

TREATMENT COMPLIANCE IN RELATION TO SOURCES OF REFERRAL AND INITIAL REACTION TO THE DIAGNOSIS OF TUBERCULOSIS*

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Summary : The source of referral and patient's reaction to diagnosis were studied in relation to regularity of treatment in 107 patients attending Tuberculosis Research Centre (TRC), Chennai. In all, 29% of the patients were referred by family members, 27% by neighbours and friends, 11% attended on their own, private practitioners referred 18% and government facilities/NGOs referred 15%. The initial reactions to diagnosis of tuberculosis were anxiety, fear, worry and/or shock in 59%. Only 31% of the patients were hopeful of cure at the time.

All those who attended on their own completed > 80% of treatment as did 90% of those who were hopeful of cure at the time of diagnosis. And, 86% of those who experienced a negative reaction (fear of death, anxiety and worry) completed > 80% of treatment.

Key words : Treatment compliance; Source of referral to TB clinic; Psychological response and Treatment completion

INTRODUCTION

Tuberculosis remains the main killer among infectious diseases in India and a source of worry for society as well as health providers¹.

Tuberculosis is a complex social disease whose visage changes in different settings. Therefore, its control requires a strategy that has to be varied in its adaptation to the realities of the disease situations². To fight tuberculosis, not only must individual patients co-operate but also the community needs to be involved.

For individual patients, the aim would be to adhere to prescribed treatment and go back to normal life. For the community, the aim should be to reduce infection through early case-finding, provide appropriate management and get maximum cures. Globally, the aim is to control the disease the world over through effective strategies.

Case-finding under NTP is based on passive case-finding. The 30 year old NTP in India has shown a success rate of 30% for case-finding, 35% for case-holding, 80% in respect of chemotherapy and around 50% efficacy³. In passive

case-finding the symptomatic reaches the nearest health facility seeking relief. For passive case-finding to be successful, there has to be close cooperation between the government, the health care providers in health centres and the community, at all the levels, all the time. The community is represented by religious groups, political leaders, community leaders and voluntary agencies. People's participation comes when they understand own situation and realise their own collective potential for action⁴. This study was undertaken to analyse the situation in the community from such an angle.

Aims and Objectives

To study :

1. The sources of referral for case-finding
2. The initial reaction of the attending symptomatic to the disclosure of diagnosis of tuberculosis
3. To correlate the source of referral and patients' initial reaction to the diagnosis with subsequent adherence to the treatment prescribed.

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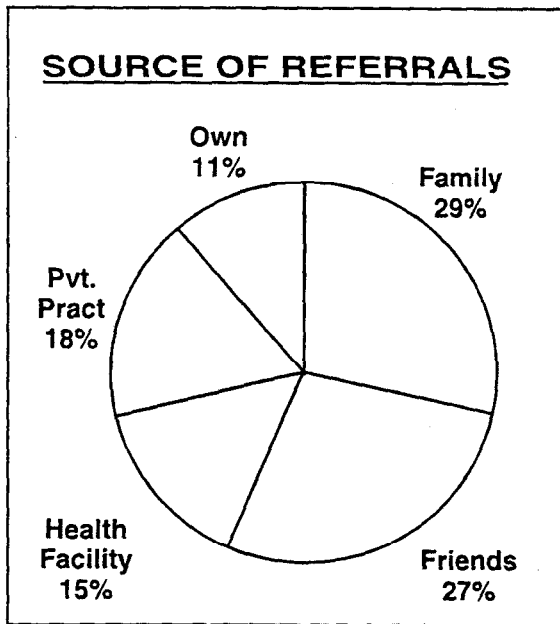


Fig. 1.

Material and Methods

One hundred and seven newly diagnosed sputum positive patients attending the Tuberculosis Research Centre, Chennai were interviewed with the help of an interview schedule with questions pertaining to how they reached the specialised TRC for relief. They were also questioned as to the initial reactions when the diagnosis of tuberculosis was divulged to

them. For the first, the questions were aimed at finding out whether patients came on their own motivation or were brought in by a family member or a neighbour, friend or co-worker or they were referred by a health facility, be it a government/non-government centre or private practitioner. For the second, they were questioned as to their initial reactions grouped as fear/worry/shock or hope of cure.

Later, the 107 patients were followed up to assess their treatment compliance based on the amount of chemotherapy received by them during the treatment period :

- > 80% - considered as good
- < 70% - considered as unsatisfactory

The defaulter retrieval procedures at TRC are intensive in that for every default a visit is made by a health visitor and if the patient still does not attend, another visit is made by a Medical Social Worker, followed by a doctors' visit, if necessary.

FINDINGS

Source of Referral

Of the 107 patients, 31 (29%) were brought in by a family member viz., spouse/parent/son/daughter/relative (Fig. 1). The family member may or may not have been a tuberculosis patient. The next frequent referral was done by neighbours and friends (29)

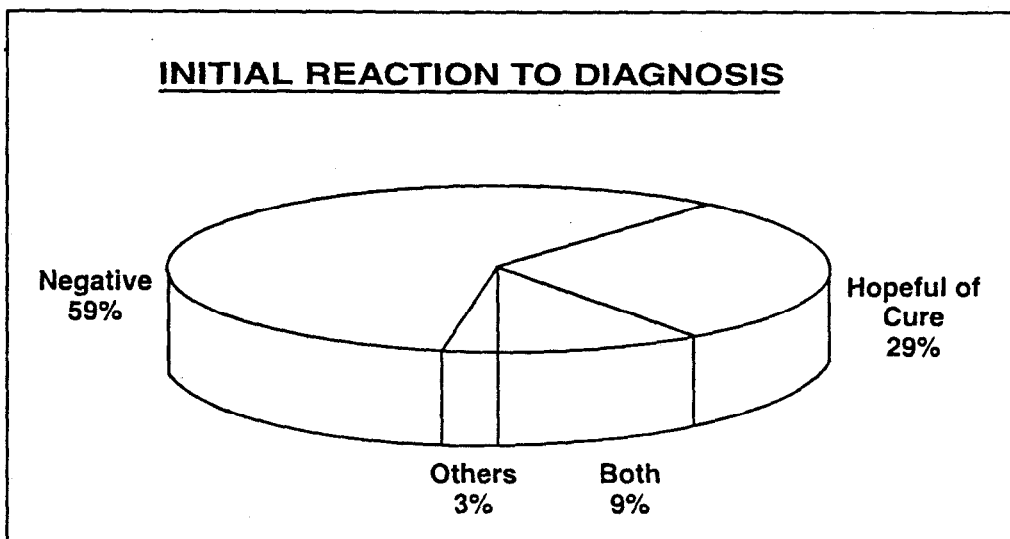


Fig. 2.

patients : 27%) followed by private practitioners (19 patients : 18%) or a health facility (16 patients : 15%) while only 12 (11%) patients attended on their own.

Reactions to diagnosis

The initial reaction to the diagnosis was negative in the majority of respondents (63 patients : 59%) admitting to fear of death, worry, anxiety and shock. Only 31 (29%) were hopeful of cure. Ten (9%) of the patients had mixed reactions, both negative and positive. The remaining 3 (3%) expressed suicidal tendencies and denial when the diagnosis, of tuberculosis was revealed to them (Fig. 2).

Treatment compliance : Correlation with source of referral and initial reaction

The treatment regularity pattern of these patients was studied in relation to their source of

referral (Table 1). All those who came on their own (11%) had > 80% of treatment. Of the 31 patients who were brought in by a family member 25 (81%) had \geq 80% of treatment and 4 (13%) had < 70%. Of the 29 patients referred by neighbours and friends, 26 (90%) completed \geq 80% of treatment and 2 (7%) had < 70% of treatment. Of the 16 referred by a health facility, 14 (88%) had \geq 80% of treatment. Among the 19 patients referred by private practitioners, 14 (74%) had completed \geq 80% of treatment.

The initial reaction to diagnosis of patients was also studied in relation to compliance of treatment (Table 2). Among the 63 who expressed anxiety, such as fear, worry and depression, 14 (22%) completed 100% treatment while 54 (86%) had > 80% of treatment (Fig. 3). Among the 31 who were hopeful of cure, 6 (19%) had 100% treatment while 28 (90%) had > 80% of treatment.

Table 1. Distribution of patients according to drug compliance and source of referral

Drug Compliance (%)	Referred by					Total	
	Family	Friend/ neighbour	Health Facility NGO	Pvt practitioner	Own	No.	%
100	6	2	3	6	6	23	21
90-99	13	17	9	4	4	47	44
80-89	6	7	2	4	2	21	20
70-79	2	1	2	2	0	7	7
< 70	4	2	0	3	0	9	8
All	No. 31	29	16	19	12	107	
	% 29	27	15	18	11		100

Table 2. Distribution of patients according to drug compliance and initial reaction to diagnosis

Drug Compliance %	Reaction				Total	
	Anxiety	Hopeful of cure	Both	Others	No.	%
100	14	6	3	0	23	21
90-99	25	18	4	0	47	44
80-89	15	4	1	1	21	20
70-79	4	1	0	2	7	7
< 70	5	2	2	0	9	8
All	No. 63	31	10	3	107	
	% 59	29	9	3		100

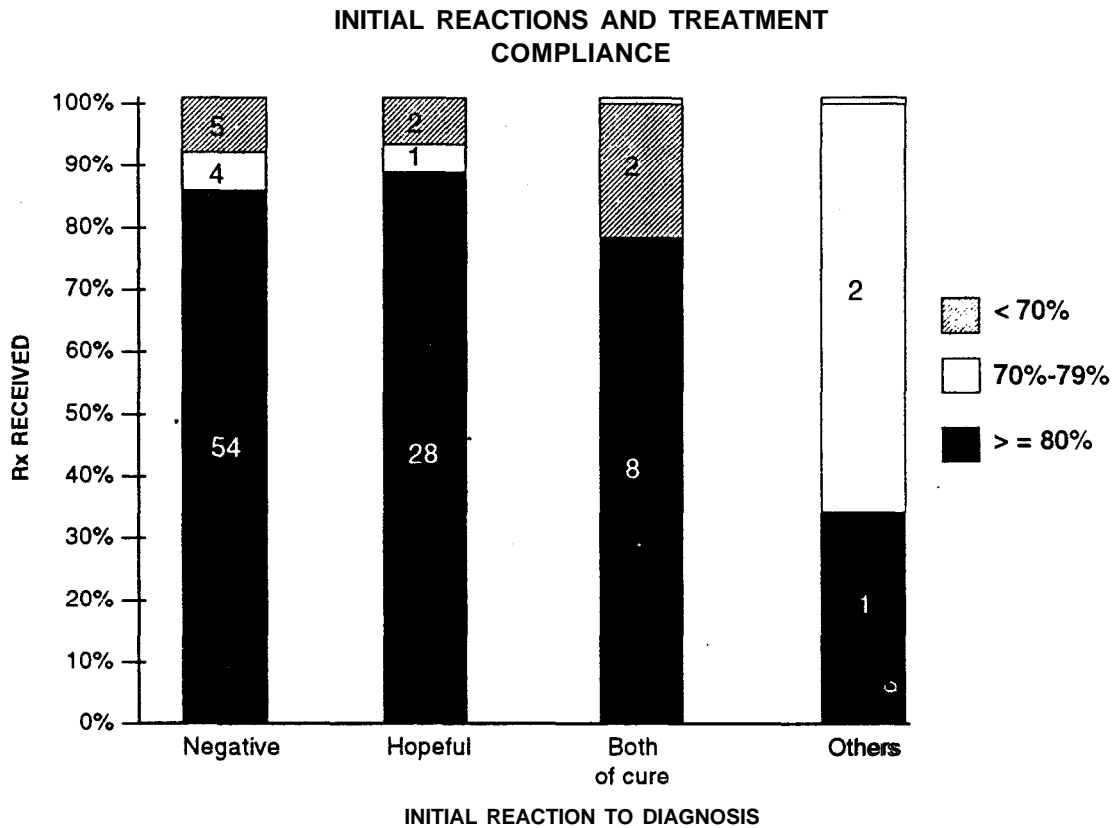


Fig. 3.

DISCUSSION AND CONCLUSIONS

The influence of the family for bringing patients to TRC was very important with 29% brought by a family member, followed by neighbours and friends (27%). This reflects the sense of responsibility existing within the community in bringing symptomatics to a tuberculosis centre, perhaps contrary to the general belief that there is a stigma associated with tuberculosis. Even private practitioners made 18% referrals while only 11% came on their own, which may show awareness among symptomatics about tuberculosis, besides the community at large.

Among those referred by neighbours and friends, 90% completed > 80% of treatment as compared to 81% by a family member and 74% by a private practitioner. Even if the compliance could be a reflection of the efficient defaulter retrieval mechanism at the TRC, it does re-emphasize the role of the community in

motivating symptomatics to complete their chemotherapy

As far as the initial reactions to learning the diagnosis are concerned, 90% of those who were hopeful of cure completed > 80% and 86% of those who experienced anxiety completed > 80% of the treatment.

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