"A DESCRIPTIVE STUDY AMONG ANM STUDENTS REGARDING NON-HODGKIN LYMPHOMA IN CHILDREN''

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Abstract-
The current study has been undertaken to assess the pre-test Knowledge score regarding non-Hodgkin lymphoma in children among ANM Students in selected nursing school, Orissa. 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 non-Hodgkin lymphoma in children among ANM Students. The data was analyzed by using descriptive & inferential statistical methods. The most significant finding was that 44.0% subjects have poor knowledge, 40.0% have average knowledge score while 16.0% ANM Students were having good knowledge score.

Keyword- Non-Hodgkin lymphoma in children and ANM Students.

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I. Introduction

Non-Hodgkin lymphoma (lim-FOE-muh) is a type of cancer that develops in the white blood cells of the lymphatic system, which is part of the immune system. These systems work together to remove bacteria, viruses, and other harmful substances from the body. The current WHO classification recognizes different subtypes with distinct morphologic, immunophenotypic, and genetic features. Thus, an accurate diagnosis is based on integrating all these informations. The main NHL pathologic subtypes in children include: Burkitt's lymphoma (BL), diffuse large B-cell lymphoma (DLBCL), T or B lymphoblastic lymphoma and anaplastic large-cell lymphoma. In the current literature, available data on clinico-pathological aspects of NHL among children in developing countries are limited.

II. Need of the study

According to Darhaoui S (2022) Available data on clinico-pathological aspects of pediatric NHL in developping countries are limited and diagnostic approach appears more delicate with absence of molecular studies. The objectives of our study are: analyzing the pathological spectrum of NHL among children and highlighting challenges in the diagnosis including: limited biopsic material; unususal subtyptes, age group, or localization. We retrospectively analyzed clinico pathological characteristics of 101 NHL's cases among children diagnosed in the Pediatric's pathology unit over a period of 4 years There were 78 (77.2%) male and 23 (22.8%) female. The median age was 7.2 years. The most common histologic subtypes of NHL were Burkitt lymphoma in 65 patients (64.4%); followed by lymphoblastic lymphoma in 22 patients, large B-cell lymphoma in 9 patients (8.9%); anaplastic T cell lymphoma in 3 patients; NOS mature T cell lymphoma and pediatric type follicular lympoma in 1 patient each. In conclusion, this study Morocco illustrates the pattern of distribution of NHL and emphasizes challenges in the diagnosis of these neoplasms.

III. Objective of the study

1. To assess the pre-test knowledge scores regarding non-Hodgkin lymphoma in children among ANM Students.
2. To find out association between pre-test knowledge score regarding non-Hodgkin lymphoma in children among ANM Students with their selected demographic variables.

IV. Hypotheses:

RH_0: There will be no significant association between pre-test score on non-Hodgkin lymphoma in children among ANM Students with their selected demographic variables.

RH_1: There will be significant association between pre-test score on non-Hodgkin lymphoma in children among ANM Students with their selected demographic variables.

V. Methodology

A descriptive research design was used to assess the pre-test knowledge score regarding non-Hodgkin lymphoma in children among ANM Students residing in selected nursing school, Orissa. The study was carried out on 50 ANM Students selected by convenience sampling technique. Demographical variable and self-structured 30 knowledge questionnaire were used to assess the pre-test Knowledge score regarding non-Hodgkin lymphoma in children by survey method.

VI. Analysis and interpretation

SECTION-I

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

n = 50

S. No	Demographic Variables	Frequency	Percentage
1	**Age in Years**		
a.	Less than 21	20	40.0
b.	Greater than 21	30	60.0
2	**Living area**		
a.	Rural	36	72.0
b	Urban	14	28.0
3	**Educational status**		
a.	Higher secondary	31	62.0
b.	Graduate	19	38.0
4.	**Previous knowledge regarding**		
a.	Yes	28	56.0
b.	No	22	44.0

5.	**Sources of information regarding RTI's**		
a.	Internet	6	12.0
b	TV	23	46.0
c	News paper	19	38.0
d.	Conference/workshop	2	4.0

SECTION-II-

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

Category and test Score	Frequency (N=50)	Frequency Percentage (%)
POOR (1-10)	22	44.0
AVERAGE (11-20)	20	40.0
GOOD (21-30)	8	16.0
TOTAL	50	100.0

The present table 2.1.1 concerned with the existing knowledge regarding non-Hodgkin lymphoma in children in children among ANM Students were shown by pre-test score and it is observed that most of the ANM Students 22 (44.0%) were poor (01-10) knowledge, 20 (40.0%) were have average (11-20) knowledge score and rest of the ANM Students have 8 (16.0%) were from good (21-30) category.

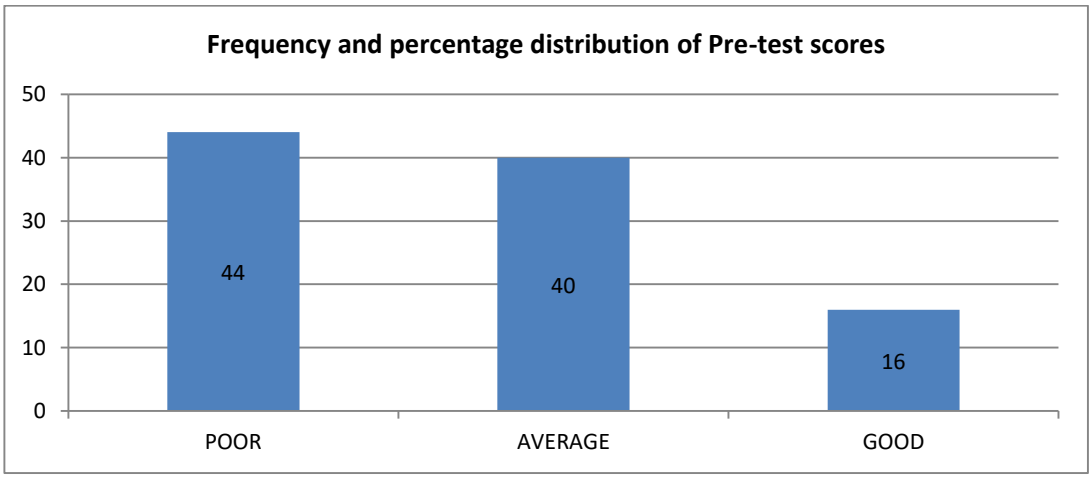

FIG.-2.1.1- Frequency and percentage distribution of Pre-test scores of studied subjects

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	1.60	0.49

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 1.60 ± 0.49 while in knowledge regarding non-Hodgkin lymphoma in children among ANM Students in selected nursing school.

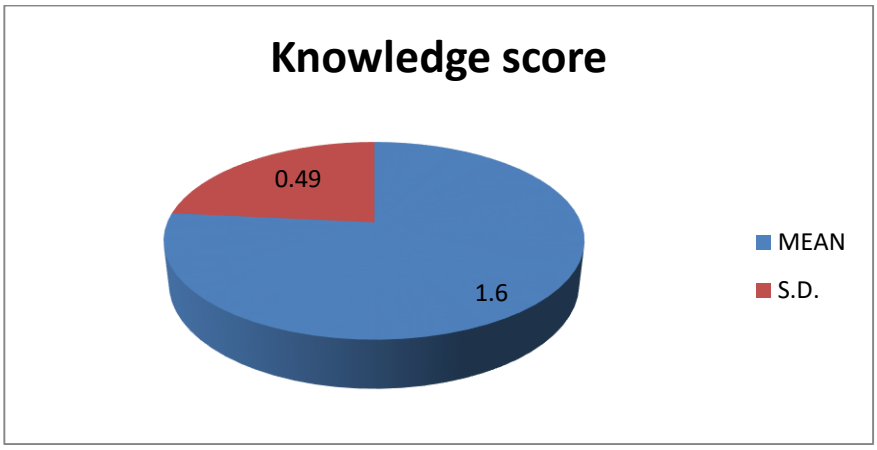

Figure no.-1 Mean and SD of knowledge score of ANM Students.

SECTION-III Association of knowledge scores between test and selected demographic variables:

Table- 3.1 Association of age of ANM Students with pre-test scores:

Age	**Test scores**			**Total**
(In years)	**POOR (1-10)**	**AVERAGE (11-20)**	**FAIR (21-30)**	
Less than 21	9	7	4	**20**
Greater than 21	13	13	4	**30**
Total	**22**	**20**	**8**	**50**
X= 0.549	p>0.05 (Insignificant)			

The association of age & test scores is shown in present table 3.1. The probability value for Chi-Square test is 0.54 for 2 DF which indicated insignificant value (p>0.05). Hence, it is identified that there is insignificant association between age & test scores. Moreover, it is reflected that age isn't influenced with current problem.

Table- 3.2 Association of living area with pre-test scores:

Living area	**Test scores**			**Total**
	POOR (1-10)	**AVERAGE (11-20)**	**FAIR (21-30)**	
Rural	1	8	5	**14**
Urban	21	12	3	**36**
Total	**22**	**20**	**8**	**50**
X= 12.15	p>0.05 (significant)			

The association of living area & test scores is shown in present table 3.2. The probability value for Chi-Square test is 12.15 for 2 df which indicated living area & test scores. Moreover, it is reflected that living area is influenced with current problem.

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)**	
Higher sec.	16	13	2	**31**
Graduate	6	7	6	**19**
Total	**22**	**20**	**8**	**50**
X= 5.80	p>0.05 (Insignificant)			

The association of educational status & test score is shown in present table 3.3. The probability value for Chi-Square test is 5.80 for 2 degrees of freedom which indicated educational status and test scores. Moreover, it is reflected that educational status isn't influenced with present problem.

Table- 3.4 Association of previous knowledge regarding management of TB with pre-test scores:

Previous knowledge	**Test scores**			**Total**
	POOR (1-10)	**AVERAGE (11-20)**	**FAIR (21-30)**	
Yes	10	10	8	**28**
No	12	10	0	**22**
Total	**22**	**20**	**8**	**50**
X= 7.57	p<0.05 (significant)			

The association of previous knowledge & test score is shown in present table 3.4. The probability value for Chi-Square test is 7.57 for 2 degrees of freedom which indicated previous knowledge and test scores. Moreover, it is reflected that previous knowledge is influenced with present problem.

Table- 3.5 Association of sources of knowledge with pre-test scores:

Sources of knowledge	**Test scores**			**Total**
	POOR (1-10)	**AVERAGE (11-20)**	**FAIR (21-30)**	
Internet	4	2	0	**6**
TV	9	10	4	**23**
News paper	7	8	4	**19**
Conference	2	0	0	**2**
Total	**22**	**20**	**8**	**50**
X= 5.04	p>0.05 (Insignificant)			

The association of sources of knowledge & test scores is shown in present table 3.5. The probability value for Chi-Square test is 5.04 for 6 degrees of freedom which indicated sources of knowledge & test scores. Moreover, it is reflected that source of knowledge isn't influenced with current problem.

VII. Results

The findings of the study revealed that 44.0% subjects have poor knowledge, 40.0% have average knowledge score while 16.0% ANM Students were having good knowledge score towards non-Hodgkin lymphoma in children in children. The mean knowledge score of subjects was 1.60 ± 0.49. The association of knowledge score of ANM Students was found to be statistically significant with Living area. ($p<0.05$).

VIII. Conclusion

It was concluded that majority of ANM Students had poor knowledge score regarding non-Hodgkin lymphoma in children in children. ANM Students should also educate regarding non-Hodgkin lymphoma in children to control disease.

IX. Limitations

- This was limited to selected nursing school, Orissa.
- This was limited to 50 ANM Students.

X. Reference

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