

# THE EVOLUTION OF KNOWLEDGE ON TYPHOID FEVER AND IT'S ASSOCIATION WITH THE DEMOGRAPHIC FACTORS AMONG THE MOTHERS.

Subbulakshmi.S<sup>1</sup> & A.Sharli Praba<sup>2</sup> & K.Maheshwari<sup>2</sup> & G.Divakar Rao<sup>2</sup>

<sup>1</sup>Associate Professor (Chettinad College of Nursing, Chettinad Academy of Research & Education, Rajiv Gandhi Salai, Kelambakkam, Kancheepuram District, Tamilnadu, India.)

<sup>2</sup>B.Sc.Nursing students (Chettinad College of Nursing, Chettinad Academy of Research & Education, Rajiv Gandhi Salai, Kelambakkam, Kancheepuram District, Tamilnadu, India.)

Received: August 25, 2018

Accepted: October 18, 2018

## ABSTRACT

*A study to assess the level of knowledge on prevention of typhoid fever among mothers of children attending Paediatric Department in a Selected Tertiary Care Hospital at Kelambakkam, Kancheepuram District, Tamilnadu. The objectives of the study were to assess the existing level of knowledge on prevention of typhoid fever among mothers of children and to find out the association between the level of knowledge on prevention of typhoid fever with their selected demographic variables. The sampling technique was non probability- purposive sample technique and the sample size was 100. The demographic variable proforma and the structured interview schedule were formulated to assess the level of knowledge on typhoid fever among the mothers of children. The total number of questions in the tool was 20. The data was collected and it was analyzed by descriptive and inferential statistics. The study finding revealed that 57% of the mothers were having inadequate knowledge, 31% of the mothers were having moderate level of knowledge and 12% of the mothers were having adequate knowledge. The mean value of knowledge score on typhoid fever was 9.8 and the standard deviation was 3.7. The study findings also revealed that there was a significant association between the demographic variables such as areas of residence ( $\chi^2=6.694$ ) and occupational status ( $\chi^2=17.182$ ) with their level of knowledge. There was no significant association between other demographic variables such as age of the mother, educational status, type of family, socio economic background, source of information with their level of knowledge on typhoid fever.*

**Keywords:** level of knowledge, typhoid fever, mothers.

## INTRODUCTION

“Typhoid fever” is a global major public health problem, It is an acute systemic bacterial infectious disease seen only in humans. Typhoid fever caused by “salmonella typhi” Almost 80% of the cases and deaths are in Asia and the rest occur mostly in Africa and Latin America, typhoid fever is endemic in many developing Countries, including India<sup>(3)</sup>. 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 fever. Care full food preparation and washing of hands are therefore crucial to preventing typhoid fever <sup>(1)</sup>.WHO conducted a study to assess the most crucial age which may prone to get typhoid fever, it founded that under five children are more prone for this disease because of inadequate knowledge of the child and their mother and also increased color perception which may leads to eat street foods and unhygienic foods which leads to under five children more prone to get enteric fever<sup>(2)</sup>.

## STATEMENT OF THE PROBLEM

A study to assess the level of knowledge on prevention of typhoid fever among the mothers of children at pediatric department in selected tertiary care hospital, Kelambakkam, Kancheepuram District, Tamil nadu, India.

## OBJECTIVES OF THE STUDY

1. To assess the existing level of knowledge on prevention of typhoid fever among mothers of children.
2. To find out the association between the level of knowledge on prevention of typhoid fever and the selected demographic characteristics of mothers of children.

## OPERATIONAL DEFINITIONS

### Assess:

It refers to the level of knowledge on prevention of typhoid fever among the mothers of children that was evaluated through the structured interview schedule in selected aspects.

**Knowledge:**

Knowledge refers to the level of understanding which measured by the correct responses from the mothers of children to the Structural interview schedule regarding the selected aspects of typhoid fever.

**Prevention of typhoid fever:**

In this study, it refers to the precaution can be taken by the mothers of children to avoid the typhoid fever among the children. Typhoid fever is the result of systemic bacterial infection mainly by salmonella typhi and paratyphi found only in human .The disease is clinically characterized by a typical continuous fever for 3 to 4 weeks, abdominal pain, vomiting, relative bradycardia with involvement of lymphoid tissues and considerable constitutional symptoms .

**Mothers of children:**

Mothers who are having children either male or female under the age of 0-18 years available at Pediatric department, at selected tertiary care hospital, Kelambakkam , Kanchipuram District , Tamil nadu , India.

**MATERIALS AND METHODS**

**Research Approach:** Quantitative–evaluative research approach was used

**Research Design:**

Non experimental, descriptive research design was used.

**Research Setting:**

The study was conducted at pediatric out patient department, Chettinad Hospital and Research Institute, Kelambakkam , Kanchipuram District , Tamil nadu , India.

**Sample and sample size**

Mothers who were having children either male or female between the age of 0-18 years available at pediatric department, Chettinad Hospital and Research Institute, Kelambakkam , Kanchipuram District, Tamil nadu , India.

Non probability – Purposive sampling technique was used to select the mothers of children and the sample size was 100 based on population proportion and the open-epi sample size determination.

**Sampling Criteria:****Inclusion criteria:**

The study includes the mothers who were

- having children 0-18 years of age.
- able to understand Tamil or English.
- available at the time of data collection.
- willing to participate in the study.

**Exclusion criteria:**

The study excludes the mothers who were

- having critically ill children.

**Data Collection Procedure**

Structured interview schedule was used to assess the data of demographic variables and the level of knowledge on prevention of typhoid fever. Data was collected for a period of one week. Prior permission and consent were obtained from the mothers before conducting the study.

**TOOL DESCRIPTION**

It consist of two parts like part-I and part-II

**PART-I**

Selected demographic variables of mothers such as age , educational status, occupational status, area of residence, type of family,family income and the sources of information regarding typhoid fever.

**PART-II**

The level of knowledge was evaluated by the structured interview schedule consists of 20 questions regarding prevention of typhoid fever. Each questions consists of four options out of which one was the correct option, the mother instructed to select the correct option and to mark in box given for each questions.

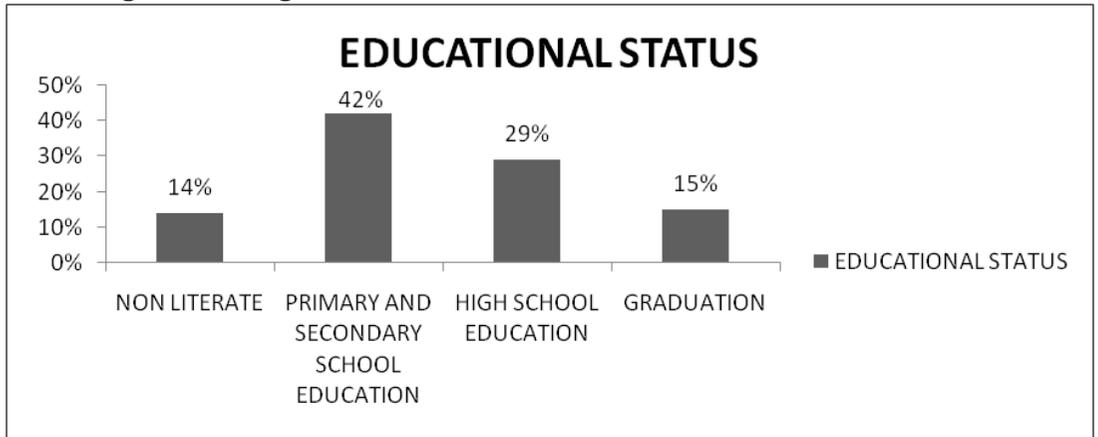
**Scoring Interpretation**

SCORE	PERCENTAGE (%)	INFERENCE
0-9	<50%	Inadequate knowledge
10-15	50-75%	Moderately adequate Knowledge
16-20	76-100%	Adequate knowledge

**ANALYSIS AND INTERPRETATION**

The study finding showed that most of the mothers were in the age group of 20-30 years. Majority of them (76%) were belongs to joint family type. Majority (63%) of the mothers were from urban area. 62%of the mothers were earning monthly income below Rs -10,000.

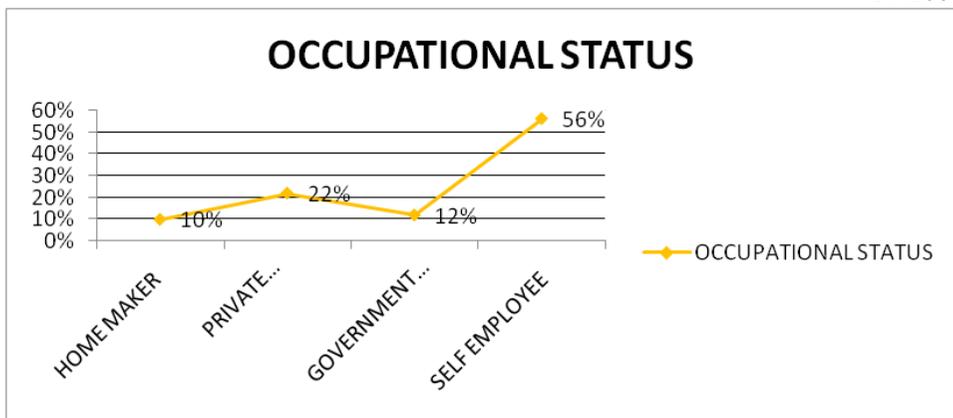
**Fig.1. Percentage distribution of educational status of mothers of children**



N=100

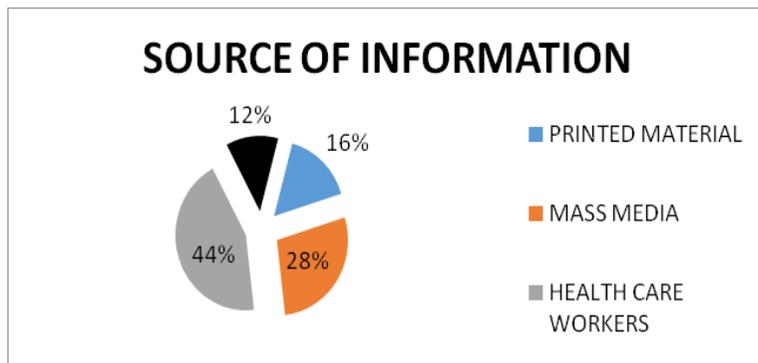
**Fig.2. Percentage distribution of occupational status of mothers of children**

N=100



**Fig.3. Percentage distribution of source of information on prevention of typhoid fever among mothers of children.**

N=100



The study finding also reveled that 57% of the mothers were having inadequate knowledge, 31% of the mothers were having moderate level of knowledge and 12% of the mothers were having adequate knowledge. The mean value of knowledge score on typhoid fever was 9.8 and the standard deviation was 3.7.

The study findings also revealed that there was a significant association between the demographic variables such as areas of residence ( $\chi^2=6.694$ ) and occupational status ( $\chi^2=17.182$ ) with their level of knowledge. There was no significant association between other demographic variables such as age of the mother, educational status, type of family, family income, source of information with their level of knowledge on prevention of typhoid fever.

## DISCUSSION

### Frequency and percentage distribution of demographic variables of mothers of children

Demographic variables shows that majority (76%) of the mothers were in the age group of 20-30 years. According to the Indian marriage act the ideal age of female for marriage is 18 years. So the majority of the mothers were in the age group of 20-30 years. Majority (63%) of the mothers from urban area, now a days women are working, to seek job they will be shifting from rural area to urban area. 42% of the mothers were educated up to the level of primary/secondary school education. Cultural limitations and the financial crisis restrict the females from higher educations so they were limited up to the level of primary and secondary school education. RENUGA S et al (2017) were conducted a study related to assess the knowledge on respiratory infections among mothers of children with the sample number of 60, the study findings showed that most of the mother were educated up to the level of primary and secondary school education.

Most (56%) of the mothers were self employee. Because most of the women whether they are educated or uneducated they actively involving in reducing the economic burden of the family HILDA GRACE et al (2017) were conducted a study related to knowledge about breast cancer with the sample number of 100. In that they showed majority of the women (46%) were self employee.

Majority of the mother (76%) were belongs to joint family. Joint family system is a traditional system of India. Even though there is a urbanization most of the Indians belong to joint family system. Most of the mothers were having inadequate knowledge on prevention of typhoid fever, the reason might be most of the mother were educated up to the level of school education, awareness programme on typhoid fever by the health care workers are not adequate.

Most (62%) of the mothers were having the family income of less than Rs.10,000. Majority (44%) of the mothers have received information from the health care workers when they are hospitalized for typhoid fever.

### Frequency and percentage distribution of level of knowledge of mothers of children on prevention of typhoid fever .

While assessing the existing level of knowledge it was noted that 57% of the mothers had inadequate knowledge, 31% of mothers had moderately adequate knowledge and only 12% of mothers having adequate knowledge on prevention of typhoid fever. A study conducted by Sivakumari (2009) analytical study to assess the effectiveness of planned teaching programme on management and prevention of typhoid fever among the mothers of school age children. In that the result shows that in pre test the majority of mothers had inadequate knowledge. In post test the majority of mothers had adequate knowledge it stated that planned structured teaching programme is very effective for incorporating the knowledge on typhoid fever.

### Mean and standard deviation on level of knowledge on prevention of typhoid fever among mothers of children.

In the present study the mean value of knowledge on prevention of typhoid fever was 9.8 and the standard deviation was 3.7. The mean value shows below average. This might be due to lack of previous experience, lack of education given by the health care workers, mass media and mothers are not oriented to the health issue Sivakumari (2009) were conducted a analytical study of effectiveness of planned teaching program on typhoid fever among mothers of school age children in that study her pretest mean value is 7.4. This study also reveals that the mothers are having inadequate knowledge. After that she were conducted a planned teaching program and the posttest. In that the post test value is 16.7. This reveals that low level of communication and the low education may be the cause for low level of knowledge.

### Association between selected demographic variables and the level of knowledge of mothers of children on prevention of typhoid fever:

The study finding revealed that there was a significant association between the demographic variables such as areas of residence ( $\chi^2=6.694$ ) and the occupational status ( $\chi^2=17.182$ ) with there level of knowledge. There was no significant association between other demographic variables such as age of the mother ( $\chi^2=5.9858$ ) educational status ( $\chi^2=10.373$ ) type of family ( $\chi^2=0.049$ ) socio economic background ( $\chi^2=3.914$ ), source of information ( $\chi^2=7.3191$ ) with their level of knowledge on prevention of typhoid fever. In urban area most of the mothers were educated and the mass media and health care

---

workers are effectively works better than the rural area. The working women are having good exposure to many people and more chances for getting information through their coworkers that might be the reason for association of level of knowledge with their area of residence and also their occupational status.

### CONCLUSION

The study results showed that most of the mothers were not having adequate knowledge on typhoid fever. The knowledge on prevention of typhoid fever should be strengthened by the health care workers and the mass media and even the school educational syllabus should focus on typhoid fever to reduce the burden of typhoid related morbidity and the mortality.

**Conflict of interest-**Nil

**Source of Funding-** self funding and no external funding.

**Ethical Clearance:** Obtained clearance from institutional human ethical committee on 11.04.2018.

### REFERENCES

1. Achar's. A text book of pediatrics, 4th ed. universities press (India) private limited; 2006.
2. Ashraf M Dewan, Robert Corner. Typhoid fever and its association with the Environmental factor in Dhaka metropolitan area of Bangladesh. <http://doi.org/10.1371/journal.pntd.0001998> (accessed 24 January 2013).
3. World health organization . The diagnosis, treatment and prevention of typhoid fever. <http://www.who.int/rpc/TFguidewho> (accessed May 2003).
4. Zulfiqar A Bhutta, Husein Lalji dewraj. Current concepts in diagnosis and treatment of typhoid fever. *The BMJ* 2006; 333(7558): 78.
5. Panchali Pal. Textbook of pediatric nursing , 1st ed. Hyderabad: Paras medical publisher; 2016.
6. Dorothy R. Marlow, Barbara A. Redding. Marlow's Textbook of pediatric nursing , 1st ed. Mangalore, India.: Elsevier; 2013.