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"Effect of Awareness Package on Knowledge Regarding Non-Hodgkin Lymphoma Among Parents of Children of Kalinganagar, Bhubaneswar''

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Effect, awareness package, knowledge and non-Hodgkin lymphoma.

ABSTRACT:

The present study has been undertaken to assess knowledge score regarding non-Hodgkin lymphoma among peoples by awareness package in Sum hospital at Kalinganagar, Bhubaneswar. The research design adopted for the study was pre- experimental in nature. The tool for the study was self-structured knowledge questionnaire which consists of two parts-PART- I consisted questions related to Socio-demographic data; PART-II consisted of self -structured knowledge questionnaire to assess the knowledge score regarding non-Hodgkin lymphoma among parents of children. The data was analyzed by using descriptive and inferential statistical methods. The most significant finding was that 63.3% of parents of children were having average knowledge regarding non-Hodgkin lymphoma whereas 36.7% had good knowledge after post-test. It was suggested that the nurses must educate parents of children regarding non-Hodgkin lymphoma.

1.INTRODUCTION

Non-Hodgkin's lymphoma is a type of cancer that begins in your lymphatic system, which is part of the body's germ-fighting immune system. In non-Hodgkin's lymphoma, white blood cells called lymphocytes grow abnormally and can form growths (tumors) throughout the body. Non-Hodgkin's lymphoma is a general category of lymphoma. There are many subtypes that fall in this category. Diffuse large B-cell lymphoma and follicular lymphoma are among the most common subtypes. The other general category of lymphoma is Hodgkin's lymphoma. The main difference between Hodgkin's lymphoma and NHL is the presence of a type of atypical cell called the Reed-Sternberg cell. This cell is only present in Hodgkin's lymphoma. In addition, Hodgkin's lymphoma and NHL have very different treatment options.

2.NEED FOR STUDY

One hundred and ninety-one patients of B-NHL from 10 centers diagnosed between 2013 and 2016 were analyzed retrospectively. B/T lymphoblastic lymphoma and patients with inadequate data were excluded. The median age was 88 months (IQR: 56, 144) with an M:F ratio of 5.6:1. Undernourishment and stunting were seen in 36.5% and 22%. Primary site was abdomen in 66.5%. Hypoalbuminemia was noted in 82/170 (48.2%). Histological subtypes: Burkitt lymphoma (BL): 69.6%, Burkitt-like: 10.4%, and diffuse large B cell lymphoma (DLBCL): 13.6%, unclassified and others (6.4%). Stage distribution: I/II, 33 (17.3%), III, 114 (59.7%), and IV, 44 (23%). One-eighty-six patients took treatment. Protocols used were LMB and BFM in 160/186 (86%). At a median follow-up of 21.34 (IQR: 4.34, 36.57) months, the disease-free-survival (DFS) was 74.4% and event-free-survival (EFS) was 60.7%. Treatment-related mortality (TRM), relapse/progression and abandonment were 14.3%, 14.5%, and 8.4%, respectively. Bone marrow positivity, stage IV disease, and lactate dehydrogenase (LDH) > 2,000 U/l predicted inferior EFS. Stage IV disease, LDH > 2,000 U/l, bone marrow positivity, tumor lysis syndrome and low albumin predicted TRM;

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LDH retained significance on multivariate analysis for EFS and TRM [OR: 4.54, 95% CI: 1.14-20, p 0.03; OR 20, 95%CI: 1.69-250, p 0.017]. BL was the main histological subtype. High TRM and relapse/progression are hampering survival. An LDH > 2,000 U/l was adversely prognostic. These data demonstrate a need to develop a national protocol that balances toxicity and potential for cure. (Rahiman E A et al 2022)

3.OBJECTIVE OF THE STUDY

1. To assess the pre-test and post-test Knowledge score regarding non-Hodgkin lymphoma among parents of children.
2. To assess the effectiveness of customized awareness package on knowledge regarding non-Hodgkin lymphoma among parents of children.
3. To find out the association between the pre-test knowledge score regarding non-Hodgkin lymphoma among parents of children with their selected demographic variables.

4. HYPOTHESES:

RH_0: There will be no significant difference between pretest and post-test knowledge score on non-Hodgkin lymphoma among parents of children.

RH_1: There will be significant difference between pretest and post-test knowledge score on non-Hodgkin lymphoma among parents of children.

RH_2: There will be significant association between the pre-test score on non-Hodgkin lymphoma among parents of children with their selected demographic variables.

5.ASSUMPTION

1. Parents of children may have deficit knowledge regarding non-Hodgkin lymphoma.
2. Awareness package will improve knowledge of parents of children regarding non-Hodgkin lymphoma.

6. METHODOLOGY:

An evaluative approach was used and research design pre-experimental one group pre-test post-test research design was used for the study. The samples consisted of 30 parents of children selected by Non probability purposive sampling technique. The setting for the study was Sum hospital at Kalinganagar, Bhubaneswar. Data was collected with the help of demographic variables and administering a self-structured knowledge question-naire by the investigator before and after awareness package. Post-test was conducted after 7 days of pretest. Data were analysis using descriptive & inferential statistics.

7. ANALYSIS AND INTERPRETATION

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

n = 30

S. No	Demographic Variables	Frequency	Percentage
1	**Age in Years**		
a.	21-25	7	23.3
b.	26-30	9	30.0
c.	31-35	8	26.7
d.	≥35	6	20.0
2	**Family Monthly income**		
a.	<10000/-	3	10.0
b.	10001-15000/-	13	43.3
c.	15001-20000/-	10	33.3
d.	>20000/-	4	13.3
3	**Marital status**		
a.	Married	17	56.7
b	Single	9	30.0
c	Widow	2	6.7
d.	Divorce	2	6.7

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4	**Occupation**		
a.	Street vendor	3	10.0
b.	Laborer	15	50.0
c.	Shopkeeper	7	23.3
d.	Office worker	5	16.7

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

Category and test Score	Frequency (N=30)	Frequency Percentage (%)
POOR (1-10)	20	66.7
AVERAGE (11-20)	10	33.3
GOOD (21-30)	0	0.0
TOTAL	30	100.0

The present table 2.1.1 concerned with the existing knowledge regarding non-Hodgkin lymphoma among parents of children was shown by pre-test score and it is observed that most of the parents of children 20 (66.7%) were poor (1-10) knowledge and some parents of children have 10 (33.3%) average categories.

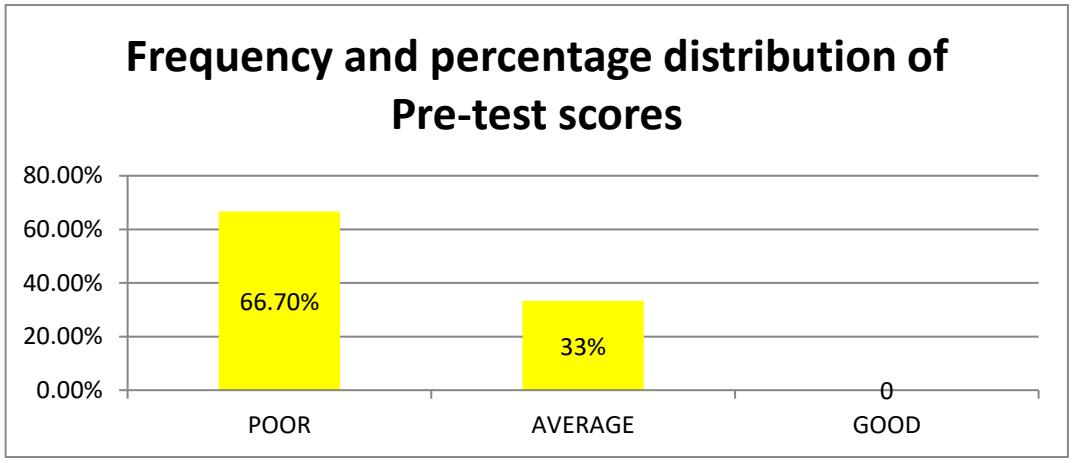

FIG.-2.1.1- Frequency and percentage distribution of Pre-test scores of studied subjects

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	8.50	1.94

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 8.50 ± 1.94 while in knowledge regarding non-Hodgkin lymphoma among peoples residing in Sum hospital at Kalinganagar, Bhubaneswar.

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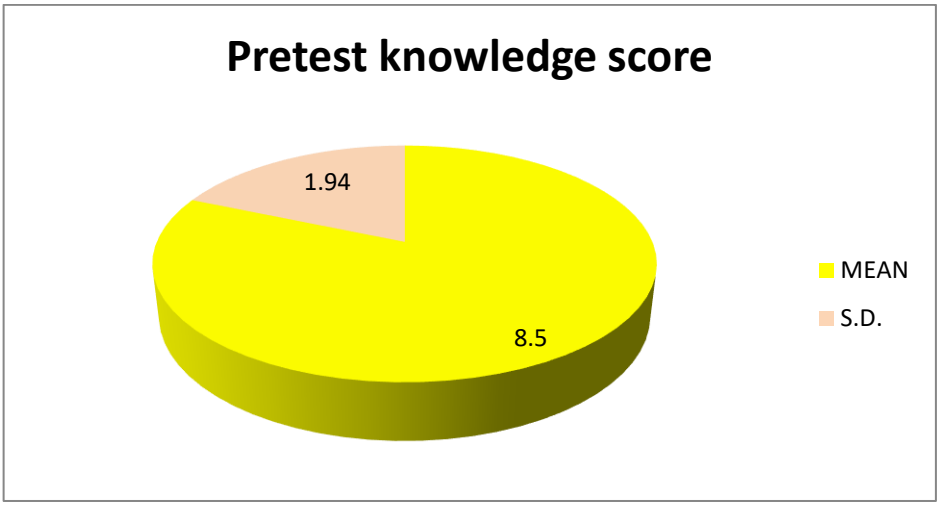

FIG.-2.1.1. - Mean ($\overline{X}$) and standard Deviation (s) of knowledge scores

Table-2.2.1- Frequency and percentage distribution of Post test scores of studied subjects:

Category and post-test Score	Frequency (N=30)	Frequency Percentage (%)
POOR (1-10)	0	0.0
AVERAGE (11-20)	19	63.3
GOOD (21-30)	11	36.7
TOTAL	30	100%

The present table 2.2.1 concerned with the existing knowledge regarding non-Hodgkin lymphoma among parents of children was shown by post test score and it is observed that parents of children 11 (36.7%) were **GOOD** (21-30) knowledge and other parents of children have 19 (63.3%) category which are **AVERAGE** (11-20) posttest knowledge score in the present study.

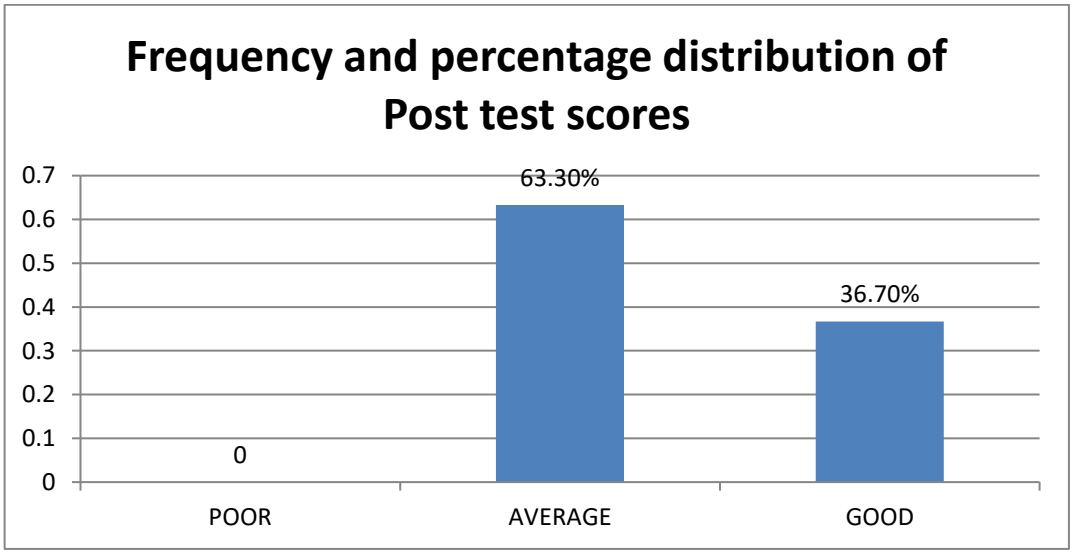

FIG.-2.2.1- Frequency and percentage distribution of Post test scores of studied subjects

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Table-2.2.2. - Mean ($\overline{X}$) and standard Deviation (s) of knowledge scores:

Knowledge Test	Mean ($\overline{X}$)	Std Dev (S)
Post-test score	18.13	4.03

The information regarding mean, percentage of mean and standard deviation of post test scores in shown in table 2.2.2 knowledge in mean post test score was 18.13 ± 4.03 while in knowledge regarding Non-Hodgkin lymphoma among peoples residing in Sum hospital At Kalinganagar, Bhubaneswar.

Hence, it is confirmed from the tables of section-II that there is a significant difference in mean of test scores which partially fulfill the first second objective of the present study.

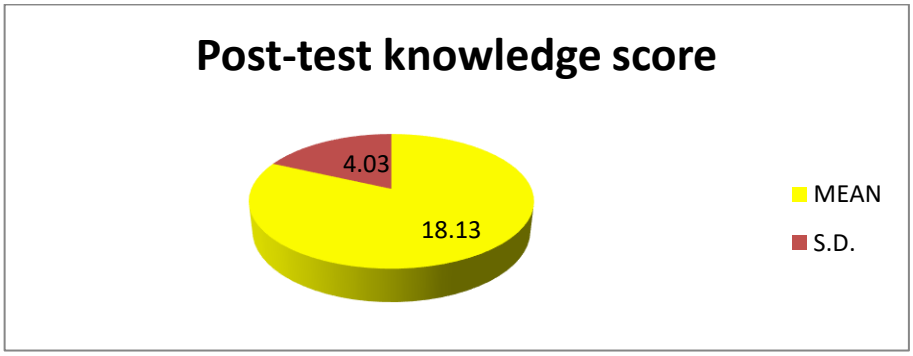

FIG.-2.2.2. - Mean ($\overline{X}$) and standard Deviation (s) of knowledge scores:

TABLE 2.2.3: Effectiveness of awareness package by calculating Mean, SD, Mean Difference and 't' Value of Pre-test and Post-test knowledge.

Knowledge Score of Parents of children	Mean ($\overline{X}$)	S. D. (s)	Std. Error of Mean	D. F.	t-value	Significance
Pre-test	**8.50**	**1.94**	0.87	29	**-10.96**	P<0.05
Post-test	**18.13**	**4.03**				

When the mean and SD of pre-test and post-test were compared and't' test was applied. It can be clearly seen that the't' value was -10.96 and p value was <0.05 which clearly show that awareness package was very effective in increasing the knowledge of parents of children.

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

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

Age	Test scores			Total
(in years)	**POOR (1-10)**	**AVERAGE (11-20)**	**GOOD (21-30)**	
21-25	5	2	0	**7**
26-30	7	2	0	**9**
31-35	5	3	0	**8**
>35	3	3	0	**6**
Total	**20**	**10**	**0**	**30**
X^2=1.38		p>0.05(Insignificant)		

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The association of age test scores is shown in present table 3.1. The probability value for Chi-Square test is 1.38 for 3 degrees of freedom which indicated a insignificant valve (p>0.05). Hence, it is identified that there is a insignificant association between age and test scores. Moreover, it is reflected that age isn't influenced with the present problem.

Table- 3.2 Association of family monthly income with pre-test scores:

Family Monthly Income	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	GOOD (21-30)	
<10000/-	1	2	0	**3**
10001-13000	9	4	0	**13**
13001-20000	6	4	0	**10**
>20000/-	4	0	0	**4**
Total	**20**	**10**	**0**	**30**
X^2= 3.73	p>0.05 (Insignificant)			

The association of family monthly income and test scores is shown in present table 3.2. The probability value for Chi-Square test is 3.73 for 3 degrees of freedom which indicated a insignificant value (p>0.05). Hence, it is identified that there is a insignificant association between monthly income and test scores.

Table-3.3. Association of marital status with pre-test scores:

Marital status	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	GOOD (21-30)	
Married	11	6	0	**17**
Single	5	4	0	**9**
Widow	2	0	0	**2**
Divorce	2	0	0	**2**
Total	**20**	**10**	**0**	**30**
X^2= 2.52	p>0.05 (Insignificant)			

The association of marital status test scores is shown in present table 3.3. The probability value for Chi-Square test is 2.52 for 3 degrees of freedom which indicated a insignificant valve (p>0.05). Hence, it is identified that there is a insignificant association between marital status and test scores. Moreover, it is reflected that marital status isn't influenced with the present problem.

Table- 3.4 Association of occupation with pre-test scores:

Occupation	Test scores			Total
CLASS	POOR (1-10)	AVERAGE (11-20)	GOOD (21-30)	
Street vendor	3	0	0	**3**
Laborer	10	5	0	**15**
Shopkeeper	4	3	0	**7**
Office-worker	3	5	0	**5**
Total	**20**	**10**	**0**	**30**
X^2= 1.88	p>0.05 (Insignificant)			

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The association of age test scores is shown in present table 3.4. The probability value for Chi-Square test is 1.88 for 3 degrees of freedom which indicated occupation and test scores. Hence, it is identified that there is a insignificant association between occupation and test scores. Moreover, it is reflected that occupation isn't influenced with the present problem.

8.RESULTS

The result of this study indicates that there was a significant increase in the post-test knowledge scores compared to pre-test scores of non-Hodgkin lymphoma. The mean percentage knowledge score was observed 8.50 ± 1.94 in the pre-test and after implementation of awareness package post-test mean percentage was observed with 18.13 ± 4.03.

9.CONCLUSION

Thus, after the analysis and interpretation of data we can conclude that the hypothesis RH1 that, there will be significance difference between the pre-test knowledge score with post-test knowledge score at the ($P<0.05$) is being accepted.

Furthermore, awareness package regarding non-Hodgkin lymphoma among parents of children may consider as an effective tool when there is a need in lacking, bridging and modifying the knowledge.

10.LIMITATIONS-

- The study was limited to Sum hospital of Kalinganagar, Bhubaneswar.
- The study was limited to 30 parents of children.

Reference

1. Shad A, Magrath I. Malignant non-Hodgkin's lymphomas in children. In: Principles and Practice of Pediatric Oncology, Third Edition, Pizzo P. Poplacka D. Philadelphia, Lippincott-Raven, 1996; pp 545-587.
2. Shad A, Magrath I. Non-Hodgkin's lym-phoma. Pediatr Clin North Am 1997; 44: 863-890.
3. Ries LA, Miller RW, Smith M. Cancer in children (ages 0-1 and ages 0-19). In: SEER Cancer Statistics Review. Eds Miller B, Ries LA, Hankey B. US Department of Health and Human Services. National Institutes of Health, Bethesda, MD, 1973-1990.
4. National Cancer Institute sponsored study of classifications of Non-Hodgkin's lymphomas: Summary and description of a working formulation for clinical usage. Cancer 1982; 49: 2112-2135.
5. Harries NL, Jaffe ES, Stein H, Banks PM, Chan JK, Cleary ML, et al. A Revised European American Classification of lym-phoid neoplasms: A proposal from the Inter-national Lymphoma Study Group. Blood 1994; 84: 1361-1392.
6. Klein G. Multiple phenotypic consequences of the Ig/Myc translocation in B cell derived tumors. Genes Chromosom Cancer 1989; 1: 3-8.
7. Kadin ME, Kinney MC. Pathogenesis of Ki = 1 + lymphomas. In: The Non-Hodgkin's Lymphomas 2nd edn. Ed. Magrath II T. London, Arnold, 1996; pp 443-458.
8. Shiramizu B, Barriga F, Neequaye J, Dalla-Favera R, Neri A, Guttierez M, et al. Patterns of chromosomal breakpoint locations in Burkitt's lymphoma: Relevance to geography and EBV association. Blood 1991; 77:1516-1526.