

Short Communication

FAILURE TO INITIATE TREATMENT FOR TUBERCULOSIS PATIENTS DIAGNOSED IN A COMMUNITY SURVEY AND AT HEALTH FACILITIES UNDER A DOTS PROGRAMME IN A DISTRICT OF SOUTH INDIA

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Summary: We studied the proportion and fate of tuberculosis patients who were not initiated on treatment (initial defaulters) in Tiruvallur district of Tamilnadu, where DOTS strategy was implemented. These patients were visited to find out the reason for default. Treatment was not initiated in 57 (23.5%) of the 243 sputum positive cases diagnosed in a community survey and 156 (14.9%) of 1049 patients diagnosed in health facility. Men were more likely not to have treatment initiated. The common reasons stated for initial default were unwillingness, symptoms being mild, personal reasons and dissatisfaction. There is an urgent need to improve the patient's perception of treatment and strengthen the health systems' capabilities to reduce initial default. [*Indian J Tuberc 2005; 52:153-156*]

Key words: Initial Defaulter, Tuberculosis.

INTRODUCTION

The Revised National Tuberculosis Control Programme (RNTCP) using the Directly Observed Treatment- short course (DOTS) strategy started in India in 1993 in a phased manner. The goal of the programme is to cure at least 85% new smear positive patients and to detect at least 70% of the cases of new smear positive cases in the community¹. All cases diagnosed are required to be registered for treatment. Several studies^{2,3} have examined the problem of default by patients after initiation of treatment and the risk factors for default. However, the issue of failure of initiation of treatment after diagnosis of tuberculosis has been studied to a limited extent only. An earlier study⁴ by this Centre, on gender disparities in tuberculosis from the same area reported an initial default rate of 29% among patients in a community survey as compared to 15% among those attending government health facilities. A study⁵ conducted in Vietnam reported an initial default rate of 8.3% among 4208 smear positive cases detected at all district tuberculosis units. The negative perceptions of patients regarding the working procedures and treatment strategy in the National Tuberculosis Programme (NTP) were cited as the main cause for initial default. The present study compares the extent of initial default among TB

patients detected in a community survey or attending a health facility and the reasons for the same.

MATERIAL AND METHODS

Study population

The study area covers a rural population of 580,000 in Tiruvallur district, where DOTS strategy is in place since May, 1999. Under the programme, patients who reported voluntarily at one of the 17 peripheral health institutions (PHIs) with symptoms of tuberculosis were diagnosed and treated for TB as per the RNTCP guidelines¹. Diagnosis and treatment facilities were available free of cost for all patients. In the intensive phase of treatment, every dose of treatment was given thrice weekly under supervision and at least the first of the three doses during the continuation phase were supervised. A community survey⁶ is in progress in this area to measure the trend of the disease and demonstrate the epidemiological impact of DOTS strategy implemented in the area. In this survey, designed to measure the prevalence and incidence of tuberculosis, subjects identified as chest symptomatics and/or suspected of having tuberculosis on chest radiography were subjected to sputum examination. Patients who were identified

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with bacteriological evidence of the disease were referred to the nearest health facility, where they received treatment under the programme, if they satisfied the RNTCP guidelines. All patients were treated on an ambulatory basis and patients were hospitalized when required.

Data collection and analysis

An experienced male field investigator, who knew the study area very well, visited the homes of patients who were not initiated on treatment, even after two months of diagnosis had been established. He collected information on the current status and reasons for default using a semi-structured questionnaire. We analyzed the proportion of initial defaulters by the two methods of diagnosis according to the sex and age. The difference in proportions was tested for statistical significance using chi-square. A P value of <0.05 was considered to be statistically significant.

RESULTS

Community survey

Subjects included in the analysis were all those individuals aged 15 years or more diagnosed in the community survey. Among 243 smear positive patients during June, 2001 – December 2003, 57

(23.5%) patients were not registered for treatment. There were no deaths in this group leaving all 57 patients available for the interviews (Five deaths were reported later during the next survey after two-and-a half years). The initial default among males and females were 24.4% and 17.6% respectively (Table) and the difference was not statistically significant (P=0.5). The initial default rates were also similar in the two age groups i.e. 15-44 and 45 years or more (22.8% vs 23.5%). The reasons given by the 57 patients for initial default included (i) unwillingness (refusal or not interested) for initiation of treatment; (ii) symptoms too mild to warrant treatment followed by (iii) too sick/old; and (iv) work related problems. More men than women were unwilling for the initiation of treatment.

Health facility

One thousand one hundred and sixty three patients were diagnosed during the period January 2002 to October, 2003. One hundred and fifty six of the 1049 (14.9%) patients were not initiated on treatment. The default rates among males and females were 17.0% and 8.4% respectively (Table) and the difference was statistically significant (P < 0.01). The corresponding rates in the two age-groups studied were 12.1% and 18.3% respectively (statistically significant; P < 0.01). Thirty eight patients could not be visited due to operational

Table: Initial default among cases diagnosed in the community survey and at the health facilities

Age (in years)	Male		Female	
	Diag.	ID.	Diag.	ID.
Community Survey				
15-44	79	18 (22.8)	17	4 (23.5)
≥45	130	33 (25.4)	17	2 (11.8)
Total	209	51 (24.4)	34	6(17.6)
Health Facility				
15-44	396	57(14.4)	189	14(7.4)
≥45	392	77(19.6)	72	8(11.1)
Total	788	134(17.0)	261	22(8.4)

Diag. = Diagnosed
ID=Initial defaulters

inconvenience. There were 23 (19%) deaths among the remaining 118 patients while another 8 (7%) migrated. Thirteen patients (11%) were taking treatment from other hospitals while 41 (35%) were not traceable at the addresses given by them. Of the 23 patients who died, more than 70% deaths among old patients aged >45 years old.

The reasons (multiple) for default given by the remaining 33 who were interviewed (27 males and 6 females) were (i) personal problems like loss of wages, social engagements, etc; (ii) dissatisfaction with health services; and (iii) disease related problems like felt better or too sick. Reasons reported by males were mostly personal and health service problems.

CONCLUSION

The proportion of initial defaulters was significantly higher among patients diagnosed in the community survey compared to those at health facilities (P<0.01). An earlier report⁷ found that cases diagnosed in the community survey have less extensive tuberculosis and mild symptoms compared

to those who report voluntarily at health facilities. We have found the same reasons in the present study also. Men were more likely to be unwilling for initiation of treatment because of the problems associated with loss of wages. The difference in the proportion of initial defaulters between male and female was not statistically significant. Similarly, there was no significant difference in the two age-groups. In the health facility, a sizeable proportion (35%) of initial defaulters was not traceable due to incorrect address provided by them. This could be due either to their inability to give accurate addresses⁸ or a deliberate attempt to mislead for fear of stigma and discrimination. This finding once again emphasizes the need for strengthening efforts to collect accurate address from patients when they report to the health facilities for diagnosis. The default rate among cases diagnosed at health facility was significantly higher among males compared to that among females. The difference in the default rates in the two age groups was statistically significant. The non-significant difference in the initial default rate among males and female patients and that among patients in different age-groups diagnosed in community survey may be a reflection of the small numbers. In community

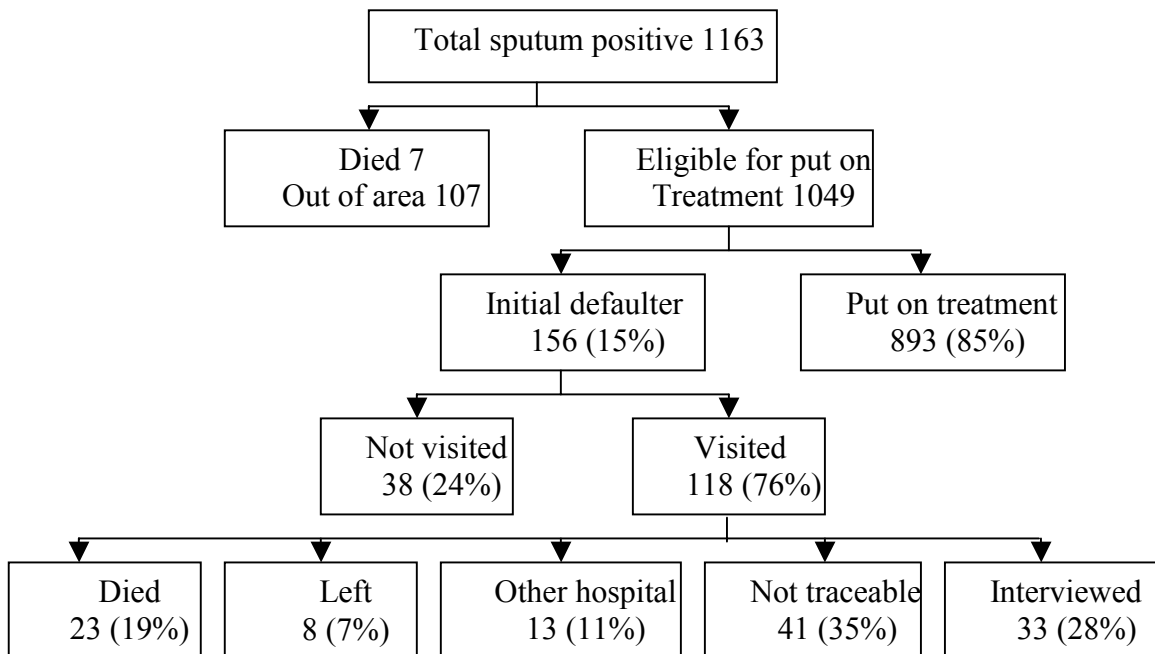


Fig.: Failure to initiate treatment among smear positive cases identified at the health facility

survey, there were no deaths reported during the intervening period. These were the early cases diagnosed unlike in health facility. A significant proportion of patients diagnosed at health facility died during the intervening period after diagnosis probably due to the severity of the disease and old age.

In summary, **initial default was a major problem and was higher among patients identified in a community survey than in patients attending health facilities. We need to motivate and improve patient's perception of disease and the need for DOTS and convince them of the need for initiating and completing treatment.** The findings of the study indicate the need for an in-depth qualitative study involving patients and focus group discussion. The study also highlights the need to improve the health system's abilities to motivate and ensure initiation of treatment immediately and thereby to reduce deaths among those who have been diagnosed at health facility. Patients, who attend government health facilities by voluntarily opting to seek health care at these centres, obviously repose their faith in the health system. The health system needs to positively respond to this health seeking behaviour and provide for treatment of such patients. Adequate emphasis of this important aspect of programme delivery should be made in the training of all health personnel manning the programme at different levels and a constant monitoring of initial default as an important indicator of the success of the programme should be advocated.

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