# "A STUDY TO ASSESS THE IMPACT OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PHOTOTHERAPY AMONG BSC (N) 6TH SEMESTER STUDENTS SELECTED COLLEGE OF NURSING, BHILAI (C.G)."

**MRS. ALKA GOSWAMI**
Assistant Professor, Medical Surgical Nursing Dept.
Bhilai
**Jeesha K., Jinsha Shaji, K. Sandhya, Kanika Sahu**
**Keshwari Patel, Kavita Salam, Keerti Kaiwart**

**B.Sc. Nursing 4th Year,**

**P.G. College of Nursing, Hospital Sector, Bhilai, Durg, C.G.**

## INTRODUCTION

Phototherapy has been used since 1958, for the treatment of neonatal hyperbilirubinemia. It causes unconjugated bilirubin to be mobilized from the skin by structural isomerization to a water-soluble form (lumirubin) that can be excreted in the urine. According to **UNICEF**, phototherapy is a crucial treatment for severe neonatal jaundice, using special blue light to break down excess bilirubin in the baby's blood. This process prevents high levels of bilirubin from causing permanent brain damage or death, with the treatment's effectiveness depending on the dose, which is influenced by light intensity, duration, and the amount of skin exposed**. UNICEF** also emphasizes the importance of early detection and increasing access to phototherapy devices, such as the transcutaneous bilirubin meter (TCB), especially in low-resource settings through initiatives like project BALLERINA, to screen and treat newborns early.

According to WHO guidance, all newborns should be checked for jaundice, and infants showing early or rapidly rising jaundice (particularly those who are premature, low birth weight, or otherwise at risk) should be evaluated promptly. When bilirubin levels reach threshold values (which vary by age and risk status), phototherapy should be initiated. The treatment should be delivered with attention to exposure of the baby's skin, adequate distance from the light source, eye protection, maintenance of hydration and feeding, and careful monitoring of the infant's condition."

## OBJECTIVES

- To assess the pre-test knowledge regarding the phototherapy among B.SC (N) 6$^{th}$ semester students.
- To assess the post-test knowledge regarding the phototherapy among B.SC (N) 6$^{th}$ semester students.

## HYPOTHESIS

**H1-** There is difference between pretest and posttest knowledge scores regarding phototherapy among BSc Nursing 6$^{th}$ semester students

**METHODOLOGY -**

A pre- experimental, one group pretest – posttest research design was adopted, and random sampling technique was used to select the 30 sample from selected college of Nursing 6th semester students. The data was generated by using self-structured questionnaire. The reliability was computed by Split Half method which was found to be 0.81. Analysis was done by descriptive and inferential statistics

**RESULT** - On the basis of the study findings, following results were drawn:

- **Analysis of sociodemographic variables** depicted that maximum 24 subjects were in the age group of 20-22 yrs, 18 subjects had family income between 30000/- to 40000/-, 15 subjects' father were in private service, 22 subjects' mothers were housewife, 25 students were aware of phototherapy and they got information from class room teaching and 24 students had worked in phototherapy un it.
- Analysis of pretest and posttest knowledge scores showed the following data:

TABLE

| Criteria | PRE-TEST KNOWLEDGE | | POST-TEST KNOWLEDGE | |
|---|---|---|---|---|
| | Frequency | Percentage | Frequency | Percentage |
| Excellent | ----- | ----- | 16 | 53.3% |
| Good | 3 | 10% | 10 | 33.3% |
| Average | 14 | 46.6% | 4 | 13.3% |
| Poor | 13 | 43.3% | 0 | 0% |
| Total | 30 | 100% | 30 | 100% |

Figure

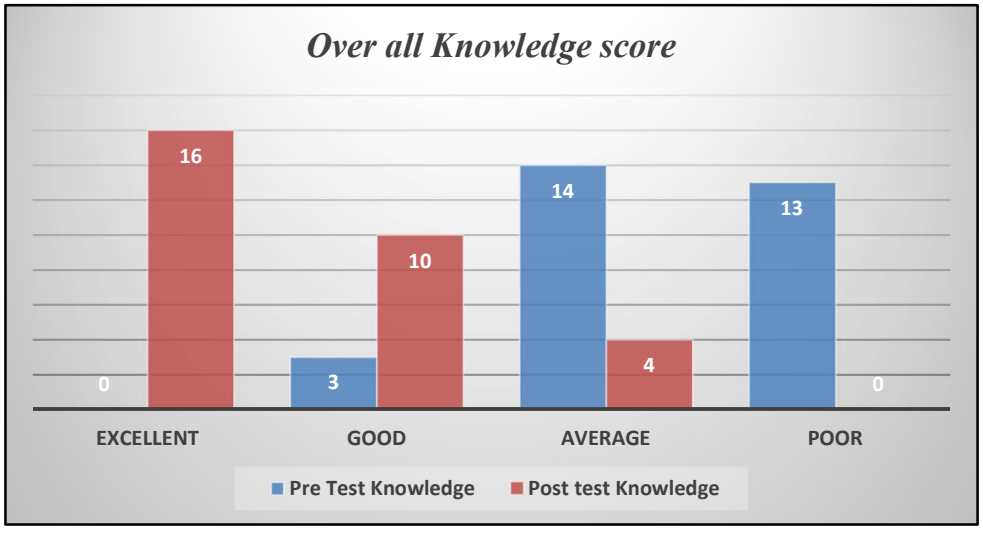


Table & Fig shows that in pretest, maximum 14(46%) subjects had average knowledge, 13(43.3%) had poor knowledge and 3(10%) had good knowledge.

In posttest, 16(53.3%) subjects had excellent knowledge, 10(33.3%) had good knowledge and 4(13.3%) subjects had average knowledge. These findings show that the planned teaching program on phototherapy was able to bring changes in posttest scores which indicate that

after intervention the knowledge have improved. Hence hypothesis H1 that there is difference between the pretest and posttest knowledge scores is accepted

**CONCLUSION-**

Phototherapy plays a crucial role in preventing jaundice-related complications in newborns. Proper nursing care, monitoring, and understanding of research evidence ensure successful treatment and safety of infants. The above study shows that proper awareness program definitely helps to increase knowledge among students, in fact it brings drastic improvement in knowledge, so such planned teaching program must be used for student to improve knowledge regarding any topic.

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