Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 7, Issue, 12, pp.24763-24766, December, 2015

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

ISSN: 0975-833X

RESEARCH ARTICLE

HEALTH SEEKING BEHAVIOUR OF SERIOUSLY ILL PULMONARY & EXTRAPULMONARY TUBERCULOSIS PATIENTS THOSE WHO ARE ADMITTED IN THANJAVUR STUDY

[1,*]Manimaran, A., [2]Vasudevan, R., [3]Murugan, S., [4]Pugal, U., [4]Rajan, K.P., [4]Muhammed Khaleel, A. and Rajaraman, P.

Department of Thorasic Medicine, Thanjavur Medical College, Thanjavur, India

ARTICLE INFO

Article History:
Received 04th September, 2015
Received in revised form
10th October, 2015
Accepted 15th November, 2015
Published online 30th December, 2015

Key words:
Tuberculosis,
Awareness,
Time Delays.

ABSTRACT

Background: Tuberculosis is one of the biggest enigma facing mankind and it is the 5th most common cause of death worldwide. The present study aims at: 1.Studying the patients knowledge about tuberculosis, 2.Estimating the time taken for the patients to approach any health care system after their onset of symptoms, 3.Estimating the time taken by the health care system to process the samples collected and confirm the diagnosis of tuberculosis,4.Estimating the time taken by the health care system to start the treatment regimen once the patient has been diagnosed with tuberculosis.

Methods: Patients of seriously ill pulmonary & extra pulmonary tuberculosis those who are admitted in Thoracic Medicine department Ward , in Thanjavur Government Medical College Hospital, were confirmed by sputum smear examination , chest X ray and CT chest.

Results: A total of 50 tuberculosis patients were involved in this study. The patients were asked to answer a set of questions from a standard questionnaire (USAID TB Care - II).The study identified that only 32% had some awareness about tuberculosis, its causes, symptoms, mode of spread, diagnostic facilities and the treatment modalities available for it. The remaining 68% didn't have awareness about tuberculosis. It is observed from the study that 26% of the patients took 1-2 weeks to approach a health care system after the onset of symptoms , 32% of the patients took 2-4 weeks and 42% took more than 1 month. For26% of the patients, the health care system took 1-6 days to confirm the diagnosis of tuberculosis , for 32% it took 1-4 weeks and for 42% it took more than 1 month. About 6% of people are presented with severe life threatening condition like hydropneumothorax and 60 % of people were consulted first in government health provider in that only 32 % people only got the information regarding tuberculosis , remaining 68% of people are unaware about the symptoms and TB treatment . Poor Accessibility for TB diagnosing health facility (per 1 lakh population), for that people have to travel minimum of 10-15 km to reach the GH/ Block PHC /CHC.

Conclusion: The present study findings clearly indicates that the knowledge about tuberculosis among patients is not sufficient and this was the cause for delay in the patients to approach the health care system after the onset of symptoms. There was also a delay in the health care system to confirm the diagnosis of tuberculosis in the patients. However, majority of the health care Provider are not giving the adequate information regarding Tuberculosis and Follow up. Thus, the study emphasizes the 1).Need for creating awareness about tuberculosis among the public, right from school level.2).Should create awareness through media (cinema theatres & TV) like Tobacco control.3).Should create the facility for diagnosis of Tuberculosis in all primary health centre level and immediately starting the treatment their itself.

Citation: **Manimaran, A., Vasudevan, R., Murugan, S., Pugal, U., Rajan, K.P., Muhammed Khaleel, A. and Rajaraman, P. 2015. "**health seeking behaviour of seriously ill pulmonary & extrapulmonary tuberculosis patients those who are admitted in thanjavur study**",** *International Journal of Current Research,* 7, (12), 24763-24766.

INTRODUCTION

To investigate the factors associated with delay in care seeking (patient delay) among smear positive tuberculosis patients, smear-positive patients were interviewed using a structured questionnaire. Among 50participants, the median patient, delay was 20 days. Twenty one per cent (21%) of patients delayed seeking care for more than 1 month, of whom 61% attributed the delay to their lack of awareness about TB. Men postponed seeking care for longer periods than women. The total delay resulted largely from a long patient delay when government providers were consulted first (60%). Public awareness about chest symptoms and the availability of free diagnostic services should be increased. Government and private physicians should be educated to be aware about the possibility of tuberculosis when examining outpatients. Effective referrals for smear microscopy should be developed between private and public providers. Since1998, India has been scaling up the

****Corresponding author: Manimaran, A.,***
Department of Thorasic Medicine, Thanjavur Medical College, Thanjavur, India.

implementation of the DOTS-based Revised National Tuberculosis Control Programme (RNTCP) and by March 2005 had covered one billion of its population (Jerard *et al.,* 2003). Strategies aiming to reduce the time between the onset of symptoms and the initiation of effective chemotherapy may impact the infectious duration in the community and thereby reduce the number of new infections. However, factors contributing to treatment delay are potentially numerous, and are likely to vary considerably in relative importance between populations in their local settings (Pronyk *et al.,* 2001). Each year, nearly one million adults develop infectious (smearpositive) tuberculosis (TB) in India. A single person with infectious TB could infect 10–15 others in a year; therefore, early detection of infectious cases, followed by effective treatment, is imperative for the successful control of tuberculosis. Delay in diagnosis of tuberculosis causes spread of infection in the community, increases patient expenditure, and is associated with a higher risk of mortality (Rajeswari *et al.,* 2002).We undertook the present study to understand the health-seeking behaviour and assess delays, if any, and pattern of delay among smear-positive pulmonary tuberculosis (PTB) patients treated at Department of Thoracic medicine Ward, Thanjavur government Medical College Hospital, Thanjavur.

OBJECTIVES

The primary objectives of this study were to 1).Studying the patients knowledge about tuberculosis. 2). Estimating the time taken for the patients to approach any health care system after their onset of symptoms.3).Estimating the time taken by the health care system to process the samples collected and confirm the diagnosis of tuberculosis. 4. Estimating the time taken by the health care system to start the treatment regimen once the patient has been diagnosed with tuberculosis.

MATERIALS AND METHODS

The study was conducted in Tamilnadu state Thanjavur Government Hospital of Thoracic Medicine Ward, Thanjavur all new smear positive pulmonary tuberculosis patients aged 15 years were considered eligible for the study. Cases diagnosed on the basis of Sputum smear examinations, X-ray and CT chest, Those are having history of taking treatment were excluded. The study was conducted from January 2014 to march 2015.

A structured questionnaire was used to interview each eligible study subject. The interviews were conducted at health facility. The information obtained from patients included sociodemographic and economic characteristics, type and number of health providers consulted, interval between onset of symptoms and first health provider consulted, expenses incurred during careseeking, and reasons for delay in care seeking. Patient delay was defined as the duration in days from the onset of symptoms to the first health-care seeking action taken by patients. Health system delay was defined as the duration in days between the first action taken by the patients and the date of sputum examination for diagnosis of tuberculosis. Patients who could read and write were considered literate. Apart from clinical manifestations and history of contact with tuberculosis patients, the diagnosis of tuberculosis was based on 1) Sputum smear examinations, 2) Chest skiagram, 3) CT chest 4) Analysis of pleural fluid, etc. and 5) Tissue biopsy / FNAC. Routine blood and urine examinations were carried out in all the patients. Other investigations were also done, as and when required, for associated diseases and disorders

RESULTS

A total of 50 tuberculosis patients were involved in this study. The patients were asked to answer a set of questions from a standard questionnaire (USAID TB Care - II). The study identified that only 32% had some awareness about tuberculosis, its causes, symptoms, mode of spread, diagnostic facilities and the treatment modalities available for it. The remaining 68% didn't have awareness about tuberculosis. It is observed from the study that 26% of the patients took 1-2 weeks to approach a health care system after the onset of symptoms , 32% of the patients took 2-4 weeks and 42% took more than 1 month. For26% of the patients, the health care system took 1-6 days to confirm the diagnosis of tuberculosis , for 32% it took 1-4 weeks and for 42% it took more than 1 month. About 6% of people are presented with severe life threatening condition like hydropneumothorax and 60 % of people were consulted first in government health provider in that only 32 % people only got the information regarding tuberculosis , remaining 68% of people are unaware about the symptoms and TB treatment.

Table 1. Socio-demographic characteristics and care-seeking behavior of smear-positive tuberculosis patients

s.no	Total no of patients =50		
1	Age (years)	MALE	FEMALE
	<15 yrs	0	0
	15 - 45 yrs	13 (26%)	11(22%)
	>45yrs	21 (42%)	5(10%)
2	Sex		
	Male	34 (68%)	
	Female	16 (32%)	
3	Literate		
	No	25 (50%)	
	Yes	25 (50%)	
4	Residence		
	Rural	35 (70%)	
	Urban	15 (30%)	
5	First provider consulted		
a.	Government	30 (60%)	
b.	Private	20 (40%)	
c.	Other		

Table 2. Factors associated with patient delay among smear-positive tuberculosis patients

1.	Reason for delay	%
a.	No Awareness About Symptoms	14 (28%)
b.	Inadequate Facility For Diagnosis	2 (4%)
c.	Nonavailability Of Drugs	5 (10%)
d.	Inadequate Follow Up	2(4%)
	Both A & B	34 (68%)
2.	EASY ACCESSIBILITY FOR TB DIAGNOSING HEALTH FACILITY	
a.	5-15 KM	26 (52%)
b.	>15 KM	24 (48%)

Poor Accessibility for TB diagnosing health facility (per 1 lakh population), for that people have to travel minimum of 10-15 km to reach the GH/ Block PHC /CHC. A few patients mentioned loss of wages or domestic pre-occupation (i.e., priority given to domestic matters than health related matters) as reasons for delay in seeking care. Male and female respondents cited similar reasons for delaying seeking care.

Table 3. Duration of delay

s.no	Variables	percentage
1.	Heard about TB treatment and knowledge	
a.	Yes	19 (38%)
b.	No	31 (62%)
2.	Duration of delay	
a.	More than 4 weeks	21 (42%)
b.	2-4 weeks	13(26%)
c.	Less than 2 weeks	16(32%)

DISCUSSION

Late diagnosis of pulmonary tuberculosis is likely to be associated with a worse prognosis owing to the presence of extensive disease and poor clinical condition. Additionally, particular importance from a public health perspective, delay in treatment for active tuberculosis is likely to be associated with a greater number of secondary cases per index case .This study confirms that there is a considerable delay between the onset of illness and the initiation of treatment among pulmonary tuberculosis patients. While a substantial proportion of the delay to diagnosiswas attributable to late patient presentation, an important, preventable period of infectiousness in the community was caused by the failure of recognised clinical services to diagnose tuberculosis among symptomatic individuals.

This study revealed that patients who first consult governmental health services > private services experienced a significantly longer health system delay. There are at least two possible explanations for the lack of a reciprocal relationship between health system delay and the duration of cough among patients who first consulted a private provider:rather than screening patients in a systematic fashion with the aidof standard guidelines, private practitioners usually resort to symptom-based treatment, followed by X-ray examination, and infrequently sputum examination; there is also a lack of effective links of referral between the private and the government sector. This study also reveals important patient-related factors, illiteracy and lower family income and a lack of knowledge about tuberculosis associated with a delayed diagnosis of TB. When asked why they had delayed seeking care, more than 42% of patients who had waited longer than 30 days to seek care attributed the delay to their lack of awareness of tuberculosis.

Conclusion

Thus, the study emphasizes the 1).Need for creating awareness about tuberculosis among the public, right from school level 2). Should create awareness through media (cinema theatres & TV) like Tobacco control.3). Should create the facility for diagnosis of Tuberculosis in all primary health centre level and immediately starting the treatment their itself.

Acknowledgments

The authors appreciate the study participants for their cooperation in providing the necessary information

REFERENCES

Hudelson, P. 1996. Gender differentials in tuberculosis: the role of socioeconomic andcultural factors.TubercleLung *Dis.,* 77:391–400.

Jerard, M., Selvam, F.,Wares, Perumal, M., Gopi, P.G. and Sudha, G. ChandrasekaranV,Santha T. Health-seeking behaviour of new smear-positive TB patients under a DOTS programmein Tamil Nadu, India, 2007. Int J Tuberc Lung Dis 2003; 11(2):161–167.

Lawn, S.D., Afful, B. and Acheampong, J.W. Pulmonary tuberculosis; diagnostic delay in Ghanaian adults. *Int. J. TubercLung Dis*., 1998; 2:635–640.

Long, N.H., Johansson, E. and Lonnroth, K. et al. 1999. Longer delays in tuberculosis diagnosis among women with TB in Vietnam. *Int. J. Tuberc Lung Dis*., 3:388–393.

Pronyk, P.M., Makhubele, M.B., Hargreaves, J.R., Tollman, S.M. and Hausler, H.P. Assessing health seeking behaviour among tuberculosis patients in rural South Africa. Int JTubercLungDis. 2001; 5(7):619–627.

Rajeswari, R., Chandrasekaran, V., Suhadev, M., Sivasubramaniam, S., Sudha, G. and Renu, G. 2002. Factors associated with patient and health system delays in

the diagnosis of tuberculosis in South India. *Int. J. Tuberc Lung Dis.,* 6(9):789–795.

Salaniponi, F.M., Harries, A.D. and Banda, H.T. et al. 2000. Care seeking behaviour and diagnostic processes in patients with smearpositive pulmonary tuberculosis in Malawi. *Int JTubercLungDis.,* 4:327–332.

Sherman, L.F., Fujiwara, F.I. and Cook, S.U. et al. 1999. Patient and health care system delays in the diagnosis and treatment of TB. Int J Tuberc Lung Dis., 3:1088–1095.

Styblo, K. and Salomao, M.A. 1993. National Tuberculosis Control Programmes. In: Reichman L B, HershfieldES,eds.Tuberculosis—a comprehensive international approach.NewYork:MarcelDekker. pp573–600.

Uplekar, M. and Rangan, S. 1996.Tackling TB: the search for solutions. Bombay, India:TheFoundation forResearch inCommunityHealth.

Uplekar, M., Juvekar, S. and Morankar, S. et al. 1998. Tuberculosis patients and practitioners in private clinics in India. Int J Tuberc Lung Dis., 4:324–329.

Wandwalo, E.R. and Morkve, O. 2000. Delay in tuberculosis case-finding and treatment inMwanza,Tanzania. *Int JTubercLungDis.,* 4:133–138.

Wandwalo, E.R. and Morkve, O. 2000. Delay in tuberculosis case-finding and treatment in Mwanza, Tanzania. *Int. J.Tuberc Lung Dis.,* 4:133–138.

Yamassaki-Nakagawa, M., Ozasa, K. and Yamada, N. et al. 2001. Gender difference in delays to diagnosis and health care seeking behaviour in a rural area of Nepal. *Int J. Tuberc. Lung.Dis.,* 5:24–31.

Yamassaki-Nakagawa, M., Ozasa, K. and Yamada, N. et al. Gender difference in delays to diagnosis and health care seeking behaviour in a rural area of Nepal. *Int J. Tuberc. Lung. Dis.,* 5:24–31.

****