

# A Study to Assess the Effectiveness of Video Assisted Teaching Regarding Knowledge of Care of Neonate Undergoing Phototherapy

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## Abstract

A study to assess the effectiveness of video assisted teaching regarding knowledge of care of neonate undergoing phototherapy among the 3rd year GNM student of Aminaben M Gangat Memorial School of Nursing, Surat was conducted by the investigator, in partial fulfilment as a requirement for the degree of Basic B.Sc. (N) Veer Narmad South Gujarat University during year 2015-2016. **Objectives of the Study:** 1. To assess the knowledge regarding care of neonate undergoing phototherapy among students. 2. To determine effectiveness of video assisted teaching regarding care of neonate undergoing phototherapy. **Methods:** An evaluative research approach with pre-experimental design was used for the study. The study was conducted in Aminaben M. Gangat Memorial School of Nursing rampura, Surat. The sample comprised of 30 students of the 3rd year GNM. Sample was selected by using purposive sampling technique. Data was collected using a self structured questioner. Data was analyzed using descriptive and inferential statistics. The results of this study showed that highest percentage (53.33%) of student were in the age of 20 years. Majority (60%) of the students have previous exposure related to topic. The findings of the study concluded that students had inadequate knowledge regarding care of neonate undergoing phototherapy. The Video assisted teaching on care of neonate undergoing phototherapy was highly effective in improving the knowledge of students regarding care of neonate undergoing phototherapy.

**Keywords:** Neonate; Undergoing Phototherapy; Newborn.

## Introduction

A child is the gift of god or the greatest treasure of mankind, child's health wellbeing safety and future are in the hands of parents from birth to death newborn are consider to be tiny and powerless. The first year of child life is crucial laying the foundation to good health. At this time certain specific care and precautions are essential to ensure the survival of health of child to a future adult during this physiological process or adaptation for its survival of the infants life or neonates have to face life threatening problems such as asphyxia, hypothermia, hyperthermia, infections and hyperbilirubinemia etc. so the assessment and care of newborn is very essential.<sup>1</sup>

Among these problems of neonates hyperbilirubinemia is the commonest problem among infants in neonatal period. High levels of bilirubin can occur in the blood called hyperbilirubinemia. In cases the etiology of these disorder multifactorial. Several factors must be

considered before treatment is begun in icteric newborns. First, it is important that the obstetric history of the mother and delivery be analyzed to allow identification of the factors that may be contributing to the occurrence of hyperbilirubinemia, such as drugs taken by the mother (diazepam, oxytocin's), type of delivery (forceps, pelvic, cesarean section), delay in umbilical cord clamping, blood type, Rh factor, and maternal comb's test.<sup>1</sup>

Phototherapy is the most common form of treatment for jaundice. The bilirubin level for initiative of phototherapy varies depends on the age and health status of the newborn. However any newborn with a total serum bilirubin greater than 21 mg/dl should receive phototherapy. Phototherapy consists of the application of fluorescent light to the infants exposed skin. Light promotes bilirubin excretion by photo-isomerization, which alters the structure of bilirubin to a soluble form



for easier excretion. Studies indicate that blue fluorescent light is more effective in reducing bilirubin. However, because blue light alters the coloration of the infant, the normal light of fluorescent bulbs in the spectrum of 420 to 460 nm is often preferred. So that the infants skin can be better observed for colour (Jaundice, pallor and cyanosis) or other condition.

## Objectives

- To assess the knowledge regarding care of neonate undergoing phototherapy among students.
- To determine effectiveness of video assisted teaching regarding care of neonate undergoing phototherapy.
- To assess the post test knowledge regarding care of neonate undergoing phototherapy among the students.

## Hypotheses

**H1:** There will be significant difference between mean pre and post test knowledge score of the students regarding care of neonate undergoing phototherapy.

**H2:** There will be significant association between pre-test knowledge score of students regarding care of neonate undergoing phototherapy and the selected demographic variables.

## Materials and Methods

An evaluative research approach with pre-experimental design was used for the study. The study was conducted in Aminaben M. Gangat Memorial School of Nursing rampura, Surat.

The sample comprised of 30 students of the 3rd year GNM. Sample was selected by using purposive sampling technique. Formal written permission from collage authorities was obtained prior to data collection process. Data was collected using a self-structured questioner. Data was analyzed using descriptive and inferential statistics.

**Research Approach:** Research approach used for this study was evaluative approach.

**Research Design:** A pre experimental design, pre and post test without control group.

## Variables:

**Independent Variables:** In present study independent variables was video assisted teaching regarding knowledge of care of neonate undergoing phototherapy.

**Dependant Variables:** In present study; knowledge regarding knowledge of care of neonate undergoing phototherapy among 3rd year GNM students, age of the students and previous exposure regarding the topic.

## Sample, Sample Size & Sampling Techniques:

### Sample:

- Sample defined as a representative unit of a target population, which is to be worked upon by researchers during their study.
- The third year GNM student's were the sample for the present study.

**Sample size:** The sample size is 30 students of GNM 3rd year.

**Sampling technique:** Sampling refers as a process of selecting a representative segment of the population under study. Convenient sampling was used for this study.

## Finding of Study:

The major findings of the study are summarized as follows:

- Majority 16 (53.33%) of sample was 20 years old.
- Majority 18 (60%) of the sample had the previous exposure related to topic.
- Most of the samples i.e. students in pre test were having 18(60%) poor knowledge score.
- In the post-test majority of the students i.e. 22(73.33%) had good knowledge score.
- Highly significant difference found between the pre test and post test Knowledge Scores at the level of ( $P < 0.05$ ).
- **Structured teaching programme** is proved to be effective in improving the knowledge of the mother regarding care of LBW newborns.

## Recommendations for Further Study:

Based on the findings of the present study recommendations offered for the future study are:

- Similar study can be conducted on a larger sample covering the different department of the hospitals.
- Similar study can be conducted on a Staff Nurses working in the Pediatric Units.
- A similar study can be conducted with control group design.
- The comparative study can be conducted related to phototherapy in Government hospital attached Medical Collage and in Private Hospital of the Gujarat State.
- A comparative study can be conducted to find out the effect of different teaching methods in improving knowledge and Practices of Nurses.

## Conclusion

The findings of the present study showed that highest percentage 16 (53.33%) of students belonged to the age of 20 years old. The post-test knowledge score was higher than the pre-test knowledge score range. The mean post-test knowledge score (23.5) also was higher than the mean pre-test knowledge score (15.63).

The comparison of pre-test and post-test knowledge score showed that there was a significant gain in knowledge scores of students after VAT at 0.05 level ( $t = 22.6, p < 0.05$ ). This shows that video assisted teaching was effective.

The study findings concluded that students had inadequate knowledge regarding care of neonate undergoing phototherapy. The video assisted teaching had great potential for accelerating the awareness regarding care of neonate undergoing phototherapy.

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