EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM ON KNOWLEDGE REGARDING CARE OF PRETERM BABIES AMONG B.SC. NURSING FOURTH YEAR STUDENTS IN SELECTED NURSING INSTITUTE OF GWALIOR, MADHYA PRADESH, INDIA

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ABSTRACT

World health organization defined preterm as a live born infant delivered before 37 week from the first day of last menstrual period. These babies are also termed as immature or born early. There are three sub-categories of preterm based on gestational age: Extremely preterm (<28 weeks), Very preterm (28 to <32 weeks) and moderate to late preterm (32 to <37 weeks). In this study aim assess the effectiveness of Structured teaching program on knowledge regarding Care of Preterm Babies among B.Sc. Nursing fourth year Students in Selected nursing Institute of Gwalior, Madhya Pradesh, India. Methodology: This study was Quantitative research approach is adopted The research design selected for the present study Quasi experimental study to assess the effectiveness of Structured teaching program on knowledge regarding Care of Preterm Babies among B.Sc. Nursing fourth year Students in Selected nursing Institute of Gwalior, Madhya Pradesh, India. The sample of the present study comprised of 200 experimental and 200 control group. Convenient sampling technique was used to select the sample for the study. The tools in the present study were socio demographic profile data, structured knowledge questionnaire to assess knowledge. Conceptual model of this study relies on Modified Conceptual Model based on Ludwig Von Bertalanffy General System Theory 1968. Statistical Analysis Comparing of findings of experimental and control group using descriptive and inferential statistics. Results: The knowledge mean post-test scores of knowledge (20.97) were significantly high in comparison to mean pre-test scores of knowledge (10.29) in experimental group. It reflects that it was significant difference. The mean post-test scores of knowledge (10.11) were significantly high in comparison to mean pre-test scores of knowledge (10.090) in control group. It reflects that it was no significant difference. Conclusion It is concluded that structured teaching program relating to care of preterm babies was effective as a teaching strategy that helped the B.Sc. Nursing fourth year students to enhance their knowledge.

Key Words: Knowledge, Structured teaching program, B.Sc. nursing fourth year Students, Care of preterm babies.
INTRODUCTION

“Children are the wealth of Nation, take care of them if you wish to have a strong Indian”

-NEHRU

Neonates are very tender and delicate. Proper care of newborn babies forms the foundation for the subsequent life not only in terms of longevity but also in terms of qualitative outcome without any physical and mental disabilities. Birth weight is reliable and sensitive indicators for predicting the immediate or late outcome of a newborn. The birth weight of an infant is the single most important determinant of its survival, illness, growth and developments.¹

Newborn or neonates refers to an infant in the first 28 days of life old. The term “Newborn” includes pre-mature infants, post-mature infants and full term newborns. About 12% of newborns are born prematurely (preterm).² A baby’s weight at birth is a strong indicator of maternal and newborn health. The fetus who is undernourished in the womb increases the risk of death in the early months and years of life. Those who survive tend to have impaired immune function and increased risk of disease; they are likely to remain undernourished, with reduced muscle strength, cognitive abilities and IQ throughout their lives. As adults, they suffer a higher incidence of diabetes and heart disease.³

Globally, babies with preterm accounts 25 and 15 million, respectively. Almost all of them (96%) are in developing countries. Almost 1 million children die due to complications of preterm birth. World health organization defined preterm as a live born infant delivered before 37 week from the first day of last menstrual period. These babies are also termed as immature or born early. There are three sub-categories of preterm based on gestational age: Extremely preterm, Very preterm, and Preterm.

NEED OF STUDY

The development and the prosperity of a nation depend on the health and development of growing children. The first month of a baby’s life is a most critical period. Over 80% of the new born babies require minimal care.³⁷ Worldwide, 4 million newborns are dying in the first month of life, the vast majority of them from developing countries.³⁸ While neonatal morbidity and mortality are multi-factorial, maternal awareness and training are among the most significant factors.³⁹ Preterm birth (PTB) is a worldwide health problem and remains the leading cause of prenatal morbidity and mortality. In developing countries, preterm delivery is responsible for 70% of mortality and 75% of morbidity cases during the neonatal period, contributing to significant long-term neurodevelopment problems, pulmonary dysfunction, and visual impairment.⁴⁰ Today’s nursing students will be tomorrow’s full-fledged nurses who will be practicing at bed side. The investigator during her clinical experience found that preterm Babies born are not getting adequate care. After giving birth to preterm baby investigator realized the importance of need of care for the Preterm babies. Even in wards investigator observed mothers of preterm babies that they are not confident to provide care to the babies. Even the professional nurses need skills for the care of preterm babies. To gain Knowledge regarding care of preterm babies investigator wants to provide structured teaching program. As the B.Sc. Nursing fourth year students are trainee, they lack of Knowledge of basic nursing care of newborn babies and need to improve Knowledge regarding care of preterm babies, so they can implement the Knowledge in practice while working in clinical area of NICU, Community Health Center and in other field of their working area in Hospital.

To improve the Knowledge of Health care worker investigator will provide Structured Teaching Program for B.Sc. Nursing forth year students.

PROBLEM STATEMENT “A Quasi experimental study to assess the effectiveness of structured teaching program on Knowledge regarding Care of Preterm Babies among B.Sc. Nursing fourth year Students in Selected nursing Institute of Gwalior, Madhya Pradesh, India.”

OBJECTIVES

1. To assess the pre test knowledge regarding Care of Preterm Babies among B.Sc. Nursing fourth year Students of experimental and control group in selected nursing institutes of Gwalior, Madhya Pradesh, India.

2. To prepare and implement structured teaching program regarding Care of Preterm Babies among B.Sc. nursing fourth year Students of experimental group in selected nursing institutes of Gwalior, Madhya Pradesh, India.

3. To assess the post test knowledge regarding Care of Preterm Babies among B.Sc. Nursing fourth year Students of experimental and control group in selected nursing institutes of Gwalior, Madhya Pradesh, India.

4. To compare the pre and post test knowledge regarding Care of Preterm Babies among B.Sc. Nursing fourth year Students of experimental and control group in selected nursing institutes of Gwalior, Madhya Pradesh, India.

5. To determine the association between pre and post test knowledge regarding Care of Preterm Babies among B.Sc. Nursing fourth year Students of experimental and control group with their selected socio-biodemographic characteristics.
RESEARCH APPROACH
A selection of research approach is the basic procedure conducting research enquiry. A research approach tells investigator what data to collect and how to analyze it. It also suggests conclusions to be drawn from the data. In view of nature of the problem under study and to accomplish the objectives of the study Quantitative research approach is adopted.

RESEARCH DESIGN
The selection of research design is the most important step as to provide the framework for the study. A quasi-experimental research design under nonrandomized control group design which include experimental group and control group was used to conduct the study.

Socio demographic profile data sheet
Socio Demographic Profile: Socio demographic variables under the study are- Age (in years), Gender, Nature of Institution, Residence of students, family residence, Clinical Experience in Pediatrics Ward, Source of Information.

Structured Knowledge Questionnaire
It consists self structured knowledge questionnaire to assess the effectiveness of structured teaching program on knowledge regarding Care of Preterm Babies among B.Sc. Nursing fourth year Students in Selected nursing Institute of Gwalior, Madhya Pradesh, India.

Table 1: Criterion measure of level of knowledge score

<table>
<thead>
<tr>
<th>S. NO.</th>
<th>CRITERION MEASURE</th>
<th>SCORES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Good knowledge</td>
<td>21-30</td>
</tr>
<tr>
<td>2</td>
<td>Average knowledge</td>
<td>11-20</td>
</tr>
<tr>
<td>3</td>
<td>Poor knowledge</td>
<td>0-10</td>
</tr>
</tbody>
</table>

Table shows that 100 B.Sc. Nursing fourth year students in experimental group, 1(0.5%) had good knowledge score followed by 89(44.5%) had average knowledge score followed by 110(55%) had poor knowledge score in pre test knowledge score and after the administration of structured teaching Programme, shows that 100 B.Sc. Nursing fourth year students 110(55%) had good knowledge score followed by 88(44%) had average knowledge score and 2(1%) had poor knowledge score in post test knowledge score. It reveals that after 7 days of administration of structured teaching Programme had significantly improved the knowledge score in experimental group. On the other hand, shows that 100 B.Sc. Nursing fourth year students in control group, 0(0%) had good knowledge score followed by 91(45.5%) had average knowledge score followed by 109(54.5%) had below average knowledge score in pre test score and without administration of structured teaching Programme, shows that 100 B.Sc. Nursing fourth year students 1(0.5%) had good knowledge score followed by 99(49.5%) had average knowledge score and 100(50%) had poor knowledge score and in post test knowledge score. It reveals that after 7 days of without administration of structured teaching Programme had not significantly improved the knowledge score in control group.

MAJOR FINDINGS
The major findings of the study are summarized as follows:

Findings related to Demographic characteristics of the sample.
Majority of the subjects B.Sc. Nursing fourth year students maximum number of 200 experimental group were 102(51%) and maximum number of 200 control group were 101(51%) were from the age group 21-24 years. Majority of the subjects B.Sc. Nursing fourth year students maximum number of 200 experimental group were 126(63%) and maximum number of 200 control group were 116(58%) were Male. Majority of the subjects B.Sc. Nursing fourth year students maximum number of 200 experimental group were 200(100%) and maximum number of 200 control group were 200(100%) were from private institution. Majority of the subjects B.Sc. Nursing fourth year students maximum number of 200 experimental group were 106(53%) and maximum number of 200 control group were 111(56%) were from the age group 21-24 years. Majority of the subjects B.Sc. Nursing fourth year students maximum number of 200 experimental group were 102(51%) and maximum number of 200 control group were 109(55%) were from urban areas. 95 Majority of the subjects B.Sc. Nursing fourth year students maximum number of 200 experimental group were 111(56%) were 5-6 weeks clinical experience in pediatric ward and maximum number of 200 control group were 132(66%) were 3-4 weeks clinical experience in pediatric ward. Majority of the subjects B.Sc. Nursing fourth year students maximum number of 200 experimental group were 77(39%) and maximum number of 200 control group were 60(30%) were information from health professionals.

Findings Related to assess pre-test and post-test knowledge scores of experimental and control group.
1. Pre-test and Post-test knowledge scores of experimental and control group.

Majority of subjects B.Sc. Nursing fourth year students maximum number in Pre-test knowledge score of 200 experimental group 110(55%) had poor knowledge score and 200 control group
Findings related to compare the pre-test and post-test knowledge scores of experimental and control groups.

To compare the pre-test and post-test knowledge scores of experimental and control groups.

It was found that in the mean post test level of knowledge score is 20.97 were\( \sigma \) significantly high in comparison to mean pre-test scores of knowledge 10.29 in experimental group. It reflects that it was significant difference and it shows that structured teaching program was effective to enhance the knowledge score B.Sc. Nursing fourth year students of experimental group. Hence Hypothesis H1 is accepted. It was found that in the mean post test level of knowledge score is 10.11 were\( \sigma \) significantly high in comparison to mean pre-test scores of knowledge 10.090 in control group. It reflects that it was no significant difference. Hence Hypothesis H2 is rejected.

Analysis to determine the association of knowledge regarding Care of Preterm Babies among B.Sc. Nursing fourth year Students of experimental and control group with their selected demographic variables.

Association of Pre-test knowledge level of B.Sc. Nursing fourth year students with selected demographic variables of experimental and control group.

In the experimental group, it is elicited that from the pre-test chi square value off\( \sigma \) the age was \( x^2= 3.568 \), Gender was \( x^2= 13.348 \) which is more than the table value at 0.05 level of significance. So, there is no significant association between pretest knowledge scores of B.Sc. Nursing fourth year students with their demographic variables. Hence Hypothesis H3 is accepted. Nature of Institution was \( x^2= NA \), Residence of student was \( x^2=1.162 \), Family Residence was \( x^2= 2.608 \), Clinical Experience in Pediatrics Ward was \( x^2= 4.886 \), Source of information was \( x^2= 2.547 \) which is less than the table value at 0.05 level of significance. So, there is no significant association between pre-test scores of knowledge of B.Sc. Nursing fourth year students with their demographic variables. Hence Hypothesis H3 is rejected. In the control group, it is elicited that from the pre-test chi square value of them Source of information was \( x^2= 11.757 \) which is more than the table value at 0.05 level of significance. So, there is no significant association between pre-test knowledge scores of B.Sc. Nursing fourth year students with their demographic variables. Hence Hypothesis H4 is accepted. Age was \( x^2= 1.400 \), Gender was \( x^2=1.474 \), Nature of Institution was \( x^2= NA \), Residence of student was \( x^2= 0.185 \), Family Residence was \( x^2= 0.207 \), Clinical Experience in Pediatrics Ward was \( x^2= 1.007 \) which is less than the table value at 0.05 level of significance. So, there is no significant association between pre-test knowledge scores of B.Sc. Nursing fourth year students with their demographic variables. Hence Hypothesis H4 is rejected.

Association of Post-test knowledge level of B.Sc. Nursing fourth year students with selected demographic variables of experimental and control group.

In the experimental group, it is elicited that from the post-test chi square value of the Age was \( x^2= 108.021 \), Source of information was \( x^2= 153.350 \) which is more than the table value at 0.05 level of significance. So, there is no significant association between post-test knowledge scores of B.Sc. Nursing fourth year students with their demographic variables. Hence Hypothesis H3 is accepted. 98 Gender was \( x^2 = 2.036 \), Nature of Institution was \( x^2= 2.963 \), Family Residence was \( x^2= 2.112 \), Clinical Experience in Pediatrics Ward was \( x^2= 0.090 \) which is less than the table value at 0.05 level of significance. So, there is no significant association between post-test knowledge scores of B.Sc. Nursing fourth year students with their demographic variables. Hence Hypothesis H3 is rejected. In the control group, it is elicited that from the post-test chi square value Age was \( x^2= 4.650 \), Gender was \( x^2= 1.370 \), Nature of Institution was \( x^2= 2 \), Residence of student was \( x^2= 2.963 \), Family Residence was \( x^2= 1.966 \), Clinical Experience in Pediatrics Ward was \( x^2= 1.540 \), Source of information was \( x^2= 11.795 \) which is less than the table value at 0.05 level of significance. So, there is no significant association between post-test knowledge scores of B.Sc. Nursing fourth year students with their demographic variables. Hence Hypothesis H4 is rejected.

CONCLUSION

It is finished that structured teaching program relating to care of preterm babies was effective as a teaching strategy that helped the B.Sc. Nursing fourth year students to enhance their knowledge.

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