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A STUDY TO ASSESS THE KNOWLEDGE REGARDING PRIMARY AMOEBIC MENINGOENCEPHALITIS AMONG ADOLESCENT BOYS OF SELECTED AREAS IN PALLITHOTTAM, WITH A VIEW TO DEVELOP AN INFORMATION BOOKLET

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ABSTRACT

The research project undertook was" A study to assess the knowledge regarding primary amoebic meningoencephalitis among adolescent boys of selected areas in Pallithottam, with a view to develop an information booklet" The objectives of the study were to assess the knowledge regarding primary amoebic meningoencephalitis among adolescent boys of selected areas in Pallithottam, Kollam and to find out the association between the knowledge score and selected demographic variables such as age, education, type of family, occupation of the father and economic status also to prepare an information booklet on primary amoebic meningoencephalitis. Non experimental research design was adopted for this study. The study was conducted among 60 adolescent boys in selected community area, Kollam in order to assess the knowledge on primary amoebic meningoencephalitis. In this study, non probability convenient sampling technique was used. The tool used for the data collection consisted of demographic proforma and structured knowledge questionnaire. The analysis of the data was based on the objectives of the study using descriptive and inferential statistics. The study revealed that 10% had poor knowledge, 39% had average knowledge and 15% had good knowledge. The findings of the present study also revealed that there was no association between knowledge and demographic variables such as age, education, type of family, occupation of father and economic status. Based on the findings the investigator has drawn implications which were of vital concerns in the field of nursing practice, nursing administration, nursing pattern, nursing education for future development.

KEYWORDS: Assess, knowledge, structured knowledge questionnaire, Primary amoebic meningoencephalitis.

INTRODUCTION

Primary amoebic meningoencephalitis (PAM) is a rare but extremely severe infection of the central nervous system caused by the amoeba Naegleria fowleri. This amoeba is typically found in warm freshwater environments, such as lakes, rivers, and hot springs. These amoebas are considered free-living protozoan environmental parasites, meaning they can complete their life cycle without needing a specific host.

PAM is commonly observed in immunocompetent children and young adults, especially after having contact with amoeba-contaminated water. Even though the disease is extremely rare, it has a mortality rate of 98%.[1,2]

A systematic review was carried out to investigate the Epidemiology and Clinical Characteristics of Primary amoebic meningoencephalitis (PAM) caused by Naegleria fowleri. In this review, a total of 381 cases of PAM were identified. Among these, seven survivors were confirmed cases. The most frequently reported activity associated with PAM was swimming or diving, and the primary source of contaminated water was lakes, ponds, or reservoirs. The majority of patients were male (75%), with a median age of 14 years. The confirmed and probable cases showed similar outcomes in terms of survival, the progression of the disease, and cerebrospinal fluid (CSF) findings.[3]

STATEMENT OF THE PROBLEM

A study to assess the knowledge regarding Primary amoebic meningoencephalitis among adolescent boys of selected areas in Pallithottam with a view to develop an information booklet.

OBJECTIVES

The objectives of the study were

1. To assess the knowledge regarding Primary amoebic meningoencephalitis among adolescent boys of selected areas in Pallithottam.
2. To find out association between knowledge score regarding Primary amoebic meningoencephalitis and selected demographic variables.
3. To prepare an information booklet regarding Primary amoebic meningoencephalitis.

ASSUMPTION

1. Adolescent boys may have poor knowledge regarding Primary amoebic meningoencephalitis.
2. There may be certain demographic variables which influences knowledge regarding Primary amoebic meningoencephalitis.

Research approach	**Quantitative research**
Research design	Non-Experimental research design
Variables	**Demographic variables:** In this study the demographic variables were age, education, type of family,occupation of the father,economic status.
Setting of the study	This study was conducted at the selected community area in Pallithottam, Kollam.
Population	Adolescent boys of selected areas in Pallithottam,
Sample	Adolescent boys (11-19years) who met the inclusion criteria.
Sample Size	The sample size was 60 adolescent boys at selected areas of Pallithottam.
Sampling Technique	Non probability convenience sampling technique.

RESULT AND DISCUSSION

Section A: Description of level of knowledge regarding Primary amoebic meningoencephalitis among adolescent boys in areas at Pallithottam,

The scores were interpreted as
Good knowledge: 17-25
Average knowledge: 9-16
Poor knowledge: 0-8.

Demographic data of adolescent boys in selected community area at Pallithottam

- In the case of age of adolescent boys, the chi square value was 6.58 which is less than table value 9.48 at 0.05 level of significance. So there was no significant association between age of adolescent boys and knowledge regarding Primary amoebic meningoencephalitis among adolescent boys in selected community area at Pallithottam.

- In the case of education of adolescent boys, the Chi-square square value was 3 which is less than table value 12.59 at 0.05 level of significance. So there was no significant association between education of adolescent boys and knowledge regarding Primary amoebic meningoencephalitis among adolescent boys in selected community area at Pallithottam.

- Regarding of type of family the chi-square value was 3.1 which is less than table value 9.48 at 0.05 level of significance. So there was no significant association between type of family and knowledge regarding Primary amoebic meningoencephalitis among adolescent boys in selected community area at Pallithottam.

- Regarding occupation of the father the Chi-square value was 4.92 which is less than table value 5.99 at 0.05 level of significance. So there was no significant association between occupation of the father and knowledge regarding Primary amoebic meningoencephalitis among adolescent boys in selected community area at Pallithottam.

- Regarding economic status the Chi-square value was 7.1 which is less than table value9.48 at 0.05 level of significance. So there was no significant association between economic status and knowledge regarding Primary amoebic meningoencephalitis among adolescent boys in selected community area at Pallithottam.

Table 1: Age of adolescent boys.

SL NO.	AGE OF ADOLES--CENT BOYS	LEVEL OF KNOWLEDGE		
		Good	Average	Poor
1	11-13	1	15	3
2	14-16	4	14	1
2	17-19	8	12	2

The table of data regarding age of adolescent boys shows that out of 60 sample, 31.60% were in the age group of 11-13 years and 31.60% were in the age group of 14-16 years and 36.60% were in the age group of 17-19 years.

Table 2: Education of adolescent boys.

SL NO	Education of adolescent boys	LEVEL OF KNOWLEDGE		
		Good	Average	Poor
1	Upper Primary	1	8	1
2	High School	6	12	3
3	Higher Secondary	5	9	2
4	Under Graduate	3	10	0

The data regarding education of adolescent boys shows that out of 60 sample, 16.60% had upper primary education, 35% had high school education, 26.60% had higher secondary education and 21.60% were under graduates.

Table 3: Type of family.

SL NO	Type of Family	LEVEL OF KNOWLEDGE		
		Good	Average	Poor
1	Joint Family	6	10	1
2	Nuclear Family	7	23	5
3	Extended Family	2	6	0

The data regarding type of family, 28.30% of participants were from joint family, 58.30% of participants were nuclear family and only 13.30% of participants were extended family.

Table 4: Occupation of the father.

SL NO	Occupation of Father	LEVEL OF KNOWLEDGE		
		Good	Average	Poor
1	Employed	13	37	4
2	Not employed	2	2	2

The data regarding Occupation of the father 90% were employed and 10% were not employed.

Table 5: Economic Status.

SL NO	Economic Status	LEVEL OF KNOWLEDGE		
		Good	Average	Poor
1	APL	6	16	0
2	BPL	12	19	6
3	None	1	0	0

The data regarding the economic status, 61.60% of participants were BPL, about 36.60% were APL and the remaining 1.60% were other categories.

Table 5: Association between knowledge score and selected demographic variables.

SI. No	Variables	Level of knowledge			df	Chi square value	Table value	Significance
		Good	Average	Poor				
1.	**Age :**							
	11-13	1	15	3				
	14-16	4	14	1	4	6.58	9.48	NS
	17-19	8	12	2				
2.	**Education :**							
	Upper Primary							
	High School	1	8	1				
	Higher	6	12	3	6	3.46	2.776	NS
	Secondary	5	9	2				
	Under Graduate							
		3	10	0				
	Type of Family							
	Joint Family							

3.	**Nuclear Family** **Extended** **Family**	6 7 2	10 23 6	1 5 0	4	3.1	9.48	NS
4.	**Occupation of the Father** **Employed**	13 2	37 2	4 2	2	4.92	5.99	NS
5.	**Not employed** **Economic status** **APL** **BPL** **None**	6 12 1	16 19 0	0 6 0	4	7.1	9.48	NS

NS- non-significant
S* - Significant
From the above statistical data, it was clear that there is no significant association between knowledge of adolescents regarding Primary amoebic meningoencephalitis with demographic variable such as age, education, type of family, occupation of father, economic status.

DISCUSSION

Discussion of findings with other studies based on objectives: The present study was conducted to assess the knowledge regarding primary amoebic meningoencephalitis among adolescent boys of selected areas in Pallithottam with a view to develop an information booklet. In order to achieve the objectives of the study non experimental design was adopted. The Sample was selected by the non-probability convenient sampling. The sample consisted of 60 adolescent boys who were above 11- 16 of age. The findings of the study have been discussed in relation to objectives and other similar studies.

Assess the knowledge regarding Primary amoebic meningoencephalitis among adolescent boys.
The present study revealed that 10% of the participants had very poor knowledge, 65% had average knowledge and 25% had good knowledge.

The findings of the study were supported by a similar study conducted to assess the knowledge, attitudes and practice of young doctors in relation to Naegleria fowleri and the associated infection. Convenient sampling technique was used to select 145 young doctors at Lahore. The study findings showed that young doctors lacked sufficient awareness regarding Naegleria fowleri.[4]

Association between knowledge score regarding primary meningoencephalitis and selected demographic variables
There was no significant association between knowledge score and demographic variables such as age, education, type of family, occupation of father and economic status.

The findings are supported by a systematic review was carried out to investigate the Epidemiology and Clinical Characteristics of Primary amoebic Meningoencephalitis (PAM) caused by Naegleria fowleri. In this review, a total of 381 cases of PAM were identified. Among these, seven survivors were confirmed cases. The most frequently reported activity associated with PAM was swimming or diving, and the primary source of contaminated water was lakes, ponds, or reservoirs. The majority of patients were male (75%), with a median age of 14 years. The confirmed and probable cases showed similar outcomes in terms of survival, the progression of the disease, and cerebrospinal fluid (CSF) findings.[9]

CONCLUSION

The present study was conducted to assess the knowledge regarding Primary amoebic meningoencephalitis among adolescent boys in selected community area at Pallithottam Kollam.
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Nursing implication of the study included in the area of nursing practice, nursing education, nursing administration and nursing research are given below.

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