# Findings Related To The Association Of Pre-Test Knowledge Scores And The Socio Demographic Variables of The UG Students

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**Abstract—** This paper presents A study to evaluate the effectiveness of Video Assisted Teaching Programme on phototherapy among undergraduate students in Lucknow city. Objectives :1 To assess the existing knowledge of undergraduate students regarding Phototherapy.2To assess the effectiveness of VATP among under graduate students regarding phototherapy.3 To find the association between pre-test knowledge of UG students and selected demographic variables. The research design for the present study is pre-experimental one group pre-test post-test design. Findings related to the association of pre-test knowledge scores and the socio demographic variables of the UG students revealed that there were no significant association between the gender of UG students place of residence, type of family religion and pre-test knowledge scores.The given Video Assisted Teaching Programme was effective.

**Keywords:** *effectiveness, VATP, phototherapy*

## I. INTRODUCTION

Children are like buds in a garden. A child is the gift of god or greatest treasure of mankind. Childs health, wellbeing, safety and future are in the hands of parents from birth to death. 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. Development of infant depends on enjoying their good health.1 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 most cases, the etiology of this disorder is 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 Coombs' test.2 During this process of the physiological process or adaptation for its survival of the infants life or neonates have to face many life threatening problems such as asphyxia, hypothermia, hyperthermia, infections and hyperbilirubinemia etc. So the assessment and care of newborn is very essential.3 Among these problems of neonates hyperbilirubinemia is the commonest problem among infants in neonatal period. It is in two forms, namely physiological and pathological jaundice. Physiological jaundice is normal physiologic occurrence between the second and third days of life, appearing in about 60% of all neonates.4 Neonatal jaundice is a common physiological occurrence in newborns with resulting from high serum levels of bilirubin. 5 Phototherapy is used to prevent the concentration of unconjugated bilirubin in the blood from reaching the levels where neuro-toxicity may occur. High intensity light photo chemically converts fat soluble unconjugated bilirubin in to water soluble bilirubin that can be excreted in bile and urine. Accurate charting is another important nursing responsibility it includes times that phototherapy is started and stopped, proper shielding of the eyes, types of fluorescent lamps number of lamps , distance between surface of lamps and infant , use of phototherapy in combination with incubator or open bassinet , photometer measurement of light intensity, occurrence of sideeffects. 8

## II. NEED FOR STUDY

A retrospective cohort study was conducted to assess the risk of skin cancer in persons treated with neonatal phototherapy for jaundice in Grampian Region, UK Main outcome measures were Incidence ratios, standardized for age, sex, calendar period and socio-economic position. The study revealed that after excluding neonatal deaths (n=435), the cohort comprised 77,518 persons. 5868 Received neonatal phototherapy, providing 138,000 person-years at risk (median follow-up, 24 years). Two cases of melanoma occurred in persons exposed to neonatal phototherapy versus

16 cases in unexposed persons, yielding a standardized incidence ratio of 1.40 (95% CI, 0.17 to 5.04; p=0.834). No cases of squamous cell or basal cell carcinoma of skin were observed in exposed persons. Author concluded by saying although there is no statistically significant evidence of an excess risk of skin cancer following neonatal phototherapy, limited statistical power and follow-up duration mean it is not possible categorically to rule out an effect.

WHO reveals the source of incidence of hyperbilirubinemia is 50 to 60,000 neonates reported. 2% has total serum bilirubin level over 20 mg/dl; the total serum bilirubin level in normal range is 0.3 to 1 mg/dl. 0.15% had levels over 25mg/dl & 0.01% had over 30mg/dl. Each year in India over 1 million newborn dies before they complete their first month of life, accounting for 30% of the world's neonatal death.

9 It is known that missed diagnosis of jaundice, trivializing all cases of neonatal jaundice, poor monitoring, and prescriptions of wrong and ineffective medications for jaundice has been found responsible for the persistence of acute bilirubin encephalopathy and cerebral palsy in the sub region.

Among the babies who presented late with acute bilirubin encephalopathy in a teaching hospital, about 80% were seen by at least a health worker 24 hr. before the brain damage and were given ineffective prescription, wrong counsel and reassurance. 10Hence the studyevaluate the effectiveness of Video Assisted Teaching Programme on phototherapy among undergraduate students in Lucknow city.

### III. STATEMENT OF THE PROBLEM
A study to evaluate the effectiveness of Video Assisted Teaching Programme on phototherapy among undergraduate students in Lucknow city.

### IV. IV. OBJECTIVES OF THE STUDY
1. To assess the existing knowledge of undergraduate students regarding Phototherapy.

2. To assess the effectiveness of VATP among undergraduate students regarding phototherapy.

3. To find the association between pre-test knowledge of UG students and selected demographic variables.

### V. ASSUMPTIONS
1. Undergraduate students will have inadequate knowledge regarding phototherapy.

2. Video Assisted Teaching Programme will help to increase the knowledge and it has a valid place in continuing education.

### DELIMITATIONS

• This study limited to undergraduate students of Career College Of Nursing, Lucknow.

• Sample size is limited to 30 UG students.

### VI. RESEARCH METHODOLOGY RESEARCH APPROACH:

An evaluative approach was adopted for the present study. RESEARCH DESIGN:The research design for the present study is pre-experimental one group pre-test post-test design.

### VII. VARIABLES UNDER STUDY
Research variables:Knowledge regarding Phototherapy among UG students. Demographic variables:Gender, religion, place of residence, type of family, family income. POPULATION: In the present study, the population comprises of UG students of career institute, Lucknow SAMPLE: The sample for the present study was students of B.Sc nursing of Career College Of Nursing, Lucknow. Sample size and sampling technique: The sample size considered for the study was 30 UG students in selected Career College Of Nursing, Lucknow. The sampling technique used for the study was convenient sampling, which is a type of non-probability sampling.

### VIII. ANALYSIS AND INTERPRETATION OF DATA
In this study, data is collected to assess the knowledge regarding phototherapy from UG students in investigator administered structured questionnaire for UG students to collect data. The collected data was analyzed according to the plan of data analysis which includes both descriptive and inferential statistics. The data findings have been tabulated according to plan of data analysis and interpreted under the following objectives.

Objectives:

• To assess the existing knowledge of UG students regarding Phototherapy

• To assess the effectiveness of VATP among UG students regarding phototherapy.

• To find the association between pre-test knowledge of UG students and selected demographic variables

### IX. PRESENTATION OF DATA:
The analysis of data was organized and presented under the following headings:

Section A: Findings related to socio-demographic variables of undergraduate students

Section B:Findings related to knowledge scores of undergraduate students

**Table 1: Mean, Median, Mode, standard deviation, range of knowledge of Undergraduate students**

| AREA OF ANALYSIS | MEAN | MEDIAN | MODE | STANDARED DEVIATION | RANGE |
|---|---|---|---|---|---|
| Pre-test | 10 | 10 | 10 | 2.5 | 10 |
| Post-test | 16 | 16 | 15 | 1.6 | 5 |
| Difference | 7 | 7 | 6 | 1.3 | 5 |

Table 1: Mean, Median, Mode, standard deviation, range of knowledge of Undergraduate students

## X. DISCUSSION

The major findings of the study are organized under the following Heading

1. Finding related to demographical data

2. Finding related to the pre-test knowledge score of the UG students.

3. Findings related to the effectiveness of Video Assisted Teaching Programme.

Findings related to social demographic variables of UG students in phototherapy: Majority (83%) of the subjects are females, while minimum (40%) are male. Majority (66.6%) of the subjects belongs to Hindu (20%) belongs to Christian and(13.33%) belongs to Muslim. Majority (73%) of the subjects belongs to nuclear family, while minimum (26.66%) belongs to Joint family. Majority (93.3%) of the subjects are from rural area, while minimum (6.66%) are from urban area Findings related to the association of pre-test knowledge scores and the socio demographic variables of the UG students: There were no significant association between the gender of UG students place of residence, type of family religion and pre-test knowledge scores.

## XI. CONCLUSION

The study showed that VAT programme has resulted in significant improvement in the knowledge, development of students. Therefore special and continuous health education of students in their formative years improve their knowledge and helps to develop positive attitude. IMPLICATION: The finding of the study had varied implication in different areas of Nursing administration, Nursing Education and Nursing Research Nursing Education: Nursing Education should prepare nurse with the potential for imparting health education effectively to everyone. Nursing students should be aware of their role in promoting educational programmes regarding phototherapy. Nursing Administration: Nurse as an administrator has a special role in planning the policies for imparting health information to the targeted population. Instructors in the Nursing field are in a better position to take initiative in imparting health information through different effective teaching methods. Nursing Research: Research is a systematic attempt to obtain answers to meaningful questions about phenomenon or events through the application of scientific procedures. The findings of the present study can be utilized by nurse researcher in the future to conduct extensive studies to identify or assess the knowledge of undergraduate students. Present study would help the nurse to understand the level of knowledge of undergraduate students on phototherapy.

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