in the highest rank with 522 number of neonates death per 1000. Neonates are at the greatest risk of being ill during these periods because of rapid changes in physiology and environment. Neonate may show many subtle signs of illness during the first four weeks of life [1]. Early detection of such clinical signs improves newborn survival. In contrast, late recognition may contribute to late health-seeking behavior thereafter can increase morbidity and mortality rate [2]. Most of the deaths are avoidable by simple actions; others may need intensive health facilities. Mothers are constantly and continuously in contact with her child and she is the best persons to recognize the early evidence of illness and prime development deflection from normal. Thus, improving mothers' knowledge in recognizing danger signs of sick neonates plays a significant role in reducing mortality rate [3]

Audiovisual aids make the learning process more effective and conceptual as it captures the nature of phenomena accurately and comprehensively. Multi-media uses multiple sensory system therefore, it is easy to retrieve information with more confidence about the particular context. Notably, video-assisted teaching modules revealed a gain in knowledge of postnatal mothers regarding neonatal danger signs. [4]

A Quasi-experimental study was conducted on Effectiveness of Video Assisted Teaching on Danger signs in New born among mothers of preterm baby in a selected hospital with total of 150 mothers, 75 each in experimental and control group elected by purposive sampling technique. The overall mean pre-test knowledge score (5.62±2.8) in experimental group was significantly higher (t=0.14; p<.0001) than that of post-test knowledge score (5.04±1.96) in control group. [5]

Another, study conducted in India<sup>2</sup>revealed mean post-test knowledge score was greater than 31.80 the pre-test knowledge score of 18.30 after the administration of the Video-Assisted Teaching Module

## 2. Methods

A Quantitative, Pre-experimental research design with pre and post-test without a control group was adopted for the study. The sample of the study was 75 Postnatal mothers who were selected using the Purposive Sampling technique from Khanpur, Greater Noida, Gautam Buddh Nagar district, U. P. The data collection was done using a Structured closed-ended questionnaire and a Video-assisted teaching module was administered as an intervention. The data collection tool consists of two sections. Section-I consists of demographic variables and Section-II consists of 30 multiple choice questions. 1 score was given for each correct response and 0 for incorrect response. The maximum score was 30. Scoring criteria were set as, inadequate

knowledge less than 50%, moderately adequate knowledge 51-75%, and adequate knowledge more than 76-100% of the score. The data was collected by the researcher herself. 30 item MCQ was administered to postnatal mothers. On the same day, a video-assisted teaching module about selected neonatal danger signs was introduced as an intervention to the sample. A Post-test was done after five days of intervention using the same knowledge questionnaire administered to postnatal mothers during the pre-test.

### 3. Result and Analysis

The mean score on level of knowledge was 15.45 in pretest and 18.75 in post-test. The standard deviation was 3.231 and 3.767. The mean difference was 3.3. The calculated t value was 15.594. A Chi-square test was used to find out the association between knowledge and demographic variables. Association was found with parity, educational status, occupation, and Family monthly income except for age, religion, and source of information with parity, Education, Occupation, and Family monthly income.

**Table 1:** Frequency and percentage distribution of demographic variables, N=75

S. n	Demographic variables	F	%
1	<b>AGE</b>		
	18-24	22	29.3
	25-31	39	52.0
	32-38	14	18.7
	39-45	-	-
2	<b>Religion</b>		
	Hindu	64	85.3
	Muslim	11	14.7
	Sikh	-	-
	Christian	-	-
	Others (specify)	-	-
3.	<b>Parity</b>		
	1	24	32.0
	2	31	41.3
	3	17	22.7
	4 and above	3	4.0
4	<b>Educational status</b>		
	Primary	13	17.3
	Secondary	47	62.7
	Diploma	-	-
	Graduate and above	15	20.0
5	<b>Occupation</b>		
	Housemaker	60	80.0
	Government employee	6	8.0
	Merchant	-	-
	Private employee	9	12.0
6	<b>Family monthly Income</b>		
	Rs.5, 000-Rs.10, 000	9	12.0
	Rs10, 001-Rs 15, 000	6	8.0
	Rs15001-Rs.20, 000	22	29.3
	Rs.20, 001 and above	38	50.7
7	<b>Place of delivery</b>		
	Home	12	16.0
	PHC/CHC	18	24.0
	District hospital	7	9.3
	Private hospital	38	50.7
8	<b>Mode of delivery</b>		
	Spontaneous vaginal delivery	30	40.0
	Spontaneous vaginal delivery with episiotomy	33	44.0
	Assisted delivery	1	1.3
	Cesarean section	11	14.7
9	<b>Source of Information</b>		

Mass media	2	2.7
Health care professionals	20	26.7
Friends and Relatives	53	70.7
Others	-	-

**Table 2:** Frequency of knowledge regarding neonatal danger signs among postnatal mothers

Level of knowledge	Score	Pre-Test		Post-Test	
		f	%	f	%
Inadequate	0-50%	43	57.3	13	17.3
Moderately adequate	51-75%	31	41.3	38	50.7
Adequate	76-100%	1	1.3	24	32.0

### 4. Discussion

Major findings of demographic Performa drawn from the study are as:

The majority 52% of the respondents belong to the 25-31 age group, Majority 85.3% of them were Hindu. Likewise, most 41.3% of them were multiparous. Maximum 62.7% had completed their secondary level education Highest 80% of mothers are a homemaker. Among the participants, 50.7% had a family income per month above 20, 001. Most of the 50.7% had their recent delivery in a private hospital. The majority 44% had a spontaneous vaginal delivery with episiotomy. The highest 70.7% had information about neonatal danger signs from friends and relatives.

In this study, 57.3 % of respondents had inadequate knowledge, 41.3% had moderately adequate knowledge and 1.3% had adequate knowledge during the pre-test. In contrast, 32% of mothers obtained adequate knowledge and 50.7% obtained moderate knowledge score and 17.3% had inadequate knowledge during post-test. Also, the overall mean of pre and post-test scores varied from 15.45 to 18.75. Hence, the Video assisted teaching module was effective in improving the knowledge level of postnatal mothers in this study.

Above result was supported by a study conducted in Indonesia which showed that mothers had inadequate knowledge about neonatal danger signs. i. e., 40 % at pre-test and significantly increased to 79.4% after the intervention [6]. Similarly, study revealed that 31.32% of mothers had average knowledge about neonatal danger signs whereas the majority of participants had poor knowledge [7].

### 5. Conclusion

The findings of the study concluded that there was significant improvement in the knowledge level of post-natal mothers regarding neonatal danger after intervention thus, Video assisted teaching module was effective. Therefore, this intervention should be promoted and implemented as health promotion activities during antenatal visits and postnatal visits which can be beneficial in reducing neonatal morbidity and mortality.

### 6. Recommendation

Videos including neonatal danger signs should be availed at the point of contact with mothers within health care facilities.

A true or quasi-experimental study can be conducted with mothers in a different setting.

A similar study can be conducted by using various instructional media for obtaining the most effective method, i. e., simulation, SIM, etc.

A comparative study can be done between urban and rural mothers on knowledge regarding neonatal danger signs.

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