



# A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE AND BELIEF REGARDING THALASSEMIA AMONG CARE GIVERS OF THALASSEMIC CHILDREN IN SELECTED PEDIATRIC HOSPITALS AT BANGALORE.

1. Manasa B N, 2 Mrs Ashwini Nisha D'Souza. Lecturer, Professor  
HARSHA COLLEGE OF NURSING NELAMANGALA, BANGALORE

## INTRODUCTION

Among all the childhood diseases, hematological and hereditary diseases are most life-threatening diseases which affects during early life period. Problem of Haemoglobinopathy in India was first described by Professor J.B. Chatterjee who initiated thalassemia diagnosis and research work in West Bengal in 1959.

Thalassemia is a chronic disease starting in childhood. Therefore, mothers have a critical role in caring for these children. Many studies emphasize that mothers have a more active role in caring for a child with a chronic illness. These mothers have several roles like caring for the child during continuous blood transfusions and iron chelation therapy, caring for the child in frequent hospitalizations, caring for the child with different thalassemia abnormalities, and following up different child tests.

## STATEMENT OF THE PROBLEM

A study to evaluate the effectiveness of structured teaching programme on knowledge and belief regarding thalassemia among care givers of thalassemic children in selected pediatric hospitals at Bangalore.

## OBJECTIVES OF THE STUDY

1. To assess the level of existing knowledge and belief regarding thalassemia among care givers of thalassemic children.
2. To assess the level of belief regarding thalassemia among care givers of thalassemic children.
3. To evaluate the effectiveness of structured teaching programme on knowledge regarding thalassemia among care givers of thalassemic children by comparing pretest and post test scores.
4. To find out the association between post-test knowledge scores regarding thalassemia with their selected socio-demographic variables of care givers of thalassemic children.

## OPERATIONAL DEFINITIONS

- 1. Effectiveness:** In this study, effectiveness refers to the extent to which structured teaching programme will enhance the level of knowledge of care givers of thalassemic children regarding thalassemia in terms of differences in pre-test and post-test score measured by questionnaire.
- 2. Thalassemia:** In this study, thalassemia refers to a heterogenous group of genetic disorder that result from a decreased alpha or beta chains of haemoglobin(Hb),
- 3. Care givers:** In this study, Caregivers are the persons who provide care at the time of distress or illness.

## ASSUMPTIONS

### It is assumed that:

- Structured teaching programme (STP) will be effective in enhancing the level of knowledge on thalassemia among care givers of thalassemic children..

## DELIMITATIONS

- The study is delimited to only the care givers of thalassemia children in selected pediatric hospitals at Bangalore.

## METHODOLOGY

**RESEARCH DESIGN :** Non-experimental descriptive design

## DEMOGRAPHIC VARIABLES

Attributed or demographic variables are the characteristics of the subjects that are collected to describe the samples age, sex, education, marital status, occupation, type of work, monthly income, dietary pattern, type of family, family history of coronary artery disease .

## STUDY SETTING

“Setting” refers to location for conducting research, such as a natural, partially controlled or highly controlled setting.

Based on the investigator’s familiarity with the settings and availability of the samples, present study was conducted at Indira Gandhi Institute of child health, Bangalore.

- **Target Population :** All care givers of thalassemic children who is present at various hospitals in Bangalore.
- **Accessible Population:** care givers of thalassemia children in selected pediatric hospitals at Bangalore.

## SAMPLING

### Sample And Sample Size Estimation

Small portion of a population for observation and analysis is referred to as a sample.

In this study, the sample size consists of 60 care givers of thalassemic children from Harsha hospital and government hospital, Nelamangala, Bangalore, who satisfied the inclusion criteria.

### Sampling Technique

Sampling refers to the process of selecting a portion of population to represent the entire population. In the present study non probability purposive sampling technique was adopted to select the sample.

## CRITERIA FOR SELECTION OF SAMPLE

### Inclusion Criteria

- Care givers of thalassemic children who,
1. are working in selected hospitals at Bangalore.
  2. are willing to participate in the study.
  3. are available during the time of data collection.

### Exclusion Criteria

- Care givers of thalassemic children who,
1. are sensitized to any research study on thalassemia in the last three months.
  2. not willing to participate in the study.
  3. Psychologically and physically unfit during the time of data collection.

## DESCRIPTION OF THE TOOL

The tool comprised of three parts.

### PART-I

A Performa for selected personal information was used to collect the sample characteristics. The characteristics included are Age, Education, Occupation, Income, Area of Residence, Duration of illness of Thalassemic child, Previous knowledge regarding thalassemia, Sources of knowledge. The respondents were asked to give relevant information in the space provided.

### PART-II

A structured, self-administered knowledge questionnaire is used to assess the effectiveness of structured teaching programme on Knowledge regarding thalassemia among care givers. It consists of five aspects.

I General Information and Types of Thalassemia

II knowledge regarding causes and symptoms of Thalassemia

III knowledge regarding Diagnostic Test.

IV Knowledge regarding its Management.

V Knowledge regarding prevention and complications of Thalassemia in children.

### PART-III

A structured, self-administered questionnaire and likert rating scale was used to assess the effectiveness of structured teaching programme on Knowledge regarding thalassemia among care givers.

## SCORING PROCEDURE

Preparation of final copy of lesson plan and structured teaching programme after incorporating suggestions from experts.

<50% -	Inadequate knowledge
51-75% -	Moderate knowledge
>75%	adequate knowledge

For Belief questions, score will be given as following:

- For positive statement: strongly agree-5, agree-4, uncertainty-3, disagree-2, strongly disagree-1
- For negative statement: strongly disagree-5, disagree-4, uncertainty-3, agree-2, strongly agree-1

<50% -	Unfavorable
51-75% -	Moderate
>75%	Favorable

### PLAN FOR DATA ANALYSIS :

The data was analyzed using descriptive and inferential statistics.

### RESULTS AND DISCUSSION

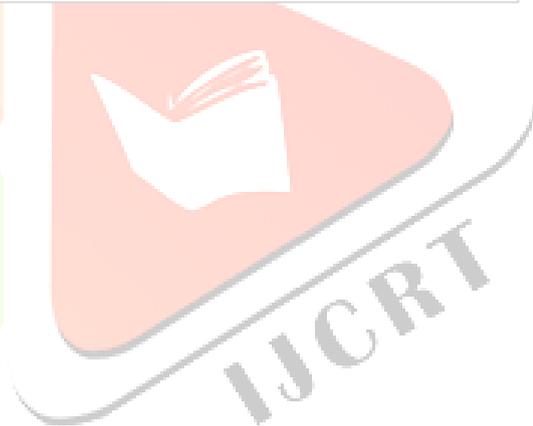
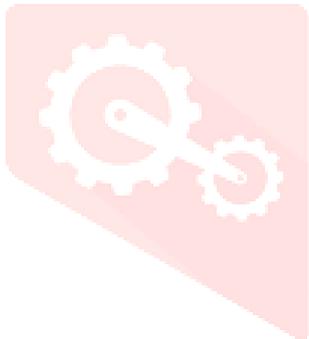
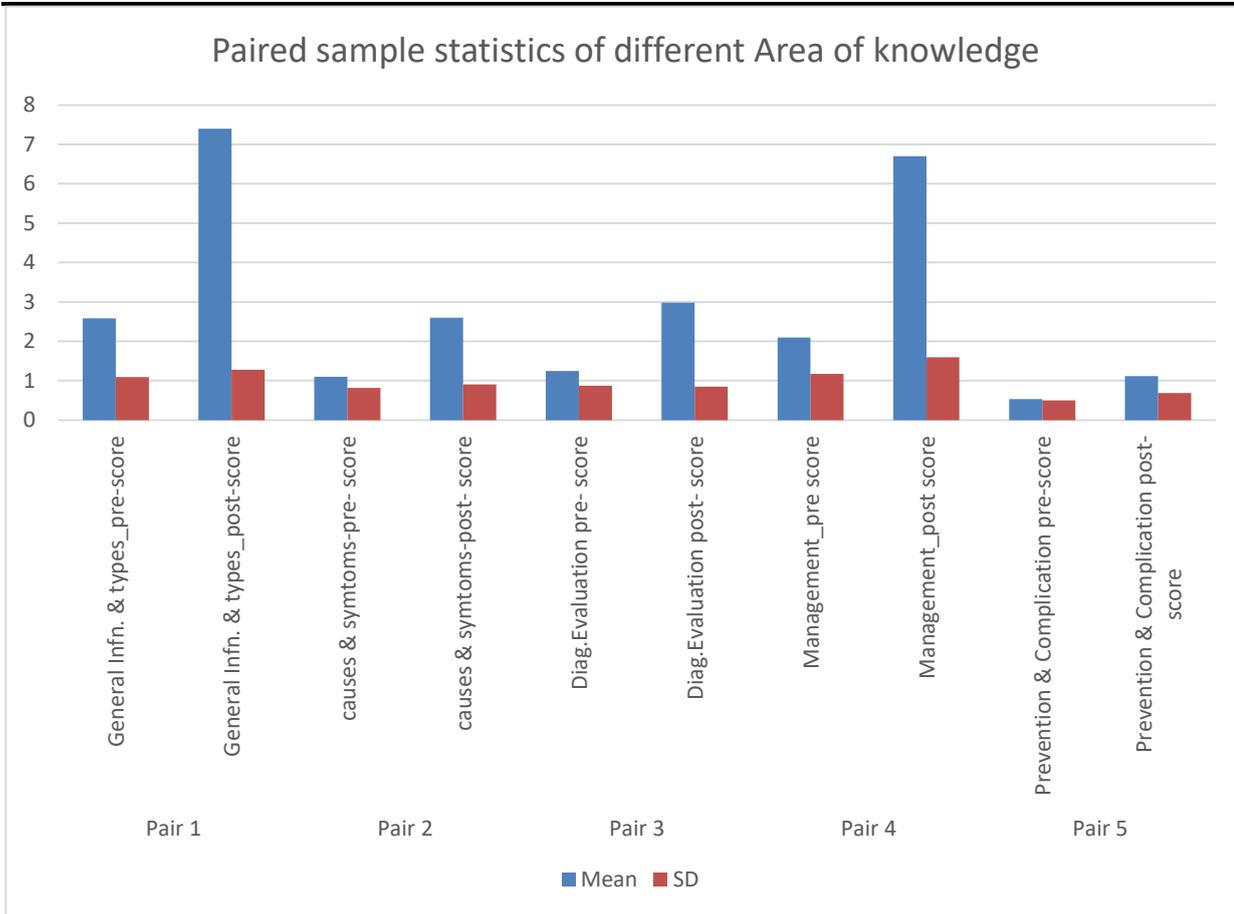
**Overall knowledge regarding thalassemia among caregivers of thalassemic children before the administration of structured teaching programme**

Sl. No	Overall level of knowledge	Frequency	%
1	Inadequate	44	73.33
2	Moderatelyadequate	16	26.67
3	Adequate	-	-

## Overall Knowledge Regarding Thalassemia Among Caregivers Of Thalassemic Children After Structured Teaching Programme

SI No	Overall level of knowledge	Frequency	%
1	Inadequate	-	-
2	Moderately adequate.	33	55.00%
3	Adequate	27	45.00%

Aspects	Paired Samples Statistics			
		Mean	SD	SE(MEAN)
Aspects-1	General Info. & types Pré-score	2.583	1.093	0.1412
	General Info. & types post-score	7.4	1.278	0.165
Aspects-2	causes & symptoms-pre- score	1.1	0.817	0.1054
	causes & symptoms-post- score	2.6	0.905	0.1169
Aspects-3	Diag.Evaluation pre- score	1.25	0.875	0.113
	Diag.Evaluation post- score	2.983	0.853	0.1101
Aspects-4	Management Pré score	2.1	1.174	0.1516
	Management post score	6.7	1.597	0.2062
Aspects-5	Prevention & Complication pre-score	0.533	0.503	0.0649
	Prevention & Complication post-score	1.116	0.691	0.0892



**Table 17: paired t-test between Pre-test and Post-test scores of the subject i.e., Area wise knowledge**

Paired Samples Test							
		Paired Differences			t-VALUE	df	Sig. (2-tailed)
		Mean	SD	SE(MEAN)			
Pair 1	Genl_Info_Types_Pre Vs. Gnl_Info_Types_Post	4.8167	1.308274	0.168897	28.518*	59	0.00000
Pair 2	Causes_Symptoms_Pre Vs. Causes_Systems_Post	-1.5	1.186077	0.153122	9.7961*	59	0.00000
Pair 3	Diag_Evaluation_Pre Vs. Dag_Evaluation_Post	1.7333	0.936395	0.120888	14.338*	59	0.00000
Pair 4	Management_Pre Vs. Mangement_Post	-4.6	1.923979	0.248385	18.52**	59	0.00000
Pair 5	Prevention_Complication_Pre Vs. Prevention_Complication_Post	0.5833	0.743142	0.095939	6.0802*	59	0.00000

P&lt;0.05

\*Significant \*\*Highly significant

**paired t-test between Pre-test and Post-test scores of the subjects i.e., Overall knowledge and belief**

Paired Samples Test							
		Paired Differences			t-VALUE	df	Sig. (2-tailed)
		Mean	SD	SE(MEAN)			
Pair 1	Overall_Knowledge_Pre Vs. Overall_Knowledgel_Post	-9.8	4.939636	0.637704	-15.3676**	59	0.00000
Pair 2	Belief_Pre Vs. Belief_Post	19.61667	4.250989	0.5488	35.74464*	59	0.00000

**DISCUSSION:**

The results of association between Knowledge regarding Thalassemia among care givers and demographic variables; the chi- square test was resulted to be significant at  $p < 0.00$ , so there is a statistical association between age, education, area of residence and source of information and knowledge scores and pre- test knowledge scores.

According to the hypothesis of the study, the investigator found that there is significant association between pre-test knowledge score and selected demographic variables hence hypothesis is accepted.

**CONCLUSION:** The study was conducted with the objective of assessing the effectiveness of structured teaching programme on Knowledge regarding thalassemia among care givers of thalssemic children using structured knowledge questionnaire.

The following thalassemia were drawn on the basis of the findings of the study.

1. Present study did find significant difference in Knowledge regarding Thalassemia among care givers of thalassemic children at selected hospitals.
2. Present study did find significant association between the Knowledge regarding Thalassemia among care givers of thalassemic children at selected hospitals.

**BIBLIOGRAPHY:**

1. Dr. Sharmila Ghosh .pdf-PD hinduja hospital. [Homepage of the internet] 2016 cited [cited may 20] Available from: [www.hindujahospital.com/communityportal/articles/articles-download.aspx?ridJ](http://www.hindujahospital.com/communityportal/articles/articles-download.aspx?ridJ).
2. Dr. Mausumi B. A study on knowledge, attitude and practice about thalassemia among general population in outpatient department at tertiary care hospital of Kolkata. Journal of preventive medicine and holistic health, 2015; 1 (1):6-13.
3. Hockenberry M.J. And Wilson D. Wong's nursing care of infants and children 9<sup>th</sup>ed. Elsevier Health Sciences. pp. 949-51, 2014.
4. Dorothy M, Barbara A. Text book of Pediatric nursing. Publisher Philadelphia, Saunder. pp 657-58, 2013.
5. Wikipedia. Thalassaemia. [homepage on internet]2012[cited 2016 Jun6]. Available from: <http://en.wikipedia.org/wiki/thalassaemia>.
6. <https://www.cdc.gov/ncbddd/thalassaemia/facts.html>
7. Biswas B, Naskar NN, Basu R, Dasgupta A, Paul B, Basu K. Knowledge of the caregivers of thalassaemic children regarding thalassaemia: A cross-sectional study in a tertiary care health facility of eastern India. Iraqi J Hematol 2018; 7:49-54
8. Seirin M K, Sara L. Knowledge and practices among Mothers about Care of their children with Beta Thalassaemia Major. Egyptian Journal of Health Care.2020;11(3):1-11.
9. Bijit B, Narendra N, Rivu B, Aparajita D, Bobby P, Keya B. Knowledge of the caregivers of thalassaemic children regarding thalassaemia. Iraqi journal of Haematology.2018;7(2):49-54.
10. Ankur J, Shafali S, Samridhi L, Ira J. A cross-sectional study of awareness and practices regarding thalassaemia among parents of thalassaemic children. journal of family medicine and primary care. Apr 2020 ; 9(4): 1935–1938.