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TO STUDY THE PERCEPTION OF PATIENTS ABOUT DURATION OF TREATMENT AND CURABILITY OF TUBERCULOSIS DISEASE TREATED UNDER RNTCP IN KARAD TUBERCULOSIS UNIT

Anil D. Bhoi¹, Vandana Bhoi²

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ABSTRACT: BACKGROUND: The Revised National Tuberculosis Programme (RNTCP) in INDIA. **OBJECTIVES:** To study the perception of patients about duration of treatment and curability of tuberculosis disease treated under RNTCP in Karad Tuberculosis Unit. **MATERIAL & METHODS:** The present longitudinal study was carried out during January 2008 to June 2009 on patients registered at Karad TU catering 9 PHCs, Sub District Hospital, Krishna Hospital & 6DMCs with 3ICTCs. In total 806 patients were study subjects with prior permission of District Tuberculosis Officer (DTO). Patients were interviewed using semi structured questionnaires at their residence in defined time period i.e. at the start of treatment, after completion of IP. **RESULT & OBSERVATIONS:** Out of 806 patients, 334 (41.4%) gave correct answers out of which 257 (41.5%) were literate while 77 (41.4%) were illiterate, 48 (6%) patients gave incorrect answers of which 38 (6.1%) were literate and 10 (5.4%) were illiterate. Out of 806 patients, it was observed that 376 (46.6%) told disease is curable while out of which 289 (46.6%) were literate, 26 (3.2%) patients told disease is not curable out of which 20 (3.2%) were literate and 6 (3.2%) were illiterate. 404 (50.1%) patients did not know the curability of disease. **CONCLUSION:** More than 50% of males and female patients were unaware about duration of treatment in this study. Males 225 (27.9%) were aware about the curability of tuberculosis than female 151 (18.7%) in this study.

KEYWORDS: RNTCP, TU, DTO, PHC, DMC, ICTC, IP, TB.

INTRODUCTION: Tuberculosis is a major cause of mortality and morbidity worldwide affecting different countries disproportionately^{1,2} increasing number of HIV infected people and the emergence of drug resistance strains of *M. tuberculosis* make TB control more complicated.^{3,4,5}

Millennium development goal 6 implies to halt and begin to reverse the incidence of TB by 2015 and fixed the target (MDG 6 Target 6.C) to reduce prevalence of and death due to TB by 50% compared with a baseline of 1990 by 2015.⁶ The direct observed treatment short course (DOTS) was launched in 1995 as the main strategy in the control of tuberculosis.⁷ It is important that basic knowledge about the disease and the availability of treatment is clear among community to prevent any undue delay in availing the service.

The perceptions of TB prevailing in the community influence the health seeking behaviour of people for their symptoms. While care seeking behaviour of chest symptomatic has been explored in different studies, there is dearth of information on community perceptions of TB.⁸ According to the case document published by Harvard business publishing on urban TB programme in 2011,⁹ combating TB in urban areas is more complexed than in rural. Despite the availability of effective treatment and the healthcare providers giving their best effort, most patients perceived that TB was incurable and no TB patient.¹⁰

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The current study was done to determine knowledge about duration of treatment of TB and curability of tuberculosis disease treated under RNTCP in Karad Tuberculosis Unit.

AIMS AND OBJECTIVE:

1. To study the perception of patients about duration of treatment of tuberculosis treated under RNTCP.
2. To study the perception of patients about curability of tuberculosis disease.

MATERIAL & METHODS:

1. **STUDY COHORT:** All patients registered in Karad Tuberculosis Unit selected from January 2008 to June 2009, 806 patients formed the study cohort. Hence no sampling procedure was used. Under Karad Tuberculosis Unit there are 9PHCs, Sub District Hospital and Krishna Hospital, 6 Designated Microscopy Centres (DMC), 3 Integrated Counselling and Testing Centres (ICTC). Before commencement of study permission of District Tuberculosis Officer (DTO) was taken.
2. **STUDY PERIOD:** January 2008 to June 2009. Data collection from October 2008 to April 2010. Analysis done May 2010 using appropriate techniques.
3. **TYPE OF STUDY:** Longitudinal (Prospective) Study.
4. **STUDY PLAN: Data Collection:** Patients were interviewed using pre-tested semi structured questionnaires at their residence after treatment initiation, after completion of intensive phase (IP) and at the end of continuation phase.

STATISTICAL METHODS: (Data Analysis) Data was summarized in number and in percentage. Appropriate techniques used. Chi-square test was applied to assess statistical significance between variables.

OBSERVATIONS:

		Correct	Incorrect	Unaware	Total	P value
Gender	Male	201(42.3%)	28(5.9%)	246(51.8%)	475(100%)	0.832
	Female	133(40.2%)	20(6.0%)	178(53.8%)	331(100%)	
	Total	334(41.4%)	48(6.0%)	424(52.6%)	806(100%)	
Literacy	Illiterate	77(41.4%)	10(5.4%)	99(53.2%)	186(100%)	0.926
	Literate	257(41.5%)	38(6.1%)	325(52.4%)	620(100%)	
	Total	334(41.4%)	48(6.0%)	424(52.6%)	806(100%)	

Table 1: Gender wise and literacy wise awareness about duration of treatment of TB disease

		Correct	Incorrect	Unaware	Total	P value
Gender	Male	225(27.9%)	15(1.9%)	235(29.2%)	475(100%)	0.0886
	Female	151(18.7%)	11(1.4%)	169(21.0%)	331(100%)	
	Total	376(46.7%)	26(3.2%)	404(50.1%)	806(100%)	

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Literacy	Illiterate	87(46.8%)	6(3.2%)	93(50.0%)	186(100%)	0.0999
	Literate	289(46.6%)	20(3.2%)	311(50.2%)	620(100%)	
	Total	376(46.7%)	26(3.2%)	404(50.1%)	806(100%)	

Table 2: Gender wise and literacy wise awareness about curability of Tuberculosis disease

DISCUSSION: The DOTS strategy relies greatly on passive case finding for TB treatment and its success depends on the patient's health awareness, ability to recognize early sign symptoms, and accessibility to health services for immediate self-reporting.⁹

It is important that basic knowledge about the disease and the availability of treatment is clear among community to prevent any undue delay in availing the service.

The perceptions of TB prevailing in the community influence the health seeking behaviour of people for their symptoms. While care seeking behaviour of chest symptomatic has been explored in different studies, there is dearth of information on community perceptions of TB⁸. Poor knowledge about TB and traditional misbeliefs are associated with delays in case detection.^{11,12}

Awareness about duration of treatment -Out of 806 patients, 334 (41.4%) gave correct answers out of which 257 (41.5%) were literate while 77 (41.4%) were illiterate, 48(6%) patients gave incorrect answers of which 38 (6.1%) were literate and 10 (5.4%) were illiterate. Literacy wise and gender wise awareness about duration of treatment of tuberculosis has no significant association between them in this study.

Awareness about curability of tuberculosis-Out of 806 patients, it was observed that 376 (46.6%) told disease is curable while out of which 289 (46.6%) were literate, 26 (3.2%) patients told disease is not curable out of which 20 (3.2%) were literate and 6 (3.2%) were illiterate. 404 (50.1%) patients were don't know the curability of disease Literacy wise and gender wise awareness about curability of tuberculosis has no significant association between them in this study.

Poor knowledge about the disease in illiterate is disturbing. It is clear that the literacy increases the curiosity and which is major requirement of health education. To make people aware about TB is the fundamental aspect of IEC activity and ultimately it brings out good outcome of disease, its duration of treatment and curability.

N.P. Hoa et al¹³ have been found more or less similar findings in their study. Patient's compliance with treatment is affected by issues of belief and perceived susceptibility to disease and its severity. These factors can be modified by empowering patient doctor relationship through health education. This may provide a chance of more open and useful discussion of patient's problem.

Once treatment begins, after rapid improvement of symptoms we cannot determine at what moment adherence begins to fall. Hence it is necessary to educate patient at initiation of treatment to have regular and adequate follow up. N. P. Hoa et al¹³ have been found more or less similar findings in their study.

S. J. Boyle et al¹⁴ found that out of 86 patients interviewed 78 (90.7%) told the TB curable with proper treatment, according to 8 (9.3%) TB is not curable, 49 (57%) told TB can be cured with four weeks treatment, while 37(43%) told TB cannot be cured with four weeks treatment, 19 (22%) told treatment can be stopped once free from symptoms while 57 (66.3%) told treatment cannot be stopped.

Saria Tasnim et al¹⁵ found that out of 872 patients 98.6% males,97.2% females knew that TB could be completely curable and 2.1%males and1%females don't know about curability of TB.

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They also found that out of 872, 90% of them mentioned correct duration treatment, 6% were unaware, 3% didn't know and 1% told that 2 months treatment required.

Sudha Ganpathy et al⁸ (2007), highlights in their study that the need for gender specific intervention strategies to enhance better access of TB services.

Mass media could play a vital role in success for passive case finding and treatment.⁶ Impact of governments' initiatives of mass awareness utilizing the media. This may also be the reason that 98% could mention that TB can be cured completely through taking specific drugs from DOT centres.

In India doctors and health care workers were stated to be the source of the information regarding tuberculosis by 50.2% followed by mass media (33.8%), and (34.7%) mentioned interaction with others in the community.¹⁶ The current study was done to determine knowledge about duration of treatment of TB and curability of tuberculosis disease treated under RNTCP in Karad Tuberculosis Unit.

CONCLUSION: More than 50% of males and female patients were unaware about duration of treatment in this study. Males 225 (27.9%) were aware about the curability of tuberculosis than female 151 (18.7%) in this study. Knowledge about cause and treatment of tuberculosis among TB patients was not good, however, misconceptions also exist. Mass media can be better utilized to remove misconceptions. Psychosocial reactions towards TB as revealed should be addressed through counselling and communication during treatment in the DOTS centre. This may contribute to success of the national TB control program

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AUTHORS:

1. Anil D. Bhoi
2. Vandana Bhoi

PARTICULARS OF CONTRIBUTORS:

1. Assistant Professor, Department of Paediatrics, PIMSR, Urun-Islampur, Maharashtra.
2. Assistant Professor, Department of Community Medicine, IMSR, Mayani, Maharashtra.

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NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Anil D. Bhoi,
Ganesh Nagar,
Islampur-415409,
Tal-Walwa, Sangli District,
Maharashtra.
E-mail: dranilbhoi@yahoo.com

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