



STUDY OF KNOWLEDGE ATTITUDES AND PRACTICES ON TUBERCULOSIS AMONG TREATMENT PARTNERS OF PEDIATRIC PATIENTS IN TUMKUR CITY.

Community Medicine

Savitha Rani B.B Associate Professor, Department of Community Medicine

Vinay K.S Associate Professor, Department of General Medicine

Greshma Nair Post-graduate student, Professor & HOD Department of Community Medicine

Krishna Iyengar

ABSTRACT

Background: Tuberculosis has remained a major health problem worldwide, most noted in developing countries such as India. TB has been reported to be one of the most important causes of death among children, and treatment outcomes among children with TB have also been found to be poor. **Methodology: Results:** 74(77.1%) were knowing about Tuberculosis, 72(75%) know Tb is highly infectious, 84(87.5%) believe TB is curable, most of them 40(41.7%) heard about TB from hospital, 67(69.8%) did not sought Medical consult when symptoms started, 61(63.5%) told economy has the reason for not consulting doctor, 35(36.5%) consulted doctors for symptoms. It showed statistically significant result when we studied association between knowledge ,Tb is infectious or not ,was medical consult sought with Education of Care givers. **Conclusion:** The relatively-poor outcome based on the knowledge, attitudes and practices among the respondents showed that there is a need to implement activities that would educate the public about the disease.

KEYWORDS

Paediatric TB, care givers, Knowledge, attitude, adherence.

INTRODUCTION:

Tuberculosis has remained a major health problem worldwide, most noted in developing countries such as India. Globally, TB has been reported to be one of the most important causes of death among children¹, and treatment outcomes among children with TB have also been found to be poor².

In terms of the number of cases, Southeast Asia carries the biggest burden of disease. In economically-underprivileged countries, other contributing factors for the rise in the number of TB cases include: parasitic diseases, malnutrition, ignorance, superstition and overcrowding³.

In most of the TB-control efforts worldwide, clinical aspects of the disease received more Attention than the human aspect. Previous studies had determined that the most important factors in the emergence of acquired resistance were people's perception of TB and the patient's no adherence to anti-TB treatment.

Research had also shown that improved communication between health care providers and the treatment partners, in the case of paediatric patients, contributed to better therapeutic outcomes.

The present research aims to Assess the knowledge, attitudes and practices among treatment partners of Paediatrics patients diagnosed with Tuberculosis.

METHODOLOGY:

This was a Cross-Sectional study conducted among caregivers of all Paediatric TB patients of Tumkur district. After taking Informed consent study was done using semi-structured questionnaire which contains Socio-demographic characteristics and the questions to evaluate awareness knowledge, attitudes and practices on tuberculosis among treatment partners of paediatric patients. Pediatric TB cases are traced by information obtained from DTC. Data will be collected using semi structured pretested questioner by interview technique.

- Inclusion criteria: All the Pediatric TB under Tumkur District
- Exclusion criteria: People who are not willing to participate in study

All Pediatric TB cases Obtained from DTC data base were included in the study using Purposive sampling sampling technique

Statistical Analysis: Data was entered and analyzed in SPSS version 22.0

Descriptive statistics like mean and standard deviation will be calculated and analysed with Sociodemographic variables, Inferential statistics, Test of significance like chi-square test was used.

Institutional Ethical committee clearance and Informed consent from study subjects were taken

RESULTS :

Socio-demographic Characteristics:

Most of them 35(36.5%) were in the age group 1-5 yrs, 6(6.3%) were in the age group 15 yrs & above, 55(57.3%) were females and 41(42.7%) were male.

69(71.9%) care givers were Male, 27(28.1%) were females.

31(32.3%) were from Urban area, 35(67.7%) were from rural area. 73(76.1%) were Literates

81(84.4%) of children's had received complete Immunization, 66(68.8%) had exposed to cases in neighbours, 60 (62.5%) had received Prophylaxis.

Care givers Knowledge about Disease:

74(77.1%) were knowing about Tuberculosis, 72(75%) know Tb is highly infectious, 84(87.5%) believe TB is curable, most of them 40(41.7%) heard about TB from hospital, 35(36.5%) from friends, 17(17.7%) from media.

Most of them 55(57.25) told cough more than 2 weeks is the symptom for Tb, 27(28.1%) were not knowing about symptoms.

Most of them 69(71.9%) answered TB spreads through Respiratory route. 35(36.5%) answered Tb can be diagnosed by sputum examination, 33(34.4%) by chest X-ray

61(63.5%) answered complication of disease may occur if we don't consult doctor for symptoms, 27(28.1%) believe disease transmit to others if not consulted doctors

Attitude and Practice:

67(69.8%) did not sought Medical consult when symptoms started, 61(63.5%) told economy has the reason for not consulting doctor, 7(6.3%) told symptoms got relived. 36(37.5%) told they hide from People regarding their child disease status

35(36.5%) consulted doctors for symptoms, 30(31.3%) consulted health workers, 10(10.4%) consulted traditional healers. Most of them 69(71.9%) consulted doctor for fever.

Association of Knowledge with Literacy of caregivers:

It showed statistically significant result when we studied association between knowledge ,Tb is infectious or not ,was medical consult sought with Education of Care givers.

DISCUSSION:

India has the highest number of cases in the world and it has to be addressed at any cost. Knowledge and awareness regarding various aspect of TB is very important to address the problem.

Out of 96 Pediatric Tb cases , 69(71.9%) care givers were Male ,27(28.1%)were females, 74(77.1%) were knowing about Tuberculosis, 72(75%) know Tb is highly infectious,84(87.5%) believe TB is curable, most of them 40(41.7%) heard about TB from hospital,35(36.5%) from friends,17(17.7%)from media.

In Rami Kiran et al out of 151 patients, 104 (68.8%) were male. were from rural area. 63 (41.7%) were illiterate. More than 50% patients of TB were aware of person to person transmission of TB. 62 (41.05%) patients of TB knew mode of spread of TB. 95 (62.91%) patients correctly answered that cough was commonest symptoms. 99 (65.56%) patients knew about DOTS clinic. Only 90 (59.6%) patients believed that TB was curable⁴.

This was consistent with the result of the study of Bacay-Domingo and Ong-Lim which showed good knowledge (57%) about the disease, its presenting symptoms, its infectiousness and curability, and modes of transmission among the treatment partners of those TB pediatric patients at the OPD of Tarlac Provincial Hospital⁵.

The study conducted in rural Delhi by Fochsen et al showed >95% participants being aware of cause of TB⁶. In Kar-et al only 20% replied cough or sputum as a mode of spread of TB and rest 80% didn't have knowledge or wrong knowledge about mode of spread of Tb⁷.

The mass survey carried out by health government of India reported poor level of awareness among disadvantaged section of society⁸.

In our study out of 96 study subjects Most of them 55(57.25) told cough more than 2 weeks is the symptom for Tb,27(28.1%) were not knowing about symptoms. Most of them 69(71.9%) answered TB spreads through Respiratory route. 35(36.5%) answered Tb can be diagnosed by sputum examination.

The study conducted in rural Delhi by Fochsen et al showed >95% participants being aware of cause of Tb⁶. In Kar et al only 20% replied cough or sputum as a mode of spread of TB and rest 80% didn't have knowledge or wrong knowledge about mode of spread of TB⁷.

In our study 67(69.8%) did not sought Medical consult when symptoms started, 61(63.5%) told economy has the reason for not consulting doctor, 36(37.5%) told they hide from People regarding their child disease status. study of Bacay-Domingo and Ong-Lim found that 8% of the respondents who were treatment partner of paediatric TB patient would hide the disease from other people⁵.

In a study done in Cambodia, the delay in seeking TB treatment was residence located far from health facilities, lack of awareness or knowledge on TB, older age group, lower socioeconomic status, and cost of transportation and service fees⁹.

Although most of the respondents were aware that TB is a highly infectious but curable disease still would not disclose, this may add to the illness burden in many ways such as it may delay appropriate help-seeking, fair case detection or terminate treatment for treatable disease. The personal stigma and limited financial resources contributed to Poor case detection and non-adherence to treatment, which led to the emergence of acquired resistance. The treatment partners' knowledge, attitudes and practices played significant roles in the adherence to anti-TB medications, It showed statistically significant result when we studied association between knowledge, Tb is infectious or not ,was medical consult sought with Education of Care givers.

The KAP study among sandstone quarry workers in Rajasthan by Yadav SP et al showed that literate people was having significantly higher level of awareness and knowledge regarding TB¹⁰.

The relatively-poor outcome based on the knowledge, attitudes and practices among the respondents showed that there is a need to implement activities that would educate the public about the disease.

CONCLUSION:

The relatively-poor outcome based on the knowledge, attitudes and

practices among the respondents showed that there is a need to implement activities that would educate the public about the disease.

Childhood TB makes up a small proportion of all reported TB cases. While treatment outcomes are reasonable, particularly for smear-positive cases, better follow-up and monitoring is needed during treatment to reduce the high burden of loss to follow-up and unknown outcomes.

Recommendations:

- 1) There is need to implement activities that would educate the public about the disease.
- 2) Strong collaboration between the NTP and the Private practitioners is required to improve Case notification and treatment outcomes.

RESULTS

Table 1: Distribution of Study Subjects based on Socio-demographic characteristics.

Socio-Demographic Characteristics	Frequency	Percent
Age in Yrs		
1-5	35	36.5
6-10	31	32.3
11-15	24	25.0
15&>	6	6.3
Gender		
Male	41	42.7
Female	55	57.3
Care takers gender		
Male	69	71.9
Female	27	28.1
Residence		
Urban	31	32.3
Rural	65	67.7
Education		
Literate	73	76.1%
Non-literate	23	23.9%
Total	96	100.0

Table 2 : Distribution of Study Subjects based on Risk factors.

Risk Factors	Frequency	Percent
Immunization Status		
Completed	81	84.4
In complete	15	15.6
Exposure in neighborhood/Family		
Yes	66	68.8
No	17	17.7
Don't know	13	13.5
Prophylaxis given		
Yes	60	62.5
No	6	6.3

Table 3 : Distribution of Study Subjects based on Knowledge about Disease.

Knowledge about the disease		
Know about Tb		
Yes	74	77.1
No	22	22.9
Tuberculosis is highly infectious		
Yes	72	75.0
No	24	25.0
Tuberculosis is curable or not		
Yes	84	87.5
No	12	12.5
Source of Information		
Friends	35	36.5
Hospital	40	41.7
Media	17	17.7
Booklets/Pamphlets	4	4.2
Symptoms		
Cough >2weeks	55	57.2
Fever>2weeks	5	5.2
Loss of weight	3	3.1
Decreased appetite	6	6.3

Don't know	27	28.1
Route of Transmission		
Respiratory	69	71.9
Blood Borne	10	10.4
Physical Contact	10	10.4
Use of Patient things	5	5.2
During Child birth	2	2.1
Diagnostic Modalities		
Chest-xay	33	34.4
Sputum Examination	35	36.5
Blood Examination	10	10.4
PPD	18	18.8
Consequences for not seeking consult/Medication:		
Complications from disease	61	63.5
Transmit disease	27	28.1
Death	8	8.3
Total	96	100

Table 4: Distribution of Study Subjects based on Attitude and Practice.

Attitude and Practice	Frequency	Percentage
Was Medical Consult sought		
No	67	69.8
Yes	22	22.9
Don't know	7	7.3
Reason for not seeking Medical Consult		
Economy	61	63.5
Became better	07	6.3
Would you hide from other people:		
Yes	36	37.5
No	46	47.9
Didn't revealed	14	14.6
Where was medical consult sought:		
Family doctor	35	36.5
Pulmonologist	21	21.9
Health workers	30	31.3
Traditional healers	10	10.4
Reason for seeking Medical consult		
Fever	69	71.9
Cough>2 weeks	7	7.3
Poor weight gain	14	14.6
Decreased appetite	6	6.3
Total	96	100.0

Table 5 : Distribution of study subjects based on Association between Literacy of caregivers and Knowledge about disease

Knowledge	literate	Non-Literate	Percentage (%)	Chi-square value	P-value
Knowledge about disease					
Yes	68	6	77.0	8.89	0.03
No	5	17	22.9		
Tuberculosis is highly infectious					
Yes	63	9	75	20.75	0.00
No	10	14	25		
Was Medical Consult sought					
Yes	56	11	67.4	7.75	0.02
No	12	10	22.9		
Don't know	5	2	7.2		

REFERENCES:

- World Health Organization. Global tuberculosis report 2011. WHO/HTM/TB/2011.16. Geneva, Switzerland: WHO, 2011.
- Delacourt C. Specific features of tuberculosis in childhood. Rev Mal Respir 2011; 28: 529-541.
- Philippine Pediatric Society, editor. Tuberculosis in Infancy and Childhood. 1st ed. Manila (Philippines); 2003. 1-7.
- Rami K, Thakor N, Patel A. Awareness and knowledge about tuberculosis in patient of tuberculosis at GMERS Medical College and Hospital Dharpur, Patan, Gujarat. Int J Med Sci Public Health. 2015;4:906-9.
- Bacay-Domingo MCN, Ong-Lim AL. 2009. A descriptive study of the knowledge, attitudes and practices on tuberculosis among treatment partners of pediatric patients in Tarlac city 6 (1):81-90.
- Fochsen G, Deshpande K, Diwan V, Mishra A, Diwan VK, Thorson A. Health care seeking among individual with cough and TB. A population based study from rural India. Int J Tuberc and Lung disease. 2006;10(9):995-1000.
- Kar M, Logaraj M. Awareness, attitude and treatment seeking behaviour regarding TB in rural area of Tamilnadu, India. Indian J Tuberc 2010;57:226-9.
- WHO REPORT global TB control: surveillance, planning, financing 2008.
- Saly S, Onozaki I, Ishikawa N. Decentralized DOTS shortens delay to TB treatment significantly in Cambodia. Kekkaku. 2006;81(7):467-74.
- Yadav SP, Mathur ML, Dixit AK. Knowledge and attitude toward TB among sand stone

quarry workers in desert part of Rajasthan. India J Tuberc. 2006;53:187-95.