A Descriptive Study To Assess The Knowledge Of Nursing Personnel Related To Pediatric Thalassemia

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Abstract

The current study has been undertaken to assess the knowledge score regarding pediatric thalassemia among nursing personnel in Index Hospital, Indore. The research design used for study was descriptive in nature. The tool for study was self-structured knowledge questionnaire which consists of 2 parts-PART- I consisted questions related to Socio-demographic data; PART-II consisted of self -structured knowledge questionnaire to assess the pre-test knowledge score regarding pediatric thalassemia among nursing personnel. The findings of the study revealed that 62.5% subjects have poor knowledge; 27.5% have average knowledge score towards pediatric thalassemia while 10.0% have fair knowledge score towards pediatric thalassemia. The mean knowledge score of subjects was 11.59 ± 4.11.

Keyword- Assess, knowledge & pediatric thalassemia.

1. INTRODUCTION

Thalassemia is a group of inherited blood disorders caused by defects in one or more genes responsible for producing the globin chains in hemoglobin. The clinical syndromes are the result of two problems. First, insufficient synthesis of either α- or β-globin leads to inadequate production of the predominant adult hemoglobin A (α2β2) and results in microcytosis (low mean corpuscular volume) and hypochromia (low mean corpuscular hemoglobin). Second, diminished synthesis of one type of globin leads to a relative excess of the globin with which it would normally pair. Excess unpaired globin chains form unstable tetramers that precipitate in red blood cells, causing impaired erythropoiesis or hemolysis..

II. Objective of the study

1. To assess the knowledge scores regarding pediatric thalassemia among nursing personnel.
2. To find out association between pre-test knowledge score regarding pediatric thalassemia among nursing personnel with their selected demographic variables.

III. Hypotheses:

RH$_0$: There will be no significant association between pre-test score on pediatric thalassemia among nursing personnel with their selected demographic variables.

RH$_1$: There will be significant association between pre-test score on pediatric thalassemia among nursing personnel with their selected demographic variables.

IV. Methodology

A descriptive research design was used to assess the knowledge score regarding pediatric thalassemia among nursing personnel in Index Hospital, Indore. The study was carried out on 40 nursing personnel selected by convenience sampling technique. Demographical variable and self-structured 30 knowledge questionnaire were used to assess the pre-test Knowledge score regarding pediatric thalassemia by survey method.

V. Analysis and interpretation

SECTION-I Table -1 Frequency & percentage distribution of samples according to their demographic variables.

n = 40

S. No	Demographic Variables	Frequency	Percentage
1	**Age in Years**		
a.	21-30	28	70.0
b.	31-40	9	22.5
c.	Above 40	3	7.5
2	**Gender**		
a.	Male	18	45.0
b	Female	22	55.0
3	**Educational status**		
a.	Post B.Sc. Nursing	8	20.0
b.	B.Sc. Nursing	30	75.0
c.	M.Sc. Nursing	2	5.0
4	**Experience**		
a.	1-10 years	5	12.5
b	11-20 years	23	57.5
c	Above 20 years	12	30.0

SECTION-II- Table- 2.1.1- Frequency and percentage distribution of pre-test scores of studied subjects:

Category and test Score	Frequency (N=40)	Frequency Percentage (%)
POOR (1-10)	25	62.5
AVERAGE (11-20)	11	27.5
FAIR (21-30)	4	10.0
TOTAL	40	100.0

The present table 2.1.1 concerned with the existing knowledge regarding pediatric thalassemia among nursing personnel were shown by pre-test score and it is observed that most of the nursing personnel 25 (62.5%) were poor (01-10) knowledge & some nursing personnel have 11 (27.5%) were from average category while few nursing personnel have 4 (10.0%) were from fair (21-30) category.
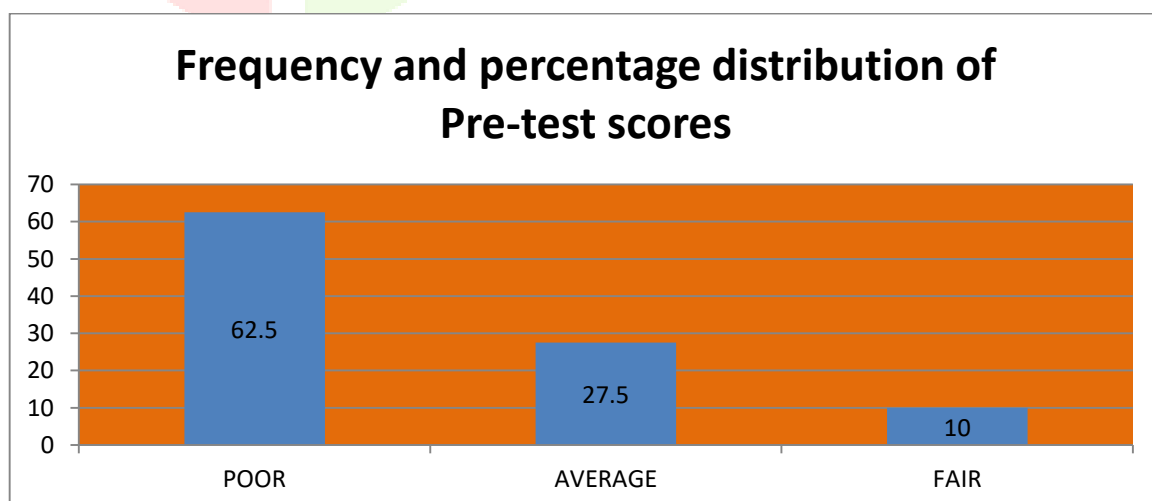

FIG.-2.1.1- Frequency and percentage distribution of Pre-test scores of studied subjects

Table-2.1.2. - Mean ($\overline{X}$) and standard Deviation (s) of knowledge scores:

Knowledge Pre –test	Mean ($\overline{X}$)	Std Dev (S)
Pre-test score	11.59	4.11

The information regarding mean, percentage of mean and standard deviation of test scores in shown in table 2.1.2 knowledge in mean pre-test score was 11.59 ± 4.11 while in knowledge regarding alcoholism its risk factors among nursing personnel in Index Hospital, Indore.

Hence, it is confirmed from the tables of section-II that there is mean of test scores which partially fulfill first objective of the present study.
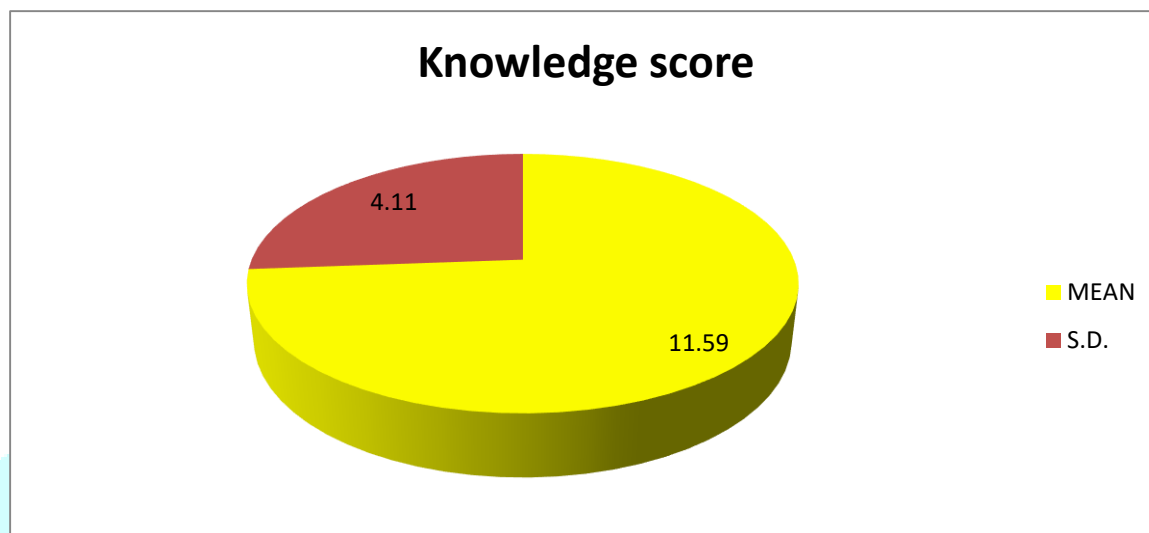
SECTION-III Association of knowledge scores between test and selected demographic variables:

Table- 3.1 Association of age of nursing personnel with pre-test scores:

Age (in years)	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	FAIR (21-30)	
21-30	18	9	1	28
31-40	6	0	3	9
Above 40	1	2	0	3
Total	25	11	4	40
X^2=11.17		p<0.05(significant)		

The association of age & test scores is shown in present table 3.1. The probability value for Chi-Square test is 11.17 for 4 DF which indicated significant value (p<0.05). Hence, it is identified that there is significant association between age & test scores.

Table- 3.2 Association of gender with pre-test scores:

Gender	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	FAIR (21-30)	
Male	11	5	2	18
Female	14	6	2	22
Total	25	11	4	40
X^2=0.05		p>0.05 (Insignificant)		

The association of gender & test scores is shown in present table 3.2. The probability value for Chi-Square test is 0.05 for 2 df which indicated gender & test scores. Hence, it is identified that there is insignificant association between gender & test scores.

Table- 3.3 Association of educational status with pre-test scores:

Educational status	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	FAIR (21-30)	
Post BSc	6	0	2	8
BSc Nursing	19	9	2	30
MSc Nursing	0	2	0	2
Total	25	11	4	40
$X^2=9.87$		p<0.05 (significant)		

The association of educational status & test score is shown in present table 3.3. The probability value for Chi-Square test is 9.87 for 4 degrees of freedom which indicated educational status and test scores. Hence, it is identified that there is significant association between educational status & test scores.

Table- 3.4 Association of Experience of nursing personnel with pre-test scores:

Experience in years	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	FAIR (21-30)	
1-10	16	5	2	23
11-20	2	3	0	5
Above 20	7	3	2	12
Total	25	11	4	40
$X^2=3.92$		p>0.05 (Insignificant)		

The association of living area & test scores is shown in present table 3.4. The probability value for Chi-Square test is 3.92 for 4 degrees of freedom which indicated experience of nursing personnel & test scores. Hence, it is identified that there is insignificant association between experience of nursing personnel & test scores

VI. Results

The findings of the study revealed that 62.5% subjects have poor knowledge; 27.5% have average knowledge score towards pediatric thalassemia while 10.0% have fair knowledge score towards pediatric thalassemia. The mean knowledge score of subjects was 11.59 ± 4.11. The association of knowledge score of nursing personnel was found to be statistically insignificant with demographic variables (p<0.05).

VII. Conclusion

It was concluded that majority of nursing personnel had poor knowledge score regarding pediatric thalassemia. Nursing personnel should also educate regarding pediatric thalassemia.

VIII. Limitations

- This was limited to Index Hospital, Indore.
- This was limited to 40 nursing personnel.

IX. Reference

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