



A STUDY OF PATIENT'S PROSPECTIVE ABOUT QUALITY OF DIRECTLY OBSERVED TREATMENT SERVICES (DOTS)

Respiratory Medicine

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ABSTRACT

Introduction—An observational study was conducted in the Department Of Respiratory Medicine in a tertiary care centre who were taking ATT under DOTS or had history of ATT consumption in the past.

Aim : Aim of the study was to 1. To see the patient's perspective of the DOTS services. 2. Behaviour of the DOTS provider, 3. Facilities available at the DOTS centre. 4. Waiting period.

Materials and Methods: The study was carried out among 201 patients coming to the Department of Respiratory Medicine who were on ATT under DOTS or had received ATT in the past. Demographic details and clinical findings were noted. Data collected was entered into Excel spread sheet and quantitative data were expressed as number and percentage.

Results—In our study among the 201 participants who were on ATT or had history of ATT consumption in the past, 36.8% of the participants found the attitude of DOTS providers as supportive and helpful. A slightly higher 37.3% people had neutral opinion about it. A huge 70.6% of the participants were satisfied with the services at the DOTS centre. A good 56.7% of the participants were of the opinion that all their queries concerning TB were satisfactorily answered. A good 66.7% of the participants were comfortable with the waiting time at the DOTS centre. About half (53.2%) of the participants were satisfied with the laboratory facility and availability of drugs. 51.7% of the participants were satisfied with the DOTS provider.

Conclusion—Our study analysed the various aspects of interaction of patient with the DOTS provider and DOTS centre and to judge its efficiency in delivering DOTS services.

Our study found that DOTS provider is very important for compliance to treatment and patient satisfaction and must for completion of the treatment and we must strengthen the services

KEYWORDS

DOTS , Satisfaction

INTRODUCTION

DOTS is the standard of care for treatment of Tuberculosis patients. Directly Observed Treatment Short-Course (DOTS) is just not only the supervision of treatment of TB or observing the act of swallow of drugs by health care worker but it is also important from the point of view of the building the bond between the patient and the DOTS provider. The basic purpose of DOTS is to ensure compliance of the treatment by the patient as well as recognition of the adverse effects at the early stage, so as to avoid the deterioration of the patient's condition because of late recognition of the adverse effects. Patient's satisfaction is one of the essential criteria for the regular intake of drugs. The compliance rate may be dependent upon rural factors like the behaviour of the DOTS provider, waiting period, provision the drugs supply and proper addressal of the query of the patient during visit as well as the proper guidance regarding the duration of the treatment, compliance of the treatment, advice to the patient and members of the family. So patient's perspective about the services provided by the DOTS provider is important from the point of view of success or failure of directly observed treatment under National Tuberculosis Elimination programme (NTEP)

MATERIALS AND METHODS

The present study was conducted in the department of Respiratory Medicine among 200 patients coming to OPD and IPD who were either new patients or follow up patients consuming ATT under DOTS.

INCLUSION CRITERIA

1. Patients willing to participate in the study
2. Age more than 18 years old
3. All patients consuming ATT under DOTS or a history of ATT consumption including cases of both PTB & EPTB.

EXCLUSION CRITERIA

1. Patients who do not fit in the inclusion criteria.
2. Critically ill patients
3. Patients not willing to participate in the study.

Study protocol was reviewed by the ethical committee of the hospital and was granted the ethical clearance. After explaining the purpose and details of the study a written informed consent was obtained from the

patients participating in the study. In all cases patients were asked as per the performa containing the questions regarding the health care behaviour, health care facilities, waiting period, availability of drugs, addressal of the questions of the patient and his family members regarding DOTS and its services. Their response was graded as 1. Strongly Disagree, 2. Disagree, 3. Don't Know, 4. Neutral, 5. Strongly Agree. The recorded data was compiled and entered in a spreadsheet computer programme (Microsoft excel 2010) and then exported to the data editor page of SPSS version 19. Appropriate statistical technique was used for analysis of data.

RESULTS

1. Demographic details of the study population

Age(mean+/-SD)	39.07+/-16.86
Males	111(55.2%)
Females	90(44.8%)
Rural	152(75.6%)
Urban	49(24.4%)

The mean age of study patients was 39.07+/-16.86 of which males outnumbered females by 55.2 to 44.8% respectively. 75.6 % of the study population belonged to rural areas whereas 24.4% of the study population belonged to urban areas.

2. Healthcare Providers Supportive/Respectful (n = 201)

Healthcare Providers Supportive/Respectful	Frequency	Percentage
1. Strongly Disagree	7	3.5%
2. Disagree	10	5.0%
3. Don't Know	75	37.3%
4. Agree	74	36.8%
5. Strongly Agree	35	17.4%
Total	201	100.0%

3.5% of the participants Strongly Disagree to it. 5.0% of the participants Disagree to it. 37.3% of the participants were not sure. 36.8% of the participants Agree to it. 17.4% of the participants Strongly Agree to it

3. Participants Satisfied with DOTS Centre Services(sitting arrangement, drinking water) (n = 201)

Satisfied with DOTS Centre Services	Frequency	Percentage
1. Strongly Disagree	5	2.5%
2. Disagree	12	6.0%
3. Don't Know	19	9.5%
4. Agree	142	70.6%
5. Strongly Agree	23	11.4%
Total	201	100.0%

2.5% of the participants Strongly Disagree to it. 6.0% of the participants Disagree to it. 9.5% of the participants were not sure. 70.6% of the participants Agree to it. 11.4% of the participants Strongly Agree to it.

4. Healthcare Workers Answered All Questions Regarding TB (n = 201)

Healthcare Workers Answered All Questions Regarding TB	Frequency	Percentage
1. Strongly Disagree	9	4.5%
2. Disagree	23	11.4%
3. Don't Know	14	7.0%
4. Agree	114	56.7%
5. Strongly Agree	41	20.4%
Total	201	100.0%

4.5% of the participants Strongly Disagree to it. 11.4% of the participants Disagree to it. 7.0% of the participants were not sure. 56.7% of the participants Agree to it. 20.4% of the participants Strongly Agree to it

5. Participants who were comfortable with Waiting Time at DOTS Centre (n = 201)

Comfortable with Waiting Time at DOTS Centre	Frequency	Percentage
1. Strongly Disagree	2	1.0%
2. Disagree	2	1.0%
3. Don't Know	35	17.4%
4. Agree	134	66.7%
5. Strongly Agree	28	13.9%
Total	201	100.0%

1.0% of the participants Strongly Disagree to it. 1.0% of the participants Disagree to it. 17.4% of the participants were not sure. 66.7% of the participants Agree to it. 13.9% of the participants Strongly Agree to it.

6. Participants Satisfied with Availability of follow-up Laboratory Facilities/Drugs (n = 201)

Satisfied with Availability of Laboratory Facilities/Drugs	Frequency	Percentage
1. Strongly Disagree	2	1.0%
2. Disagree	5	2.5%
3. Don't Know	59	29.4%
4. Agree	107	53.2%
5. Strongly Agree	28	13.9%
Total	201	100.0%

1.0% of the participants Strongly Disagree to it. 2.5% of the participants Disagree to it. 29.4% of the participants were not sure. 53.2% of the participants Agree to it. 13.9% of the participants Strongly Agree to it.

7. Participants overall satisfaction with the DOTS Provider (n = 201)

Satisfied with DOTS Provider	Frequency	Percentage
1. Strongly Disagree	10	5.0%
2. Disagree	21	10.4%
3. Don't Know	7	3.5%
4. Agree	104	51.7%
5. Strongly Agree	59	29.4%
Total	201	100.0%

5.0% of the participants Strongly Disagree to it. 10.4% of the participants Disagree to it. 3.5% of the participants were not sure. 51.7% of the participants Agree to it. 29.489% of the participants

Strongly Agree to it.

DISCUSSION

NTP of India was started in the year 1962 but failed to achieve its desired goals and objectives. So RNTCP was formulated to plug the weakness of NTP. DOTS was one of the most important of the 5 components of DOTS strategy because in the NTP the default rate was high on account of unsupervised treatment and the failure rate was high on account of erratic drugs supply. In the RNTCP we could achieve more than 85% cure rates and default rate was as low as 5-6 %. This was made possible because of the DOTS as one of the components. In order to sustain the results the quality of DOTS services should be maintained.

In the present study the patient's perspective about the quality of DOTS services was studied. In the present study it was found that 54.2 % patients observed that the health care providers were supportive and respectful. Sitting arrangement and drinking water arrangement at DOTS centre was found to be adequate by 81% of patients. Health Care workers besides dispensing the drugs and observing the treatment of patients were also addressing the query related to the disease as well as of the other problems faced by the patients in 77.17% of the cases. Most of the times it is irritating to wait for the availability of DOTS provider and the treatment given by him, but in this present study it was found that 80% of the patients were satisfied and did not found the waiting period too long. The supply of drugs and the availability of sputum containers for follow up sputum examination at the end of the treatment is an important issue and only 3.5% of the patients found them inadequate. Beside the above points the patients were asked about the overall satisfaction about the DOTS services, 81.5% of them found them to be of high quality. From the above observations it can be concluded that more than 80% of the patients are satisfied with the availability of DOTS provider, drugs, sputum containers and the attitude of the DOTS provider.

The ASHA/USHA are available at the doorstep of the patients and they are doing a commendable job .The incentives provided to them for the DOTS services can be a motivating factor for them. Moreover because of the close proximity and close relation developed while living in the same village/area of the patient, the ASHA worker are more approachable by the patient and the patients are free to approach them for their TB ,health and other social problems as well.

Limitations

1. It is a single centre study and study results cannot be generalized .
2. An impediment to our investigation was that it is based on interviews of the patients and their family members. Recall bias cannot be ruled out.

CONCLUSION

Directly Observed Treatment Short-course treatment provided by healthcare workers was observed to be of good quality and the reason for this seem to be the sharing of same habitat as well as an incentive provided to the health care workers for their DOTS services

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