Impact of Structured educational Intervention on knowledge regarding care of children with Thalassemia among Caregivers.

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Abstract

Present study aimed to assess the knowledge of caregivers regarding care of children with thalassemia and its effect on planned teaching. Quantitative approach, pre -experimental one group pre-test post test design used to conduct the study. 40 caregivers selected considering the inclusion and exclusion criteria using non probability purposive sampling technique. Caregivers who are looking after the children with thalassemia more than two years were included and who are having children above 12 years were excluded from the study. Reliability of the data collection tool done by using test-retest method and calculated r wan 0.84. Data collection tool had two sections with demographic variables and structured questionnaire for assessing knowledge. After getting written informed consent pre test taken followed by planned teaching. Post test taken on 8th day by using same data collection tool. Result showed that there is significant increase in knowledge level after planned teaching.

Key words: Thalassemia, caregiver, planned teaching

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Introduction

Thalassemia is a heterogeneous group of blood disorders affecting the haemoglobin genes and causes ineffective erythropoiesis. Which lead to anaemia and need frequent blood transfusions to maintain haemoglobin levels.[1] There are two types of thalassemia known as alpha and beta, depending on the part of an oxygen-carrying protein in the red blood cells is lacking.[2] a cascade of clinical manifestations occur in thalassemia are anaemia, bone deformities, and iron overload. Primary management is regular blood transfusions and iron chelation therapy to prevent iron overload. Gene therapy and bone marrow transplantation are newer treatments. [3] Caregivers knowledge regarding thalassemia is one of the vital areas in the prevention of the disease. which will help to plan the intervention[4.] At every given opportunity, the knowledge of caregivers of the thalassaemic child should be addressed, should arrange regular counselling sessions and awareness campaigns in vernacular language to be conducted.[5]

Families with major thalassemia patients facing a high level of caregiver burden. Family members specially mothers are the key components of the care system of patients with thalassemia.[6] Thalassemia is a disease which doesn't have a known cure. Prevention is the only way to prevent or reduce the burden. So, there is a need of having adequate knowledge among caretakers.[7]

Methodology

Quantitative approach with pre-experimental one group pre-test post design used to assess the effectiveness of planned teaching on knowledge of mothers regarding care of child with Thalassemia. 40 caregivers selected as research samples according to the inclusion and exclusion criteria using non probability purposive sampling technique. Caregivers who are looking after the children with thalassemia more than two years were included and who are having children above 12 years were excluded from the study. Reliability of the data collection tool done by using test-retest method and calculated r wan 0.84. Data collection tool had two sections with demographic variables and structured questionnaire for assessing knowledge with 22 multiple choice questions. After getting written informed consent from the samples pre test taken followed by planned teaching. Post test taken on 8th day by using same data collection tool. Analysis of demographic variables, pre-test and post-test knowledge. Effectiveness of planned teaching by paired t-test. Result showed that there is significant increase in knowledge level after planned teaching.

Result

Analysis of data done based on the study objectives. Analysis presented under five sections

Table No.1

Analysis of Demographic Variables

N=40

Sr. No	Demographic Variables.		Characteristics	Frequency	Percentage (%)
1.	Age of the caregivers	a.	20-30 Years	24	60
		b.	30-40 Years	07	17.5
		c.	>40 years	09	22.5
2.	Education of caregivers	a.	No formal education	05	12.5
		b.	Primary	12	30
		c.	Secondary	06	15
		d.	H.sc	09	22.5
		e.	Graduate and above	8	20
3.	Occupation of caregivers	a.	Service	07	17.5
		b.	Business	06	15
		c.	Housewife	27	67.5
4	Type of family	a.	Nuclear	24	60
		b.	Joint	16	40

Table no.1 shows that, maximum caregivers (60%) belonged to the age group of 20-30 years. 30% of caregivers had primary education and maximum i.e. 73.3% of caregivers were housewife and majority of caregivers (60%) were from nuclear family.

Table No :2

Pre-test Knowledge Score.

N=40

Knowledge Score	Frequency	Percentage (%)
< 5 (Poor)	11	27.5
6 - 11 (Average)	25	62.5
12 – 17 (Good)	04	10

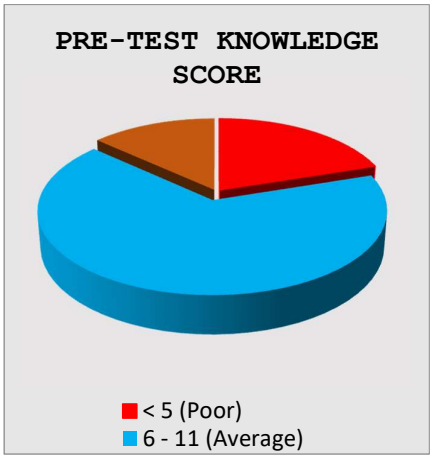

Figure No. 2

Table no.3 and figure no.2 shows that, 62.5 % caregivers have average knowledge score (6-11), 27.25 % have poor knowledge score, 10 % have good knowledge score and none of caregiver have excellent knowledge score. It is evident that more efforts are necessary to improve the knowledge regarding care of children with thalassemia.

Table No: 3

Post Test Knowledge Score

N=40

Post-test score	Frequency	Percentage (%)
< 5 (Poor)	00	00.0
6 - 11 (Average)	9	22.5
12 – 17 (Good)	21	52.5
18 – 22(Excellent)	10	25

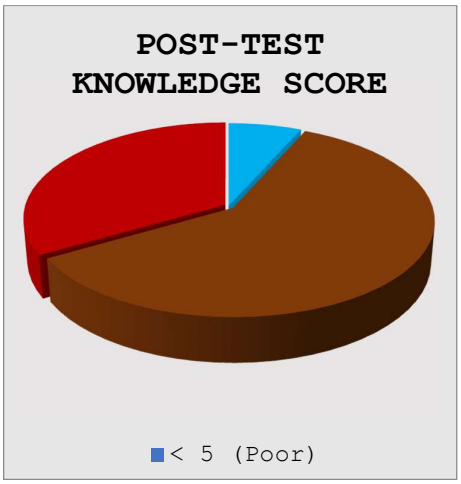

Figure No. 3

Table no.4 and figure no.3 shows that, 52.5 % caregivers have good knowledge score (12-17), 25 % have excellent knowledge score, 22.5% have average knowledge score and none of caregiver having poor knowledge score. This suggests that there is marked increase in post-test knowledge score.

Table No: 4
Comparison of Knowledge

N=40

Group	MEAN	SD	't' value	'p' Value
PRE TEST SCORE	8.3	3.25	-18.665	0.000
POST TEST SCORE	15.57	3.287		

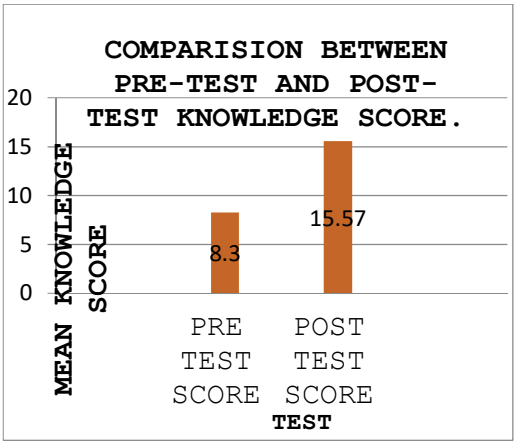

Figure No. 4

Table no.5 and figure no.4 shows that, mean value of pre-test knowledge score is 8.3 and post-test knowledge score is 15.57 and calculated 't' value is -18.665 which is more than tabulated 't' value and calculated 'p' value is 0.00 which is less than tabulated 'p' value (0.05). This suggests that there is statistically significant increase in post test score so planned teaching programme on thalassemia care among caregivers was effective.

Table No: 5
Association of Knowledge score with demographic variables

N=40

S.No	Demographic Variables	Fishers Exact Test Value	P Value	Remark
01	Age	2.211	0.786	Not significant
02	Education	7.995	0.358	Not significant
03	Occupation	1.967	0.943	Not significant
04	Type of family	0.924	0.804	Not significant

TABLE NO.6 shows that, there is no significant association between age, education, occupation, type of family and residential area and pre-test knowledge score as calculated 'p' value is more than tabulated 'p' (0.05) value. Thus, it shows that there is no significant association between pre-test knowledge score and selected demographic variables.

Discussion

A study was conducted to assess the effectiveness of planned teaching on knowledge regarding care of children with thalassemia among caregivers.

In pretest It was found that, 62.5% of caregivers were having average knowledge score, 27.5 % of caregivers were having poor knowledge score, 10 % were having good knowledge score and no one caregivers having excellent knowledge score.

In post-test knowledge score it was found that, 52.5 % of caregivers were having good knowledge score, 25 % of caregivers were having excellent knowledge score, 22.5 % were having average knowledge score and no one caregivers having poor knowledge score. The mean knowledge score of pre-test phase was 8.3 and in post-test phase it rose to 15.57 and standard deviation score in pre-

test phase was 3.25 and in the post-test was 3.287 and std. error mean in pretest phase was 0.593 and in post test phase it was 0.6 . The improvement in post-test knowledge score.

The 't' value was computed to find out effectiveness of planned teaching programme on knowledge regarding care of children with thalassemia among caregivers. The calculated 't' value was -18.665 which is more than table 't' value and calculated 'p' value was 0.000 which was less than 0.05. It shows that there is statistically significant increase in post test score. There was marked improvement in post-test knowledge score. It proves that planned teaching programme on knowledge regarding care of children with thalassemia among caregivers was effective. There was no association of pretest knowledge score with selected demographic variables.

Conclusion

Present study accepted the research Hypothesis and researcher concluded that there is need of education in care of children with thalassemia. Even after looking after the child for many years the knowledge level is less.

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