



A study to assess the knowledge regarding typhoid fever and its prevention among high school students at selected schools in Mangaluru

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Abstract: Typhoid fever is a global high public health problem. Typhoid fever is a systemic infection caused by *Salmonella enterica serotype Typhi* (S. typhi). Its incidence is highest in children and young adults between 5 and 19 years old. Typhoid fever is a disorder of school age children and of adults. Typhoid is a common significant cause of morbidity between 1 and 5 years of age¹.

Objectives: 1.To assess the knowledge regarding typhoid fever and its prevention among high school students 2.To find the association between knowledge regarding typhoid fever and its prevention among high school students and selected demographic variables.

Method: Anon-experimental descriptive design with purposive sampling technique was used to collect the data from high school students to assess knowledge of high school children regarding typhoid fever & its prevention. Data was collected using a structured knowledge questionnaire. Results were described by using descriptive and inferential statistics. The theoretical framework for the study was modified and adopted from general system theory.

Results: Out of 100 respondents, majority 49% had showed inadequate knowledge level regarding the typhoid fever and its prevention, 35% of the samples had adequate knowledge and only 16% of them had moderate knowledge. Overall Mean knowledge score obtained by the respondents was 15.38 and standard deviation was 4.271.

Conclusion: In the present study, the most of the subject (16%) had moderate knowledge, 49% had inadequate knowledge and 35% had adequate knowledge. The mean percentage of knowledge on the prevention of typhoid fever 51.266. There is a significant association between the knowledge and demographic variables i.e. family income ($\chi^2 = 94.91, p = .02$). There is no significant association with other demographic variables. Hence the null hypothesis is rejected and research hypothesis accepted for some variables such as family income.

I. INTRODUCTION

The name enteric was given by Louis (1829) to distinguish it from typhus fever. Budd (1856) pointed out that the disease was transmitted through the excreta of patients². The incidence mode of transmission and consequences of typhoid fever differs significantly in developed and developing countries. Typhoid is a communicable disease and bacteria of typhoid survive in unhygienic conditions. These bacteria spread by typhoid patients and carriers in large quantities through stool and vomit. The bacteria then travel to food, drinks and water through houseflies and other insects. Such foods are contaminated. When healthy person takes these contaminated food or drinks, bacteria enter in to the body of person and causes typhoid fever. In case of Typhoid which is a major health problem in the community or worldwide it causes 16 million illness and more than 600,000 deaths each year especially common in parts of Asia, Africa and South America, Where pure water is not readily available and sewage treatment is limited. The complications of typhoid fever mainly, encephalopathy, intestinal hemorrhage, toxic myocarditis, bronchitis sanitation and hygiene are the critical measures that can be taken to prevent typhoid. Careful food preparation and washing of hands are therefore crucial to preventing typhoid Protection and purification of drinking water supply, improvement of basic sanitation and promotion of food hygiene are essential measures to interrupt transmission of typhoid fever.

II. METHODS

A non-experimental descriptive design was used *purposive sampling* technique was adopted for 100 high school students in Mangaluru. Data was collected using a structured knowledge questionnaire, which consists of the 30 items. Results were described by using descriptive and inferential statistics.

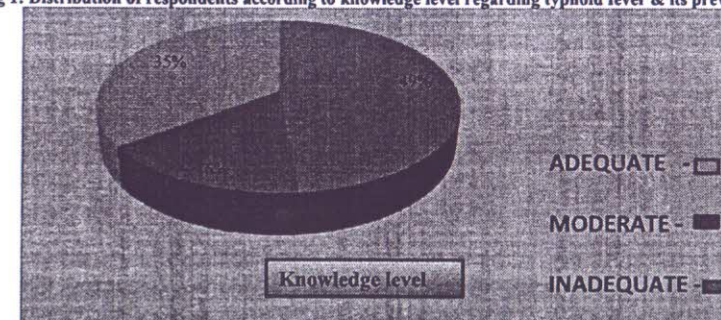
III. RESULTS & DISCUSSION

Table 1: Frequency and percentage distribution of sample characteristics

		n=100	
SL NO	Demographic variables	Frequency(f)	Percentage (%)
1	Age in years		
	12 - 13	34	34.0
	13 - 14	60	60.0
	15 - 16	6	6.0
2	Gender		
	Male	35	35.0
3	Female	65	65.0
	Class/Standard in which they study		
4	9 th standard	41	41.0
	10 th standard	57	59.0
5	Religion		
	Hindu	26	26.0
6	Christian	20	20.0
	Others	50	54.0
7	Number of siblings		
	1	28	28.0
	2	42	42.0
8	3	18	18.0
	4 and above	12	12.0
9	Source of information regarding typhoid fever & its prevention		
	Parents	39	39.0
	Family members	4	4.0
10	Siblings	4	4.0
	Mass Media	21	21.0
	Teachers	22	22.0
11	Health care professionals	3	3.0
	Any other (specify).....	7	7.0

The data presented in Table 2 shows the distribution of high school student to their age, class/standard, number of siblings, religion, type of family, family income per month, source of information

Fig 1: Distribution of respondents according to knowledge level regarding typhoid fever & its prevention



Data presented in fig 14; shows that majority of respondents 49% had showed inadequate knowledge level regarding the typhoid fever and its prevention, 35% of the samples had adequate knowledge and only 16% of them had moderate knowledge. The data is also presented in the form of pie diagram.

Table 2: Association between Demographic variables and Knowledge level regarding typhoid fever and its prevention in high school students

n=100

Sl No.	Demographic variables	Median (<14)	Median (≥14)	df	Chi-square Value (x ²)	P value
1	Age in years					
	12 – 13	17	17			
	13 – 14	31	29	2	35.32	.87
3	Class/Standard in which they study					
	8 th standard	21	20			
	9 th standard	28	31	1	20.28	.62
4	Religion					
	Hindu	15	11			
	Christian	8	12	2	33.75	.91
	Muslim	26	28			
5	Type of family					
	Nuclear	35	41			
	Joint	14	7	2	45.75	.48
	Extended	2	1			
6	Family income (in rupees)					
	< 2,500	8	24			
	2,500-5,000	13	34			
	5001-7500	10	9	3	94.91*	.02
	>7,501	18	4			
7	Number of siblings					
	1	17	11			
	2	19	23			
	3	6	12	3	85.77	.8
	4 and above	8	4			
8	Source of information regarding typhoid fever & its prevention					
	Parents	21	18			
	Family members	3	1	6	1013.93	.93
	Siblings	1	3			
	Mass Media	8	13			
	Teachers	10	12			
	Health care professionals	1	2			
	Any other (specify).....	6	1			

The data presented in Table 5 shows that there is a significant association between knowledge score and demographic variables, i.e., family income ($\chi^2 = 94.91$, $p = .02$). The knowledge score is independent of all other variables, like age, gender, religion, type of family, Class/Standard in which they study, number of siblings, source of information. Hence the null hypothesis is rejected and research hypothesis accepted for some variables such as family income.

IV. CONCLUSION

Conclusion is the chronological end of any discussion or study. It is the stopping point of a detailed argument. The following conclusions were drawn the basis of the findings of the study. In the present study, the most of the subject (16%) had moderate knowledge, 49% had inadequate knowledge and 35% had adequate knowledge. The mean percentage of knowledge on the prevention of typhoid fever 51.266. There is a significant association between the knowledge and demographic variables i.e., i.e., family income ($\chi^2 = 94.91$, $p = .02$). There is no significant association with other demographic variables. Hence the null hypothesis is rejected and research hypothesis accepted for some variables such as family income.

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