"A Study To Assess The Effectiveness Of Structured Teaching Programme On Knowledge Regarding Thalassemia Among B.Sc. Nursing Third Year Students In Selected Nursing College At Bilaspur, (C.G)."

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ABSTRACT

Thalassemia is a genetic blood disorder. People with Thalassemia disease are not able to make enough hemoglobin, which causes severe anemia. Hemoglobin is found in red blood cells and carries oxygen to all parts of the body. When there is not enough hemoglobin in the red blood cells, oxygen cannot get to all parts of the body. Organs then become starved for oxygen and are unable to function properly. There are two primary types of Thalassemia disease: Alpha Thalassemia disease and Beta Thalassemia disease. Beta Thalassemia Major (also called Cooley's Anemia) is a serious illness. Symptoms appear in the first two years of life and include paleness of the skin, poor appetite, irritability, and failure to grow. Proper treatment includes routine blood transfusions and other therapies. A study was conducted, **"A Study To Assess The Effectiveness Of Structured Teaching Programme On Knowledge Regarding Thalassemia Among B.Sc Nursing Third Year Students In Selected Nursing College At Bilaspur, Chhattisgarh".** The study was undertaken with 60 sample.

Key words: Thalassemia, Hemoglobin, Anemia, Oxygen, blood transfusions.

INTRODUCTION

The name Thalassemia is derived from a combination of two Greek words: thalassa meaning the sea (Cooley et al., 1925, 1927; Bradford and Dye, 1936) and mia that is the Mediterranean and anemia ("weak blood"). Another term found in literature, although infrequently, is Cooley's anemia and it was believed to be endemic. Prof. Cooley Thomas, a pediatrician in the USA who first described the clinical characteristics of this disorder in patients of Italian origin 1925. The name Thalassemia was coined by the Nobel Prize winning pathologist George Hoyt Whipple (1878-1976). Whipple and Bradford (1936) studied the erythroblastic anemia of Cooley and associated pigment anomalies simulating hemochromatosis.

Thalassemia is the name of a group of genetically inherited blood disorder passed down through a family in which the body makes an abnormal form of hemoglobin, the protein in red blood cells that carries oxygen. It results in excessive destruction of red blood cells, which leads to anemia. It is not infectious and cannot be passed from one individual to the other by personal or any other contact, or through blood

transfusion, food or air (Wikipedia, 2008). Individuals with Thalassemia major have severe anemia and hepatosplenomegaly. Treatment with a regular transfusion Programme, chelation therapy, bone marrow transplantation and medication aimed at reducing transfusion iron overload, allows for normal growth and development and extends life expectancy into the third to fifth decade (Gene Reviews, 2009).

Worldwide Distribution

Thalassemia is a major health problem, placing an immeasurable emotional, psychological and economic burden on millions of people around the World (Panos, 2005; Riewpaiboo et al. 2010). Recent data indicate that about 7% of the World's population is a carrier of a hemoglobin disorder and that 3,00,000-5,00,000 children are born each year with the severe homozygous states of these diseases (WHO-March of Dime, 2006).

Thalassemia in India

India is a large Southeast Asian country with a population of over one Billion. An estimated 1-3% of the populations are carriers of Beta Thalassemia, a figure rising up to 17% in some ethnic groups (Sukumaran and Master, 1973; Modell and Petrou, 1983). About 6,000 children are born with Thalassemia major each year, more than 30% of births with a major Thalassemia syndrome in South East Asia (Modell and Petrou, 1983). Madan Sharma et al. (1998) observed that 10% of the World incidence of Thalassemia.

NEED FOR THE STUDY

Children in the age group of 0-14 years constitute 40% of the population. The wellbeing of these children are the responsibility of parents as well as health personnel. As they are the most vulnerable section which undergo various types of health problems. The risk is connected to growth, development and survival. Without treatment, affected children have severe failure to thrive and shortened life expectancy. The primary health care in children aims at prevention of disease and promotion of health.

Among all the childhood diseases, haematological and hereditary diseases are most life threatening disease conditions which affects in their early life. It affects upon birth, severely affecting their ability to survive on their own due to chronic anemia resulting from an inherited hemoglobin disorder.

With currently available medical treatment, afflicted children have a substandard quality of life and a shortened life expectancy. The selective pressure that have made the Thalassemias are so common are not known but are assumed to relate to the geographic distribution of Malaria.

Among the world's total population, 4.5% are the carriers of hemoglobinopathies, about 15 million people are Thalassemia patients and 240 million people are carriers of B-Thalassemia. The largest concentration of Thalassemia patients seen in South Asia, Sri Lanka, Bangladesh, Pakistan, Middle East countries and Italy.

Every year, around 8000-10,000 children with Thalassemia are born, accounting for 10% of the annual world incidence. The carrier rate of B-Thalassemia varies from 1to3% in South India; 3to15% in North India. Its prevalence is high in ethnic groups among Gujarathies, Punjabies, Sindhis, and Lohanas etc. Over 30 million people are carriers of Thalassemia gene in our country.

Thalassemia, depending on its severity, the disease may cause an enlarged spleen, bone weakness and growth problems and may require transfusions starting in early childhood. The blood transfusions lead to the most serious complications. Children with this Illness usually end up also suffering from other complications such as heart disease, cirrhosis of the liver, diabetes, facial deformities, and spinal cord abnormalities.

PROBLEM STATEMENT:

"A Study To Assess The Effectiveness Of Structured Teaching Programme On Knowledge Regarding Thalassemia Among B.Sc Nursing Third Year Students In Selected Nursing College At Bilaspur, Chhattisgarh".

OBJECTIVES OF THE STUDY:

1. To assess the pretest and posttest knowledge score regarding Thalassemia among B.Sc Nursing Third Year Students.
2. To compare pre-test knowledge score with post-test on knowledge score regarding Thalassemia among B.sc Nursing Third Year Students.
3. To find out the association between pretest on knowledge score regarding Thalassemia among B.Sc Nursing Third Year Students with selected socio demographic variables.

HYPOTHESIS

H_0 There will be no significant difference between pretest and posttest score.

H_1 Post-test knowledge of B.Sc Nursing Third Year Students regarding Thalassemia will be significantly higher than pre-test knowledge.

H_2 There will be significant association of pre-test knowledge score with selected socio demographic variables.

METHODOLOGY

RESEARCH APPROACH: -
In present study evaluative approach is used to assess the effectiveness of structured teaching Programme knowledge regarding Thalassemia among B.Sc Nursing Third Year Students.

RESEARCH DESIGN
In the present study pre-experimental one group pretest posttest research design is used.

POPULATION OF THE STUDY
The conclusion of research study is based on the data obtained from the accessible population and the statistical inferences were made only to the group from which the sample was randomly selected. The population for the present study is comprised of B.Sc Nursing Third Year Students.

TARGET POPULATION: -
In the present research target population includes JES College Of Nursing C.G.

ACCESSIBLE POPULATION: -
For the present study accessible population is B.Sc Nursing Third Year Students from JES College Of Nursing C.G.

VARIABLES:
Two types of variables were identified in this study.
- **Independent variables-**
  In the present study, the independent variable is the "structured teaching Programme about Thalassemia"
- **Dependent variables-**
In the present study, the dependent variable is the "knowledge of B.Sc Nursing Third Year Students." The present study was conducted at JES College Of Nursing (C.G).
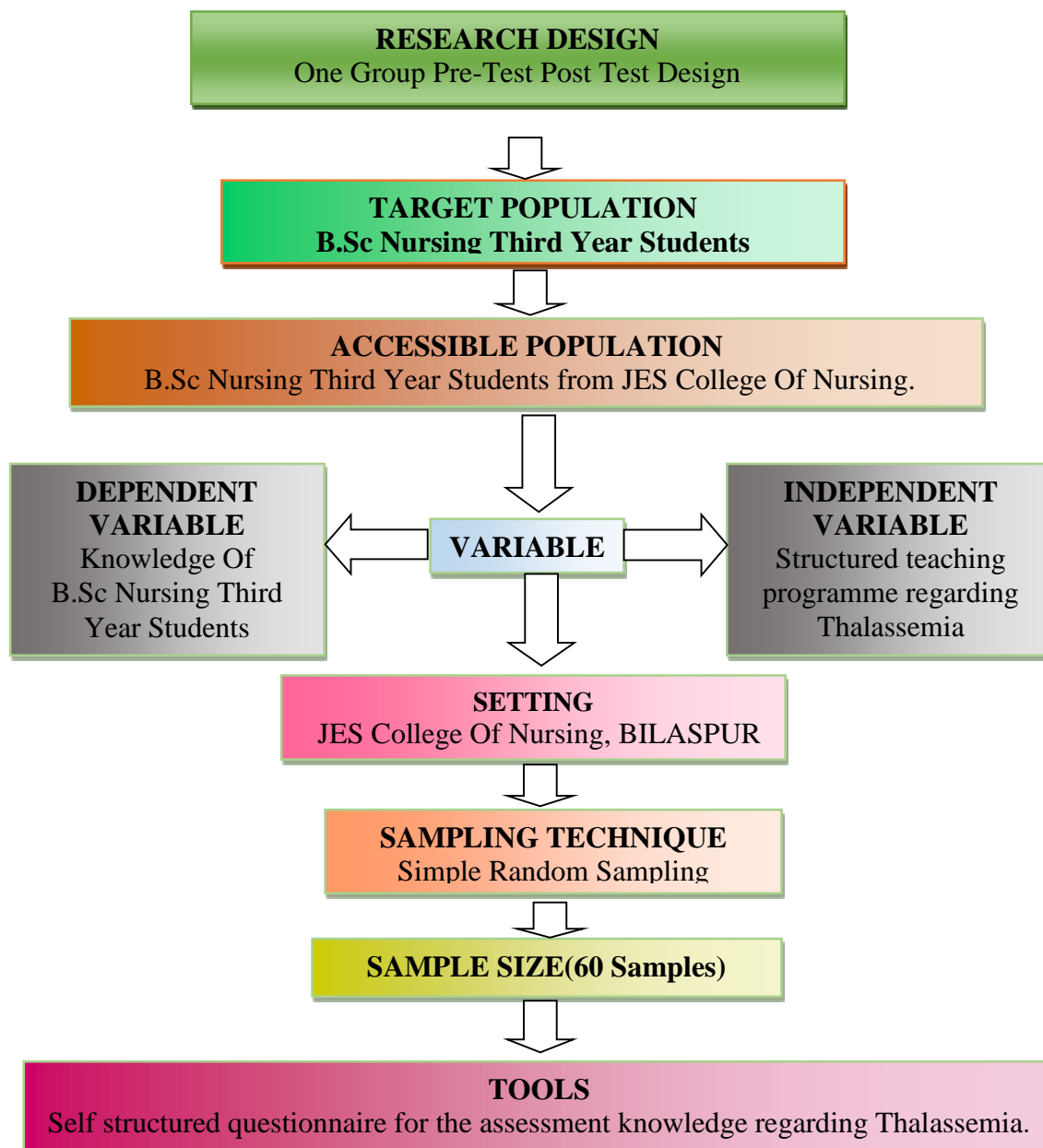
SAMPLE:

A sample is a small portion of the population selected to participate in the research study. The sample of the population for the present study is B.Sc Nursing Third Year Students from JES College Of Nursing (C.G.)

SAMPLING TECHNIQUES:

Sampling technique is a method or process devised for obtaining a sample, which will be a representation of its population. The process of sampling makes it possible to draw valid inferences or generation on the basis of careful observation of variables within a relatively small portion (sample) of the population. In the present study simple random technique was used.

SAMPLE SIZE:

The sample size consists of B.Sc Nursing Third Year Students (60) from J.E.S College Of Nursing Bilaspur, CG.

RESEARCH DESIGN
One Group Pre-Test Post Test Design

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TARGET POPULATION
B.Sc Nursing Third Year Students

↓

ACCESSIBLE POPULATION
B.Sc Nursing Third Year Students from JES College Of Nursing.

↓

DEPENDENT VARIABLE
Knowledge Of B.Sc Nursing Third Year Students

←　**VARIABLE**　→

INDEPENDENT VARIABLE
Structured teaching programme regarding Thalassemia

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SETTING
JES College Of Nursing, BILASPUR

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SAMPLING TECHNIQUE
Simple Random Sampling

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SAMPLE SIZE(60 Samples)

↓

TOOLS
Self structured questionnaire for the assessment knowledge regarding Thalassemia.
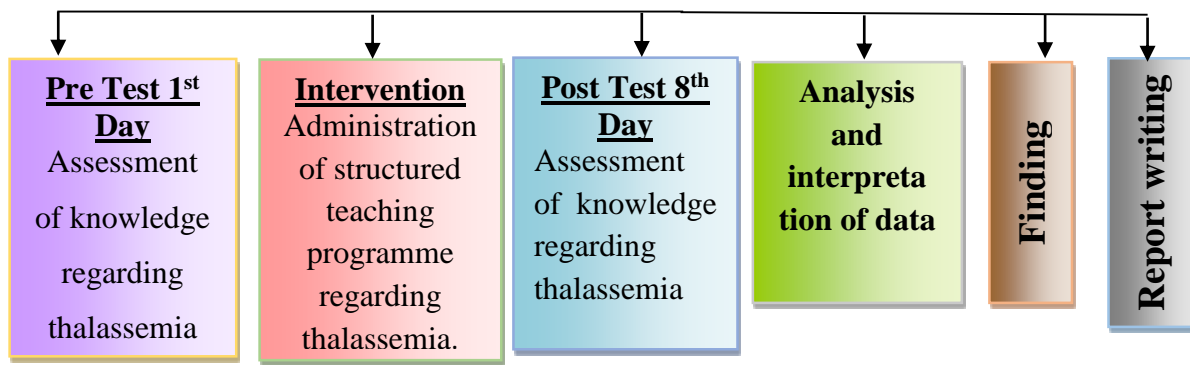
FIG 3.1 SCHEMATIC DIAGRAM OF RESEARCH DESIGN FOR THE PRESENT STUDY.

RESULTS

TABLE 1.1

Pre-Test and post test Knowledge Score Regarding Thalassemia Among B.Sc Nursing Third Year Students.

N=60

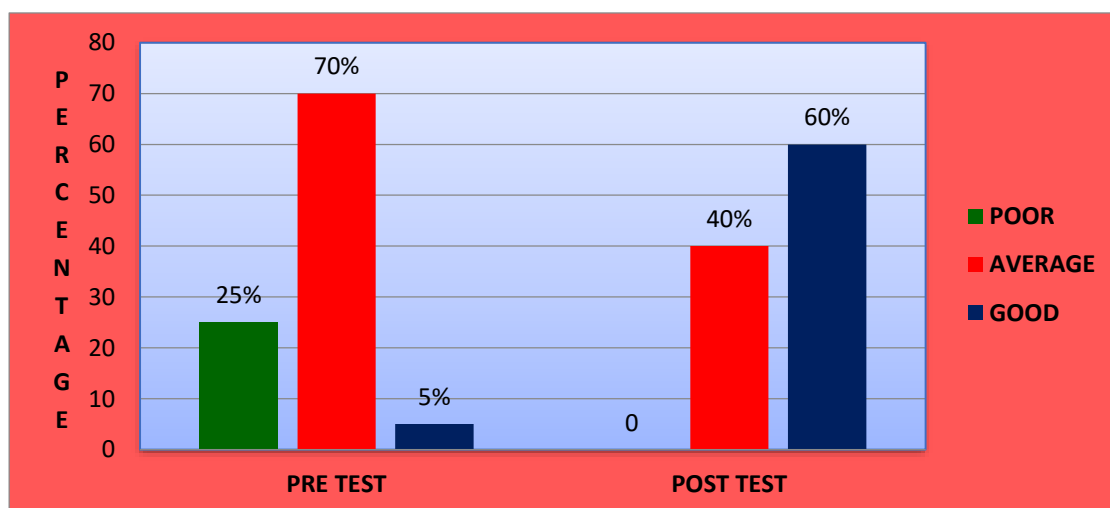| S.NO	TEST	LEVEL OF KNOWLEDGE AND THEIR SCORE		FREQUENCY (N)	PERCENTAGE (%)
1.	PRE TEST	POOR	1-16	`15	25
		AVERAGE	17-32	42	70
		GOOD	33-50	3	5
2.	POST TEST	POOR	1-16	-	-
		AVERAGE	17-32	24	40
		GOOD	33-50	36	60

Figure - 1.1 Column diagram shows the pre-test and post-test knowledge score regarding Thalassemia among B.Sc Nursing Third Year Students.

Table 4.7(figure- 4.7) represents that 5%of B.Sc Nursing Third Year Students are having good knowledge, 70% of them having average knowledge and 25% of them having poor knowledge regarding Thalassemia pre-test and after structured teaching 60% having good knowledge, 40 % are having average knowledge .

TABLE 1.2

Association of demo variable with pretest knowledge score

S. NO	Demographic Variables	Knowledge Score			Chi - Square	df	P Value
		Poor	Average	Good			
A.	Age						
1.	20 Years	9(60%)	5(33.33%)	1(6.67%)	15.38	6	<0.02
2.	21 Years	4(12.12%)	27(81.82%)	2(6.06%)			
3.	22 Years	2(25%)	6(75%)	0(0%)			
4.	>22 Years	0(0%)	4(100%)	0(0%)			
B.	Course Before Nursing						
1.	Yes	-	-	-			
2.	No	15(25%)	42(70%)	3(5%)			
C.	Exposure to Care given To Thalassemic Patients						
1.	Yes	5(71.43%)	2(28.57%)	0(0%)	9.17	2	<0.02
2.	No	10(18.87%)	40(75.47%)	3(5.66%)			
D.	Do You Have Knowledge Regarding Thalassemia						
1.	Yes	15(25%)	42(70%)	3(5%)			
2.	No	-	-	-			
E.	Source Of Knowledge						
	Books	14(29.79%)	31(65.96%)	2(4.26%)	2.92	6	>0.05 NS
	Newspaper	-	1(100%)	-			
	Television	-	-	-			
	Previous Study	1(8.33%)	10(83.33%)	1(8.33%)			

N=60

S. NO	Demographic Variables	Knowledge Score			X2	df	P Value
		Poor	Average	Good			
.	**Do you use internet for studies**						
	Yes	1(2.56%)	35(89.74%)	3(7.69%)	**30.25**	**2**	**<0.001HS**
	No	14(66.67%)	7(33.33%)	-			

Significant at P≤0.05** highly significant at P≤0.01*** very high significant at   P≤0.00

Table 1.2 Shows that the association between pre-test knowledge score with selected socio demographic variables i.e. age, knowledge and use of internet variables are highly significantly associated with their pre-test knowledge score.

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