EXAMINING THE ACCEPTABILITY OF DOTS AMONGST PATIENTS AND PRIVATE PRACTITIONERS IN URBAN SLUMS OF HOWRAH, WEST BENGAL



#### A COLLABORATIVE STUDY BY

THE MAHARASHTRA ASSOCIATION OF ANTHROPOLOGICAL SCIENCES, CENTRE FOR HEALTH RESEARCH AND DEVELOPMENT (MAAS-CHRD), PUNE AND ST THOMAS HOME





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# EXAMINING THE ACCEPTABILITY OF DOTS AMONGST PATIENTS AND PRIVATE PRACTITIONERS IN URBAN SLUMS OF HOWRAH, WEST BENGAL

### **EXECUTIVE SUMMARY**

#### **INTRODUCTION**

The Government of India, for effective tuberculosis (TB) control, has now shifted its focus from the 70/85 target approach to universal access to quality assured services for TB for all patients [RNTCP Status Report 2012] by involving all public, voluntary, corporate and private practitioners (PPs) through Public-Private Mix (PPM) approaches and promote use of International Standards for TB Care (ISTC) [RNTCP Status Report 2010].

One such initiative of involving the PPs was initiated by St. Thomas Home in West Bengal in 2005, to ensure optimal utilization of the Revised National TB Control Programme (RNTCP) by PPs and patients. The St Thomas Home, a charitable non-governmental organization (NGO), operates presently as a designated microscopy centre under the NGO involvement scheme of the RNTCP [Central TB Division].

In order to improve the case notification rate in its area of work, the NGO initiated a partnership between the RNTCP and PPs in five big urban slums in 2005, four of which are under four different TB Units in Howrah District. Separate sensitization programmes were arranged for PPs with a degree in modern medicine and paramedical or grassroots doctors to inform them about the ways they could participate in the programme. This has led to referrals from all the sensitized grass roots doctors and a large number of qualified doctors. However, the percentage of rational referrals remains low. Moreover, the response from the majority of the PPs operating in its area of work to join the programme as DOT providers is also poor, with only four grass roots doctors participating as DOT providers. This puts a burden on the NGO to provide DOT to the patients and ensure their successful treatment outcomes.

Treatment for individual TB patients is delivered through a network of seven DOT centres. Patients referred to the NGO are provided clinical and organizational services including all necessary diagnostics, free of charge. Patients on DOTS are provided with breakfast. In addition the inpatient charges of critical TB patients are also borne by the NGO.

Despite efforts by the NGO to make the programme accessible and the provision of nutritional supplements, a small percent of the patients do not start treatment under the RNTCP after diagnosis, and a small percentage of patients continue to discontinue treatment with the RNTCP.

On this background, a study was conducted by the St Thomas Home, Howrah in collaboration with The Maharashtra Association of Anthropological Sciences, Pune with the following aim and objectives.

#### AIM

To examine the acceptability of DOTS by the PPs and the patients in five slums of Howrah District in West Bengal where the St Thomas Home's PPM-DOTS initiative is in operation.

#### **SPECIFIC OBJECTIVES**

- To document the referral and treatment practices of the PPs practicing in the area of work of the NGO.
- To document the enablers and barriers to their participation in the PPM
- To document the barriers to patients' initiating DOTS after diagnosis by the RNTCP

#### METHODOLOGY

Data were collected using qualitative and quantitative methods

Interviews were conducted using semi-structured interview schedules and interview guides with

- i. Forty-nine qualified doctors
- ii. Seventy-seven grass roots doctors
- iii. Four DOT providers
- iv. Fourteen patients taking treatment under the RNTCP
- v. Two patients who had defaulted treatment under the RNTCP
- vi. Two patients who had failed to initiate treatment under the RNTCP
- vii. Eight key informant interviews were conducted with Programme officers and staff of RNTCP (n=4); and St Thomas Home staff- Medical Co-ordinator (n=1); Treatment Supervisor (n=1), field workers (n=2)

Following are the key issues/ problem areas identified and the suggested points of action to deal with these issues/problem areas.

Interviews with PPs		
Issues /problems identified	Action Points	
	Short term	Long term
<ul> <li>Most qualified and grass roots doctors are aware of RNTCP.</li> <li>Qualified doctors on the whole do not have a very good opinion regarding RNTCP. In contrast, grass roots doctors have a good opinion regarding the RNTCP.</li> </ul>	<ul> <li>Systematic listing of qualified and grass roots doctors practicing in area to be done for purposes of documentation.</li> <li>Documentation system to be developed to record number of referrals by PPs; number of those diagnosed and put</li> </ul>	<ul> <li>Establish a 'partnership' with the doctors based on mutual trust and respect through:</li> <li>Provision of regular knowledge updates</li> <li>Organizing case discussions</li> <li>Ensuring prompt follow-up on any problems/ issues faced by doctors or</li> </ul>
<ul> <li>Most grass roots doctors were contacted by STH /RNTCP for referral of patients. In contrast a little more than 50% of qualified doctors were contacted by STH/RNTCP for referral of patients.</li> </ul>	<ul> <li>on treatment, date of visit by STH staff to the referring doctors, feedback given.</li> <li>o Field Medical Officer (FMO) qualified in allopathic medicine to visit all the listed qualified and grassroots doctors. Purpose of visit to</li> </ul>	<ul> <li>Providing regular feedback</li> <li>Improve quality of care at STH by:</li> <li>Minimizing delay in treatment seeking</li> <li>Effective counseling to patients before initiation of treatment to quaid default</li> </ul>
$\circ$ Most grass roots doctors and	establish dialogue, introduce	treatment to avoid default

only 60% of qualified doctors	STH and services provided by	Development of an
are aware of facilities	STH or reiterate the above	effective monitoring and
provided by STH.	information.	supervision system for
		patients.
• Most qualified and grass	• The FMO to introduce the	
roots doctors advice	respective field workers as	<ul> <li>Develop a sustainable</li> </ul>
investigations for diagnosis of	the contact persons (where	dialogue with the MO TCs for
ТВ.	ever necessary) for further	more effective service
$\sim$ Around 40% of qualified and	follow-up.	delivery to patients.
17% of grass roots doctors	○ Small bandout with	
refer their nations only to	information on services	
the private sector for	provided by STH along with	
diagnosis	contact numbers of the field	
	staff and doctors to be	
$\circ$ Majority of doctors, both	handed over by the EMO to	
qualified and grass roots,	the doctors for easy	
refer some or all patients to	reference	
RNTCP/STH for treatment.		
	$\circ$ The FMO to encourage	
$\circ$ A small percentage of grass	doctors to refer poor	
roots doctors including a DOT	patients in whom they	
provider, are treating their	suspect TB at the diagnosis	
suspected TB patients on	stage to avoid default.	
their own.		
	$\circ$ Handout with information	
• The main barriers to referral	regarding diagnostic	
of patients for diagnosis and	algorithm and treatment	
treatment to RNICP/SIH	regimen to be given by the	
Include:	FMO.	
Patients' reluctance		
Better access to	• Updates through handouts	
private sector services	with regard to TB and related	
Better quality of care in	topics to be distributed at	
the private sector	regular intervals depending	
<ul> <li>Mostly poor patients referred</li> </ul>	on reasibility.	
by qualified and grass roots	<ul> <li>Regular written feedback to</li> </ul>	
doctors to RNTCP/STH for	be given to referring doctors.	
diagnosis and treatment.		
$\sim$ Majority of grass roots	$\circ$ Monetary incentives to be	
doctors consider DDM	given on time to referring	
advantageous for nationts	doctors. Referring doctors to	
advantageous for patients	be given options regarding	
majority of qualified doctors	easy collection of incentives	
consider PDM advantageous	especially for doctors	
CONSIDER FRIM AUVAILAGEOUS		

for patients but less than 60%	practicing in areas far away	
consider it advantageous for	from STH.	
doctors.		
	<ul> <li>Doctors to be encouraged to</li> </ul>	
<ul> <li>Majority of qualified and all</li> </ul>	be DOT providers for their	
grass roots doctors are willing	referred patients. This may	
to refer patients to	lead to better treatment	
STH/RNTCP.	adherence, referring doctor	
$\sim$ Less than 50% of qualified	being able to retain their	
and less than 60% of grass	patients and reducing the	
roots doctors are ready to be	load on the STH staff.	
DOT providers	$\sim$ Willing qualified doctors can	
	be considered as referral	
$\circ$ The main barrier to	doctors for grass roots	
willingness to be DOT	doctors according to their	
providers is lack of time and	area of practice. This may	
DOT provision perceived to	help in screening out of non-	
be a time consuming activity.	TB cases thus reducing	
	delays for patients and the	
<ul> <li>Expectations for referral of</li> </ul>	load on STH.	
patients included		
<ul> <li>Good quality of care</li> </ul>	$\circ$ Doctors need to be informed	
Feedback	that they can refer	
<ul> <li>Assurance that patients</li> </ul>	emergency cases on non	
complete treatment	PPM days.	
<ul> <li>Monetary incentives</li> </ul>		
$\circ$ Expectations for DOT	<ul> <li>Monetary incentives to be</li> </ul>	
provision include	provided to referrals on non	
<ul> <li>Monetary incentives</li> </ul>	PPIVI days.	
<ul> <li>Financial aid to patients</li> </ul>		
<ul> <li>Patients should be</li> </ul>		
cured		
$\odot$ PPM models likely to succeed		
include:		
Model providing		
training / knowledge		
updates		
Model providing		
monetary incentives to		
PPs or STH model		
Model providing		
monetary incentives as		
well as knowledge		
updates		

<ul> <li>Suggestions for increasing participation</li> <li>Create awareness regarding RNTCP</li> <li>Provide training / CME / knowledge updates</li> <li>Regular communication between RNTCP/STH staff and doctors</li> </ul>		
Interviews with patients		
Issues indentified	Action	points
	Short term	Long term
<ul> <li>Long waiting time for patients to see consultant at STH.</li> <li>Long delay in initiation of</li> </ul>	<ul> <li>Basic screening procedure to be established to identify patients most likely to default treatment. Health workers to</li> </ul>	
<ul> <li>treatment for some patients.</li> <li>Low recall of information given to patients.</li> <li>Lack of uniformity in the information given to patients.</li> <li>DOT centre and timing for DOT not always chosen by patients.</li> </ul>	<ul> <li>be trained to recognise such patients.</li> <li>Increase in the number of OPD days and area wise referrals to be made on allotted days. For eg: Doctors from Pilkhana and other surrounding area to refer their patients on Monday etc.</li> </ul>	
<ul> <li>Unsuitable DOT centre or unsuitable timings for DOT a reason for initial default.</li> </ul>	<ul> <li>Since the Consultant is very busy, these OPDs can be managed by other not so senior doctors. Complicated</li> </ul>	
<ul> <li>Poor communication or miscommunication between</li> <li>STH staff and patients a reason for initial default.</li> </ul>	cases could then be referred to the consultant on Thursdays OR	
<ul> <li>Very few patients eat their breakfast at the centre. They prefer to take it home.</li> </ul>	<ul> <li>Having a morning and evening OPD on the current PPM day (Thursday).</li> </ul>	
<ul> <li>Discomfort of taking seven tablets at one time</li> </ul>	OR	

 Roping in MBBS doctors who are willing to act as referral

experienced initially by some

patients.

<ul> <li>Need for increased privacy</li> </ul>	doctors for grass roots	
expressed by some patients.	doctors in their area. Once	
	screened the patient can be	
<ul> <li>Though cost of treatment is</li> </ul>	referred to STH for diagnosis	
nil or low, patients bear cost	and treatment	
of transportation.		
<ul> <li>Cost of treatment quite high</li> </ul>	• Retrain grass roots doctors	
for patients with co morbid	on suspicion, diagnosis and	
condition like disbetes	diagnostic algorithms either	
condition like diabetes.	through meetings/	
	handouts/ personal visits by	
	the FMO in order to decrease	
	the burden of referral of	
	non-IB cases to SIH.	
	$\circ$ STH to accept emergency	
	cases referred to them at any	
	time.	
	$\circ$ Patients to be allowed to	
	choose the DOT centre and	
	the convenient time in order	
	to minimize inconvenience	
	and wage loss as reported by	
	some of the respondents.	
	<ul> <li>Patients need to be</li> </ul>	
	counselled regarding the	
	importance of putrition for	
	early recovery and avoiding	
	the spread of infection.	
	Alternately food rations can	
	be supplied to the patients.	
	$\circ$ More attention to be paid by	
	DOT provider in the initial	
	days of patients' treatment	
	so that possible interruptions	
	/default can be avoided.	
	$\circ$ DOT centres that are more	
	accessible to be assigned to	
	reduce cost of transport and	
	loss of time.	
	$\circ$ Patients with co-morbid	

		conditions to be provided	
		help.	
Ke	y Informant interviews		
Iss	Issues identified Action points		
		Short term	Long term
Fie	ld workers:	$\circ$ Special attention to be paid to	<ul> <li>Create employment</li> </ul>
0	Default rate high among	alcoholic patients.	opportunities for
	alcoholic patients and daily		patient/spouse
	wage earners who take	<ul> <li>Counselling to be done by</li> </ul>	
	DOTS from RNTCP DOT	DOT providers at regular	
	centres.	intervals to motivate patients	
		to complete treatment.	
0	Patients default after 2-3	• Datiants completing Intensive	
	months of treatment.	Phase (ID) to be service lied	
T	atus ant ann an daon	Phase (IP) to be counselled	
116	eatment supervisor:	again to avoid default.	
0	Reduced field visits by field	$\circ$ An advanced tour plan for	
	workers after starting their	field workers to be drawn up	
	own DOT centres.	and STS to monitor the visits	
		made.	
0	Lack of follow-up activities		
	with PPs.	○Issues discussed with PPs	
		need to be prioritized and	
0	Field workers get patients	addressed accordingly with	
	from their own area	the help of supervisors,	
	examined by doctors out of	doctors, other staff.	
	turn on PPM OPD days. As a		
	result other patients miss	• Field workers to wait for the	
	their rightful turn and have	turn of their patients to see	
	to wait longer.	doctors	
Pro	ogramme officers:	○ Provide food rations for	
	5 ,,	patient/family/children	
0	STH seen as overstepping		
	their limit by providing	$\circ$ Dialogue with MO TC of all	
	treatment to patients	TUs:	
	outside designated area.	<ul> <li>to clear misunderstandings</li> </ul>	
		and arrive at an acceptable	
0	Increased referrals seen	system of working.	
	because of monetary	• to request them to refer	
	incentives given to	alcoholic patients so that	
	reterring doctors by STH.	they can be admitted to the	
<u> </u>	Objection to high positivity	de-addiction facilities and	
	rate among cases		
1	Tate arriving cases		

diagnosed at STH.	provided treatment	
	<ul> <li>to request them to</li> </ul>	
	communicate with the	
	district authorities to open	
	a DOT centre after the	
	working hours of RNTCP	
	DOT centre in order to	
	provide DOT to daily wage	
	earners or alternately to	
	make provision for DOT to	
	be provided at home.	

# MAIN REPORT

#### **INTRODUCTION**

The absolute number of incident TB cases per year has been falling globally since 2006, and the incidence rate (per 100 000) has been falling by 1.3% every year since 2002. However, the increase in the prevalence of biomedical (HIV, Diabetes, malnutrition etc), environmental (indoor air pollution) and socioeconomic (migration, urbanization and crowding) risk factors for the progression of the latent TB to active disease in certain segments of population, may tend to increase the incidence despite improved diagnostic and treatment services. In addition, drug resistant TB has become a significant public health problem the world over and is creating an obstacle to effective TB control [RNTCP Status Report 2012].

The Revised National Tuberculosis Control Programme (RNTCP) launched in India in 1997, has been able to achieve a reduction of TB mortality and prevalence. Even so, India has more new TB cases annually than any other country. In 2009, out of the estimated global annual incidence of 9.4 million TB cases, two million were estimated to have occurred in India. Based on a three state DRS Survey, the estimated proportion of MDR-TB is 2.1% (1.5%-2.7%) in new TB cases and 15% (13%-17%) in previously treated cases. As per the WHO Global TB Report 2011, the estimated number of MDR-TB cases out of notified pulmonary TB cases in India is 64,000 (range 44,000 to 84,000) annually while 112 Extensively Drug Resistant Tuberculosis (XDR- TB) patients have been diagnosed at the National Reference Laboratories as reported by the states from 2008 till Sept 2011. Besides drug resistant TB, diabetes, HIV, malnutrition, urbanization, crowding and migration are some of the rapidly emerging risk factors that pose a challenge for effective TB control [RNTCP Status Report 2012].

To effectively control TB, the Government of India has now shifted its focus from 70/85 target approach to universal access to quality assured services for TB for all patients [RNTCP Status Report 2012]. Universal access means early detection of <u>all</u> TB cases and includes the prevention, diagnosis and treatment of drug resistant TB, and the way to achieve that is to "*engage all care providers by involving all public, voluntary, corporate and private providers through Public-Private Mix (PPM) approaches and promote use of International Standards for Tuberculosis Care (ISTC)"* [RNTCP Status Report 2010].

There have been several initiatives to involve the private sector- private practitioners (PP), NGOs, traditional healers etc in the RNTCP since its launch [Dewan *et al.*, 2006; Krishnan and Kapoor 2006; Ambe *et al.*, 2005; Rangan *et al.*, 2004; Arora *et al.*, 2003; Murthy *et al.*, 2001], partly to respond to patient preference for the private sector [Kelkar-Khambete *et al.*, 2008; Uplekar, Pathania & Ravigilone, 2001: Uplekar *et al.*, 1998;] and to curb treatment with non-standardized drug regimens

[Prasad *et al.*, 2002; Singla *et al.*, 1998; Uplekar *et al.*, 1998] but also to increase access to DOTS for patients who lived in areas where public sector facilities were lacking.

PPM-DOTS has contributed to increased case detection [Sehgal *et al* 2007; Krishnan & Kapoor 2006; Kumar *et al* 2005; Ambe *et al* 2005; Arora *et al* 2004], helped reduce delays [Kelkar-Khambete *et al* 2008] and costs incurred by patients in accessing DOTS [Pantoja *et al* 2009; Kelkar-Khambete *et al* 2008; Floyd K *et al* 2006; Muniyandi *et al* 2005; Murthy *et al* 2002]. It has also been shown to have comparable treatment outcome as those for patients taking treatment with the public sector [Biswas *et al* 2005; Singh *et al* 2005; Murthy *et al* 2002; Chadha and Bhagi 2000; Pradhan AP *et al*].

#### **RATIONALE FOR THE STUDY**

One such PPM initiative was initiated by the St. Thomas Home in West Bengal in 2005, to ensure optimal utilization of the RNTCP by PPs and patients. The St Thomas Home, a charitable NGO, operates presently as a designated microscopy centre under the NGO involvement scheme of the RNTCP [Central TB Division].

In order to improve the case notification rate in its area of work, the NGO initiated a partnership between the RNTCP and the PPs in five big urban slums in 2005, four of which are under four different TB Units (TU) in Howrah District. Practitioners with a degree in modern medicine were invited to attend Continuous Medical Education (CME) programmes, while the paramedical or grassroots doctors were invited to sensitization seminars about the RNTCP. The practitioners were told about how they could participate in the PPM programme. Amongst those sensitized, all grass roots doctors refer their patients to STH and four amongst these are also participating as DOT providers, while a large number of qualified doctors refer their patients to STH, though none of them is participating as a DOT provider.

However, this is still a low percentage of rational referrals. Secondly the low numbers of DOT providers in the community puts a burden on the NGO to provide DOTS to these patients and ensuring their successful treatment outcomes.

Treatment for individual TB patients is delivered through a network of DOT centres - one located at St. Thomas Home and seven others located in the various slums under the PPM project. Patients referred to the NGO are provided clinical and organizational services including all necessary diagnostics free of charge. Patients on DOTS are provided with breakfast. In addition, the inpatient charges of critical TB patients are also borne by the NGO. Despite efforts by the NGO to make the programme accessible and the provision of nutritional supplements to patients, a small percent of the patients do not start treatment under the RNTCP after diagnosis, and a small percentage of patients continue to discontinue treatment with the RNTCP. Moreover, the response from the majority of the PPs operating in its area of work to join the programme as DOT providers is also poor.

#### AIM

To examine the acceptability of DOTS by the PPs and the patients in five slums of Howrah District in West Bengal where the St Thomas Home's PPM-DOTS initiative is in operation.

#### **OBJECTIVES:**

- To document the referral and treatment practices of the PPs practicing in the area of work of the NGO
- To document the enablers and barriers to their participation in the PPM
- To document the barriers to patients' initiating DOTS after diagnosis by the RNTCP

#### **STUDY SETTING**

Howrah, a twin city of Kolkata with a population of 1,008,704 (Census 2001), includes an industrial belt that is surrounded by several very crowded urban slums that are very high TB endemic area. The health sector in the area is served by public health facilities, several NGOs and numerous qualified (modern medicine) and paramedical or grass roots PPs. Several NGOs and the RNTCP in Howrah work together to control TB and have achieved an annualized total case notification rate of 107 TB patients per 100 000 population [RNTCP Status Report 2012].

#### METHODOLOGY

#### A. INTERVIEWS WITH DOCTORS

#### i. INTERVIEWS WITH QUALIFIED (ALLOPATHIC) DOCTORS

#### SAMPLING FRAME:

All qualified doctors practicing in the study area.

#### SAMPLING STRATEGY:

Inclusion criteria:

- Doctors (General practitioners, General physicians, Chest Physicians) having a degree in allopathic medicine
- Allopathic practitioners (other than general practitioners/ general physicians/ chest physicians) referring their TB patients to STH

#### Exclusion criteria:

All doctors who did not have an allopathic degree in medicine

#### STUDY SAMPLE:

A list of 100 doctors was drawn up by the field workers. A list of 85 doctors was finalized in consultation with the consultant at STH, after excluding double listing and ineligible doctors.

Out of the list of 85 doctors, 49 doctors were interviewed, 16 doctors refused, eight doctors were not found / could not be located, five doctors had moved out of the area and seven respondent were not available [Figure A]

Thirteen out of 16 doctors gave reasons for refusals. The reasons given were as follows: 'no time' (n=8), 'do not see TB patients' (n=2), "I do not entertain research" (n=1), "I am not a general physician" (n=1), 'not interested' (n=1).

#### STUDY TOOL:

Semi-structured interview schedule in English

#### METHOD:

Three senior researchers from MAAS-CHRD interviewed the doctors individually. All the doctors in the list were approached personally for an interview. All those who consented either orally or verbally were interviewed.



#### FIGURE A: SAMPLE FOR INTERVIEWS WITH QUALIFIED DOCTORS

#### ii. INTERVIEWS WITH GRASS ROOTS DOCTORS

#### SAMPLING FRAME:

All grass roots doctors practicing in the study area.

#### SAMPLING STRATEGY:

Inclusion criteria:

All practitioners, other than those having an allopathic degree in medicine practicing in study ٠ area.

#### Exclusion criteria:

Practitioners having an allopathic degree in medicine •

#### **STUDY SAMPLE:**

A list of 114 grass roots doctors was drawn up by the field workers. A list of 113 grass roots doctors was finalized after a double entry was excluded from the list.

Out of a total of 113 grass roots doctors, 81 interviews, including 4 DOT providers, were completed within the data collection period. Of the remaining 32 interviews, clinics of two grass roots were closed; one doctor was not available because he was busy studying for some exams; one doctor's clinic was not found; two doctors refused to be interviewed. Twenty-six respondents were not interviewed<sup>1</sup>. All respondents were contacted at least once for an interview [Figure B].

#### STUDY TOOL:

Semi-structured interview schedule translated in Bengali.

#### METHOD:

The Treatment supervisor and Laboratory supervisor at STH were trained by senior researchers from MAAS-CHRD to conduct the interviews. All the doctors were approached for an interview. Those who consented were interviewed individually. A total of seventy-seven grass roots doctors and 4 DOT providers were interviewed.





<sup>&</sup>lt;sup>1</sup> Due to resource constraints, a deadline was set and all interviews completed until that day were considered for analysis.

#### **B. INTERVIEWS WITH PATIENTS**

#### i. PATIENTS TAKING TREATMENT UNDER RNTCP

#### SAMPLING FRAME:

All patients taking treatment at STH in 2011.

#### Inclusion criteria:

- Patients diagnosed at STH
- Patients who were initiated on treatment between 15<sup>th</sup> June and 15<sup>th</sup> July 2011
- Patients above the age of 18 years
- Patients who were physically fit to give an interview

#### SAMPLING STRATEGY:

The interviews with patients taking treatment under the RNTCP aimed at understanding their experiences while taking treatment. Therefore, patients who had taken treatment for a substantial period of time (towards the end of their Continuation Phase or in the 5 / 6<sup>th</sup> month of treatment) were considered for interviews. A list of 34 patients was obtained that met the inclusion criteria. Twenty patients were randomly selected considering refusal and non-availability rate in order to meet the final sample of 15 patients.

#### STUDY SAMPLE:

Out of a final list of 20 patients, 14 patients were interviewed, three patients had changed residence and were not longer residing in the study area, one patient refused because of lack of time, one patient was contacted thrice at three different times but was not present for an interview and one patient had defaulted treatment and hence was ineligible for the interview [Figure C]

#### STUDY TOOLS:

Semi-structured interview schedules in Hind and Bengali were used to interview patients.

#### METHOD:

A field worker and a nurse were trained by a senior MAAS-CHRD researcher. Interviews were conducted by the field worker and the nurse as a team. All patients who gave their consent were interviewed.

#### FIGURE C: SAMPLE FOR INTERVIEWS WITH PATIENTS TAKING TREATMENT UNDER RNTCP



#### ii. DEFAULTERS AFTER INITAION OF TREATMENT

#### SAMPLING FRAME:

All patients who had defaulted treatment at STH in 2011.

#### Inclusion criteria:

- Patients who were registered at STH
- Patients above the age of 18 years
- Patients who were physically fit to give an interview

#### SAMPLING STRATEGY:

The interviews with patients who had defaulted treatment under the RNTCP aimed at understanding the reasons for default. A list of seven patients who met the inclusion criteria was drawn up. Two defaulters were interviewed.

#### STUDY SAMPLE:

Out of the list of seven patients, two patients were interviewed; two patients could not be located according to the address on record, one patient was very ill, while two patients had been transferred out [Figure D]

#### STUDY TOOLS:

Semi-structured interview schedules were used to interview patients. Schedules were translated from English to Hindi and Bengali.

#### METHOD:

A field worker and a nurse were trained by a senior MAAS-CHRD researcher. Interviews were conducted by the field worker and the nurse as a team. All patients who gave their consent were interviewed.

#### FIGURE D: SAMPLE FOR INTERVIEWS PATIENTS WHO HAVE DEFAULTED TREATMENT



#### iii. INITIAL DEFAULTERS

#### SAMPLING FRAME:

All patients who had not initiated treatment after diagnosis at STH in 2011.

Inclusion criteria:

- Patients diagnosed at STH
- Patients above the age of 18 years
- · Patients who were physically fit to give an interview

#### SAMPLING STRATEGY:

The interviews with initial defaulters aimed at understanding their reasons for not initiating treatment after diagnosis at STH. A list of four initial defaulters who met the inclusion criteria was drawn up. Two initial defaulters were interviewed [Figure E].

#### STUDY SAMPLE:

Out of the final sample of 4 Initial defaulters, two patients were interviewed and two patients were not found/ not located at the address on record.

#### STUDY TOOLS:

Semi-structured interview schedules were used to interview patients. Schedules were translated from English to Hindi and Bengali.

#### METHOD:

A field worker and a nurse were trained by a senior MAAS-CHRD researcher. Interviews were conducted by the field worker and the nurse as a team. All patients who gave their consent were interviewed.

#### FIGURE E: SAMPLE FOR INTERVIEWS WITH GRASS ROOTS DOCTORS



#### C. KEY INFORMANT INTERVIEWS

Eight key informants were interviewed to understand the context and issues involved in implementing the PPM project in Howrah. The list of key informants interviewed included, three Programme officers and one RNTCP staff from four TUs, and four STH staff consisting of one Senior Staff member/Medical Co-ordinator, one Treatment supervisor and two field workers.

#### STUDY TOOL:

An interview guide was used to conduct interviews with key informants.

#### METHOD:

Senior MAAS-CHRD researchers conducted interviews individually after obtaining verbal consent of the respondents.

#### LIMITATIONS OF THE STUDY

- The present study had some limitations that may have had an impact on the study findings.
  - Lack of systematic listing of qualified doctors which affected the number of doctors interviewed.
  - Interviews conducted by staff members who were not trained researchers has, to an extent, affected the quality of data collected.
  - Routine duties of the field staff resulted in delays in the data collection period and thereby, compromised the total number of grass roots doctors interviewed.
  - Low numbers of default and initial defaulters can give pointers towards actions to be taken for individual patients and to some extent, for the STH programme, but make it difficult to make any conclusive statements.

# QUALIFIED DOCTORS

#### 2012

### FIGURE F: SUMMARY OF FINDINGS



#### QUALIFIED DOCTORS

A total of 49 qualified doctors were interviewed. The areas of enquiry included respondents' opinions regarding the RNTCP, their referral and treatment patterns, willingness to refer TB patients for diagnosis and treatment to RNTCP, opinion regarding PPM, their expectations and conditions for the participation, suggestions regarding a successful PPM model and ways to increase the participation of private doctors in PPM.

#### 1. PROFILE

Forty-eight out of the total 49 qualified doctors interviewed were male (98%) [Table 1].

#### TABLE 1: SEX

	Frequency	Percent	
Male	48	98	
Female	1	2	
Total	49	100	

Thirty-one (n=31/49; 63%) had MBBS degree while the remaining 18 respondents had post graduate degrees (n=18/49; 36%) [Table2].

#### **TABLE 2: QUALIFICATIONS**

	Frequency Percent	
MD	18	36.7
MBBS	31	63.3
Total	49	100.0

Twenty-six of the 31 respondents with MBBS degree (84%) had general practice while the rest practiced gynaecology & obstetrics, paediatrics, cardiology and ultrasonography (Table 3). Seven of the 18 respondents who had post graduate degrees practiced General Medicine (39%) while the rest practiced Chest Medicine, Surgery, Gynecology & Obstetrics, Paediatrics, Cardiology & Diabetology and General Medicine & Diabetology [Table 3].

#### TABLE 3: TYPE OF PRACTICE

Specialization	Qualification		Total
Specialization	MD	MBBS	
Medicine	7 (38.9%)	0	7 (14.3%)
Chest Medicine	3 (16.7%)	0	3 (6.1%)
Surgery	1 (5.6%)	0	1 (2.0%)
Gynecology and Obstetrics	1 (5.6%)	1 (3.2%)	2 (2.0%)
Paediatrics	3 (16.7%)	2 (6.5%)	5 (10.2%)
Cardio-diabetology	2 (11.1%)	0	2 (4.1%)
Medicine and diabetology	1 (5.6%)	0	1 (2.0%)
General Practice	0	26 (83.9%)	26 (53.1%)
Cardiology (diploma)	0	1 (3.2%)	1 (2.0%)
Ultrasonography (diploma)	0	1 (3.2%)	1 (2.0%)
Total	18 (100.0%)	31 (100.0%)	49 (100.0%)

The mean (average) years of practice for the respondents was 25 years (range 6-30) [Table 4].

No. of years	Frequency	Percent	
10 or >	4	8.2	
11-20	16	32.7	
21-30	12	24.5	
31-40	8	16.3	
41-50	5	10.2	
Not asked	4	8.2	
Total	49	100.0	

#### **TABLE 4: YEARS OF PRACTICE**

The reported average number of patients seen in a day was 31 (range 5-100) [Table 5]. The average number of patients seen in a day was comparable for MBBS (median 30; range 10-100) and MD (median 30; range 5-55) doctors [Annexure 1: Tables 5.1 and 5.2].

No. of patients	Frequency	Percent	
1-20	16	32.7	
21-40	21	42.9	
41-60	10	20.4	
81-100	1	2.0	
Not asked	1	2.0	
Total	49	100.0	

### TABLE 5: AVERAGE NO. OF PATIENTS SEEN IN A MONTH

The average number of TB patients seen in a month was reported as 14 (range 0 -180) [Table 6]. The average number of TB patients seen in a month was slightly less for the MBBS doctors (Mean 13.69; range 0 to 180) in comparison to MD doctors (Mean 15.44; range 0-60) [Annexure 1 : Tables 6.1 and 6.2]

Frequency	Percent
39	79.6
4	8.2
2	4.1
1	2.0
1	2.0
1	2.0
1	2.0
49	100.0
	Frequency           39           4           2           1           1           1           4

#### TABLE 6: NO. OF TB PATIENTS SEEN IN A MONTH

#### 2. AWARENESS REGARDING RNTCP

All 49 respondents were asked if they were aware of RNTCP. Forty-five out of the 49 respondents (92%) reported they were aware; three respondents (6%) reported not having any awareness regarding the national programme; while one respondent (2%) reported being aware but not knowing the details of the programme [Annexure 1 : Table 7]. The extent of awareness among MBBS and MD doctors was similar [Graph 1] [Annexure 1: Table 7.1].





Respondents were asked if they had attended any awareness programme on RNTCP. Twenty-four respondents (n=24/49; 49%) reported attending such a programme while 23 (n=23/49; 47%) reported not attending any such programme; one respondent was not asked while the other could not remember. The one respondent who could not remember properly whether he had attended any awareness programme was an MBBS doctor [Annexure 1: Table 8]. More MBBS doctors (n=17/31; 55%) reported attending awareness programmes as compared to MD doctors (n=7/18; 39%) [Table 8.1].

Qualification	Attended seminars/awareness/training programme on RNTCP				Total
of respondent					
	Yes	No	remember	Not asked	
MD	7 (38.9%)	11 (61.1%)	0	0	18 (100.0%)
MBBS	17 (54.8%)	12 (38.7%)	1 (3.2%)	1 (3.2%)	31 (100.0%)
Total	24 (48.9 %)	23 (46.9%)	1 (2.0%)	1 (2.0%)	49 (100.0%)

TABLE 8.1: ATTENDED SEMINARS/AWARENESS/ TRAINING PROGRAMME ON RNTCP

#### 3. OPINION ABOUT THE RNTCP

All 49 respondents were asked regarding their opinion on the following: use of sputum as the main diagnostic tool under the RNTCP, thrice weekly regimen under the RNTCP, Directly Observed Treatment and system of address verification before initiation of treatment<sup>2</sup>.

#### A. OPINION REGARDING USE OF SPUTUM AS THE MAIN DIAGNOSTIC TOOL UNDER RNTCP

Thirty-one out of the 49 respondents (63%) commented on the use of sputum as the main tool for diagnosis under the RNTCP. The remaining 18 respondents (n=18/49; 37%) did not respond to the question [Annexure 1: Table 9].

Of the 31 respondents who commented on the use of sputum as the main diagnostic tool, 23 (47%) were of the opinion that only sputum was not enough for the diagnosis of TB; seven respondents (14%) were of the opinion that sputum examination was appropriate, while one respondent was of the opinion "…clinical experience is at the top of everything. Experienced doctors can easily diagnose TB in their patients." (Male, MBBS GP, 60 years of age)

More MBBS doctors (n=17/31; 55%) as compared to MD doctors (n=6/18; 33%) were of the opinion that it was not enough to use sputum for the diagnosis of TB [Graph 2] [Annexure 1: Table 9.1].





<sup>&</sup>lt;sup>2</sup> For the purpose of analysis, 'No response' pertains to responses such as "I cannot say", "I have no opinion", "I have no experience" or where there was no comment made on the subject of enquiry

#### Sputum is not enough for diagnosis of TB

Of the 23 respondents who were of the opinion that sputum was not enough for the diagnosis of TB, 16 spontaneously gave a reason why they thought that sputum was not enough to diagnose TB. Six of these 16 respondents commented that sputum proved to be inadequate as a diagnostic tool for extra pulmonary TB.

#### Inadequate for extra pulmonary TB

"I do not agree fully. The reason is that medical diagnosis is based on clinical examination and diagnostic tools of which sputum is a part but not for say pleural effusion, abdominal TB, peritonitis, brain (CFS is normal), carries spine. So it is good for pulmonary but even for all pulmonary we cannot say sputum is enough. Sputum cannot be made the pillar of diagnosis" (Male, MBBS, 58 years of age).

Three respondents (n=3/16) were of the opinion that not all cases were sputum positive and hence sputum examination was inadequate.

#### Inadequate in case of sputum negative

"...going only for sputum is not enough. Many times it happens that patient comes as a sputum negative but still he has infection. Those cases remain undiagnosed" (Male, MBBS, 54 years of age).

Four respondents (n=4/16) felt that in case of sputum negative patients or in case of some pulmonary cases, sputum was not enough for diagnosis.

#### Inadequate in case of sputum negative as well as extra pulmonary cases

"I have a difference of opinion with sputum being the main diagnostic tool. Sputum negative does not mean patient does not have TB. We have had discussion in IMA with Dr X (referring to the consultant at St Thomas Home). Also patient with stomach TB, his sputum will be negative. For extra pulmonary patient, sputum will be negative. Even all pulmonary TB will not have sputum positive. It has happened that I have referred patients to STH and their sputum was negative. They were told you don't have TB. So they came back to me and when I started treatment (TB) they started getting better" (Male, MBBS, 58 years of age).

"...that is the basic fallacy in RNTCP because sputum negative is also there. Both are of equal value" (Male MBBS doctor above 62 years of age).

Another reason reported by two other respondents (n=2/16) was that sputum was not appropriate to diagnose TB in specific age groups.
#### Not appropriate for specific age groups

"Sputum if done properly is fine. In paediatrics (age group) you don't get sputum till 4-5 years. Also in case of lymph nodes, abdominal TB you have to do USG" (Male, MBBS, DCH Paediatrics, 36 years of age).

"You do not get more than 50% sputum +ve in paediatric cases and induced sputum in about 13% of the cases are sputum +ve" (Male, MD Paediatrics, 53 years of age).

The remaining two respondents (n=2/16) questioned the method of sample collection itself.

#### Method of sputum collection itself can be a problem

"Sputum is important. It is okay. Since 50s' when I was a student, sputum was emphasized. It is good but the quality of sputum is important - whether it is sputum or saliva. I tell patients that don't give saliva. Many doctors are not aware of the difference between saliva and sputum. They have to make patients aware. Labs do not tell patients" (Male, MD General Medicine, more than 75 years of age).

"I agree with sputum. Problem is only if one cannot cough out properly. Otherwise for those who can cough out it is adequate. Otherwise we use other investigations"

(Male, MBBS Paediatrics, 46 years of age).

Seven out of the 23 respondents (30%) who commented that sputum was not enough did not give any reason for their opinion. Four of them spontaneously mentioned that additional tests like X ray, Bronchoscopy, Eliza, PCR, gastro lavage were needed along with sputum for diagnosis of TB, "Sputum is good. But you cannot ignore other methods like X ray, Bronchoscopy, gastro lavaj- they are necessary" (Male, MBBS, 57 years of age).

#### Sputum for diagnosis of TB is appropriate

Seven out of the 49 respondents (14%) considered sputum to be appropriate. One respondent reported that previously he advised X ray but now he advises sputum (Male, MBBS, 77 years of age), while the other said that he advised three samples for diagnosis (Male, MBBS, GP, 59 years of age) the third respondent commented that sputum was "100% accurate" (Male, MBBS, 62 years of age); the fourth respondent remarked that sputum was "*okay*" since "*mostly there is pulmonary TB in the population*" (Female, MBBS DGO, 42 years of age).The remaining three respondents only commented that sputum as the main tool for diagnosis was either okay or fair or that they agreed to its use but did not elaborate.

#### B. OPINION REGARDING THRICE WEEKLY REGIMEN PRESCRIBED UNDER THE RNTCP

When asked to opine on the thrice weekly regimen prescribed under the RNTCP, 19 respondents (n=19/49; 39%) gave an opinion regarding only thrice weekly regimen without comparing it to the

Qualification		Thrice weekly in comparison with daily						Total
of								
respondent	Both	Dailv	Thrice	Thrice	Thrice	No	No	
	regimens	better	weekly	weekly	weekly	decisive	response	
	effective	than	better	effective	not	opinion		
		thrice	than		effective			
		weekly	daily					
MD	1 (5.6%)	2	0	6 (33.3%)	3 (16.7%)	2	4 (22.2%)	18(100.0%)
		(11.5%)				(11.1%)		
MBBS	8 (25.8%)	5	1 (3.2%)	6 (19.4%)	4 (12.9%)	1 (3.2%)	6 (19.4%)	31(100.0%)
		(16.1%)						
Total	9	7	1	12	7	3	10	49
	(18.4%)	(14.3%)	(2.0%)	(24.5%)	(14.3%)	(6.1%)	(20.4%)	(100.0%)

TABLE 10.1: OPINION ABOUT THRICE WEEKLY REGIMEN PRESCRIBED UNDER RNTCP

Twelve respondents (n=12/49; 25%) were of the opinion that the thrice weekly regimen was effective. However, eight respondents out of these 12 did not give a reason for this opinion while four others gave the following reasons:

Thrice weekly is effective

"90% get cured, 10% don't" (Male, MBBS, 60 years of age)

"Drug resistance cases are cured in govt. According to me DOTS is a good strategy" (Male, MBBS, 42 years of age)

"...easily accepted by patients" (Male, MBBS, 57 years of age)

"...the TB bacilli is activated after 48 hours that is the reason it is an alternate day therapy but need we scientific evidence" (Male, MD Paediatrics, 53 years of age)

Seven respondents (n=7/49; 14%) were of the opinion that thrice weekly was not effective.

## Thrice weekly is not effective

"Government does not give any medicines. It has stopped long back. After the Left govt has come in, everything has stopped. Now they are giving WHO medicines [that have a] "short expiry" [and are] "totally unscientific". Alternate day [regimen] will not cure. It creates resistance. They give DOTS medicines for 6 months blindly. Then they leave the patients. Free medicine is only for one month" (Male, MBBS, more than 60 years of age).

"...quality of drugs is good but higher doses are given in alternate day so there are adverse effects" (Male, MBBS, 58 years of age)

Seventeen respondents compared the two regimens. Nine were of the opinion that both were effective. For one respondent the use of either regimen depended on the condition of patients.

#### Both regimens are effective

"..... (I) do not like alternate day [regimen]. If patient has dizziness, vertigo then we shift patient to alternate [day regimen]. Daily [regimen] is better for 2 things- 1) habit formation for patients 2) drug effectiveness. If lungs are excessively damaged then regular (daily regimen) is better. If it is in early stages then alternate (day regimen) is better. But for treatment to be effective patient has to eat well only then drugs will be effective. Diet is the major part. If early stages then alternate [day regimen] is better because monetary taxation is less. But I cannot give details about which treatment is more effective as such" (Male, MBBS, 72 years of age).

For a former programme manager who had worked for the RNTCP, both regimens were equally effective. However, he had a difference of opinion regarding the duration of the regimen and doubts about the proper implementation of the programme.

#### Both regimens are effective but programme is not properly implemented

"Both regimens are equally effective. Difference is negligible. Patient has to take 7 tablets. Compliance for a patient is a big problem. Actually Rifampicin should be taken on an empty stomach for better absorption but almost all patients don't observe that. Observation is done in very few places. Nobody takes on empty stomach.

Results should be good with proper duration. Six months of treatment is not sufficient. I had a big fight with Dr. K [referring to the former Deputy Director General of Central TB Division] about it. Now it turns out I was right and they were all wrong. For Cat I patients 6 months treatment is not at all sufficient. It will create MDR [multi-drug resistance]. I have always had questions about Cat II but nobody has any answers.

I have 5-6 MDR [Multi-drug resistant TB] patients who are not getting medicines from any government hospital. I am arranging medicines with the help of medical representatives. There is no 3rd line drugs in West Bengal. Pulmonary TB should have 9 months treatment and EP [extra-pulmonary TB] like bones should have at least 1 year of treatment" (Male, MBBS, more than 62 years of age).

Another respondent (Male, MBBS DCH, 36 years of age) commented that both regimens were equally effective but RNTCP was for people who could not afford the daily treatment. One respondent said that he gave his patients daily treatment but, "Usually if the patient shows no improvement in two months I refer to RNTCP" (Male, MBBS, 67 years of age).

Seven respondents, who compared the two regimens, were of the opinion that the daily regimen was better. While two respondents out of these seven just stated that the daily regimen was better, the remaining five gave a reason why they thought the daily regimen was better.

## Daily regimen is better

Because patient had to take 'four drugs for 6-8 months' (Female, MBBS DGO, 42 years of age)

"Alternate day had high doses so patients have side effects" (Male, MBBS, 55 years of age)

Daily treatment for a longer duration may be better because, "I have some reservations about the alternate day regimen. Sometimes there is a relapse of TB. Not really because of the alternate day regimen. Patients leave treatment after few months. Sometimes it appears that if they take treatment everyday then their immunity might be more. Nine months of continuous treatment may be necessary. Treatment may be better." (Male, MD, 41 years of age)

"Alternate day treatment regimen is now proved as a weak regimen compared to daily treatment. I have heard that WHO is now in favour of daily treatment."

(Male, MD Chest Physician, 57 years of age)

One respondent felt that the daily regimen was better because it was "habit forming" like "brushing of teeth". He expressed concern regarding the pharmacodynamics of the drugs prescribed under the RNTCP.

"But tell me, drugs are made to last in the blood for 6 hours, 12 hours, 24 hours. How can it stretch for 48 hours? Technically it is not possible. Resistance possibilities are more" (Male, MBBS, 58 years of age).

Only one respondent was of the opinion that alternate day regimen was good for patients as,

"They don't have to take medicines daily. Taking medicines daily causes digestion related problems in patients" (Male, MBBS, 51 years of age).

Three respondents did not give any decisive opinion regarding the thrice weekly regimen. One respondent (Male, MD, more than 60 years of age) said that he could not comment because he did not use it. One respondent said that *"his friend practices it and he finds it useful"* (Male, MBBS, 59 years of age), while the third respondent asked for scientific evidence:

"There is a need to conduct comparative study of 100 RNTCP patients and 100 patients who are taking regular treatment. Then only we will know the effectiveness of these treatment patterns" (Male, MD Medicine, 69 years of age).

Although they considered thrice weekly regimen to be effective, four respondents spontaneously expressed their concerns regarding patient compliance due to thrice weekly regimen. One respondent was of the opinion that, "...since they have to work every day so they can't go every alternate day to take treatment" (Male, MBBS, 45 years of age).

#### C. OPINION REGARDING DIRECTLY OBSERVED TREATMENT

Twenty-five of the 49 respondents (51%) did not give any response/ opinion on the issue of observation of treatment under the RNTCP. Fifteen respondents (n=15/49; 31%) considered DOT to be useful; six respondents (n=6/49; 12%) considered it to be useful but not practical and three (n=3/49; 6%) to useful but not properly implemented [Annexure 1: Table 11]. More MBBS doctors considered the direct observation of treatment under RNTCP to be useful (n=11/31; 36%) as compared to MD doctors (n=4/18; 22%) (Graph 3) [Annexure 1: Table 11.1].

#### **GRAPH 3: OPINION ON DIRECTLY OBSERVED TREATMENT**



Fifteen respondents (n=15/49; 31%) were of the opinion that observation of treatment was useful. Of these, 14 gave reasons as to why they considered it to be useful whereas one respondent did not give any reason for his opinion. Out of the fourteen who gave reasons, two respondents (n=2/14) considered the system to be useful in case of illiterate patients; three (n=3/14) thought it helped maintain continuity in long term treatment, one of who spontaneously remarked:

#### DOT is useful

"In private sector patients don't come back if they feel better. Again when they have cough they go back to the doctor. So this system is good'' (Male, MBBS, 59 years of age)

Six respondents (n=6/14) found the system useful since it ensured that patient took their medicines regularly; one (1/14) respondent agreed that this system was useful in case patients had side effects like fever, loose stools and vomiting; two respondents (n=2/14) were of the opinion that observation helps ensure patients take the medicines, "patients carry the medicines home and don't take them. Because of observation it is a compulsion for patients- no wastage, no abuse" (Male, MBBS, 78 years of age).

Six respondents (n=6/49; 12%) were of the opinion that although the system was useful it was not practical. Out of the six respondents, four (n=4/6) were of the opinion that it was impractical because patients had to incur financial loses

#### DOT is useful but not practical

"Observation is a cumbersome procedure. Patient has to go to the DOT centre and bear the cost of transport and loss of wages" (Male, MBBS, 58 years of age).

A respondent (n=1/4) who had worked in the public health system commented "Observation is a

farce. You are observing so you should come to me. It is simply a joke. If you have to observe me then I have to come to you! Person needs to go on leave from work" (Male, MBBS, 57 years of age).

Another provider (n=1/4) attributed the stigma attached to TB to its failure, "RNTCP fails in case of adolescent girls because once she goes to the DOT centre she will not get married. These are the logistics" (Male, MD Paediatrics, 53 years of age).

Three respondents (n=3/49; 6%) were critical of DOT since it was not being implemented properly.

## Programme not implemented properly

"There should be close supervision by health visitors but I can tell you sitting in this chair and also while I was working in the programme that there is no observation- in very few centres. Even there [in those centres] patients don't take medicines properly. The DOT providers hand the medicines to patients to take home"

(Male, MBBS, more than 62 years of age and former Programme Manager, RNTCP)

Another respondent attributed the rising cases of drug resistant cases and defaulters to the lack of observed treatment "Drug resistance and defaulters are increasing. Proper implementation of programme should be there because no DOT is followed" (Male, MBBS, 58 years of age)

## D. OPINION REGARDING ADDRESS VERIFICATION AS A PREREQUISITE FOR INITIATION OF TREATMENT UNDER RNTCP

Thirty-three out of the 49 respondents (67%) did not give any response/ comment on the issue of address verification of patients in the RNTCP [Annexure 1: Table 12]. More MBBS doctors (n=10/31; 32%) as compared to MD doctors (n=2/18; 11%) were of the opinion that the system of address verification was good (Table 12.1).

STAKING INLAMENT						
Qualification		Total				
of respondent	Good system Not a good/ Not No response					
		practical	implemented			
		system	practically			
MD	2 (11.1%)	1 (5.6%)	2 (11.1%)	13 (72.2%)	18 (100.0%)	
MBBS	10 (32.3%)	1 (3.2%)	0	20 (64.5%)	31 (100.0%)	
Total	12 (24.5%)	2 (4.1%)	2 (4.1%)	33 (67.3%)	49 (100.0%)	

TABLE 12.1: QUALIFICATION WISE OPINION REGARDING ADDRESS VERIFICATION AS PREREQUISITE FOR STARTING TREATMENT

Twelve respondents (n=12/49; 25%) considered it to be a good system. Of these 12 respondents, five only commented that this system was good but did not give any reason for their opinion. Five respondents were of the opinion that address verification was good because it helped to control default, "Patients start medicines and then leave. They interrupt and go. So (the providers) have to go to their homes. Otherwise it will not be successful" (Male, MBBS, 57 years of age). Two other

respondents remarked that it was not possible to have this system in the private sector because of lack of time.

Two respondents (n=2/49; 4%) did not consider the system was being properly implemented. While one of the respondents considered "*poor contact tracing*" as the reason for failure in the RNTCP (Male, MD Paediatrics, 53 years of age) the other commented "*I have seen how it is implemented. Nobody is doing follow-up of patients. Address verification has no meaning*"

(Male, MD Chest Physician 57 years old).

Two other respondents (n=2/49; 4%) did not consider the system to be good and criticized the practice of address verification for the possible stigma it might create.

## DOT may lead to stigma

'Stigma for TB is on a large scale. Patients don't want health staff to come to their home. Patients want to hide TB from others'. The same respondent spontaneously advocated the use of cell phones instead because "Address verification is a difficult thing but tracing patients by using cell phone is a good idea. Cell phone is a good thing. It ensures privacy" (Male, MD Chest Physician 57 years old).

#### E. COMMENT ON RNTCP

Fourteen of the 49 respondents (29%) made a spontaneous comment on the RNTCP (Table 13).

Comment		Frequency	Percent
	Good programme		
	Good programme but not practically implemented	3	21.4
	Not a good programme	4	28.6
	Programme needs to be improved	2	14.3
	Total	14	100.0
Not applicable	No spontaneous comment	35	
Total		49	

#### TABLE 13: COMMENT ON RNTCP (n=14)

Out of these 14 respondents who commented, five felt that RNTCP was a good/ fine programme.

## RNTCP is a good programme

"I know all these things. Sputum examination, alternate day treatment and address verification. I think these things are ok [/ good/]. Every government programme follows some procedures. They design the programme as per WHO guidelines so these things must be having utility" (Male MD, Cardio-Diabetologist, 46 years of age).

Three respondents commented that although RNTCP was a good programme in principle, its implementation was faulty.

#### RNTCP is a good programme but faulty implementation

"Good programme but there are problems at the implementation level...patients' motivation

to attend the programme. Patients refuse to go to RNTCP because they are under the impression that no proper care is taken. Poor people go to RNTCP because they don't have a choice....I have attended training at TB hospital and I have seen 60 male and 20 female inpatients who had come from different sectors of Howrah but no proper care was taken there. Patients were getting medicines after two months. No reporting was done (documentation) and not properly observed. Middle income and high income groups should be sensitized about RNTCP" (Male MD Medicine, 59 years of age).

"Such programmes are necessary for our country. But our people [programme staff] are reluctant to take any efforts and they are not sincere. So such programmes cannot be successful" (Male, MD medicine 69 years of age).

Four respondents were very critical of the RNTCP.

#### RNTCP is a not a good programme

"Government does not give any medicines. It has stopped long back. After left government has come everything has stopped. When I was a student government used to screen wife and children. Now nothing is done" (Male MBBS, over 60 years of age).

"Govt. does nothing. They always harass people, have poor control and system is *malfunctioning*" (Male MD medicine 45 years of age)

One respondent accused the Government health system to be "a money making business" and RNTCP as "looting money" (Male, MD Medicine, 50 years of age)

"I don't trust on RNTCP principles. That it is successful in Tamil Nadu does not mean in the whole country it is successful. In our country health is not a priority and government is not taking proper care. In case of TB we see repeated failure due to DOTS regimen. The infrastructure is poor. People do not get proper treatment" (Male, MBBS GP, more than 60 years of age).

Two respondents were of the opinion that the programme needed some improvement. One of these respondents felt that the present scope of the programme was limited.

#### **RNTCP** needs improvement

"Loopholes are with co morbid cases. TB with diabetes. What do you do? Unless the diabetes is taken care of it is of no use. How much does a patient spend daily on his TB medicine? Rs. 30 and what does he spend on vial of insulin? Rs160. DOTS will only treat TB. What about his diabetes? He has to go to some other doctor to manage his diabetes. Programme should give 100% support because it is part of patient management- in a co morbid case what should be given priority?" (Male, MBBS, 58 years of age).

Another respondent was of the opinion although it was a "Good community programme. Overall good and effective programme" there was "too much paper work" and that needed to be reduced (Male, MBBS, 72 years of age).

## 4. IF EVER APPROACHED BY SOMEONE FROM ST THOMAS HOME OR RNTCP FOR REFERRAL OF PATIENTS FOR DIAGNOSIS AND OR TREATMENT

Twenty-six of the 49 respondents (53%) reported being approached by someone from STH or the RNTCP for referral of patients for diagnosis or treatment of TB patients. More MBBS doctors had been approached (n=20/31, 65%) as compared to MD doctors (n=6/18; 33%) [Tables 14].

TABLE 14: EVER BEEN APPROACHED BY ST. THOMAS HOME/RNTCP STAFF FOR REFERRING PATIENTS FOF
DIAGNOSIS AND OR TREATMENT

Qualification	Ever been approached by St. Thomas home/RNTCP staff for				Total
rospondont		-			
respondent	Yes	No	Can't	Not asked	
			remember		
MD	6 (33.3%)	10 (55.6%)	1 (5.6%)	1 (5.6%)	18 (100.0%)
MBBS	20 (64.5%)	9 (29.0%)	1 (3.2%)	1 (3.2%)	31 (100.0%)
Total	26 (53.1%)	19 (38.8%)	2 (4.1%)	2 (4.1%)	49 (100.0%)

## 5. EXTENT OF AWARENESS REGARDING SERVICES PROVIDED BY ST THOMAS HOME AMONG QUALIFIED DOCTORS

Twenty-nine of the 49 respondents (59%) reported that they knew about the services offered by St Thomas Home [Table 15].

	Frequency	Percent
Yes	29	59.2
No	18	36.7
Not asked	1	2.0
No response	1	2.0
Total	49	100.0

TABLE 15: AWARENESS REGARDING SERVICES PROVIDED BY ST THOMAS HOME

Twenty-two respondents (n=22/29; 76%) reported 'free treatment for patients'; 16 respondents (n=16/29; 55%) reported 'free diagnosis'; ten reported (n=10/29; 35%) 'nutritional support'; five respondents (n=5/29; 17%) reported 'free in-patient care'; two respondents mentioned ambulance service (n=2/29; 7%) and only one respondent mentioned 'social help'. None of the respondents mentioned 'contact investigations'. Apart from these services, other services like monetary incentives, consultations, better treatment, good arrangements, good diagnosis, and mobile van were also mentioned [Graph 4][(Annexure 1: Table 15.1)

#### **GRAPH 4: TYPE OF SERVICES PROVIDED BY STH**



One respondent made a spontaneous remark regarding the services, "earlier they used to provide food and biscuits but now they only provide medicines.... Now the services have become irregular" (Male, MBBS, 60 years of age) while another respondent commented, "Diagnosis is free. Treatment is also given. But there is no follow up" (Male, MD Medicine, 37 years of age).

Eleven respondents (n=11/49; 22%) reported two services of St. Thomas Home, eight respondents reported one service (n=8/49; 16%); seven respondents reported three services (n=7/49; 14%) and three respondents reported four services (n=3/49; 6%) (Annexure 1: Table 15.2).

#### 6. ACTION TAKEN UPON SUSPICION OF TB IN PATIENTS

Twenty-eight of the 49 respondents (57%) reported sometimes confirming and sometimes referring their patients for diagnosis on suspicion of TB, 19 respondents (n=19/49; 39%) always confirmed diagnosis of patients themselves by referring them to private laboratories while the remaining two respondents (n=2/49; 4%) said that they always referred patients elsewhere for confirmation of diagnosis (Annexure 1: Table 16).

Of the two respondents who always referred patients elsewhere for confirmation of diagnosis - one respondent, a general practitioner, referred his patients either to a private sector, a chest specialist or to STH or to other government centres as he did not have *"enough knowledge"*. The other respondent, a specialist in Medicine, said that he referred TB patients because he had *"other diseases to treat"*. Twenty out of the 28 respondents who sometimes confirmed themselves and sometimes referred for diagnosis were MBBS doctors. More MD doctors confirmed diagnosis

themselves (n=9/18; 50%) compared to MBBS doctors (n=10/31; 32%) [Graph 5][Annexure 1: Table 16.1].



**GRAPH 5: QUALIFICATION OF RESPONDENTS WITH ACTION TAKEN ON SUSPICION OF TB** 

## A. PLACES / CENTRES OF REFERRAL FOR DIAGNOSIS OF TB

Twenty of the 49 respondents (41%) referred their patients for diagnosis only to the private sector that included either a private laboratory or doctor. More MD doctors (n=10/18; 56%) referred their patients to the private sector for diagnosis compared to MBBS doctors (n=10/31; 33%), while more MBBS doctors (n=20/31; 65%) referred their patients to the private, government and NGO sectors for diagnosis of TB as compared to MD doctors (n=6/18; 33%). Only two respondents, both MD doctors reported they referred their patients to STH [Graph 6][Annexure 1:Table 17].



**GRAPH 6: PLACES OF REFERRAL FOR DIAGNOSIS OF TB** 

Respondents reported a variety of combinations when asked where they referred their TB suspects to (Table 18).

	Frequency	Percent
Private sector, doctor or lab	20	40.8
Private and Govt health facilities	9	18.4
Private, Govt, NGO	7	14.3
Private and St. Thomas Home	6	12.2
St. Thomas Home	2	4.1
Private, Govt and ESIS	2	4.1
Govt., Charitable, NGO	1	2.0
Private, medical college, Govt	1	2.0
No Response	1	2.0
Total	49	100.0

#### TABLE 18: WHICH INSTITUTIONS/ DOCTORS YOU REFER THESE PATIENTS FOR DIAGNOSIS OF TB

## REASONS FOR REFERRAL OF PATIENTS TO PARTICULAR CENTRES FOR DIAGNOSIS OF TB

#### B. REASONS FOR REFERRING TO PRIVATE AS WELL AS GOVERNMENT AND NGO SECTOR

Twenty-eight out of the 49 respondents reported referring their patients to private as well as government / NGO (including STH) facilities, while one did not respond to the questions on referral and/or reasons for referral. The analysis excluded the 20 respondents who referred exclusively to the private sector. There were various reasons for their referral to these centres, the leading ones being affordability of clients and proximity to chambers [Graph 7][Annexure 1:Table 19].



#### GRAPH 7: REASONS FOR REFERRAL TO PRIVATE, PUBLIC AND NGO CENTRES FOR DIAGNOSIS (n=28)\*

\*Graph does not include one respondent who did not give any reason

#### C. REASONS FOR NOT REFERRING ALL PATIENTS TO GOVERNMENT AND NGO SECTOR

Respondents (n=29/49) were also asked for reasons for not referring all their patients to the government or NGO sector facilities (including STH). The respondents reported several reasons but the most commonly reported one was that their patients were reluctant to go to these facilities because of perceived low quality of care, stigma, or loss of man hours [Table 20].

Reasons		Frequency (n=29)	Percent
	Patients' reluctance/patients' choice		89.7
	Better facilities in private	1	3.4
Prefer to diagnose and treat women patients		1	3.4
	No response	1	3.4
	Total	29	100.0
Not applicable	Refer to only private sector	20	
Total		49	

#### D. REASONS FOR REFERRING ALL PATIENTS TO PRIVATE SECTOR

Twenty respondents (n=20/49; 41%) reported referring their patients for diagnosis to the private sector only. Multiple responses were reported. Their reasons for referring their patients only to the private sector were varied, but nine of the 20 respondents reported a practical reason which was proximity to their chambers (45%) [Table 21].

## GRAPH 8: REASONS FOR REFERRING ALL PATIENTS TO PRIVATE SECTOR (n=19)\*



\*Graph does not include one respondent who did not give any reason Note: Multiple responses

## 7. PROFILE OF PATIENTS REFERRED TO ST THOMAS HOME, GOVERNMENT OR ANY NGO FOR CONFIRMATION OF DIAGNOSIS

The 29 respondents who reported referring their patients to STH, government or other NGO facilities were asked to provide the profile of the patients whom they referred to these places. Multiple responses were reported. Twenty-four respondents reported referring patients who were poor to STH, government or NGOs (n=24/29; 83%). Other responses included adult patients, migrants, patients with upper respiratory tract infections etc [Table 22].

TABLE EE: WITO AILE			
Type of patients	Frequency	Percent	
		(n=29)	
	Poor patients	24	82.7
	Adults	2	6.8
	Migrants	1	3.4
	Patients with upper respiratory tract infections	1	3.4
	Other than gynaec	1	3.4
	Patients needing in-patient care	1	3.4
	Try and refer all	1	3.4
	Cases with complications	1	3.4
	No response	1	3.4
Not applicable	Refer to private sector only	20	
Total		49	

TABLE 22: WHO ARE THE PATIENTS REFERRED TO STH, GOVERNMENT FACILITY OR NGO

Note: Multiple responses

## 8. TREATMENT OF TB PATIENTS

Thirty-three of the 49 respondents (67%) reported that they referred some patients to other places for treatment; ten (20%) reported that they treated all their TB patients while six (12%) reported that they referred all their patients for treatment [Table 23].

TABLE 23:	ACTION	REGARDING	TREATMENT	OF TB	PATIENTS

	Frequency	Percent
Refer some patients and treat some patients	33	67.3
Treat all patients on own	10	20.4
Refer all patients for treatment	6	12.2
Total	49	100.0

More MD doctors treated their own patients (n=8/18; 44%) as compared to MBBS doctors (n=2/31; 7%) while more MBBS doctors (n=5/31; 16%) referred all their patients for treatment as compared to MD doctors (n=1/18; 6%) [Annexure 1: Table 23.1].





#### A. REASONS FOR REFERRING SOME PATIENTS FOR TREATMENT

The 33 respondents who referred some patients for treatment were asked the reasons for their practice. Multiple reasons were reported. They reported varied reasons, the leading one being patients' ability to afford treatment (n=29/33, 88%) [Table 24.1].

Reasons for referring some patients for treatment		Frequency	Percent
		(n=33)	
	Patients' ability to afford	29	87.8
	Complicated cases needing specialist attention	14	42.4
	Availability of advanced facilities		3.03
If ESIS patients, referred to ESIS facilities		1	3.03
Patients needing in-patient care		1	3.03
Not Applicable	Treat all patients	10	
	Refer all patients	6	
Total		49	

TABLE 24.1: REASONS FOR REFERRING SOME PATIENTS FOR TREATMENT

Note: Multiple responses

## B. REASONS FOR NOT REFERRING ANY PATIENTS FOR TREATMENT

The ten respondents who never referred any of their patients for treatment were asked the reasons why they preferred to treat all their patients. They reported the following reasons: 'having the expertise to treat TB on their own' (n=5/10; 50%), 'respondents did not trust government regimen' and 'respondent trusted only daily regimen' (n=2/10; 20%). The other reasons included patients preferred to take treatment from them and patients could afford to take treatment from them [Table 24.2].

Reasons		Frequency	Percent
		(n=10)	
	I can treat TB	5	50
	Do not trust govt regimen/other than daily	2	20
	Patients choice	1	10
	Patient can afford	1	10
	No response	1	10
	Total	10	100
Not applicable	Treat some patients and refer some patients	33	
	Refer all patients for treatment	6	
Total		49	

#### TABLE 24.2: REASONS FOR NOT REFERRING ANY PATIENTS FOR TREATMENT

## C. REASONS FOR REFERRING ALL PATIENTS FOR TREATMENT

The multiple reasons given by the six respondents for referring all their patients for treatment included 'inability of patients to pay for private treatment' (n=4/49; 67%),'TB was not their field of expertise or practice' (n=4/49; 67%). The other reasons included in order to 'ensure treatment was regular' since patients were generally irregular in their treatment; 'St Thomas Home had all facilities'; 'St Thomas Home was close by'; and 'St Thomas Home gave good treatment' [Table 24.3].

Reasons		Frequency (n=6)	Percent
	Inability of patients to afford private treatment	4	66.7
	Not my field of expertise	4	66.7
	Ensure regular treatment	1	16.7
	Patients' choice	1	16.7
	All facilities at STH	1	16.7
	STH is close by	1	16.7
	Good treatment at STH	1	16.7
Not applicable	Treat all patients	10	
	Treat some patients and refer some patients	33	
Total		49	

TABLE 24.3: REASONS FOR REFERRING ALL PATIENTS FOR TREATMENT

Note: Multiple responses

## D. PLACES OF REFERRAL FOR TREATMENT OF TB

Of the 39 respondents who reported they referred patients for treatment (33 who referred some and six who referred all patients) 38 were asked to list the places where they referred them. While 18 (47%) reported they referred patients to either private, NGO and government sector for treatment, 16 respondents (42%) referred patients only to government facilities [Table 25].

Qualification	Places of referral for treatment of TB				Not	Treat all	
of	STH	Govt	Private	Private,	Total	asked	patients
respondent		facilities		Govt and			
				NGO			
MD	0	5 (55.6%)	0	4 (44.4%)	9 (100.0%)	1	8
MBBS	3 (10.3%)	11 (37.9%)	1 (3.4%)	14 (48.3%)	29 (100.0%)	0	2
Total	3 (7.9%)	16 (42.1%)	1 (2.6%)	18 (47.4%)	38 (100.0%)	1	10

**TABLE 25: PLACES OF REFERRAL FOR TREATMENT OF TB** 

## 9. TYPE OF PATIENTS REFERRED TO STH OR PUBLIC SECTOR FOR TREATMENT

The 38 respondents who reported they referred patients for treatment were asked which type of patients they referred to STH or government facilities. Their responses were varied but 30 of them reported referring poor patients (n=30/38; 78.9%) [Graph 10][Annexure 1: Table 26].



GRAPH 10: TYPE OF PATIENTS REFERRED TO STH OR PUBLIC SECTOR FOR TREATMENT (n=38)

Note: Multiple responses

## **10. OPINION ON PUBLIC PRIVATE MIX (PPM) IN RNTCP**

#### A. OPINION ON WHETHER PPM IS ADVANTAGEOUS FOR PATIENTS

Thirty-nine respondents (n=39/49; 80%) were of the opinion that PPM in the RNTCP was an advantage for patients, with each respondent stating at least one advantage for patients. Six respondents (n=6/49; 12%) did not consider PPM to be advantageous for patients while four respondents (n=4/49; 8%) did not respond to the question [Table 27].

**TABLE 27: IS PPM ADVANTAGEOUS FOR PATIENT** 

	Frequency	Percent
Yes	39	79.6
No	6	12.2
No response	4	8.2
Total	49	100.0

More MBBS doctors (n=26/49; 84%) felt that PPM was advantageous for patients as compared to

MD doctors (n=13/49; 72%). [Annexure 1: Table 27.1]





The 39 respondents who opined that PPM was advantageous for patients were asked the reasons for their opinion. Multiple responses were reported. Some of the key advantages mentioned included free diagnosis and treatment (n=15/39, 39%); good quality of treatment (n=11/39, 28%); accessibility in terms of distance and time (n=11/39, 28%); assurance of treatment completion/cure (n=6/39, 15%) etc. [Table 28].

Advantages for pa	Advantages for patients		Percent
	Free diagnosis and treatment		38.5
	Accessibility	11	28.2
	Good quality care	11	28.2
	Assurance of treatment completion and cure	6	15.4
	Affordable	5	12.8
	Reduced stigma	2	5.1
	Patient has choice	1	2.6
	Patient satisfaction	1	2.6
	Availability of nutritional support	1	2.6
Not Applicable	Do not consider PPM advantageous for patients	6	
	No response/ cannot say	4	
Total		49	

#### TABLE 28: ADVANTAGES OF PPM FOR PATIENTS

Note: Multiple responses

Six respondents were of the opinion that there were no advantages in PPM. One respondent did not favour DOTS and saw no advantage either for patients or doctors. According to another respondent although under PPM there were chances that patients would get assured treatment, "PPM is a disaster like anything... total disaster. Partnership is difficult because government functionaries have different mentality than private doctors. So accountability of PPM will be at stake. I am against the PPM, it is crazy idea" (Male, MD Chest Physician, 57 years of age)

## B. OPINION ON WHETHER PPM IS ADVANTAGEOUS FOR DOCTORS

Twenty-seven respondents (n=27/49, 55%) were of the opinion that PPM had some advantage for doctors. Twelve respondents (n=12/49; 25%) were of the opinion that PPM was not an advantage for doctors [Table 29].

#### TABLE 29: IS PPM ADVANTAGEOUS FOR DOCTORS

	Frequency	Percent
Yes	27	55.1
No	12	24.5
No response	10	20.4
Total	49	100.0

More MBBS doctors (n=19/49; 61%) felt that PPM was advantageous for patients as compared to MD doctors (n=8/49; 44%). [Annexure 1: Table 29.1]





The 27 respondents who opined that PPM was advantageous for doctors were asked to explain in what ways it was advantageous. Respondents reported multiple responses. Some of the reported advantages of PPM for doctors included, 'being able to contribute to society' (n=9/27, 33%); 'increase in knowledge base and experience' (n=6/27, 22%); 'retaining and increase in patient base' (n=6/27, 22%); 'mental satisfaction' (n=3/27, 11%); 'satisfaction that patients are getting good treatment' (n=3/27, 11%); 'increased interaction between public and private sector leading to sharing of workloads'; 'building a good reputation in society'; 'gaining goodwill of patients'; 'assurance that patients were completing treatment', 'eradication of TB from society' and 'societal improvement' (n=1/27, 4%)[Table 30].

Advantages for doctors		Frequency(n=27)	Percent
	Able to contribute to society		33.3
	Increases knowledge and experience	6	22.2
	Helps retain patients and increase in patient base	6	22.2
	Satisfaction that patients are getting good treatment	3	11.1
	Mental Satisfaction/ sense of doing good work	3	11.1
Good for reputation in the community		2	7.4
Increased Interaction between public and private		2	7.4
	sector leading to sharing of work loads		
	Helps to earn goodwill of patients	1	3.7
	Assurance that patients are taking treatment		3.7
Leads to societal improvement		1	3.7
	Eradication of TB from society	1	3.7
Not Applicable	No response	10	
	Do not consider PPM advantageous for doctors	12	

#### **TABLE 30: ADVANTAGES OF PPM FOR DOCTORS**

Note: Multiple responses

#### C. OPINION ON WHETHER PPM IS DISADVANTAGEOUS FOR PATIENTS

Thirty-six respondents (n=36/49; 74%) felt that PPM had no disadvantages for patients while six respondents (n=6/49; 12%) were of the opinion that PPM was disadvantageous for patients and seven respondents (n=7/49; 14%) did not respond to the question [Table 31].

	Frequency	Percent	
Yes	6	12.2	
No	36	73.5	
No response	7	14.2	
Total	49	100.0	

TABLE 31: IS PPM	DISADVANTAGEOUS FOR PATIENTS

More MD doctors (n=4/18; 22%) felt that PPM was disadvantageous for patients as compared to MBBS doctors (n=2/31; 7%); while more MBBS doctors (n=25/31; 81%) did not find PPM to be disadvantageous for patients as compared to MD doctors (n=11/18; 61%). [Graph 13][Annexure 1: Table 31.1]





The multiple disadvantages reported were 'poor quality of care in the government sector' (n=3/6), 'delay in diagnosis and treatment in the government' (n=2/6), 'increased stigma as home visits to patients' homes in case of default could lead to disclosure of patient's status and could become a 'social disadvantage' for the patients' (n=2/6) etc. [Table 32].

Disadvantages for patients		Frequency (n=6)	Percent
	Poor quality of care in government	3	50.0
	Increase in stigma	2	33.3
	Mismanagement in government	2	33.3
	Delay in diagnosis and treatment in government	2	33.3
	If the partnership is mismanaged can lead to	1	16.7
	problems for patients and drug resistance		
Not Applicable	No response	7	
	Do not consider PPM disadvantageous for patients	36	
Total		49	

## TABLE 32: DISADVANTAGES OF PPM FOR PATIENTS

Note: Multiple responses

One of these respondents, a former programme manager commented, "there are many migrants. They say we are going to 'muluk' (native place) for 15 days and they stay there for 250 days and they become defaulters. There is provision for transfer out of patients but no one does it properly. Nobody maintains the papers. Nobody does transfer in" (Male, MBBS, more than 62 years of age) while the other respondent commented, "if the guidelines are not maintained then that could lead to drug failure or drug resistance" (Male, MD Medicine, 59 years of age).

## D. OPINION ON WHETHER PPM IS DISADVANTAGEOUS FOR DOCTORS

Twenty-nine respondents (n=29/49; 59%) said that they did not see any disadvantages in PPM for doctors, while ten respondents (n=10/49; 20%) were of the opinion that PPM had disadvantages for doctors [Table 33].

	Frequency	Percent
Yes	10	20.4
No	29	59.2
No response	9	18.4
Not asked	1	2.0
Total	49	100.0

TABLE 33: IS PPM DISADVANTAGES FOR DOCTORS

Similar percentages of MD (n=11/18; 61%) and MBBS doctors (n=15/31; 58%) were of the opinion that PPM was not disadvantageous for doctors [Graph 14][Annexure 1: Table 33.1].





The multiple disadvantages reported included: 'the initiative was not very lucrative for doctors' (n=4/10); 'it could be time consuming' (n=3/10); 'it could adversely affect the respondents' reputation' (n=3/10); and 'loss of patients and financial losses' [Table 4].

Disadvantages		Frequency	Percent
		(11-10)	
	Not very lucrative	4	40.0
	Time consuming	3	30.0
	Affects reputation of doctors	3	30.0
	Loss of patients	2	20.0
	Financial loss	1	10.0
Not Applicable	Not asked	1	
	No response	9	
	Do not consider PPM disadvantageous for doctors	29	
Total		49	

## TABLE 34: DISADVANTAGES OF PPM FOR DOCTORS

Note: Multiple responses

Among the three respondents who thought their reputation would be affected adversely, one respondent reported, "patients think all treatment is free at this doctor" since the TB treatment was free (Male, MBBS, 58 years of age). The second respondent commented that even though it was not a very common occurrence, "TB is still a social stigma. If one patient comes to take DOTS and the other patients sitting on the chambers come to know that this is a TB patient and this doctor treats TB, then they may stop coming to the doctor" (Male, MBBS Paediatrics, 46 years of age); while the third respondent reported "Patients blame private doctors… if we refer them to the government.… In the government hospital no machine is in working condition. NO CT scan [/ facility is available/] at

medical college. The system is worst in Bengal... In Kerala and Gujarat it is good" (Male, MBBS, 60 years of age).

#### 11. WILLINGNESS TO REFER THEIR PATIENTS TO ST THOMAS HOME OR RNTCP

Forty-one respondents (n=41/49; 84%) reported willingness to refer patients to St Thomas Home or any other RNTCP facility for diagnosis and or treatment. Eight respondents (n=8/49; 16%) said that they were unwilling to refer patients [Table 35].

TABLE 35: WILLING TO REFER PATIENTS TO STH/RNTCP FACILITIES FOR DIAGNOSIS AND OR TREATMENT

	Frequency	Percent
Yes	41	83.7
No	8	16.3
Total	49	100.0

More MBBS doctors (n=27/31; 87%) were willing to refer patients to STH/RNTCP as compared to the MD doctors (n=14/18; 78%) [Graph 15] [Annexure 1: Table 35.1].



#### GRAPH 15: WILLINGNESS TO REFER PATIENTS TO STH/RNTCP FOR DIAGNOSIS AND OR TREATMENT

Three out of the eight respondents who were unwilling to refer gave reasons why they would not refer to STH or RNTCP. While one respondent said that he only referred patients to chest specialists, another said that he did not have any knowledge about the facilities. The third respondent believed that DOTS was effective but its implementation was poor and would never improve.

#### A. CONDITIONS FOR REFERRAL OF TB PATIENTS TO ST THOMAS HOME OR RNTCP

Five out of the eight respondents who were unwilling to refer their patients reported conditions under which they would consider referring patients to St Thomas Home or RNTCP. Additionally two respondents who agreed to refer patients also reported conditions for their referral. The conditions included improvement in the government system; reduction in paper work for doctors; availability of treatment for extra pulmonary and resistant cases; starting of facility in area of practice since patients did not want to travel long distances etc. [Table 36].

Conditions		Frequency	Percent
		(n=7)	
	Improvement in government system	2	25.0
	Reduction in paper work	1	12.5
	Treatment for extra pulmonary and resistant cases	1	12.5
	If facility is started in area of practice	1	12.5
	If patients are willing to go	1	12.5
	Priority treatment to referred patients	1	12.5
	If information given about services provided by STH and RNTCP	1	12.5
Not	Unwilling to refer	3	
Applicable:	Willing to refer	39	

Note: Multiple responses

#### B. EXPECTATIONS FOR REFERRAL OF TB PATIENTS TO ST THOMAS HOME /RNTCP

Twenty nine respondents (n=29/49; 59%) stated some expectations, while twenty respondents (n=20/49; 41%) said that they did not have expectations for referring patients to St Thomas Home or RNTCP [Table 37].

Respondents stated multiple responses. The expectations ranged from 'good quality of care' (n=12/49; 25%); 'feedback about treatment initiation and outcome of their referred patients' (n=10/49; 20%); 'availability of treatment for drug resistant TB' etc.

Two respondents (n=2/49) wanted the benefit of the financial incentives to be passed on to the patients.

"I don't like it - if I refer in return I get something. I don't like it. It should not happen. It is my moral duty to refer so that patients will get benefit from the centre. It is my moral duty. Even if it is implemented I will not accept. I would like to request that money should be given to patients" (Male MD Medicine, more than 75 years of age)

One respondent wanted awareness programmes to be conducted since there were misconceptions that the intake of TB medicines leads to sexual weakness and these could be one of the causes for treatment discontinuation. Out of the 20 respondents who said they did not have any expectations, ten respondents made a reference to monetary incentives. Of these ten respondents, five respondents (n=5/10) commented that they did not want any monetary incentives in lieu of referring patient. Three respondents (n=3/10) did not consider it right to receive any monetary incentives for referring poor patients. A respondent critical of the 'commission system':

"It is like bribing doctors. I tell you the morals of the medical fraternity have gone down. Ninety percent of the labs give commission to the doctors for doing tests. This is trying to corrupt doctors, that is my opinion but it depends on policy makers" (Male, MBBS, 59 years of age).

TABLE 37: EXPECTATIONS FOR REFERRING PATIENTS TO STH OR GOVERNMENT SECTOR				
Expectations	Frequency (n=49)	Percent		
No expectations	20	40.8		
Good quality of care	12	24.5		
Feedback from the programme	10	20.4		
Pass on the monetary incentives given to doctors to the patients	2	4.0		
Improve implementation status	1	2.0		
Facilities to be accessible	1	2.0		
Follow up to be made available	1	2.0		
Availability of treatment for drug resistant TB	1	2.0		
Availability of HIV test for TB patients	1	2.0		
Start facility in area of practice	1	2.0		
Information about STH and RNTCP to be made available	1	2.0		
Patient satisfaction to be guaranteed	1	2.0		
Reduced work burden	1	2.0		
Awareness programme for women	1	2.0		
Surgical experience	1	2.0		
Social rehabilitation	1	2.0		
Current monetary incentives are acceptable	1	2.0		

Note: Multiple responses

No response

## **12. WILLINGNESS TO BE DOT PROVIDERS**

Twenty-seven respondents (n=27/49; 55%) said that they were not willing to be DOT providers; 21 respondents (n=21/49; 43%) expressed their willingness to be DOT providers; and one respondent said he would think about it [Table 38].

1

TABLE 38: WILLING TO BE A DOT PROVIDER FOR PATIENTS DIAGNOSED UNDER THE RNTCP

	Frequency	Percent
Yes	21	42.9
No	27	55.1
Will think about it	1	2.0
Total	49	100.0

2.0

More MBBS doctors (n=15/31; 48%) were willing to be DOT provider as compared to MD doctors (n=6/18; 33%) [Graph 16][Annexure 1: Table 38.1]



**GRAPH 16: WILLINGNESS TO BE DOT PROVIDER** 

The reasons reported by the 27 respondents for their unwillingness to be DOT providers included: 'lack of time due to busy practice' (n=11/27; 41%), 'old age and health reasons' (n=2/27;7%), 'nonacceptance of RNTCP' (n=2/27;7%) where one respondent said that did not trust DOTS (Male, MBBS, more than 60 years of age) and the second respondent said that he had a superior therapy to DOTS (Male, MD Chest Physician, 57 years of age). 'Lack of poor patients in area of practice', 'lack of interest in treating TB patients', 'lack of space', 'losing out on some perks' were the other reasons reported [Table 39]. "*If medical representatives see that I keep DOTS they will stop coming to me and then I will not get specialized medicines*" was reported by one respondent (Male, MBBS, 55 years of age).

Reasons		Frequency(n=27)	Percent
	Lack of time/busy practice	11	40.7
	Old age/poor health	2	7.4
	Non acceptance of DOTS/lack of trust	2	7.4
	No poor patients in area of practice	1	3.7
	Do not treat TB patients	1	3.7
	Not interested in treating TB patients	1	3.7
	Lack of space	1	3.7
	No time and not a resident of Howrah	1	3.7
	Losing out on some perks	1	3.7
	No response	6	22.2
	Total	27	100.0
Not Applicable	Willing to be a DOT Provider	21	
	Will consider becoming a DOT Provider	1	
Total		49	

TABLE 39: REASONS FOR UNWILLINGNESS TO BE A DOT PROVIDER

Four respondents (n=4/21) who had agreed to be DOT providers said that this was subject to the condition that they received some assistance and did not have to leave their chambers.

One respondent (n=1/49) said that he would think about it, "I have reservations. So many documents are involved. If the burden of documentation is reduced, I will think about it" (Male, MBBS, 58 years of age).

Two respondents who had refused to be DOT providers initially stated conditions under which they would consider providing DOTS. One respondent wanted support in DOTS provision and record keeping while the second respondent wanted reduced documentation.

#### A. EXPECTATIONS FOR BECOMING DOT PROVIDERS

When the 21 respondents who had agreed to become DOT provider were asked what their expectations were for becoming a DOT provider, their responses were as follows: they expected 'good quality care for patients' (n=6/21); 'monetary incentives' (n=5/21), 'feedback regarding referred patients' (n=3/21). Other expectations included 'training and knowledge inputs'; 'administrative assistance'; 'nutritional supplements', 'regular transport facilities' and 'patient satisfaction'. Multiple responses were reported [Table 40].

Responses	Frequency (n=21)	Percent
No expectations	3	14.3
Good quality of care	6	28.6
Monetary Incentives	5	23.8
Feedback	3	14.3
Administrative assistance	2	9.5
Nutritional support to patients	1	4.8
Training	1	4.8
Regular transport facilities for patients	1	4.8
Patient satisfaction	1	4.8

TABLE 40: EXPECTATIONS FOR BECOMING A DOT PROVIDER

Note: Multiple responses

#### 13. OPINION ON WHICH MODEL OF PPM WOULD BE SUCCESSFUL IN HOWRAH AND INDIA

Thirty-three doctors (n=33/49; 67%) responded when asked to comment on which PPM would succeed in Howrah and India, while 16 respondents (n=16/49; 33%) gave no response or could not comment on the matter. Respondents reported multiple responses.

The various models for a successful PPM suggested included a model providing knowledge updates, periodic CMEs on the lines of the Chennai model (n=27/49; 55%), a model that gave financial incentives to doctors (n=12/49; 25%), the Mumbai model or a model where the programme staff

were available twenty-four hours and a model that looked after the patient welfare. Three respondents were skeptical about what would work while one was sure that the PPM will not work. He did not give any reasons for his opinion [Table 41].

Frequency (n=49)	Percent			
27	55.1			
12	24.5			
7	14.3			
6	12.2			
3	6.1			
2	4.0			
1	2.0			
1	2.0			
16	32.7			
	Frequency (n=49) 27 12 7 6 3 2 1 1 1 16			

TARIE	۸1۰	SUGGESTED	MODELS		SUCCESSEUI	DDM
IADLE	4I.	SOGGESTED	IVIODELS	FUR	JUCCESSFUL	FFIVI

Note: Multiple responses

Respondents who vouched for the Chennai model suggested that since the doctors were very busy, the updates including training programmes should be short, concise and specialized. The frequency of these updates could probably be every two months with discussions on normal presentations and resistant cases or through a CD that could be viewed at the respondents' convenience.

"there should be involvement of NGOs. Doctors cannot come for trainings/ seminars. It is better to have one-to-one dialogue- [through] a Field medical officer" (Male, MD Paediatrics, 53 years of age).

Out of the 12 respondents who suggested a model that gave financial incentives to doctors, two respondents mentioned a specific amount of 1000 rupees per patient as financial incentive. A third respondent was of the opinion that incentive given by St Thomas Home was reasonable, but the RNTCP needed to increase the amount.

Three respondents were skeptical about any of the models being successful. While two elaborated on their opinion, the third respondent did not.

"Any foreign model will never work in this set up. The health system needs to improve" (Male, MBBS, more than 60 years of age).

"I have no idea what will work. We tried everything. We gave special training to PPs. We charged Rs. 200 for the training. PPs from all over West Bengal came and took training and went back. At that time RNTCP was giving Rs 75. It failed. Nobody had the time. At the cost of Rs. 75 I have to keep an assistant with remuneration. Then what will go into my pocket"? (Male, MBBS, more than 62 years of age, former Programme Manager, RNTCP).

Two doctors desired more flexibility in management of patients:

"doctors should be allowed to adapt guidelines. They should be given flexibility, to add or reduce drugs if need be. Every individual is different. Treatment should be tailor made. Flexible attitude should be shown by RNTCP for achieving the goal" (Male, MBBS, 58 years of age).

"give flexibility to MO. About drug reactions and changes to make in drugs. In RNTCP it is written but they are not maintaining (Male, MBBS, more than 60 years of age).

#### 14. SUGGESTIONS FOR INCREASING PARTICIPATION OF PRIVATE DOCTORS IN PPM

Thirty-nine of the 49 respondents (80%) gave some suggestion regarding increasing participation of private doctors in PPM, while ten respondents (20%) did not provide any response or suggestions.

The suggestions for increasing participation of private doctors in PPM included those specifically aimed at doctors like 'creating awareness among doctors regarding RNTCP' (n=16/49; 33%); 'providing training / CME and Knowledge updates' (n=10/49; 20%); 'providing financial incentives' (n=5/49; 10%); 'providing support to private doctors'; 'giving doctors flexibility in treatment regimens' etc. Some others were aimed at broader issues like 'strengthening health systems', 'ensuring there was no political interference', 'strengthening communication between private and public sectors', 'establishing diagnostic chains' etc. Three respondents were sceptical about the PPM initiative while one respondent remarked that implementation of DOTS is not possible. Multiple responses were reported [Table 42].

Suggestions	Frequency (n=49)	Percent
Create awareness among doctor	16	32.7
Provide training /CME/ knowledge updates	10	20.4
Provide financial Incentives to doctors	5	10.2
Health system strengthening	4	8.16
PPM difficult to implement	3	6.1
Create awareness among quacks	2	4.1
Create awareness among patients	2	4.1
Ensure PPM benefits patients	2	4.1
Provide support to private doctors	2	4.1
Adopt an integrated approach- involve all sectors	2	4.1
Provide flexibility in treatment regimen to doctors	1	2.0
Consider private doctors' opinion	1	2.0
Ensure there is no political interference	1	2.0
Effective communication between private and public sectors	1	2.0
Chain to be established for diagnosis , treatment with referring	1	2.0
doctor, training and monitoring by STH/RNTCP staff		
Implementation of DOTS not possible	1	2.0
No response	8	16.3
No suggestions	6	12.2

TABLE 42: SUGGESTIONS FOR INCREASING PARTICIPATION OF PRIVATE DOCTORS IN PPM

Note: Multiple responses

The respondents who suggested increasing awareness among doctors regarding RNTCP wanted it to

be done on an individual basis. One respondent explained:

"they should go to chambers of doctors like you are doing- chamber by chamber and talk to doctors. Meetings are of no use. Doctors don't have time" (Male, MBBS, 45 years of age).

Five respondents elaborated on their suggestions regarding CMEs/ knowledge updates:

"Demystify the RNTCP. Public Private Partnership has many issues. People are very alienated from RNTCP. IMA should be involved. IPA has been involved since the last four years" (Male, MD Paediatrics, 53 years of age).

Involvement could begin with, "arranging of workshops. I am not saying only through IMA but anybody once in 2 to 3 months, especially focusing on Koch's. COPD, asthma are given importance, but Koch's is the real part. COPD and asthma are not curable. They can be controlled but Koch's is curable (Male, MD, PG in Diabetology, Echocardiology and Diploma in Geriatrics, 41 years of age)

"CMEs at a good place. It should be short and sweet. Because for today's doctor time and money are the main things" (Female, MBBS DGO, 42 years of age).

"Arrange CMEs with some nominal incentives to doctors say Rs. 200 ... TB and related topics -HIV TB" (Male, MD Consultant Physician and Diabetologist, 40 years of age)

"[distribute] a short booklet that can also have the broad guidelines - including investigations, management and how to deal with patients. If it is free it is good. How much it will cost I don't know because there will be cost implications. It should be kept short. If it is done 2-3 times a year it will be helpful". [the booklet should be distributed to all doctors irrespective of their specializations since] "TB is such a disease that even an urologist can have a case- it can be a co-morbid case" (Male, MD General Medicine, more than 75 years of age).

Three respondents had suggestions regarding who should be involved in the partnership. One MD doctor wanted only general practitioners and not specialists like him to be involved while two others commented that it was the quacks who needed to be approached as they were responsible for irrational treatment and delay in referrals.

"Awareness among patient is needed. Quacks should be approached and made aware. For abdomen pain, fever, they keep on giving their treatment. They do not refer early, whereas MBBS doctors give treatment properly". (Male, MD General Surgery, 38 years of age).

Three respondents did not give PPM a chance.

"It [PPM] will not work. You can create awareness among private doctors about RNTCP activities. It can be one way. If they feel, they can participate... but it is next to impossible" (Male, MD Chest Physician, 57 years of age).

Failure of any successful initiative was attributed to poor quality of care in the government system, lack of implementation of programme, poor health systems.

"General public are fed up with government health system. They are good on paper but don't take proper care.... Private sector will be interested if things work properly. Now if patients go to take DOTS sometimes the providers remain available and many times they don't. Because of this relapse cases are increasing. So people's mentality changes and [they] become ready to spend money" (Male, MD Medicine, 50 years of age).

"You go and talk with them. Those who will find it interesting will participate in this programme but I will not" (Male, MBBS, Dip Cardiology, 54 years of age).

There was a demand for evidence base- "show some proof why RNTCP is beneficial over regular treatment" (Male, MD Medicine, 69 years of age). A few respondents felt the opinions of private doctors needed to be heard. Few doctors found their role in the partnership to be very limited.

"The programme is structured and narrow. I am not utilized in this." (Male, MD Chest Physician, 50 years of age).

## A bigger role in the partnership was sought

"Chain should be established between government and private doctor who refer patients for diagnosis but after confirmation private doctor should give treatment to their patients. We have staff at our place who can maintain records so institutions like St Thomas Home should train our staff, and they can observe us about maintaining records or ensure whether patients are getting regular and complete treatment. Giving alternate day treatment is difficult. Daily treatment is better instead. If I give treatment to my patient then there will be no issue of patient loss"

(Male, MD Medicine, 37 years of age)

ACTION POINTS				
Areas of enquir	/ Findings	Action points		
<ol> <li>Awareness about the</li> </ol>	Majority of respondents aware of RNTCP	An update through a small pamphlet having the current diagnostic algorithm in		
RNTCP		Bengali/Hindi distributed as handouts.		
2. Opinion about the RNTCP	Overall skepticism about the use of sputum as the main diagnositic tool, effectiveness of thrice weekly regimen.	Dialogue with the respondents by the Consultant/FMO regarding the programme.		
3. Approached by STH for referral of patients	Little more than half approached by STH for referral of patients	<ul> <li>Systematic listing of qualified doctors in field area to be done for purposes of documentation.</li> <li>Initial visit by a Field Medical Officer (FMO) qualified in allopathic medicine. He/she can carry a letter from the consultant at St Thomas Home, who is well known and respected among the qualified doctors. The letter could be accompanied by a short list of services provided by St. Thomas Home along with details such as contact numbers and timings of STH and other field workers in the area.</li> <li>FMO to introduce field workers as contact persons for further follow up.</li> <li>Follow up visits by FMO every quarter according to area.</li> </ul>		
<ol> <li>Referrals for diagnosis and treatment</li> </ol>	Little more than half refer to RNTCP for diagnosis and two thirds of doctors some patients to RNTCP for treatment. Most referrals made on the basis of affordability of patients	<ul> <li>Encourage doctors to refer unaffording patients at the time of diagnosis itself to STH/RNTCP.</li> <li>Provide regular feedback to referring doctors</li> </ul>		
5. Suggested PPM models	Model providing knowledge updates most reported followed by financial incentives	<ul> <li>Knowledge updates in form of pamphlets/ handouts and organizing case discussions</li> <li>Initial dialogue by FMO to establish which doctors are interested in receiving compensation and then ensuring any future referral by the said doctors is compensated.</li> </ul>		
6. Suggestions for increasing participation	Increasing awareness among doctors and knowledge updates suggested	<ul> <li>Visit by a Field Medical Officer (FMO) once followed by visits by field workers and STH.</li> </ul>		

# **GRASS ROOTS DOCTORS**

#### 2012

## **FIGURE G: SUMMARY OF FINDINGS**



#### **GRASS ROOTS DOCTORS**

Respondents were interviewed to understand their opinions regarding the RNTCP, the indicators of suspicion, their referral and treatment patterns, willingness to refer TB patients for diagnosis and treatment to RNTCP, their expectations and conditions for the participation, suggestions regarding a successful PPM model and ways to increase the participation of private doctors in PPM.

## 1. PROFILE

A total of 77 grass roots doctors were interviewed.

Seventy-six out of the 77 respondents (99%) were male [Table 1]

TABLE 1: SEX

	Frequency	Percent
Male	76	98.7
Female	1	1.3
Total	77	100.0

DMS was the most frequently reported qualification (n=15/77; 20%), followed by RMP (n=8/77; 10%) and BHMS (n=5/77; 7%) [Tables2].Thirty-four respondents (n=34/77; 44%) reported 27 other qualifications [Annexure 2: Table 2.1].

TABLE 2: QUALIFICATIO	<b>NS</b>
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Qualifications	Frequency	Percent
DMS	15	19.5
RMP	8	10.4
BHMS	5	6.5
BUMS	4	5.2
DHMS	4	5.2
BIAM	4	5.2
DUMS	2	2.6
BAMS	1	1.3
Other	34	44.2
Total	77	100.0

Thirty-two out of the 77 respondents (42%) reported between 11 to 20 years of experience, 23 respondents (n=23/77; 30%) reported between one to ten years of experience; 12 respondents (n=12/77; 16%) had between 21 and 30 years of experience (range 1-42) [Table 3].
Years	Frequency	Percent
1-10	23	29.9
11-20	32	41.6
21-30	12	15.6
31-40	9	11.7
41-50	1	1.3
Total	77	100.0

#### **TABLE 3: YEARS OF EXPERIENCE**

(Mean 17.78; range 1-42)

The average numbers of patients seen by the respondents in a day were 25 (range 2-100). The respondents reported seeing an average of three TB patients in the month prior to the interview (range 0-45) [Annexure 2: Tables 4 and 5].

#### 2. AWARENESS REGARDING RNTCP

Seventy-one out of the 77 respondents (92%) reported they were aware of the RNTCP [Table 6].

#### **TABLE 6: AWARENESS REGARDING THE RNTCP**

	Frequency	Percent
Yes	71	92.2
No	6	7.8
Total	77	100.0

The six respondents (n=6/77; 8%) who reported not being aware of the RNTCP were very varied in their ages (range 29 to 71 years) and qualifications (BHMS, Unani, MBBA, MBBS, Medical Representative, BUMS).

# 3. SOURCES OF INFORMATION REGARDING RNTCP

The 71 respondents who were aware regarding the RNTCP reported multiple sources of information regarding RNTCP.

Seminars/awareness/ training programmes were reported by 46 respondents (n=46/71; 65%); followed by various communication media like newspaper, television, radio, hoarding (n=11/71; 16%); field workers and doctors at STH (n=9/71; 13%); Government hospitals (n=6/71; 9%). Some of the other sources of information reported were journals/books, colleagues and patients [Graph 1] [Annexure 2: Table 7].



## **GRAPH 1: SOURCES OF INFORMATION REGARDING RNTCP (n=71)**

Note: Multiple responses

Fifty-seven respondents (n=57/77; 74%) reported ever attending a seminar/awareness/training programme on RNTCP [Table 7.1].

	Frequency	Total
Yes	57	74.0
No	20	26.0
Total	77	100.0

These 57 respondents reported a variety of combinations when asked who had organised these seminars/awareness/ training programmes regarding RNTCP.

Fifty respondents (n=50/57; 88%) reported attending seminars/awareness/training programmes that were organised by STH; and the government centres (n=11/57; 19%). Other responses included seminars arranged by IMA, Medical Club, a homeopathy society and another NGO [Table 7.2].

		Frequency (n=57)	Percent
	STH	50	87.7
	RNTCP	11	19.3
	Professional Association-IMA	1	1.75
	Medical Club	1	1.75
	Progotisheel Homeopathy Chikitsa Society	1	1.75
	NGO-Seed	1	1.75
Not applicable	Never attended any programmes	20	
Total		77	

Note: Multiple responses

#### 4. OPINION ON RNTCP

# A. OPINION REGARDING DAILY REGIMEN COMPARED TO THRICE WEEKLY REGIMEN:

All 77 respondents were asked for their opinion regarding the more effective regimen for treating TB.

Forty-five respondents (n=45/77; 58%) reported thrice weekly treatment regimen to be much more effective than the daily treatment, 17 respondents (n=17/77; 22%) were of the opinion that daily regimen was more effective, and 14 respondents (n=14/77; 18%) were of the opinion that both regimens were equally effective, one respondent did not give any response saying he was unable to compare the two regimens (n=1/77; 1%) [Graph2]. [Annexure 2: Table 8.1]



#### **GRAPH 2: OPINION REGARDING DAILY REGIMEN COMPARED TO THRICE WEEKLY REGIMEN**

#### THRICE WEEKLY IS MORE EFFECTIVE THAN DAILY REGIMEN:

The 45 respondents (58%) favoured the thrice weekly treatment over the daily regimen because the quality of medicines was good, patients were getting cured, there was regularity of treatment and good quality of care because of the system of observation and follow up under RNTCP. Thrice weekly regimen was also considered to be convenient for patients since it was not daily, the patients did not have to miss work daily, it was free and accessible. Also the chances of default were considered to be fewer when patients did not have to take their medicines daily.

"Doctors have become business men, they don't value the interest of their patients- as a result patients suffer. Govt treatment is good. Patients are getting cured. Infrastructure at STH is much better than the infrastructure at Govt. You people take a lot of care of your patients" [Male, RUMS, 57 years of age]

"Patients get cured. I have done some x rays for patients after they have completed treatment, they are cured" [Male, BHMS, 37 years of age]

"It is good that patients are taking medicines under observation. This way we can find out about the side effects of patients. Because patients are improving and the drugs are not made by any local company" [Male, DMS/BUMS, 45 years of age]

# DAILY REGIMEN IS MORE EFFECTIVE THAN THRICE WEEKLY REGIMEN:

The 17 respondents (22%) who were of the opinion that daily treatment regimen was more effective than thrice weekly treatment because the doses were regular, and the drugs were less harmful for patients because of lower dosages.

"See it is better to take [medicines] daily rather than thrice weekly because if there is a gap of one day, then it becomes a two day gap, then you have to start all over again" [Male, DHMS, 50 years old]

"If medicines are not taken daily the disease will not be cured and then there is a possibility of the patient becoming resistant" [Male, Unani Medicine, 39 years of age]

"Since the patients are weak it may be harmful for them to take so many doses of medicines together. That is why daily (regimen) may be better by distributing doses" [Male, DMS, 59 years of age]

## BOTH REGIMENS ARE EQUALLY EFFECTIVE:

Fourteen respondents (18%) were of the opinion that both regimens were equally effective since patients taking the daily as well as those taking thrice weekly regimen are cured. They felt patients who could afford went for the daily regimen while the poor patients went for the thrice weekly regimen.

"RNTCP drugs are available under 'composition' name and private drugs are available under 'trade' name" [Male, ISC/BAMS, 37 years of age]

"If patients are very serious then better to take daily and if not so serious then thrice weekly is good" [Male, RMP, 61 years of age]

# B. OPINION REGARDING QUALITY OF DRUGS GIVEN IN RNTCP:

All 77 respondents were asked their opinion regarding the quality of drugs given in the RNTCP. Fortyone respondents (n=41/77; 53%) were of the opinion that the quality of drugs given by RNTCP was good. Fourteen respondents (n=14/77; 18%) felt the quality was very good while four respondents (n=4/77; 5%) were of the opinion that the quality was poor. Seventeen respondents (n=17/77; 22%) were unable to make any comment on the quality of drugs [Graph 3] [Annexure 2: Table 8.2].





The reasons given for considering quality of drugs to be poor was that patients were not cured with thrice weekly medicines and the medicines under the RNTCP were not from a good company. One respondent was of the opinion that only Rifampicin was effective among the RNTCP medicines.

#### C. OPINION REGARDING THE NEED FOR DOT

Sixty-seven out of the 77 respondents (87%) were of the opinion that treatment should be observed. Seven respondents (n=7/77; 9%) were of the opinion that not everyone needed to be observed, while three respondents (n=3/77; 4%) could not make a comment [Graph 4] [Annexure 2:Table 8.3].



**GRAPH 4: OPINION ON DIRECTLY OBSERVED TREATMENT** 

The seven respondents (n=7/77; 9%) who did not consider observation of treatment necessary, were of the opinion that treatment should be observed only in case of some patients- illiterate or less educated patients (n=3); poor patients (n=2) and adolescent patients (n=1). The remaining respondent (n=1) was of the opinion that educating patients would ensure regularity of treatment [Annexure 2: Table 8.3.1].

# D. OPINION ABOUT INDIVIDUALIZED TREATMENT BOXES IN RNTCP

Sixty-three of the 77 respondents (82%) considered the system of having individualized treatment boxes in the RNTCP to be a good practice, one respondent did not find it advantageous while 13 respondents (n=13/77; 17%) gave no response to the question [Graph 5] [Annexure 2:Table 8.4 ].



**GRAPH 5: OPINION ABOUT INDIVIDUALISED TREATMENT BOXES IN RNTCP** 

Of the 63 respondents who were of the opinion that individualized boxes were good, 41 (n=41/63; 65%) gave no reason for their opinion, while 22 respondents (n=22/63; 35%) gave reasons for their opinion. The various reasons reported included 'individualized boxes contained medicines according to patients' requirement' (n=7/22; 32%); 'convenient for patients to take their treatment' (n=6/22; 27%); 'helps providers know the details regarding the patients' treatment' (n=5/22; 23%) and 'ensures continuous treatment' (n=2/22; 9%) etc [Table 8.4.1].

Reasons		Frequency (n=22)	Percent
	Individualized boxes contain medicines according to patients' requirements	7	31.8
	Convenient for patients to take treatment	6	27.3
	Come to know details about patients' treatment	5	22.7
	Ensures continuous treatment	2	9.1
	We know that patients' medicines have finished	1	4.5
	Medicines are accounted for	1	4.5
	Total	22	100
Not applicable	Did not give reasons for considering individualized boxes	41	
upplicable	No response	13	
	Having individualized boxes not advantageous	1	
TOTAL		77	

TABLE 8.4.1: REASONS FOR CONSIDERING INDIVIDUALISED BOXES TO BE ADVANTAGEOUS

#### E. OPINION REGARDING MAINTENANCE OF CARD AND TREATMENT BOX BY THE DOT PROVIDER

Sixty-nine out of 77 respondents (90%) considered the maintenance of card and treatment box by the DOT provider to be a good practice, seven respondents (n=7/77; 9%) did not give a response while one respondent did not feel the need for this system [Graph 6:] [Annexure 2: Table 8.5].



**GRAPH 6: OPINION REGARDING MAINTENANCE OF CARD AND TREATMENT BOX BY THE DOT PROVIDER** 

Out of the 69 respondents who thought maintenance of card and treatment box by the provider was good, 48 (n=48/69; 70%) commented or gave some reason for this opinion while the remaining 21 respondents gave no reason or did not make any additional comments.

The reasons/ comments made by the 48 respondents for their opinion, were that it was 'possible to monitor patients' doses' (n=33/48; 69%), 'patient records are maintained' (n=11/48; 23%), 'good quality of treatment is ensured' (n=3/48; 6%) and 'medicines are accounted for' [Table 8.5.1].

"Neglect by patient and DOT providers becomes obvious. As a result those who come to check can easily notice it and counsel patients and DOT providers" [Male, MBBA, (ICM), 35 years of age]

TABLE 8.5.1: REASONS FOR OPINION REGARDING MAINTENANCE OF CARD AND TREATMENT BOX BY TH	E
DOT PROVIDER	

Reasons		Frequency (n=48)	Percent
	Can monitor if patient missed doses	33	68.8
	Record of patients is maintained	11	22.9
	Good quality treatment since protocol is followed	3	6.3
	Medicines will be accounted for	1	2.1
	Total	48	100.0
Not	No reasons/comments made	21	
applicable	No response	7	
	Not necessary for providers to maintain card and treatment	1	
	box		
TOTAL		77	

# F. OPINION ON WHETHER THE RNTCP HAS AN ADVANTAGE OVER PRIVATE SECTOR TREATMENT BECAUSE OF DEFAULTER RETRIEVAL SYSTEM

Sixty-seven respondents (n=67/77; 87%) were of the opinion that the defaulter retrieval system under the RNTCP gave it an advantage over the private sector; three respondents (n=3/77; 4%) were of the opinion that there was no advantage; one respondent felt that although there was an advantage the implementation was not good in the government sector, and six respondents (n=6/77; 8%) did not give a response to the question [Graph:7] [Annexure 2: Table 8.6].

# GRAPH 7: DOES RNTCP HAVE AN ADVANTAGE OVER PRIVATE SECTOR BECAUSE OF DEFAULTER RETRIEVAL SYSTEM



RNTCP has an advantage over private sector because of defaulter retrieval system

"Patients who are taking treatment with private doctors do not want to come back after they start feeling better" [Male, RUMP, 58 years of age].

"Private doctors do not leave their chambers and go in search of their patients. But if any patient taking treatment under RNTCP does not come to the centre for their medicines, the health workers go to the patient's home and explain to him so that he does not discontinue the treatment. If the treatment is discontinued the disease might become worse, they explain all this. As a result the patient cannot discontinue treatment half way through" [Male, BIAM, 44 years of age]

RNTCP does not have an advantage over private sector because of defaulter retrieval system

"TB patients don't get cured despite this system/ mechanism" [Male, DMS, 61 years of age]

# 5. AWARENESS REGARDING PPM

Fifty- six respondents (n=56/77; 73%) said that they were aware of PPM in Howrah [Table 9].

	Frequency	Percent
Yes	56	72.7
No	21	27.3
Total	77	100.0

TABLE	9: AW	ARENESS	REGARDIN	G PPM

Only 56 of the 77 respondents (73%) who reported awareness regarding PPM were asked regarding their sources of information.

The most reported sources of information were training programmes organized by STH (n=39/56; 70%); followed by communication with doctors and staff at STH (Consultant, field workers and DOT provider)(n=10/56; 18%); patients (n=4/56); public sector (n=1/56); colleagues (n=1/56) and general public (n=1/56) [Graph 8] [Annexure 2: Table 9.1].

# GRAPH 8: SOURCES OF INFORMATION ABOUT RNTCP (n=56)



# 6. WHETHER APPROACHED BY ANYONE FROM STH OR RNTCP FOR REFERRAL OF PATIENTS FOR DIAGNOSIS OR TREATMENT

Seventy-two respondents (n=72/77; 94%) reported being approached by someone from STH for referral of patients for diagnosis and treatment while only four respondents (n=4/77; 5%) reported being approached by someone from RNTCP for the referral of patients for diagnosis and treatment [Graph 9] [Annexure 2: Table 10 and 11].



#### GRAPH 9: APPROACHED BY STH /RNTCP FOR REFERRAL OF TB PATIENTS FOR DIAGNOSIS AND TREATMENT

# 7. FAMILIARITY WITH SERVICES PROVIDED BY STH

Sixty-seven respondents (n=67/77; 87%) said that they were familiar with the services offered by STH to their patients [Table 12].

<b>TABLE 12: FAMILIAR WITH</b>	THE SERVICES PROVIDED	) BY STH FOR PATIENTS	TREATED UNDER RNTCP

	Frequency	Percent
Yes	67	87.0
No	10	13.0
Total	77	100.0

Only the 67 respondents who reported being aware, were asked regarding the services offered by STH to their patients. Respondents reported a variety of combinations. The services reported included free treatment (n=42/67; 63%); free diagnosis (n=33/67; 49%); free nutritional supplement/breakfast (n=24/67; 36%); free in-patient care (n=16/67; 24%), social help (n=11/67; 16%); all or many free services (n=9/67; 13%), medicine supply or TB treatment (n=8/67; 12%), all types of investigations (n=3/67; 5%) etc [Graph 10] [Annexure 2: Table 12.1].



#### GRAPH 10: AWARENESS ABOUT TYPES OF SERVICES OFFERED BY STH (n=67)

# 8. DIAGNOSIS OF TB

#### A. SYMPTOMS THAT LEAD TO SUSPICION OF TB

Free treatment

0%

10%

20%

30%

40%

50%

All 77 respondents were asked regarding the symptoms that lead them to suspect TB in their patients. The symptoms reported were cough (n=74/77; 96%); fever (n=69/77; 90%); weight loss (n=34/77; 44%); loss of appetite (n=31/77; 40%); blood in sputum/mouth (n=26/77; 34%); chest pain (n=19/77; 25%); weakness (n=18/77; 23%) and cervical lymph nodes (n=3/77; 4%). The other symptoms reported were night sweats, anaemic tendency, vomiting tendency, body ache, back ache, cold, cough not responding to medicines, joint pain and stomach ache. Respondents reported combination of responses [Table 13].

63%

70%

60%

Symptoms	Frequency	Percent
	(N=77)	
Cough	74	96.1
Fever	69	89.6
Weight loss	34	44.2
Loss of appetite	31	40.3
Blood in sputum/mouth	26	33.8
Chest pain	19	24.7
Weakness	18	23.4
Cervical lymph nodes	3	3.9
Night sweats	1	1.3
Anaemic tendency	1	1.3
Vomiting tendency	1	1.3
Body ache	1	1.3
Back ache	1	1.3
Cold	1	1.3
Cough not responding to medicines	1	1.3
Joint pain	1	1.3
Stomach upset	1	1.3
Thin patients	1	1.3

#### TABLE 13: SYMPTOMS LEADING TO SUSPICION OF TB

Note: Multiple responses

The various types of cough reported by the 74 respondents were-cough for more than 2 weeks (n=33/74; 45%); cough (n=28/74; 38%); cough for many days (n=9/74; 12%); dry cough (n=2/74; 3%) and mild cough (n=2/74; 3%).

The various types of fever reported by the 69 respondents were 'fever' (n=49/69; 71%); 'Morning/evening fever' (n=8/69; 12%); 'low grade fever' (n=7/69; 10%); 'continuous fever' (n=5/69; 7%)

# B. WHAT INVESTIGATIONS ADVISED ON SUSPICION OF TB?

Sixty-five respondents (n=65/77; 84%) reported advising their patients investigations for diagnosis of TB by themselves and referring some patients to STH, private and public sectors while the rest (n=12/77; 16%) referred their patients on suspicion to STH and the public sector without undertaking diagnosis on their own [Table13.1].

# TABLE 13.1 ADVICE INVESTIGATIONS FOR DIAGNOSIS OF TB

	Frequency	Percent
Yes	65	84.4
No	12	15.6
Total	77	100.0

The 65 respondents who advised tests to their TB suspects for diagnosis were asked regarding the tests they advised. Respondents reported a variety of combinations.

Twenty-two respondents (n=22/65; 34%) advised a combination of sputum, x ray, mantoux and blood tests to their patients; 14 respondents (n=14/65; 22%) advised sputum, x ray and blood tests, 12 respondents (n=12/65; 19%) advised sputum, x ray and mantoux, five respondents (n=5/65; 8%) advised sputum and x ray; three respondents (n=3/65; 5%) advised sputum, x ray, blood tests and others, three respondents (3/65; 5%) advised x ray, mantoux and blood tests, one respondent each suggested sputum, mantoux and blood tests; sputum and blood tests; sputum and mantoux ; x ray and blood tests; and all investigations (sputum, x ray, mantoux, blood tests and others like urine and stool). Only one respondent advised only sputum for the diagnosis of TB [Graph 11] [Annexure 2: Table 13.1.1].



GRAPH 11: INVESTIGATIONS ADVISED FOR DIAGNOSIS OF TB (n=65)

X ray and sputum were the most reported tests by the respondents. Sixty-one respondents advised sputum to their patients (n=61/65; 94%). An equal number (n=61/65; 94%) advised X ray to their patients. Other tests advised were blood tests advised by 48 respondents (n=48/65; 74%); TT/ mantoux/ skin test advised by 40 respondents (n=40/65; 62%), urine and stools (n=2/65; 3%), fluid culture (n=1/65; 2%); HIV (n=1/65; 2%) and Stool (n=1/65; 2%). Respondents reported multiple combinations [Table 14].

Tests advised		Frequency (n=65)	Percent
	Sputum for AFB	61	93.8
	Chest x-ray	61	93.8
	Blood test	48	73.8
	TT/ mantoux/ skin test	40	61.5
	Urine & Stool	2	3.1
	Fluid culture for patients with pleural effusion	1	1.5
	HIV	1	1.5
	Stool	1	1.5
Not applicable	Do not advise tests	12	
Total		77	

#### TABLE 14: TYPES OF TESTS ADVISED FOR DIAGNOSIS OF TB

Note: Multiple responses

The 61 respondents who advised sputum to their patients were asked the number of samples they advised. Fifty-six respondents (n=56/61; 93%) advised three samples, two respondents did not specify the samples but referred their patients to STH for sputum. One respondent advised two samples while one respondent advised as many as four samples if the patient was negative. One respondent did not respond to the question [Table 15].

TABLE 15: NU	IMBER OF SPUTUM SAMPLES ADVISED		
No of sample	No of samples		Percent
	Three Samples	56	93.3
	Do not specify samples, refer to STH for sputum	2	3.1
	Two Samples	1	1.5
	If first sample positive don't ask to repeat, if	1	1.5
	sample is negative ask for 4 samples		
	No response	1	1.5
	Total	61	100
Not	Do not advise tests	12	
applicable	Do not advise sputum	4	
Total		77	

#### C. PLACE OF REFERRAL FOR DIAGNOSIS:

Twenty seven out of the 65 respondents who advised tests for diagnosis of TB, referred their TB suspects to STH as well as the private sector (n=27/65; 42%); 14 respondents (n=14/65; 22%) referred their patients to both the RNTCP /public sector as well as the private sectors; 11 respondents (n=11/65; 17%) referred their patients only to the private sector; seven respondents (n=7/65; 11%) referred their patients to both STH and RNTCP, four (n=4/65; 6%) referred only to STH and two (n=2/65; 3%) referred to only public sector for diagnosis of TB. [Figure 1] [Annexure 2: Table: 16].

Out of the 12 respondents who did not advise tests but referred on suspicion, ten (n=10/12; 83%) referred their TB suspects to STH while the remaining two (n=2/12; 17%) referred to both STH as well as public sector [Figure 1] [Annexure 2: Table16.1]

# FIGURE 1 ACTION ON SUSPICION OF TB



#### D. REASONS FOR REFERRAL TO PARTICULAR CENTRES:

Reasons for referring patients to the facilities reported included 'affordability' (n=38/77; 49%); 'patients' choice' (n=8/77; 10%); 'convenience of facilities like proximity and less amount of waiting time' (n=6/77; 8%); 'good quality of diagnosis' (n=5/77; 77%); and 'availability of various services' (n=4/77; 75%). Three respondents (n=3/77; 4%) did not specify a reason while sixteen (21%) respondents did not give any response to the question [Tables 17]

TABLE 17. REASONS FOR REFERRING TO REFORTED FACILITIES				
Reasons	Frequency	Percent		
Affordability	38	49.4		
Patient's choice	8	10.4		
Convenience	6	7.8		
Good quality of diagnosis	5	6.5		
Availability of services	4	5.2		
No reason	3	3.9		
No response	16	20.8		
Total	77			

<b>TABLE 17:</b>	REASONS FOR	REFERRING TO	REPORTED FAC	UITIES
IADEL I/.	ILLAJONS I ON			

# *i.* Reasons for referral only to STH:

Fourteen respondents (n=14/77; 18%) referred their patients only to STH for diagnosis [Figure1]. The reasons for referring only to STH included 'affordability for patients' (n=10/14; 71%), 'availability of services' (n=4/14; 29%) and 'convenience' (n=1/14; 7%). [Table 18].

Reasons		Frequency (n=14)	Percent
	Affordability	10	71.4
	Availability of services	4	28.6
Convenience		1	7.1
	No response	2	14.3
Not applicable	Do not refer only to STH	63	
Total		77	

TABI F	18:	REASONS	FOR	RFFFRRING	ONIY	то	STH FO	AGNOSIS
					<b>U</b>			 

Note: Multiple responses

# ii. Reasons for not referring patients to STH or public sector

Eleven respondents who referred their patients only to the private sector for diagnosis were asked reasons for not referring any patients either to STH or any other public sector.

The reasons included 'ensuring diagnosis of TB before making referrals to STH or the public sector' (n=3/11; 27%); 'not being familiar with STH services' (n=2/11; 18%); 'patients' choice' (n=2/11; 18%). Other reasons reported were 'not being familiar with RNTCP'; 'facilities not being accessible' and 'poor quality of care'. One respondent did not give a response [Table 19].

"Patients have to stand in line for a long time. Doctors come late. They do not examine patients properly" [Male, DMS, 53 years of age]

Reasons		Frequency(n=11)	Percent
	Ensure diagnosis before referring to public sector	3	27.3
	for treatment		
	Not familiar with STH services	2	18.2
	Patients' choice	2	18.2
	Not familiar with RNTCP	1	9.1
	Not accessible	1	9.1
	Poor quality of care	1	9.1
	No response	1	9.1
	Total	11	100
Not applicable	Refer to public sector and STH	66	
Total		77	

TABLE 19: REASONS FOR NOT REFERRING PATIENTS TO STH OR PUBLIC SECTOR FOR DIAGNOSIS

#### 9. TREATMENT OF TB

#### A. TREATMENT PRACTICES

All the 77 respondents were asked regarding their TB treatment practices. Sixty-eight of these (88%) reported that they referred all patients for treatment, eight respondents (n=8/77; 10%) reported treating some on their own and referring some for treatment while one respondent said that he treated all patients himself [Figure 13] [Annexure 2: Table20]





## B. PLACES OF REFERRAL FOR TREATMENT

# *i.* Refer all patients for treatment (n=68)

The 68 respondents reported a variety of combinations [Figure 2]. The most reported place of referral was STH (n=28/68; 41%) followed by STH and public sector (n=15/68; 22%); public and private sectors (n=11/68; 16%); STH and private sector (n=10/68; 15%). Other places of referral included only public sector (n=2/68; 3%) and only private sector (n=2/68; 3%) [Annexure 2: Table 20.1]

# ii. Refer some patients for treatment (n=8):

The eight respondents who referred some of their patients for treatment reported STH and private (n=4/8; 50%); public and private sector (n=3/8; 38%) and only private sector (n=1/8; 13%) [Annexure 2: Table 20.2].

# iii. Treat all patients on own (n=1):

One respondent did not refer as he treated all his TB patients.

# C. REASONS FOR REFERRAL

# *i.* Refer all patients for treatment (n=68):

Sixty-six out of the 68 respondents gave multiple responses as reasons for referring to particular centre, while two respondents did not respond to the question. The reasons for referral included 'affordability of patients' (n=37/68; 54%); 'availability of various services at the centres of referral' (n=12/68; 18%); 'good quality of treatment' (n=10/68; 15%); 'patients' choice' (n=10/68; 15%); 'availability of all facilities under one roof' (n=2/68; 3%), 'accessibility' and 'observation of treatment' etc [Table 21].

Reasons		Frequency (n=68)	Percent
	Affordability of patient	37	54.4
	Availability of various services	12	17.6
	Good quality treatment & care	10	14.7
	Patients' choice	10	14.7
	All facilities available under one roof	2	2.9
	Accessible	1	1.5
	Treatment is observed	1	1.5
	No response	2	2.9
Not applicable	Treat some on own and refer some	8	
	Treat on own	1	
Total		77	

TABLE 21: REASONS FOR REFERRAL FOR TREATMENT

Note: Multiple responses

# *ii.* Refer some patients for treatment (n=8):

Seven out the eight respondents gave reasons for referring some of their patients for treatment while one respondent did not give any response. The reasons reported were 'affordability of the patients' (n=4/8; 50%) and 'patients' choice' (n=3/8; 38%) [Table 22].

REASONS FOR REFERRING SOME PATIENTS FOR TREATMENT					
Frequency (n=8) Percent					
	Affordability of patient	4	50.0		
	Patients' choice	3	37.5		
	No response	1	12.5		

8

68

1

77

100.0

TABLE 22:

Refer all patients for treatment

# **10. TYPE OF PATIENTS REFERRED TO RNTCP/ STH:**

Treat on own

Total

Reasons

Not applicable

TOTAL

Seventy-three out of the 77 respondents (95%) referred patients either for diagnosis or treatment or both to STH or to the public sector while four respondents (n=4/77; 5%) did not refer any patients for either diagnosis and /or treatment to STH or RNTCP [Graph: 12] [Annexure 2: Table 23].





Seventy-one out of the 73 respondents who referred their patients responded to the query about the type of patients they referred for treatment to STH/RNTCP, one respondent did not give any response and one respondent was not asked the question.

The type of patients referred were patients who 'could not afford private treatment' (n=54/73; 74%), 'all TB suspects/patients' (n=6/73; 8%); 'patients who were willing to go' (n=5/73; 7%). Other responses included 'all types of patients' (n=2/73; 3%), 'all patients' (n=2/73; 3%), 'poor and willing to go' (n=2/73; 3%) and 'middle class patients'. Multiple responses were reported [Table 23.1].

		Frequency (n=73	Percent
	Patients who cannot afford private treatment	54	74.0
	All TB suspects/patients	6	8.2
	Patients willing to go	5	6.8
	All types of patients	2	2.7
	All patients	2	2.7
	Poor and willing to go	2	2.7
	Middle class	1	1.4
	No response	1	1.4
	Not asked	1	1.4
Not applicable	Refer only to private sector	4	
Total		77	

#### TABLE 23.1: PATIENTS REFERRED TO STH/RNTCP

Note: Multiple responses

#### 11. DO PATIENTS COME BACK TO REFERRING DOCTOR WHILE TAKING TREATMENT UNDER RNTCP?

Seventy-two out of the 73 respondents who referred patients to the STH/RNTCP were asked whether their patients came back to them while taking treatment under the RNTCP, while one respondent was not asked the question.

Sixty respondents (n=60/73; 82%) said that their patient came back to them, 12 respondents (n=12/73; 16%) reported that their patients did not come back while one respondent (n=1/73; 1%) was not asked the question [Table 24].

		Frequency (n=73)	Percent
	Yes	60	82.2
	No	12	16.4
	Not asked	1	1.4
	Total	73	100.0
Not applicable	Refer only to private sector	4	
TOTAL		77	

TABLE 24: DO PATIENTS COME BACK WHILE TAKING TREATMENT AT STH /RNTCP

# A. REASONS WHY PATIENTS COME BACK:

The reasons why patients came back to the respondents while taking treatment at STH/RNTCP were 'to give a feedback' (n=37/60; 62%), 'for management of side effects' (n=30/60; 50%), 'concomitant disease management' (n=10/60;17%); 'for consultation regarding prescribed medicines' (n=3/60; 5%) while one respondent (n=1/60; 2%) said that patients came back if they had any complaints about STH [Graph 13] [Annexure 2:Table 25].



# GRAPH 13: REASONS FOR PATIENTS FOR COMING BACK TO RESPONDENTS WHILE UNDERGOING TREATMENT AT STH/RNTCP (n=60)

# 12. FEEDBACK REGARDING REFERRED PATIENTS TO STH AND RNTCP

#### A. FEEDBACK REGARDING PATIENTS REFERRED TO STH:

Sixty-six out of the 77 respondents (86%) reported referring their patients to STH for diagnosis and /treatment. Forty-seven out of these 66 respondents (71%) reported that they received feedback from STH regarding their referred patients.

These 47 respondents were asked if they were satisfied with the feedback. Thirty-five respondents (n=35/47; 75%) reported being satisfied with the feedback, 11 respondents (n=11/47; 23%) said that they were very satisfied with the feedback while one respondent (n=1/47; 2%) reported being neither satisfied nor dissatisfied with the feedback [Figure 3] [Annexure 2: Tables 26 and 26.1].

# B. FEEDBACK REGARDING PATIENTS REFERRED TO RNTCP:

Thirty-six out of the 77 respondents (47%) reported referring their patients for diagnosis and / treatment to RNTCP. Thirty-four out of the 36 respondents (n=34/36; 94%) reported not receiving any feedback regarding their referred patients, one respondent (n=1/36; 3%) said he received feedback while one respondent (n=1/36; 3%) was not asked the question. The one respondent who reported receiving feedback also said that he was satisfied with the feedback he received [Figure 3] [Annexure 2: Tables 27 and 27.1].



# FIGURE 3: FEEDBACK FROM STH AND RNTCP REGARDING PATIENTS REFERRED FOR DIAGNOSIS AND/OR TREATMENT

# **13. FEEDBACK FROM PATIENTS REGARDING THEIR EXPERIENCE AT STH/RNTCP:**

Out of the 73 respondents who referred their patient to STH /RNTCP for diagnosis and/ treatment, 45 respondents (n=45/73; 62%) reported that their patients came back to give a feedback, 27 respondents (n=27/73; 37%) reported that their patients did not come back, while one respondent (n=1/73; 1%) was not asked the question [Table 28].

		Frequency (n=73)	Percent
	Yes	45	61.6
	No	27	36.9
	Not asked	1	1.4
	Total	73	100.0
Not applicable		4	
Total		77	

TABLE 28: DO PATIENTS GIVE YOU FEEDBACK ABOUT CARE RECEIVED AT STH /RNTCP

Thirty-three out the 45 respondents (n=33/45; 73%) reported that their patients had a positive or satisfactory experience; eight respondents (n=8/45; 18%) reported that their patients had a very positive/satisfactory experience while four respondents (n=4/45; 9%) did not respond to the question [Table 28.1].

Experience a	Experience at STH/RNTCP		Percent
	Very positive/satisfactory	8	17.8
	Positive/satisfactory	33	73.3
	No response	4	8.9
	Total	45	100.0
Not	Respondents whose patients did not give feedback	27	
applicable	Respondents who referred only to private sector	4	
	Not asked	1	]
Total		77	

#### TABLE 28.1: EXPERIENCE AT STH/RNTCP

The reasons for the positive experience were; 'convenience for patients as all services and facilities were available in one place' and 'good quality of care'. One respondent remarked that patients were happy to be referred to a good place. Although overall the experience at STH was satisfactory, 10 respondents (n=10/73) reported that there was a large crowd at STH, doctors came late and their patients had to wait in a queue for a long time.

# **14. WILLINGNESS TO PARTICIPATE IN PPM**

# A. WILLINGNESS TO REFER PATIENTS TO STH FOR DIAGNOSIS AND TREATMENT

All 77 respondents were asked if they were willing to refer patients to STH or any government centres for diagnosis and treatment. All respondents were willing to refer patients to STH or any government centres.

# B. EXPECTATIONS FOR REFERRING PATIENTS:

All the 77 respondents were asked regarding their expectations for referring patients to STH /RNTCP for diagnosis and treatment. Sixty-six respondents (n=66/77; 86%) said that they had some expectations while 11 respondents (n=11/77; 14%) did not have expectations [Graph 14] [Annexure 2: Table 29]



#### GRAPH 14: EXPECTATIONS FOR REFERRING TB PATIENTS TO STH/RNTCP FOR DIAGNOSIS AND TREATMENT

Expectations for referring patients to STH/RNTCP included 'assurance of treatment completion' (n=31/66; 47%); 'monetary incentives' (n=12/66; 23%); 'nutritional supplements/ration for patients' (n=9/66; 14%); 'financial incentives for patients' (n=5/66; 8%). Other expectations reported were 'prompt and regular feedback regarding referred patients'; 'increase in DOT centres', 'patients should be provided all facilities/services'; 'arrangements for patients to travel to and fro to PM Bustee'; 'continuation of facility of ambulance and free medicines'; 'ensuring patients get good treatment'; 'be allowed to provide DOTS to the patients they referred'; 'ensure patients get good service'; 'ensure benefit for poor patients'; 'treatment to be made more accessible in terms of distance'. One respondent did not specify any expectations [Table 30].

Expectations		Frequency (n=66)	Percent
	Assurance of treatment completion	31	46.9
	Monetary incentives	12	22.7
	Nutritional supplement/ration for patients	9	13.6
	Financial incentives for patients	5	7.5
	Prompt & regular feedback regarding referred patients	1	1.5
	DOT centres should be increased	1	1.5
	All facilities/ services should be given to patients	1	1.5
	Arrangements for patients to travel to and fro to PM Bustee	1	1.5
	Continuation of facility of ambulance and free medicines	1	1.5
	Ensure patients get good treatment	1	1.5
	Doctors be allowed to provide DOTS to the patients they refer	1	1.5
	Ensure patients get good services	1	1.5
	Ensure it benefits poor patients	1	1.5
	Treatment to be made more accessible in terms of distance	1	1.5
	Not specified	1	1.5
Not applicable	No expectations	11	
Total		77	

TABLE 30: EXPECTATIONS FOR REFERRING TB PATIENTS TO STH/RNTCP FOR

Note: multiple responses

# **15. WILLINGNESS TO BE DOT PROVIDERS**

All 77 respondents were asked if they were willing to be DOT Providers. Forty-one respondents (n= 41/77; 53%) reported willingness to become DOT provider, while 36 respondents (n=36/77; 47%) reported their unwillingness. [Graph 15] [Annexure 2: Table 31].

#### **GRAPH 15: WILLINGNESS TO BE DOT PROVIDER**



# A. EXPECTATIONS FOR BEING DOT PROVIDERS-RESPONDENTS WHO EXPRESSED WILLINGNESS TO BE DOT PROVIDERS (N=41)

The 41 respondents who were willing to be DOT providers were asked regarding their expectations for being DOT providers. Thirty-one respondents (n=31/41; 76%) reported having expectations, 4 respondents (n=4/41; 10%) did not have any expectations, two respondent (n=2/41; 5%) was satisfied with the current incentives that were given and did not have any additional expectations, while four respondents (n=4/41; 10%) did not give any response [Table 32].

		Frequency (n=41)	Percent
	Yes	31	75.6
	No	4	9.8
	Current incentives are acceptable	2	4.9
	No response	4	9.8
	Total	41	100.0
Not applicable	Unwilling to be DOT providers	36	
Total		77	

#### **TABLE 32: EXPECTATIONS FOR DOT PROVISION**

The expectations for the thirty-one respondents were as follows- 'financial incentives for doctors' (n=12/31; 39%); 'patients should be cured' (n=6/31; 19%); 'financial incentives for patients' (n=4/31; 13%); 'provision of food for patients' (n=3/31; 10%); 'availability of services and facilities for patients' (n=2/31; 7%). Other expectations included 'reimbursement of travel cost for patients coming for supervised treatment', 'accessible medicines for patients', 'provision of facilities like electricity', 'fan', 'rent and supply of drugs for nausea & antibacterial solutions' (Dettol, Phenyl). One respondent wanted TB to be eradicated from society. Two respondents said they had expectations but did not specify. Respondents reported combination of responses [Table 32.1]

Expectation	s for being DOT provider	Frequency(n=31)	Percent
	Financial incentives for doctors	12	38.7
	Patients should be cured	6	19.4
	Financial incentives for patients	4	12.9
	Provision of food for patients	3	9.7
	Availability of services and facilities for patients	2	6.5
	Reimbursement of travel cost for patients coming for	1	3.2
	supervised treatment		
	Medicines to be made available close by to be	1	3.2
	convenient for patients		
	Facilities- electricity, fan, rent +etc for patients	1	3.2
	Supply of drugs for nausea & antibacterial solutions	1	3.2
	(Dettol, Phenyl)		
	Eradicate TB from society	1	3.2
	Not specified	2	6.5
Not	No expectations	4	
applicable	Current incentives are acceptable	2	
	No response	4	
	Not willing to be DOT providers	36	
TOTAL		77	

#### **TABLE 32.1: EXPECTATIONS FOR BEING DOT PROVIDERS**

Note: Multiple responses

#### B. REASONS FOR UNWILLINGNESS TO BE DOT PROVIDERS (n=36)

The 36 respondents who had expressed unwillingness to be DOT providers were asked reasons for the same. Multiple responses were reported. Lack of time for the extra work involved was reported by 23 respondents (n=23/36; 64%); four respondents (n=4/36; 11%) were of the opinion that DOT provision was not a doctor's job. In case of three respondents (n=3/36; 8%) they did not want to duplicate services as DOT centres were already present in the vicinity of their clinics. Three respondents (n=3/36; 8%) reported old age, while two respondents (n=2/36; 6%) said that they lacked the space to observe treatment and store drugs. One respondent (n=1/36) was already working for a DOT centre. One respondent (n=1/36) was concerned that if he became a DOT provider his routine practice would be neglected while another (n=1/36) was afraid having a DOT centre would harm his own practice while one respondent felt he was physically unfit [Table 32.2].

Reasons		Frequency(n=36)	Percent
	Lack of time for the extra work involved	23	63.8
	DOT provision is not a doctor's work	4	11.1
	DOT centre/s already exists near chambers	3	8.3
	Old age	3	8.3
	Lack of space to observe treatment and store	2	5.5
	boxes		
	Respondent already works at a DOT centre	1	2.8
	( Seva Sangh Samiti )		
	Routine practice will be neglected	1	2.8
	DOT centre will harm practice	1	2.8
	Physically unfit	1	2.8
Not applicable	Willing to be DOT Providers	41	
Total		77	

#### TABLE 32.2: REASONS FOR UNWILLINGNESS TO BE DOT PROVIDERS

Note: Multiple responses

# C. EXPECTATIONS FOR AGREEING TO BE DOT PROVIDERS:

The 36 respondents who expressed unwillingness to be DOT Providers were asked regarding their expectations for them to agree to be DOT Providers. Eighteen respondents (n=18/36; 50%) said they had no expectations, out of which six respondents said that since they were unwilling there were no expectations. Twelve respondents (n=12/36; 33%) said they had expectations while one respondent (n=1/36; 3%) commented that whatever the RNTCP was giving was acceptable. Five respondents (n=5/36; 14%) did not give any response to the question [Table 32.3].

# TABLE 32.3: EXPECTATIONS FOR AGREEING TO BE DOT PROVIDERS

		Frequency (n=36)	Percent
	No	18	50.0
	Yes	12	33.3
	Whatever RNTCP gives is acceptable	1	2.8
	No response	5	13.9
	Total	36	100.0
Not applicable	Willing to be DOT providers	41	
Total		77	

Expectations for willingness to be DOT providers included 'financial incentives for doctors' (n=3/12; 25%), 'patients should be cured' (n=3/12; 25%); 'availability of services and facilities for patients' (n=2/12; 17%). Other expectations were 'provision of food for patients', 'patient satisfaction', 'DOT Provider's training'. One respondent did not specify his expectation [Table 32.2.1].

Expectations		Frequency (n=12)	Percent
	Financial incentives for doctors	3	25.0
	Patients should be cured	3	25.0
	Availability of services and facilities for patients	2	16.7
	Provision of food for patients	1	8.33
	Patient satisfaction	1	8.33
	Should receive DOT Provider's training	1	8.33
	Not specified	1	8.33
	Total	12	100.0
Not applicable	No expectations	18	
	No response	5	
	Whatever RNTCP gives is acceptable	1	
	Willing to be DOT Providers	41	
TOTAL		77	

# TABLE: 32.2.1 EXPECTATIONS FOR BEING DOT PROVIDER

# **16. OPINION ON PPM**

All 77 respondents were asked their opinion on the advantage and disadvantages of Public-Private Mix for their patients and for private doctors.

# A. ADVANTAGES OF PPM

# i. For Patients:

Seventy-four respondents (n=74/77; 96%) were of the opinion that PPM was advantageous for patients, two respondents (n=2/77; 3%) did not consider it to be an advantage while one respondent (n=1/77; 1%) did not give a response [Graph 16] [Annexure 2: Table 33]

# **GRAPH 16: ADVANTAGES OF PPM FOR PATIENTS**



Broadly, the main advantages reported by the respondents were that 'patients would get free and good quality of care'. The various advantages listed included 'free diagnosis and treatment for patients' (n=21/74; 28%), 'surety of treatment completion and cure' (n=11/74; 15%), 'good quality of treatment' (n=10/74; 14%), 'prompt initiation of treatment' (n=9/74; 12%); 'free services' (n=9/74; 12%), 'patients getting appropriate treatment' (n=7/74; 10%), 'availability of all facilities in one place making it convenient for patients' (n=7/74; 10%), 'available and accessible treatment' (n=5/74; 7%), 'facilitation of treatment by private doctors' (n=4/74; 5%) so that patients could discuss their problems with the doctors and they could in turn convey these problems to the concerned people in the programme, free in-patient care (n=3/74; 4%), 'patients can save money' (n=3/74; 4%) , 'control of disease' (n=3/74; 4%). Other reported advantages included treatment being made available to everyone, reduction in patient harassment as all services would be more accessible, patients getting service from both the public as well as private sector, it was conducive for counselling and there is follow up [Table 33.1]

Advantages for patients		Frequency (n=74)	Percent
	Free diagnosis and treatment	21	28.4
	Surety of treatment completion/ cure	11	14.9
	Good quality of care	10	13.5
	Prompt initiation of treatment	9	12.2
	Free services	9	12.2
	Patients get appropriate treatment	7	9.5
	All facilities in one place	7	9.5
	Available and accessible care	5	6.8
	Facility of treatment by private practitioners	4	5.4
	Patients can save money	3	4.1
	Control of disease	3	4.1
	Free in-patient care	3	4.1
	Everyone will get treatment	2	2.7
	Patient harassment will stop/decrease	2	2.7
	Patients get services from both government	1	1.4
	and private sector		
	It is conducive for counselling	1	1.4
	There is follow up	1	1.4
Not applicable	Not advantageous	2	
	No response	1	
Total		77	

#### **TABLE 33.1: ADVANTAGES OF PPM FOR PATIENTS**

# ii. For Doctors:

Seventy respondents out of the total 77 respondents (n=70/77; 91%) were of the opinion that there were advantages of PPM even for doctors, four respondents (n=4/77; 5%) did not consider it to be advantageous for doctors and three respondents (n=3/77; 4%) did not give any response [Graph 17] [Annexure 2: Table 34].

# 91% • Yes • No • No response

**GRAPH 17: ADVANTAGE OF PPM FOR DOCTORS** 

Majority of the respondents (n=70/77; 91%) were of the opinion that PPM was also advantageous for the doctors [Table 34]. Multiple responses were reported. The advantages included: 'increase in patient base' (n=19/70; 27%); 'assurance that patients will complete treatment' (n=16/70; 23%); 'good reputation in society' (n=10/70; 14%); 'opportunity to treat all patients' (n=9/70; 13%); 'patients being benefitted' (n=9/70; 13%); 'opportunity to able to contribute to society' (n=6/70; 9%); 'monetary incentives' (n=5/70; 7%); 'feedback regarding patients' (n=4/70; 6%); 'opportunity to interact with programme officials' (n=3/70; 4%). Other advantages included 'control of disease'; 'being able to retain patients'; 'increase in doctor's self confidence'; 'doctors would be encouraged to work'; 'knowledge would increase'; 'work would be done in a better way'; and 'getting the blessings of patients' [Table 34.1].

Advantages for	Advantages for doctors		Percent
	Increase in patient base	19	27.1
	Assurance that patients will complete treatment	16	22.9
	Good reputation in society	10	14.3
	Can treat all patients	9	12.9
	Patients are benefitted	9	12.9
	Able to contribute to society	6	8.6
	Monetary Incentives	5	7.1
	Will get feedback about patients	4	5.7
	Will be able to interact with programme officials	3	4.3
	Control of disease	1	1.4
	Will be able to retain patients	1	1.4
	Doctor's self confidence increases	1	1.4
	Doctors will be encouraged to work	1	1.4
	Knowledge will increase	1	1.4
	Our work will be done in a better way	1	1.4
	We get blessings of patients	1	1.4
Not applicable	PPM not an advantage for doctors	4	
	No response	3	
Total		77	

# TABLE 34.1: ADVANTAGES OF PPM FOR DOCTOR

Note: Multiple responses

# A. DISADVANTAGES OF PPM

# i. For Patients:

Sixty-six respondents (n=66/77; 86%) did not see any disadvantage of PPM, 10 respondents (n=10/77; 13%) respondents were of the opinion that PPM was disadvantageous for patients and one (n=1/77; 1%) did not provide any response [Graph 18] [Annexure 2: Table 35].

#### **GRAPH 18: IS PPM DISADVANTAGEOUS FOR PATIENTS**



The disadvantages of PPM for patients included, 'loss of man hours' (n=5/10; 50%); 'inconvenience of visiting the clinic for DOT thrice a week'; 'financial loss for patients as STH was far away'; 'delay in diagnosis in the public sector and patients having to spend money by way of deposit for x rays in the public sector'; 'facilities not being easily accessible in terms of distance' and 'lack of communication between partners that could lead to poor quality of treatment for patients' [Table 35.1].

Disadvantages for patients		Frequency (n=10)	Percent
	Loss of man hours	5	50.0
	Inconvenience due to visiting clinics thrice a week	1	10.0
	Financial loss as STH is quite far off	1	10.0
	Delay in diagnosis and patients have to spend money in	1	10.0
	government as deposit for x rays		
	Patients have to travel far	1	10.0
	Treatment will not be good if there is no communication	1	10.0
	between partners		
Not	PPM is not a disadvantage	66	
applicable	No response	1	
Total		77	

# TABLE 35.1: DISADVANTAGES OF PPM FOR PATIENTS

#### ii. For Doctors:

Seventy-two respondents (n=72/77; 93%) did not find PPM to be disadvantageous for doctors; three respondents (n=3/77; 4%) were of the opinion that PPM was a disadvantage for doctors while two (n=2/77; 3%) did not respond to the question [Figure 22] [Annexure 2: Table 36].



#### **GRAPH 19: IS PPM DISADVANTAGEOUS FOR DOCTORS**

Of the three respondents who considered PPM to be a disadvantage for doctors, one respondent (n=1/3) was 'untrusting of NGOs working in the field'; one respondent (n=1/3) said that he left his chambers to accompany the patients to the referred centres and as a result his chamber suffered

while the third respondent (n=1/3) did not know of a particular contact person at STH and as a result it was possible that his patients suffered some delay

# 17. OPINION ON DOCTORS RECEIVING MONETARY INCENTIVES FOR REFERRING PATIENTS AND BEING DOT PROVIDERS

All 77 respondents were specifically asked if doctors should receive money for referring patients and being DOT providers. Sixty-two (n=62/77; 81%) were of the opinion that doctors should receive some monetary incentives for referring patients and being DOT providers; 11 respondents (n=11/77; 14%) were of the opinion that they should not receive any; one respondent was of the opinion that although he did not find the need he did not mind accepting if that was the regulation; while the remaining three respondents (n=3/77; 4%) did not respond to the question [Table 37].

TABLE 37: OPINION ON DOCTORS RECEIVING MONETARY INCENTIVES FOR REFERRING PATIENTS AND BEING DOT PROVIDERS

	Frequency	Percent
Yes	62	80.5
No	11	14.3
No need but if that is the regulation then no problem	1	1.3
No response	3	3.89
Total	77	100.0

# Opinion on monetary incentives for referral of patients and DOT provision

"It will be good if we get something because we will be enthusiastic/ interested to refer" [Male, DMS, 61 years of age]

"If there are no monetary incentives for doctors patients may be neglected" [Male, BUMS, 29 years of age]

"This is not a business. Ensuring patients get treatment is a social service" [Male, DMS, 58 years of age]

All the respondents (n=62/77) who were of the opinion that doctors should receive monetary incentives for referral of patients and DOT provision, were asked whether they considered the current incentives given by STH and RNTCP to be satisfactory.

Fifty-two of these 62 respondents (84%) were of the opinion that the current incentives were satisfactory; seven respondents (n=7/62; 11%) did not consider the current incentives to be satisfactory; one was of the opinion that the incentives from STH were satisfactory but not the one given by RNTCP; while two respondents did not give a response [Table 38].

		Frequency	Percent
	Yes	52	83.9
	No	7	11.3
	Okay to get incentives from RNTCP but not from STH	1	1.6
	No response	2	3.2
	Total	62	100
Not	No need for incentives	11	
applicable	No response	3	
	No need but if that is the regulation then no problem	1	
TOTAL		77	

TABLE 38: IS THE CURRENT MONETARY INCENTIVES GIVEN BY STH AND RNTCP SATISFACTORY

The seven respondents who were of the opinion that the current incentives were not satisfactory were asked what they considered to be satisfactory incentives.

#### A. FOR REFERRAL OF PATIENTS:

Out of the seven respondents, four specified (n=4/7) an amount of Rs 500, one respondent (n=1/7) wanted Rs. 500 from STH and a monthly salary from the RNTCP, one respondent (n=1/7) did not specify the amount and one respondent (n=1/7) was not asked the question [Annexure 2: Table 38.1].

#### B. FOR DOT PROVISION:

Out of the seven respondents, two respondents (n=2/7) specified an amount Rs. 500; two respondents (n=2/7) wanted something to be given on a monthly basis but did not specify amount; two respondents (n=2/7) did not respond; while one respondent (n=1/7) did not specify any amount [Annexure 2: Table 38.2].

#### 18. OPINION ON WHICH MODELS OF PPM WOULD BE SUCCESSFUL IN HOWRAH AND INDIA

All 77 respondents were asked to suggest a successful model of PPM.

Sixty-six respondents (n=66/77; 86%) suggested one single model for PPM while 11 respondents (n=11/77; 14%) suggested a combination of models.

The most frequently suggested model was that of STH, that proved monetary incentives to referring doctors (n=25/77; 33%) followed by the model that was a combination of STH and CMEs which was suggested by twenty respondents (n=20/77; 26%). Fourteen respondents (n=14/77; 18%) suggested the Chennai model where the private doctors were given knowledge inputs; four respondents (n=4/77; 5%) suggested the Mumbai model where the RNTCP staff was available for doctors at all times. This was followed by suggestions of the Latin American Model (n=2/77;3%) where an

international agency gave special training to doctors leading them to follow the national TB programme guidelines, a combination of STH and Latin American models (n=2/77; 3%); a combination of STH and Vietnam models (n=2/77; 3%); a combination of Chennai and Mumbai model (n=2/77; 3%); a combination of Chennai and Latin America (n=2/77;3%); a combination of STH, Chennai and Latin American (n=1/77; 1%); Vietnam model (n=1/77; 1%) and a combination of STH and Mumbai model (n=1/77; 1%) [Annexure 2: Table 39].





# **19. SUGGESTIONS FOR INCREASING PARTICIPATION OF PRIVATE DOCTORS IN PPM**

All the 77 respondents were asked to give suggestions for increasing participation of private practitioners in PPM. Several suggestions were made for increasing participation of private practitioners in PPM.

Twenty-eight respondents (n=28/77; 36%) suggested there should be regular communication/ contact between the doctors and the RNTCP and STH through meetings and personal visits. The frequency of the expected visits varied from once a month, every alternate month, once in three months, twice a year to once a year.

"[For] exchange of ideas, discussions with all the doctors" [Male, DMS, 56 years of age] "There should be meetings with us occasionally because if we have to share something /or discuss problems then where do we do it? And field workers should pay regular visits" [Male, DMS, 48 years of age].

"Field workers should increase the routine contact with the doctors, as a result patients will increase and as a result doctors will be willing to refer more patients" [Male, DUMS, RMP, FWT, 54 years of age]

Another suggestion made by 21 respondents (n=21/77; 27%) was to increase awareness regarding the RNTCP and PPM among doctors through awareness programmes, seminars in order to inform them about the need for coordinated efforts to combat TB in society. Two respondents amongst these respondents remarked that doctors should be informed about the monetary incentives that RNTCP and STH offer for participation in the PPM.

" hold meetings with each and every doctor and inform them about what is the incidence and prevalence of TB and what percentage of patients are getting cured" [Male, DHMS, 43 years of age]

"organize a meeting with big and small doctors to tell them about the advantages of partnership" [Male, DMS, 56 years of age]

Explain to the doctors "that TB has to be eradicated from the society and we have to work together towards a TB free society" [Male, BUMS, 26 years of age].

"those who do not come for the meetings we have to go to them. The big (well known) doctors who do not give time, you have to go to them repeatedly" [Male, DMS, 56 years of age].

Ten respondents (n=10/77; 13%) suggested organizing training programmes. One respondent [Male, MD, 53 years of age] wanted training in intestinal TB since many of his patients, most of who were children were diagnosed with it. Other than this, no other topic for the training programmes was suggested. The suggested frequency of these training programmes varied from every two months to once or twice a year.

Five respondents (n=5/77; 7%) suggested giving feedback about referred patients respondents (n=5/77; 7%). Two out of the five respondents suggested the duration- while one respondent wanted the feedback to be given monthly, another wanted it every fortnightly.

Five respondents (n=5/77; 7%) were of the opinion that the current work undertaken by STH should continue and that there was no need to make any changes.

Four respondents (n=4/77; 5%) suggested monetary benefits to doctors.

Three respondents (n=3/77; 4%) wanted staff behaviour to improve. "Staff has to be more active" [Male, DIASM, DMLT, 36 years of age]

"the people who give medicines scold the patients when patients go a second time to the people giving medicines to understand how to take them. They should not be rough with the patients" [Male, CMS, EDT, FWT, RUMP, 36 years of age]

One respondent [Male, RMP, 49 years of age] had a serious complaint against the behaviour of a field worker at STH who got his patients examined out of turn on PPM OPD days.

Another suggestion included giving benefits to patients (n=3/77; 4%). These included making
arrangements for transport since the current transport facility was very irregular; provision of free diagnosis and treatment facilities and food for patients especially with co-morbid conditions such as diabetes.

"If there is some provision for diabetes patients it will be good because many TB patients die because of diabetes" [Male, BIAM, 44 years of age].

Two respondents (n=2/77; 3%) also suggested creating more awareness regarding STH.

Other suggestions included, 'supervisory visits to monitor field workers', 'patients to be given daily medicine', 'DOTS to be given at home by a well trained DOT provider' and 'increase in the number of DOT centres'. One respondent was of the opinion that the DOTS programme would only be successful if the rules and regulations of DOTS were strictly followed, like home visits after giving medicines to ensure that patients were taking their medicines properly [Male, BHMS, 48 years of age].

Two respondents made suggestions at a more individual level. One respondent wanted the DOT centre to be open in the afternoons so that he could conveniently collect his incentives while another wanted an assurance that the patients referred by him were not shown as referrals by some other doctor. Respondents reported multiple responses [Table 40].

Suggestions	Frequency (n=77)	Percent
Have regular communication	28	36.4
Increase awareness	21	27.3
Organise more trainings/meetings	10	13
Feedback about patients	5	6.5
No need for change- continue current work	5	6.5
Give monetary incentives	4	5.2
Improve staff behaviour	3	3.9
Give benefit to patients	3	3.9
Create more awareness about STH	2	2.6
Broncho Department should be opened	1	1.3
Ensure that patients referred by doctor are not shown as some other	1	1.3
doctor's referrals		
It would be better if patients can be given daily medicines	1	1.3
It would be better if supervisory visits are made	1	1.3
If centre is kept open in the afternoon for collection incentive	1	1.3
If DOTS is given at home and DOT Provider to be trained well	1	1.3
Increase number of DOT Centres	1	1.3
RNTCP should be more active like STH	1	1.3
Strict monitoring and strict maintenance of rules and regulations of	1	1.3
DOTS		

TABLE 40: SUGGESTIONS FOR INCREASING INVOLVEMENT OF PRIVATE DOCTORS IN PPM

Note: Multiple responses

AC	ACTION POINTS				
1.	Area of	Findings	Action points		
	enquiry		Short term	Long term	
2.	Awareness about the RNTCP	Majority of respondents aware of RNTCP (92%) and source of information for a large number is training/seminars/awareness programmes (65%)	An update through a small pamphlet having the current diagnostic algorithm in Bengali/Hindi distributed as handouts.		
3.	Opinion about the RNTCP	Good opinion regarding quality of drugs, Observed treatment, individualized boxes, maintenance of card and treatment boxes by DOT Providers and default retrieval system. However, nearly half of respondents not convinced regarding the effectiveness of regimen.		Respondents faith in the regimen needs to be increased through ensuring treatment completion of referred patients	
4.	Familiarity with STH	Although high awareness (87%) regarding services offered by STH, specifically, there is low awareness regarding free inpatient, nutritional supplement and social help	Handouts containing information regarding services offered by STH along with contact numbers and timings of concerned people at STH to be distributed.		
5.	Symptoms for suspecting TB	Cough mentioned by most people but cough for more than 2 weeks mentioned by less than 50%.	An update through a small pamphlet having the current diagnostic algorithm in Bengali/Hindi distributed as handouts.		
6.	Sputum advised	Most still advised three samples	An update through a small pamphlet having the current diagnostic algorithm in Bengali/Hindi distributed as handouts.		
7.	X ray advised	Equal number advised x ray to patients- has cost implications for patients. Even if refer patients to public sector- patients need to pay deposit which may be a deterrent.	An update through a small pamphlet having the current diagnostic algorithm in Bengali/Hindi distributed as handouts		
8.	Approached by STH for referral of	Majority have reported being approached	Regular follow up needed by field workers/STS		

patients			
9. Referrals for diagnosis and treatment	Most respondents are referring patients to the RNTCP –either public or STH. However, most referrals are still those of poor patients. Referrals are not made for quality of care or because of patients' choice.		Respondents' faith in the regimen needs to be increased through ensuring treatment completion of referred patients
10. Patients going back to referring doctors	More than 80% coming back to referring doctors.	Referring doctors can be trained for minor side effect management and supplied with necessary medication	
11. Feedback regarding patients	Good and most are satisfied with the feedback given	Increased and regular feedback to be provided through field workers /STS	
12. Quality of care	<ul> <li>Mostly people are happy-patients are getting free treatment with other facilities, expert care by specialists-</li> <li>Some areas of complaint-</li> <li>Compensation for doctors who are referring patients who are serious on non-PPM days</li> <li>Delayed consultation at STH- long queues, doctors coming late.</li> <li>Field workers- show patients out of turn</li> </ul>	<ul> <li>Increase number of PPM days to be handled by other doctors. Complicated cases to be referred to consultant at STH.</li> <li>Patients to be examined according to queue.</li> <li>If possible one or more qualified doctors who are co- operative and willing can become referral doctor/s for the grassroots doctors.</li> </ul>	
13. PPM	Awareness is quite good- 73%. Considered to be advantageous for both doctors and patients.	Along with diagnostic update, a brief note/verbal introduction /reiteration regarding PPM	
14. Incentives	Most (80%) think doctors should be compensated.	<ul> <li>Ensure that all referring doctors are compensated.</li> <li>Set up a system to compensate doctors who refer serious patients on non-PPM days.</li> </ul>	
15. Suggested PPM	STH model most favoured along with model having both knowledge update and	<ul> <li>Ensuring compensation and knowledge updates in</li> </ul>	

	monetary incentives	form of pamphlets/ handouts. • Meeting twice/ thrice a year area wise
16. Suggestions for increasing participation	Increased communication, increasing awareness, training and monetary incentives	<ul> <li>Initial visit by a Field Medical Officer (FMO), qualified in allopathic medicine to establish dialogue, introduce STH and services provided by STH or reiterate above information.</li> <li>FMO to introduce ( where ever necessary) field workers as contact persons for further follow up.</li> <li>Helpline on specific days and times for doctors to seek advice with regard to complicated cases.</li> <li>Alternate helpline for emergency cases If possible, one or more qualified doctors who are co- operative and willing can become referral doctor/s for the grassroots doctors</li> </ul>
		<ul> <li>Overall supervision and monitoring of field workers needs to be increased.</li> <li>Documentation regarding number of doctors listed in area and number of referrals made- for purpose of compensation and feedback/follow up</li> </ul>

# **DOT PROVIDERS**

# DOT PROVIDERS

Interviews were conducted with four grass roots doctors. Three out of the four respondents were working as DOT Providers, while one respondent was not working as a DOT Provider at the time of the interview, but had been a DOT provider earlier. As a result, the respondent has not been considered for analysis on the sections-'Experience as DOT Providers'.

# 1. **PROFILE**

All four respondents were males. The ages of the respondents ranged from 28 to 56 years [Table 1]

TABLE 1: AGE

Age	Frequency	Percent
28	1	25.0
37	1	25.0
50	1	25.0
56	1	25.0
Total	4	100.0

All four respondents had some qualification in Unani medicine-BUMS (n=1/4), DUMS (n=2/4), RMP/

Unani/ Pharmacist (n=1/4) [Table 2].

# TABLE 2: QUALIFICATIONS

Qualifications	Frequency	Percent
BUMS	1	25.0
DUMS	2	50.0
RMP/Unani/Pharmacist	1	25.0
Total	4	100.0

The years of practice for the four respondents ranged from 2 to 40 years [Table 3].

# **TABLE 3: YEARS IN ACTIVE PRACTICE**

Years	Frequency	Percent
2	1	25.0
3	1	25.0
12	1	25.0
40	1	25.0
Total	4	100.0

The average number of patients seen in a day ranged from 4 to 50 [Table 4].

	Frequency	Percent	
4	1	25.0	
15	1	25.0	
25	1	25.0	
50	1	25.0	
Total	4	100.0	

# TABLE 4: AVERAGE NUMBER OF PATIENTS SEEN IN A DAY

The percentage of TB patients of the total patients seen ranged from 1 to 20 [Table 5].

# TABLE 5: PERCENTAGE OF TB PATIENTS OF THE TOTAL PATIENTS SEEN

Percentage	Frequency	Percent
1	1	25.0
2	1	25.0
5	1	25.0
20	1	25.0
Total	4	100.0

The number of TB patients seen in the month prior to the interview ranged from 1 to 10 [Table 6]

	Frequency	Percent	
1	1	25.0	
5	1	25.0	
10	2	50.0	
Total	4	100.0	

# TABLE 6: TB PATIENTS SEEN IN THE MONTH PRIOR TO INTERVIEW

# 2. SOURCES OF INFORMATION REGARDING RNTCP AND PPM

Respondents were asked their sources of information regarding the RNTCP and PPM.

# A. SOURCES OF INFORMATION REGARDING RNTCP

The sources of information regarding RNTCP included patients (n=1/4), from experience of working at a DOT centre (n=1/4), public sector (Howrah South General Hospital) (n=1/4) and NGO (Sarva Sangh Samiti) (n=1/4).

# B. WHETHER ATTENDED ANY SEMINARS/AWARENESS/TRAINING PROGRAMME ON RNTCP

All four respondents had attended seminars / awareness / training programmes on RNTCP that were conducted by STH. One out of the four respondents also reported attending a programme conducted by the Howrah DTC.

# C. SOURCES OF INFORMATION REGARDING PPM

All four respondents reported that they were aware of PPM. Sources of information regarding PPM were reported as training programme conducted by STH (n=3/4) and through observations and interactions with a STH field worker (n=1/4).

#### 3. EVER APPROACHED BY RNTCP OR STH FOR REFERRAL OF PATIENTS

# A. EVER APPROACHED BY RNTCP

All four respondents were asked if they had been contacted by someone from the RNTCP regarding referral of their patients for diagnosis and treatment. Three respondents (n=3/4) were not approached by any staff members of the RNTCP, while one respondents (n=1/4) reported being approached by three staff members of the RNTCP (MOTC, STS and TBHV) for referral of TB patients.

#### B. EVER APPROACHED BY STH

Three out of the four respondents were asked if they were contacted by someone from STH for referral of TB patients, while one respondent (former DOT Provider) was not asked the question. All the three respondents reported that they had been contacted by someone from STH regarding referral of patients for diagnosis and treatment.

The personnel who had approached the respondents for referral of patients were- Treatment supervisor, Laboratory supervisor and Field worker (n=1), Treatment Supervisor and Field worker (n=1). The third respondent did not specify any particular person but reported that previously someone used to visit him but not anymore.

#### 4. FAMILIARITY WITH STH SERVICES

All four respondents were familiar with the services provided by STH. The services reported were free diagnosis (n=3/4), free treatment (n=3/4), social help (n=3/4), all facilities free of cost (n=1/4), monetary assistance for education of children of poor TB patients (n=1/4) and free training for doctors (n=1/4).

# 5. SYMPTOMS LEADING TO SUSPICION OF TB

All four respondents were asked regarding the symptoms that made them suspect TB in their patients. Multiple responses were reported. The symptoms reported were weight loss (n=4/4), cough (n=3/4), loss of appetite (n=3/4), weakness (n=2/4), chest pain (n=2/4), evening fever (n=2/4). Other symptoms reported by one respondent each were- fever, fever for a month, back/spine pain, cervical lymph nodes, swelling of glands because of fever [Table 7].

Symptoms	Frequency	Percent
Weight loss	4	100.0
Cough	3	75.0
Loss of appetite	3	75.0
Weakness	2	50.0
Chest pain	2	50.0
Evening fever	2	50.0
Fever	1	25.0
Fever for a month	1	25.0
Back/spine pain	1	25.0
Cervical lymph nodes	1	25.0
Swelling of glands with fever	1	25.0
Nata, Multiple passages		

# TABLE 7: SYMPTOMS LEADING TO SUSPICION OF TB

Note: Multiple responses

# 6. ACTION ON SUSPICION

On suspicion of TB, three respondents (n=3/4) advised investigations while the fourth respondent referred patients on suspicion for further management.

The investigations advised were sputum (n=2/3), blood test (n=2/3), Mantoux test (n=2/3), FNAC in case of swollen glands (n=1/3) and CSF in case of TB meningitis (n=1/3). One respondent advised only blood test but referred his patients for all other investigations to STH [Table 8].

Investigations a	dvised	Frequency (n=3)	Percent
	Sputum AFB	2	66.7
	Mantoux	2	66.7
	Blood test	2	66.7
	Chest X ray	1	33.3
	FNAC	1	33.3
	Urine	1	33.3
	CSF	1	33.3
Not applicable	Does not advise investigations	1	
Total		4	

# TABLE 8: INVESTIGATIONS ADVISED FOR DIAGNOSIS OF TB

Both the respondents who advised sputum examination reported they advised three samples of sputum.

# 7. PLACE OF REFERRAL FOR DIAGNOSIS:

The places of referral for diagnosis included STH and private sector (n=2/4), STH, public and private sector (n=1/4), Public sector and NGOs (n=1/4) [Figure 1].

One of the respondents, who referred his patients to STH and private sector, reported that he referred patients to STH for x rays and to the private sector for all other investigations.

# A. REASONS FOR REFERRAL TO PARTICULAR CENTRES FOR DIAGNOSIS:

Three out of four respondents did not give any valid reason for referring their patients to particular centres, while the fourth respondent (n=1/4) reported that the reason for referring his patients to particular centres (STH, public and other NGOs) was because they were poor.



FIGURE 1: ACTION TAKEN FOR DIAGNOSIS AND TREATMENT

#### 8. ACTION REGARDING TREATMENT

Out of the four respondents, two respondents referred all their patients for treatment, one respondent referred some patients and treated some patients, while the fourth referred his patients on suspicion for further management [Figure 1].

# 9. PLACE OF REFERRAL FOR TREATMENT:

The place of referral for three respondents who referred some or all their patients for treatment, were STH and the public sector (n=2/3) and only STH (n=1/3) [Figure 1].

#### A. REASONS OF REFERRAL TO PARTICULAR CENTRES FOR TREATMENT:

The reasons for referral for treatment to the public, STH and NGOs were 'affordability' (n=3/4), 'good infrastructure under RNTCP' (n=1/4), 'good quality of care' (n=1/4) and 'convenient for patients since all diagnostic and treatment facilities were available at one centre' (n=1/4).

One of the respondents (former DOT provider) reported that previously he used to refer all his patients to STH but now chose to refer only poor patients to STH while referring other patients to the public sector since the concerned field worker from STH did not take good care of his patients.

# 10. PERCENTAGE OF TOTAL TB PATIENTS SEEN THAT ARE REFERRED TO RNTCP/ STH

All four respondents were asked regarding the percentage of TB patients they referred to the RNTCP/STH.

The responses were 100% to STH (n=1/4), 70% to STH and 30% to RNTCP (n=1/4), 30% to STH and 30% to RNTCP (n=1/4). The fourth respondent did not report any percentages but said that previously he used to refer 100% to STH but now referred only poor patients while referring the others to the public sector.

# 11. TYPE OF PATIENTS REFERRED TO RNTCP/STH

The type of patients referred to RNTCP/STH were 'poor' (n=4), 'middle class' (n=1/4) patients.

#### 12. PATIENTS COMING BACK TO RESPONDENT AFTER INITIATION OF TREATMENT

All four respondents reported that their patients came back to them after initiation of treatment. The reasons for doing so were for 'observation of treatment' (n=3/4); 'side effect management' (n=2/4); 'concomitant disease management' (n=1/4) and to 'inform respondent that they were receiving free treatment' (n=1/4).

# 13. PERSON TO WHOM TB PATIENTS REFERRED AT STH/RNTCP

All respondents said that they referred their patients to particular persons at STH or RNTCP. The persons included the consultant at STH (n=3/4) and STS and TBHV in the RNTCP (n=1/4).

#### 14. FEEDBACK REGARDING REFERRED PATIENTS

All four respondents were asked if they received feedback regarding their patients from the public sector and STH.

#### A. FEEDBACK FROM PUBLIC SECTOR

Three out of the four respondents did not receive any feedback from the public sector. One respondent reported receiving feedback from the public sector; the feedback was given either telephonically or in person by the MOTC, STS and TBHV. The respondent said he was very satisfied with the feedback.

#### B. FEEDBACK FROM STH

Three out of the four respondents did not receive any feedback from STH. One respondent reported receiving feedback from STH in person from the field worker who ran a DOT centre. The respondent said he was very satisfied with the feedback.

#### 15. FEEDBACK FROM PATIENTS

Three out of the four respondents reported that they received a feedback from their patients regarding the care they received at public sector or STH.

The experiences of patients as reported by the respondents were, 'very good' (n=1/3); 'good' (n=1/3) and 'positive for some while not for others' (n=1/3).

The reason for the experience not being a positive one was that the patients had to wait for a long time since the doctors came late. The respondent added that the behaviour of one of the nurses at STH was not good. As a result patients did not want to go to STH.

#### 16. OPINION ON RNTCP

Respondents were asked their opinion on the RNTCP that included comparison between effectiveness of thrice weekly regimen used in the RNTCP vs daily regimen used in the private sector, quality of drugs, individualized treatment boxes, maintenance of treatment box and card by DOT provider, mandatory observation of treatment and whether the defaulter retrieval system gave the RNTCP an advantage over the private sector.

#### A. THRICE WEEKLY VS DAILY REGIMEN

The opinions regarding the comparison of effectiveness of thrice weekly regimen and daily regimen were: thrice weekly regimen was better (n=2/4); both regimens were effective (n=1/4) and daily regimen was better (n=1/4).

The reasons for considering thrice weekly regimen to be better were that patients are cured (n=1/2) and that the government medicines are effective / "guaranteed" (n=1/2). The reason for considering both regimens to be effective was that patients taking either regimen were cured. The reason for

considering daily regimen to be better was that according to the respondent's observation, those taking daily regimen were being cured whereas those taking thrice weekly regimen were not.

# B. QUALITY OF DRUGS:

The opinion regarding the quality of drugs was 'good' (n=2/4), 'very good' (n=1/4) and 'skeptical' '(n=1/4). The reason given by the respondent who considered the quality to be very good was because he himself had been cured after taking treatment under the RNTCP and the reason for skepticism was because patients taking thrice weekly treatment were not being cured but patients taking the same medicines on a daily basis were being cured.

#### C. INDIVIDUALISED PATIENT BOXES

All four respondents were of the opinion that having individualized patient boxes under the RNTCP was very good.

Three out of the four respondents gave a reason for their opinion. The reasons included guaranteed supply of medicines for the entire treatment period (n=3/3); treatment was tailored to patients' needs (n=1/3); there was no delay in receiving medicines at the time of DOT (n=1/3) and it was easier to follow up on treatment (n=1/3).

#### D. MAINTENANCE OF CARDS AND BOXES BY DOT PROVIDER

All four respondents were of the opinion that the system of maintenance of treatment card and treatment box by the DOT providers was good. Two respondents commented that the system was in the best interests of the patients but did not give any reason for the same. The reasons given by the remaining two respondents were that this system enabled maintenance of systematic records (n=1/2); follow-up with the required investigations (n=1/2) and catching treatment interrupters early (n=1/2).

# E. MANDATORY OBSERVATION OF TREATMENT

All four respondents were of the opinion that this was a good system. Three out of four respondents gave reasons for their opinion. The reasons for this opinion were: there was a guarantee that patients had taken their treatment (n=2/3); it was possible for the early management of side effects/ complications (n=2/3) and DOT provider would be in the know about the patient's treatment (n=1/3). All four respondents were in favour of DOT for all patients.

# F. RNTCP HAS AN ADVANTAGE OVER PRIVATE SECTOR TREATMENT BECAUSE OF THE DEFAULTER RETRIEVAL SYSTEM

Three out of four respondents were of the opinion that the defaulter retrieval system gave the RNTCP an advantage over private treatment, while one respondent did not think that it gave any advantage.

The reason given by all three respondents for considering the defaulter retrieval system to be an advantage was that it helped ensure treatment regularity. One of these respondents added that this system made the RNTCP more effective since private doctors did not have time to go personally for a home visit and bring patients back on treatment.

The reason given by the respondent for not considering the retrieval system to have any advantage was that despite the system, patients under the RNTCP were not getting cured whereas patients taking daily treatment were getting cured.

# **17. EXPERIENCE AS DOT PROVIDER**

# A. REASONS FOR BECOMING A DOT PROVIDER

Three out of the four respondents gave a reason for agreeing to become a DOT provider. The reasons included: wanting to do social work (n=1/3), to improve the family's economic condition (n=1/3). The third respondent said that a head of the family in his neighborhood had died of TB because of lack of treatment facilities in his area. This motivated him to become a DOT provider since it would enable him to make TB treatment easily available and accessible to patients in his area (n=1/3).

The fourth respondent, the former DOT provider, did not give any reason. However, he commented that although he had given DOTS to patients, he was not a DOT provider he had been told at STH that doctors could not become DOT providers.<sup>3</sup>

#### B. NUMBER OF PATIENTS CURRENTLY TAKING DOT FROM RESPONDENT

The number of patients taking DOT from the three respondents was 8, 40 and 50. All three respondents were providing DOT to patients from STH as well as centres belonging to the government (Howrah DTC, Howrah South General Hospital and TL Jaiswal) and NGO (Howrah TB Hospital)

<sup>&</sup>lt;sup>3</sup> This was checked with Treatment Supervisor. He thinks there must have been some miscommunication in this matter.

#### C. WHO COLLECTS THE TREATMENT BOX AND WHEN IS IT REACHED TO THE DOT PROVIDER?

All the three DOT providers were asked who collected the treatment boxes and how soon did they receive them. The treatment boxes were reached by STH field workers (n=1/3), the TB HV from the government centres (n=1/3). In case of one respondent either the TB HV / the DOT provider from the NGO- Howrah TB Hospital reached the box or at times the DOT provider collected it himself (n=1/3).

For the three respondents, the time taken for the treatment box to reach the DOT Centre after initiation of treatment varied from a day to a week [Annexure 3: Tables 9].

		Frequency (n=3)	Percent
	Within 3 days	1	33.3
	Within a week	1	33.3
	Sometimes next day and sometimes within a week	1	33.3
	Total	3	100.0
Not applicable	Not providing DOTS at the time of interview	1	
Total		4	

TABLE 9: TIME TAKEN FOR TREATMENT BOX TO REACH THE DOT PROVIDER

#### D. WHO OBSERVES THE TREATMENT?

All three DOT providers were asked regarding who observed the treatment at their clinics. The responses were: DOT provider (n=1/3), assistant (n=1/3) and both DOT provider and assistant (n=1/3).

# E. WHO MAINTAINS TREATMENT CARD AND BOX?

All three respondents were asked who maintained the treatment cards and boxes at their clinics. The responses were DOT provider (n=1/3), assistant (n=1/3) and both DOT provider and assistant (n=1/3).

#### F. INFORMATION GIVEN TO PATIENTS BEFORE INITIATION OF DOTS

All three respondents reported giving some information to their patients at the time of initiation of DOTS at their clinic. The information given included possible side effects (n=2/3), duration of treatment (n=1/3), harmful effects of irregular treatment (n=1/3), intimation to DOT provider in case of side effects/problems (n=1/3).

#### G. HOW OFTEN DO PATIENTS COME FOR DOT DURING INTENSIVE AND CONTINUATION PERIOD?

All the respondents reported they asked their patients to come thrice a week in the intensive phase and once a week in the continuation phase.

#### H. WHEN DO PATIENTS COME FOR DOT?

All the three respondents were asked if they specified any time for their patients to come for DOT. All three respondents answered in the affirmative. The time was specified according to patients' convenience (n=1/3), according to DOT provider's convenience (n=1/3) and in consultation with patients (n=1/3) so it would not cause any inconvenience to the patients and thereby reduce chances of default.

#### I. PREFERRED TIME FOR DOT FOR MALE AND FEMALE PATIENTS

The respondents were asked the time preferred by male and female patients for DOT.

The response were, 'no preferred time' (n=1/3); 'evening' (n=1/3); 'in case of working male patients according to their convenience' and 'in case of non-working male and female patients between 11am and 12.30 pm' (n=1/3).

#### J. ARE FEMALE PATIENTS ACCOMPANIED BY SOMEONE WHILE COMING TO DOT CENTRE?

All four respondents reported that usually female patients were accompanied by a relative, especially in case of women who practiced purdah.

# K. DO FEMALE PATIENTS COMPLAIN OF PROBLEMS WHILE COMING TO DOT CENTRE?

Three respondents said that their female patients did not complain about problems while coming to the DOT centres.

The former DOT provider reported that occasionally some female patients were afraid that people would come to know about their disease because of the board outside the centre advertising availability of DOT.

# L. SIDE EFFECT MANAGEMENT

All three respondents reported that their patients complained of side effects. The side effects were managed by the DOT providers themselves (n=2/3) and by a doctor who sat in DOT centre<sup>4</sup> (n=1/3). One out of the two DOT providers, who reported managing the side effects themselves, said that in case the side effects did not subside after he had managed them, he referred the patient to the facility from where the patient had been referred after diagnosis.

<sup>&</sup>lt;sup>4</sup> One respondent reported that a qualified doctor practiced from his chambers.

#### M. HOW DO THE DOT PROVIDERS COME TO KNOW THAT PATIENTS HAVE INTERRUPTED TREATMENT?

The three respondents were asked the method by which they found out that patients interrupted treatment. The respondents reported that they found out by referring to the treatment card (n=2/3) and from experience of working with patients on a regular basis (n=1/3).

#### N. ACTION TAKEN WHEN PATIENTS INTERRUPT TREATMENT

All three respondents informed someone if a patient interrupted treatment. The person who was informed was the' STH field worker' (n=2/3), 'MOTC at the public sector facility' (n=1/3) or 'TB HV at the public sector facility' (n=1/3).

#### O. HOW SOON IS SOMEONE INFORMED ABOUT PATIENT'S TREATMENT INTERRUPTION?

In case of interruption of treatment, the concerned person was informed, by the 'end of the day' (n=1/3), 'after 2 to 3 days' (n=1/3) or 'in case the patient did not return even after the DOT provider had paid a home visit' (n=1/3).

All three respondents paid home visits independently (n=2/3) or sometimes either independently or accompanied by a STH field worker (n=1/3).

# P. PROBLEMS IN DOT PROVISION

Two out of three respondents reported having no problems providing DOT to patients. The third respondent reported having patients who did not adhere to treatment, because they started feeling better after a few days of treatment.

#### Q. SUPPORT FROM STH

Two out of three respondents reported that they received support from STH while one respondent (n=1/3) reported receiving social help and help in defaulter retrieval from STH. He reported being very satisfied with the support he received.

# **18. WHETHER THOUGHT OF DISCONTINUING DOT PROVISION**

None of the three respondents had ever thought of discontinuing being a DOT provider.

#### **19. OTHER EXPECTATIONS FOR PARTICIPATION AS REFERRING DOCTOR AND DOT PROVIDER**

Two out of the three respondents expressed having some expectations for referring patients and being a DOT provider, while the third respondent did not have any expectations.

The expectations included, 'good food for patients' (n=1), and 'some incentives from STH for DOT provision' (n=1). The former DOT provider said that he had discontinued being a DOT provider because of the STH field worker's lack of co-operation. But he expressed his desire to become a DOT provider for the patients he referred.

# 20. CONTACT WITH STH/RNTCP:

All three respondents were asked regarding the frequency of contact by staff from STH and RNTCP. Two out of three respondents reported that they were contacted by the STH staff while the third respondent reported that he was not contacted by anyone from STH.

The frequency reported was once a week from the STH field worker and once a month by DTC (n=1/3), and occasional visits from field worker and treatment supervisor from STH (n=1/3).

#### A. SATISFACTION WITH THE CONTACT WITH STH/RNTCP

One out of the two respondents who reported having a contact with STH/RNTCP was not satisfied with the contact. The respondent who was contacted occasionally by the field worker and treatment supervisor was not satisfied with the frequency of contact. He wanted more frequent contact.

The respondent, who reported not being contacted by anyone from STH/RNTCP, said that he wanted feedback regarding the patients who were taking DOT from his centre.

#### 21. OPINION REGARDING PPM

All four respondents were asked their opinion regarding PPM. All four respondents considered the PPM to be helpful in controlling the disease.

All four respondents were of the opinion that PPM was advantageous for patients. The advantages reported were, 'free investigations' (n=1/3); 'free treatment' (n=1/3); 'accessible treatment for patients since it was exclusively a TB clinic' (n=1/3); 'prompt treatment' (n=1/3); 'availability of all kinds of facilities at STH' (n=1/3) and 'patients being benefited' (n=1/3).

Three out of the four respondents were of the opinion that PPM was advantageous for doctors. The advantages reported were 'good reputation' (n=2/3) and 'increase in patient base' (n=1/3). The fourth respondent was of the opinion that there were no advantages for doctors.

Three out of the four respondents were of the opinion that PPM had no disadvantages for patients. The fourth respondent was of the opinion that it could be a disadvantage for patients as they had to wait for a long time for treatment. All four respondents did not consider PPM to be disadvantageous for doctors.

# 22. INCENTIVES FOR REFERRING PATIENTS AND DOT PROVISION

All four respondents were asked their opinion on whether doctors should receive monetary incentives for referring patients and providing DOTS to TB patients.

Two out of the four respondents were of the opinion that doctors should receive monetary incentives, while the remaining two respondents (n=2/4) were unable to comment on the need for monetary incentives.

#### OPINION ON WHETHER CURRENT INCENTIVES GIVEN BY STH AND RNTCP ARE SATISFACTORY

Three out of four respondents were of the opinion that the current incentives from STH and RNTCP were adequate. The fourth respondent did not answer the question.

Two respondents (n=2/4) spontaneously reported that they had not received any incentives.

#### 23. OPINON ON WHICH MODEL OF PPM WOULD BE SUCCESSFUL IN HOWRAH AND INDIA

All four respondents were asked for suggestions regarding successful PPM models. The models reported were 'STH model' (n=2/4) and 'STH model combined with knowledge update through training / CME' (n=2/4).

# 24. SUGGESTIONS FOR INCREASING PARTICIPATION OF OTHER DOCTORS IN PPM

All four respondents were asked for suggestions for increasing participation of other doctors in PPM. The suggestions were, 'communication with STH to get feedback regarding patients' (n=2/4); 'occasional meetings to update doctors regarding changes in RNTCP and encourage them to refer patients' (n=1/4); 'improved behaviour of DOT providers towards their patients' (n=1/4). The respondent who suggested improved behaviour of DOT provider commented that DOT Providers should never insult patients and listen to them carefully. He also suggested that DOT providers should be educated at least up to higher secondary.

ACTION POINTS		
Areas of enquiry	Findings	Action points
1. Sources of information	All respondents had attended seminars conducted by STH but none of them mentioned it as a source of information regarding RNTCP.	
2. Symptoms leading to suspicion of TB	Only cough mentioned	Handout giving latest diagnostic algorithm
3. Investigations for diagnosing TB	Only two out of four respondents advised sputum	Handout giving latest diagnostic algorithm
4. No. of sputum samples advised	Three samples	Handout giving latest diagnostic algorithm
5. Referral for diagnosis	Referrals to STH and public sector One respondent refers to STH only for x ray and for others to private sector	Encourage referrals to STH and public sector only
6. Referral for treatment	One respondent treating some patients on own	Encourage doctors to refer for treatment to STH/public sector
7. Feedback regarding patients	Only one reported getting feedback	Feedback to be given for all referrals
8. Information before starting DOTS	Respondents did not report importance of uninterrupted and completion of treatment	Doctors should provide information to patients regarding the ill effects of interrupting and / discontinuing treatment
9. Timings of coming to DOT centre	One respondent not allowing patients to make a choice nor consulted in choosing a time for DOT	Doctors should be asked to consult with the patients for a convenient time for DOTS in order to avoid default
10. Duration after which information given regarding treatment interruption	One respondent reported 2-3 days after interruption by patient	Doctors should be encouraged to report immediately in order to decrease delay in bringing patient back onto treatment
11. Support from STH	Only two out of four reported receiving support from STH	Doctors need to be contacted regarding support needed and any support that is required to be provided to the concerned persons.
12. Contact by STH	Two out of three contacted by STH staff. One respondent not satisfied with the present contact	Field workers to contact the doctors regularly once a week/ fortnight
13. Incentives for DOT provision	Two respondents reported wanting monetary incentives for DOT provision	Incentives for referral may be supplemented (cash/ kind) in case of patients referred and taking DOT with the referring doctor.
		One visit by FMO to the DOT provider as a 'feel good' visit and also to find out about any problems/issues faced by doctors in their discharge of duties.

# PATIENTS TAKING TREATMENT UNDER RNTCP

# **RESPONDENTS TAKING TREATMENT UNDER RNTCP**

Fourteen patients taking treatment under the RNTCP were interviewed about their experiences of taking treatment for TB under the RNTCP, the quality of care provided at the centres and their suggestions for improving services.

# 1. **PROFILE**

#### A. CENTRE OF DIAGNOSIS

All the respondents were diagnosed at STH.

# B. DOT CENTRE WHERE PATIENTS TAKING TREATMENT

Ten out of the 14 respondents (71%) were taking DOT at centres run by STH; two at NGO-Howrah South Point (n=2/14); one at an NGO- Howrah TB hospital (n=1/14) and one at a RNTCP run DOT centre at Baltikuri Hospital (n=1/14) [Graph 1].



# **GRAPH 1: DOTS CENTRES WHERE PATIENTS TAKING TREATMENT**

# C. GENDER OF RESPONDENTS AND TREATMENT CATEGORY

Ten out of 14 respondents (72%) were male.

Eleven out of the 14 respondents (eight men and three women) were taking Category I treatment while three respondents (two men and one woman) were taking Category II treatment [Graph 2] [Annexure 3: Tables 1 and 1.1].

GRAPH 2: GENDER WISE TREATMENT CATEGORY



# D. AGE GROUP

Seven respondents (n=7/14; 50%) were in the age group of 18 to 25 years; two (n=2/14; 14%) in the age group 36 to 45 years and two (n=2/14; 14%) in the age group of 56 to 65 years etc [Annexure 3: Table 2].

# E. MARITAL STATUS

Seven respondents (n=7/14; 50%) were married, six (n=6/14; 43%) were unmarried and one respondent was deserted. Out of the seven married respondents, four were men while three were women. Of the six respondents who were unmarried, five were men while one was a woman. The one respondent who was deserted was male [Annexure 3: Table 3].

# F. EMPLOYMENT

Seven out of the 14 respondents (50%) were gainfully employed, all of who were male [Annexure 3: Table 4].

#### G. YEARS OF RESIDENCE IN HOWRAH

Seven out of the 14 respondents (50%) were residing in Howrah since their birth, four (n=4/14; 29%) were residing in Howrah since ten or more years and three (n=3/14; 21%) had been living in Howrah for less than 10 years, one of who (female, 20 years old, unmarried) had come to Howrah just six months prior to the interview [Annexure 3: Table 5].

#### H. WHETHER LIVING ALONE OR WITH SOMEONE IN HOWRAH

Thirteen out of the 14 respondents (93%) lived with some relatives, while one respondent (45 years old, rickshaw driver) had been living alone as his wife and child had left him five years back. Out of the 13 respondents who were living with relatives, one (female 20 years old, unmarried) lived with her maternal uncle and aunt, another respondent (male, 22 years old) a bangle maker, lived with his brother in his factory premises while the rest of the respondents (n=11/13; 85%) lived with their parental family or marital family member/s [Annexure 3: Table 6].

# I. AVERAGE MONTHLY INCOME OF RESPONDENTS AND FAMILY

The average monthly income of the seven respondents (n=7/14) was 3500 rupees (range 1800 to 25000). The average family monthly income of all the 14 respondents was 3750 rupees (range 1000 to 25000) [Annexure 3: Tables 7 and 7.1].

# 2. DURATION BETWEEN DIAGNOSIS AND INITIATION OF TREATMENT

The reported time for treatment initiation after diagnosis for the 14 respondents at the various centres ranged from three days to three weeks. The various responses reported were three days (n=2/14), five days (n=1/14), seven days (n=7/14), 10 days (n=2/14), 15 days (n=1/14) and 21 days (n=1/14) [Figure 1].

Both respondents who were started on treatment after 15 days (75 years of age) and 21 days (18 years of age) were females.

One respondent (male, 25 years of age) who was initiated on treatment within 10 days spontaneously reported that he was responsible for the delay.



# FIGURE 1: DURATION BETWEEN DIAGNOSIS AND INITIATION OF TREATMENT

# 3. INFORMATION GIVEN AT STH BEFORE INITIATION OF TREATMENT AS REPORTED BY RESPONDENTS

All 14 respondents were asked regarding the information given before the initiation of treatment. All 14 respondents reported receiving some information.

When asked for the details about the information that was given to them, ten respondents (n=10/14; 72 %) recalled receiving the following information- 'they were diagnosed with TB' (n=8/10; 80%); 'duration of treatment' (n=3/10; 30%); 'importance of completing treatment' (n=2/10; 20%). Other information given included: 'instruction regarding taking medicines on time' (n=1/10; 10%); 'STH gives rations to poor patients' (n=1/10; 10%); 'respondent had pleurisy' (n=1/10; 10%); 'instruction on not to miss a single dose' (n=1/10; 10%) and the 'need to come every alternate day for treatment' (n=1/10; 10%)[Table 8].

Respondents were probed on the topics that they had not reported spontaneously. Upon probing the following information was reported- 'disease was curable' (n=14); 'diagnosis and treatment was free' (n=13/14); 'importance of completing treatment' (n=12/14); 'possible side effects' (n=12/14); 'centres where DOT could be taken' (n=12/14); 'duration of treatment was 6-8 months' (n=11/14); 'disease was airborne and caused by germs' (n=10/14) and 'you have TB' (n=5/14) [Table 8].

		Spon		Probed		Can't	
		(n=10)		(n=14)		remember	
Sr.		Freq	%	Freq	%	Freq	%
No							
1	You have TB	8	57.1	5	35.7	0	0
2	The disease is airborne and caused by germs	0	0	10	71.4	0	0
3	The disease is curable	0	0	14	100	0	0
4	Diagnosis and treatment is free	0	0	13	92.9	0	0
5	Duration of treatment is 6 to 8 months	3	21.4	11	78.6	0	0
6	Possible side effects of drugs	0	0	12	85.7	0	0
7	Centres where treatment is available	1	7.1	12*	85.7	0	0
8	Importance of completing treatment	2	14.3	12	85.7	0	0
9	STH gives nutritional supplement and social service	0	0	12	85.7	1	7.1
10	Other	5	35.7	0	0	0	0
Othe	r (specify)			0			
1	Take your medicines on time	1	7.1	0	0	0	0
2	STH gives ration to poor patients	1	7.1	0	0	0	0
3	Water has accumulated in your chest	1	7.1	0	0	0	0
4	Do not miss your dose even for one day	1	7.1	0	0	0	0
5	You have to come every alternate day for your medicines	1	7.1	0	0	0	0

# TABLE 8: INFORMATION GIVEN BEFORE INITIATION OF TREATMENT

(Note: The probed section reports on the affirmative responses only. \*One respondent was not asked the question)

Respondents were specifically asked if they were informed about ill effects of interrupting or discontinuing their treatment. Twelve respondents (n=12/14; 86%) reported being informed about it. When asked to specify what information, they were informed that 'their illness would increase' (n=6/12; 50%) and 'there were chances of re-infection' (n=2/12; 17%). Other reported information included, 'chances of transmission to family members'; 'increase in treatment duration with injections' and 'longer duration to get cured'. One respondent said that no specific information was given to him [Tables 9].

Information		Frequency	Percent
	Illness will increase	6	50.0
	May cause re- infection	2	16.7
	Longer duration of treatment including injections	1	8.3
	Illness will increase, no medicines available, will take long to get better	1	8.3
	Can infect others in family	1	8.3
	No specific information given	1	8.3
	Total	12	100.0
Not	No informed about ill effects of discontinuing or interrupting	2	
applicable	treatment		
Total		14	

TABLE 9: INFORMATION REGARDING ILL EFFECTS OF DISCONTINUING OR INTERRUPTING TREATMENT

Respondents were asked regarding the person who had given them the information. Respondents reported receiving the said information from doctors (n=12/14; 86%); doctor and health worker (n=1/14; 7%); private doctor (n=1/14; 7%) and maternal uncle who had been treated for TB at the same centre (n=1/14; 7%).

All respondents reported that they found the information easy to follow.

# 4. EXPERIENCE AT STH

# A. WAITING TIME TO SEE DOCTOR

All 14 respondents were asked regarding the average waiting time to see the doctor at STH. One respondent did not respond to the question and another respondent could not specify a time but said that he slept for a long time while waiting to see the doctor.

The reported waiting time for the remaining 12 respondents ranged from one hour to six hours. The various waiting times reported were one hour (n=4/14; 29%), three hours (n=3/14; 21%) etc. The longest waiting time that one respondent reported was six hours [Table 10].

	Frequency	Percent
One hour	4	28.6
Three hours	3	21.4
Six hours	1	7.1
Four hours	1	7.1
Three and half hours	1	7.1
Two hours	1	7.1
One and half hours	1	7.1
Cannot specify	1	7.1
No response	1	7.1
Total	14	100.0

# TABLE 10: REPORTED WAITING TIME TO SEE A DOCTOR

# B. EXAMINATION BY DOCTORS AND ATTENTIVENESS OF STAFF

All 14 respondents reported being satisfied with the examination by the doctors at the centres. All respondents reported that the doctors and staff had been attentive towards them. Two respondents spontaneously responded to the question by saying that they had improved in health because the doctors and staff had been attentive towards them.

# C. BEHAVIOUR OF DOCTORS AND STAFF

Thirteen respondents (n=13/14; 93%) said that they found the doctors and staff at STH to be approachable and friendly. Only one respondent (female, unmarried, 18 years old) said that she was scared of speaking to the doctors and the staff.

None of the respondents had any complaints regarding the behaviour of the doctor or staff at STH.

# D. DECISION REGARDING CHOICE OF DOT CENTRE AND TIME FOR DOT

Respondents were asked who had chosen the DOT centre and the reporting time at this place for DOT.

# E. CHOICE OF DOT CENTRE

The choice of DOT centre was made by doctors /staff (n=11/14; 79%), relatives (maternal uncle and brother) (n=2/14; 14%) and by respondent himself (n=1/14; 7%). Out of the 13 respondents who had not chosen the DOT centre, 10 (n=10/13; 77%) reported being consulted while making the decision, while three respondents (n=3/13; 23%) were not consulted while making the decision regarding the DOT centre.

#### F. WHETHER ASKED IF CENTRE CONVENIENTLY LOCATED FOR RESPONDENTS

Eleven respondents (n=11/14; 79%) were asked if the centre was conveniently located for them, while three were not asked this question. Two out of the three (n=2/3), however, spontaneously reported that the centres were very close by.

# G. CHOICE OF TIMINGS FOR DOT

Nine respondents (n=9/14; 64%) reported they had chosen the time for reporting to the centre for DOT themselves. For the remaining the choice was made by the doctor/staff at the centre (n=4/14; 29%) and the respondent's brother (n=1/14; 7%).

# H. WHETHER ASKED IF TIMINGS FOR DOT CONVENIENT

Out of the five respondents who had not chosen the time for DOT, three respondents (n=3/5; 60%) were not asked if the time was convenient for them.

# I. PREFERRED TIME FOR DOT

Twelve out of the 14 respondents (86%) went to the DOT centre before or at noon, while the remaining two (14%) went to the centre in the afternoon. The reported preferred time for the 12 respondents who went to the DOT centre before noon was between 10 and 11am (n=8/12; 67%), 9.30 am (n=2/12; 17%) and 12 pm (n=2/12; 17%).

The preferred time for both men and women was in the mornings [Tables 11].

Timings	Se	Total	
	Male	Female	
Morning	8 (66.7%)	4 (33.3%)	12
Afternoon	2(100%)	0 (0%)	2
Total	10 (100%)	4 (100%)	14

TABLE 11: GENDER WISE DISTRIBUTION OF PREFERRED TIME FOR DOT

# 5. EXPERIENCES OF TAKING TREATMENT AT DOT CENTRE

# A. INFORMATION REGARDING DOT AND NUMBER OF MANDATORY VISITS TO DOT CENTRE FOR TREATMENT

All 14 respondents reported that they were told that the treatment would be given under observation and that they would have to come thrice a week in the first two months and then once a week for the remaining four months. All respondents were given this information by their respective DOT providers.

#### B. WHETHER ACCOMPANIED BY SOMEONE WHILE COMING FOR DOT

Four out of 14 respondents (n=4/14; 29%), were accompanied by someone to the DOT centre. Three of these four respondents were unmarried females, below the age of 25 [Annexure 3: Table 12 and 12.1].

#### C. TIME TAKEN TO REACH THE DOT CENTRE

The time taken for the 14 respondent to reach the DOT centre ranged from five minutes to half an hour. The various times reported were five minutes (n=7/14; 50%); ten minutes (n=1/14; 7%); fifteen minutes (n=4/14; 29%) and half an hour (n=2/14; 14%)[Annexure 3: Table 12.2].

#### D. MODE OF TRANSPORT USED TO REACH DOT CENTRE

The various ways in which respondents reached the DOT centre were: by foot (12/14; 86 %); cycle rickshaw during water logging (n=1/14; 7 %) and bus (n=1/14; 7 % [Annexure 3: Table 12.3].

# E. COSTS INCURRED TO REACH DOT CENTRE

Twelve out of the 14 respondents (86%) did not incur any travel costs since they walked to the centre. In case of the remaining two, the respondent who took the cycle rickshaw paid 20 rupees to and fro for each trip, while the respondent who took the bus paid 16 rupees for each trip.

#### F. WAITING TIME AT DOT CENTRE

None of the 14 respondents reported any waiting time to receive their medicines at the DOT centre.

#### G. WHETHER TREATMENT OBSERVED

Thirteen respondents (n=13/14; 93%) reported being observed while taking treatment. The one respondent who was not observed was 75 years old and unable to travel to the centre for DOT on account of her age. Her daughter-in-law used to get her medicines home.

## H. WHETHER RECEIVED BREAKFAST AT CENTRE

Eleven respondents (n=11/14; 79%) reported that they received breakfast at the centre. Of the remaining three respondents (n=3/14; 21%), two respondents were taking DOT from a public sector and an NGO where there was no supply of breakfast for the patients. The third respondent who was taking DOT from STH centre reported that he had received breakfast only in the first two months but neither had he asked the reason for discontinuation nor was he given one by the DOT provider.

#### I. WHETHER EAT BREAKFAST AT THE DOT CENTRE

Nine out of the 11 respondents who reported ever receiving breakfast (n=9/11; 82%) did not eat their breakfast at the DOT centre, while two respondents (n=2/11; 18%) reported eating their breakfast at the DOT centre [Annexure 3: Table 12.4].

#### J. REASONS FOR NOT EATING BREAKFAST AT CENTRE

The reasons given by the nine respondents for not eating their breakfast at the DOT centre were – 'not being hungry at the time of taking medicines since they usually ate something before they went to the centre' (n=4/9; 44%); 'difficulty in eating after taking so many tablets' (n=2/9; 22%); 'do not like to eat at centre' (20 years old female)(n=1/9; 11%); 'would be delayed for work' (n=1/9; 11%) and 'do not travel to DOT centre due to old age' (n=1/9; 11%) [Annexure 3: Tables 12.5].

#### K. WHETHER COMING TO DOT CENTRE IS CONVENIENT

Eleven out of the 14 respondents (79%) found it convenient to come for their DOT thrice a week in the first two/ three months of treatment, while the remaining three respondents (n=3/14; 21%) reported they found it inconvenient. All the three respondents who found it inconvenient were male; two of them were unemployed while one was employed.

#### L. CHANGES IN ROUTINE BECAUSE OF DOT

Eight out of the 14 respondents (57%) said they did not have to make any changes in their routine due to DOT, while six respondents said that they had to make some changes (n=6/14: 43%). The changes that had to be made were- 'managing their time' (n=2/6; 'forgoing work' (n=2/6) (one respondent worked in a tea stall while the other took tuitions), 'hurrying through household chores or leaving work unfinished'. The last respondent gave no response to the question [Annexure 3 :Table 12.6].

#### M. ADJUSTMENTS IN WORKS SCHEDULES

The seven respondents who were employed were asked if they had to make adjustments in their work schedules. Two respondents (n=2/7) said they were late for work as they had to take DOT in the mornings. One of these respondents worked in a company and also gave tuitions while the second respondent was a rickshaw driver.

#### N. LOSS OF WAGES ON ACCOUNT OF DOTS

Three out of the seven respondents who were employed (n=3/7) reported that they lost wages because they had to come thrice a week for their treatment. Two respondents were rickshaw drivers while the third worked at a tea stall for a living.

# O. HARASSMENT FACED WHILE COMING FOR DOTS

None of the respondents reported any harassment by community people on their way to the DOT Centre.

# P. STAFF BEHAVIOUR

All respondents found the staff to be friendly, approachable and attentive towards them.

# 6. IMPRESSIONS REGARDING THE DOT CENTRE

Thirteen respondent (n=13/14; 93%) said that the DOT centre was well ventilated, while one respondent did not consider it to be well ventilated.

All 14 respondents reported that there was adequate waiting area with seating arrangement. Thirteen respondents (n=13/14; 93%) reported that their DOT centre was clean and hygienic, while one respondent did not find it to be so. The same centre (run by STH field worker) was also reported as not being well ventilated by the respondent.

Twelve respondents (n=12/14; 86%) reported that there were toilet facilities at the DOT centre while two respondents reported that there was no toilet facility at their DOT centre.

Thirteen respondents (n=13/14; 93%) reported that their centre had provision for clean drinking water, while one respondent reported that his centre did not have clean drinking water facility [Table 13].

	Yes		
	Frequency (N=14)	Percent	
Well ventilated	13	92.9	
Adequate space	14	100.0	
Sitting arrangements while taking medicines	14	100.0	
Clean and hygienic	13	92.9	
Toilet facility	11	78.6	
Clean drinking water	13	92.9	

# TABLE 13: IMPRESSIONS REGARDING DOT CENTRE

#### I. STIGMA AND DISCRIMINATION

Respondents were asked regarding privacy at the clinic, whether lack of privacy had led to disclosure of their illness, and if they had faced any discrimination due to the disclosure of their illness [Figure 2]

#### II. PRIVACY AT DOT CENTRE

Nine respondents (n=9/14; 64%) said that there was lack of privacy at the DOT centre, while five respondents (n=5/14; 36%) reported that there was privacy at the DOT centre.

#### i. Was the illness disclosed because of lack of privacy at DOT centre?

Of the nine respondents who reported lack of privacy at the DOT centre, seven (n=7/9; 78%) reported that their neighbours and community had found out about their disease because of the lack of privacy at the clinic, while two respondents (n=2/9; 22%) reported that lack of privacy had not led their neighbours and community to find out about their illness. These two respondents were asked if their neighbours and community members knew or suspected regarding their illness. Both respondents replied that their neighbours and community members knew about their sknew about their illness [Annexure 3: Table 13.1].

#### III. DO NEIGHBOURS AND COMMUNITY MEMBERS KNOW ABOUT THE ILLNESS?

The five respondents, who did not report a lack of privacy at the DOT centre, were asked if their neighbours and community members knew or suspected regarding their illness. Three of them (n=3/5; 60%) reported that their neighbours and community members knew about their illness, while two respondents (n=2/5; 40%) said that their neighbours and community members did not know about their illness [Annexure 3: Table 13.2].

#### i. Discrimination from neighbours and community due to disclosure of illness

Twelve out of the 14 respondents reported that their neighbours or community either knew or suspected about their illness. Ten of these respondents (n=10/12; 83%) reported not facing any discrimination due to the disclosure of their illness while the remaining two respondents (n=2/12; 17%) – one male and one female – reported facing discrimination from them.

#### ii. Type of discrimination experienced and whether that made treatment seeking difficult?

The male respondent (20 years old) who reported facing discrimination said that people kept a distance from him and did not allow him to sit next to them. The female respondent (23 years old) reported that the discrimination had made it difficult for her to seek treatment but did not report

any specific manifestations of discrimination. She did not elaborate on the extent of difficulty but said she took her treatment despite the discrimination. The male respondent said that it was not difficult for him to seek treatment since he was discreet about it.

# FIGURE 2: PRIVACY AT DOT CENTRE AND DISCRIMINATION FACED DUE TO DISCLOSURE OF ILLNESS



# 7. EXPERIENCE OF TAKING TREATMENT

# A. DISCOMFORT BEFORE INITIATION OF TREATMENT

All 14 respondents reported that they had been in a lot of discomfort before initiation of treatment. Eight respondents (n=8/14; 57%) specified the problems that they had experienced. These included severe chest pain, loss of appetite, weakness, nausea, severe cough, sweating, fever, vomiting and chest pain.

#### **B. CHANGE IN CONDITION AFTER STARTING TREATMENT**

Thirteen respondents (n=13/14; 93%) reported that their condition had improved after taking treatment. Only one respondent reported that he had become weaker since starting treatment. The reasons he reported for his weakness were diabetes and vomiting.

All 14 respondents believed that they would be cured of their disease after taking the treatment.

# C. DISCOMFORT WHILE CONSUMING SEVEN TABLETS AT ONE TIME

Eight respondents (n=8/14; 57%) reported experiencing some discomfort while consuming all seven tablets at one time while six did not experience any discomfort while doing so. The various discomfort reported were vomiting (n=3/8), nausea (n=2/8), dizziness (n=2/8), bitter taste in mouth (n=1/8), itching (n=1/8), uneasiness (n=1/8), choking sensation (n=1/8) and weakness (n=1/8) [Annexure 3: Table 14.1].

Remedial measures taken by the eight respondents to get relief from their problems/ discomfort included consulting a doctor /DOT provider/ field worker (n=4/8), taking rest (n=2/8), mixing nutritional supplement (Horlicks) with medicines (n=1/8). One respondent said that he did nothing but problem/discomfort had been alleviated on its own. [Table 14.2]

 TABLE 14.2: REMEDIAL MEASURES TAKEN FOR DISCOMFORT EXPERIENCED WHILE CONSUMING SEVEN

 TABLETS

Remedial measures		Frequency	Percent
	Consulted doctor/ DOT provider/field worker Took rest		50.0
			25.0
Mixed Horlicks with the medicines Did nothing- got cured on its own		1	12.5
		1	12.5
	Total	8	100.0
Not applicable	Did not face any discomfort	6	
Total		14	

#### D. SIDE EFFECTS OF MEDICINES

Eleven respondents (n=11/14; 79%) did not experience any severe side effects of the medicines, while three (n=3/14; 21%) reported experiencing strong side effects that had affected their daily routine. The side effects were listed as dizziness, uneasiness, vomiting.

#### i. Remedial measures taken on side effects and whether the advice given proved to be useful

All three respondents had informed their DOT provider about their side effects. The respondent who had experienced dizziness was told that this was quite common. As a remedy the respondent would lie down whenever she felt dizzy. The other two respondents were advised to go and see the doctor

at the centre. All three were of the opinion that their DOT provider had been attentive towards their problems. Two out of these three respondents found the advice given, useful in reducing the side effects while the remaining respondent did not give a valid response.

# 8. TREATMENT COSTS

Respondents were asked regarding the costs they had incurred on treatment until the time of the interview including cost of investigations and wage loss.

The reported amount ranged from 0 to Rs 15000 with a median of Rs 300. Eight respondents (n=8/14; 57%) reported spending some amount on the treatment while four (n=4/14; 29%) reported not spending any money on the treatment, one respondent (n=1/14) could not specify an amount and one respondent (n=1/14) did not give a response to the question but reported having spent Rs 3500 on medicines for diabetes and monthly tests for diabetes.

The respondent who reported spending Rs 15000 said that he had spent it on medicines for diabetes and cough but did not give a breakup of the two [Table 15].

	Frequency	Percent
0	4	28.6
30	1	7.1
300	3	21.4
450	1	7.1
1000	2	14.3
15000	1	7.1
Cannot specify amount	1	7.1
No response	1	7.1
Total	14	

#### **TABLE 15 COSTS INCURRED ON TREATMENT**

(Mean 300, range 0-15000)

# 9. SUGGESTIONS REGARDING SERVICES AND QUALITY OF CARE AT STH

#### A. WHETHER THERE WAS DELAY IN INITIATION OF TREATMENT

Thirteen of the fourteen respondents (93%) were of the opinion that there had been no delay in the initiation of their treatment, while only one respondent (female, unmarried, 23 years old) was of the opinion that there had been a delay in the initiation of her treatment (treatment initiation was one week after diagnosis). When she was asked her opinion on how many days after diagnosis had she expected to be put on treatment, she said that she had not given any thought to it.

#### B. WAS THE INFORMATION GIVEN USEFUL IN UNDERSTANDING DISEASE AND TREATMENT TAKING?

All fourteen respondents said that the information provided to them was helpful in understanding their disease and taking treatment properly.

# C. MAXIMUM AGREEABLE WAITING TIME TO SEE A DOCTOR

The maximum agreeable waiting time for the respondents to see a doctor ranged between 20 minutes and three hours. The varied responses included, one hour (n=5/14; 36%); half an hour (n=4/14; 29%) etc

The other responses was twenty minutes (n=1/14); two to three hours since it was a matter of life and death (n=1/14); while one respondent (n=1/14) was unable to specify a time but wanted it to be as little as possible. The remaining two respondents (n=2/14) were of the opinion that they were not in a position to dictate what should be the waiting time, the reasons being they were receiving the treatment free of cost and there were many other patients with similar condition. [Table 16.1].

TABLE 16.1:	ΜΑΧΙΜΙΙΜ	AGREFABLE	WAITING '	TIME TO SEE	A DOCTOR
1 ADEC 10.1.		AGINELADEL		THATE TO SEE	A DOCION

	Frequency	Percent
Twenty minutes	1	7.1
Half an hour	4	28.6
One hour	5	35.7
Two to three hours	1	7.1
As little as possible	1	7.1
Not in a position to dictate what should be the waiting time	2	14.3
Total	14	
#### D. WHETHER PRIVACY NEEDED AT THE DOT CENTRE

When specifically asked regarding privacy at the DOT centre, seven respondents (n=7/14; 50%) were of the opinion that there was a need for more privacy while the other seven did not.

Three respondents spontaneously commented when asked the question, that privacy was necessary in case of females (n=1/3), unmarried females (n=1/3) and not for him but for others (n=1/3).

## **10. SUGGESTIONS REGARDING FACILITIES AT DOT CENTRE**

When asked for suggestions regarding facilities at the DOT centre, ten respondents (n=10/14; 71%) were of the opinion that no additional facilities were required. The additional facilities that the remaining four respondents (n=4/14; 29%) asked for were: 'more privacy at the DOT centre in order to avoid disclosure to friends' (n=1/4); 'medicines for diabetes' (n=1/4), 'toilet facilities' (n=1/4) and 'drinking water facility' (n=1/4) [Annexure 3: Table 16.2].

#### **11. SUGGESTIONS REGARDING SERVICES OFFERED BY STH**

Eleven respondents (n=11/14; 79%) had no suggestions with regard to services offered by STH. The suggestions from the remaining three respondents were monetary help (n=2/3) and medicines for diabetes (n=1/3).

# **12. TREATMENT SEEKING IN PRIVATE SECTOR**

Twelve respondents (n=12/14; 86%) had not taken treatment in the private sector. Only two respondents (n=2/12; 17%) had taken treatment in the private sector prior to coming to STH. In case of both respondents, their inability to afford private treatment was the reason for coming to STH.

The twelve respondents who had not taken private treatment were asked if they had ever considered taking treatment in the private sector and their reasons for not doing so. Nine respondents (n=9/12; 75%) reported that they had never considered taking treatment in the private sector. Only three respondents (n=3/12; 25%) had considered treatment in the private sector but decided against it because they could not afford it.

# 13. REASONS FOR ULTIMATELY SEEKING CARE AT STH

Respondents were asked the reasons for ultimately seeking care at STH. Multiple reasons were reported. The reported reasons were 'affordability' (n=13/14; 93%); 'good quality of care' (n=3/14; 21%); 'availability of all facilities' (n=2/14; 14%); 'provision of nutritional supplements' (n=1/14; 7%); 'referred by a doctor' (n=1/14; 7%).

TABLE 17: REASONS FOR SEEKING CARE AT STR	<b>TABLE 17:</b>	REASONS	FOR	SEEKING	CARE	AT STH
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	Frequency(n=14)	Percent
Affordable	13	92.9
Good quality treatment	3	21.4
Availability of all facilities	2	14.3
Provision of nutritional supplements	1	7.1
Referred by doctor	1	7.1

Note: Multiple responses

#### 14. REFERRAL TO STH

Respondents were asked who had referred them to STH. Seven had been referred by a private doctor (n=7/14; 50%), four by family members/neighbour (n=4/14; 29%), which included a respondent whose father had previously been treated at STH; two by STH field workers (n=2/14; 14%) and one by a doctor who was a DOT provider at STH (n=1/14; 7%)[Graph 3][Annexure 3: Table 17].



#### **GRAPH 3: PERSON WHO REFERRED RESPONDENT TO STH**

# 15. DISADVANTAGES OF TAKING TREATMENT AT STH AS COMPARED TO TAKING TREATMENT WITH A PRIVATE DOCTOR

Respondents were asked if they saw any disadvantages of taking treatment at STH as compared to taking treatment in the private sector. Twelve respondents (n=12/14; 86%) were of the opinion that there were no disadvantages, one respondent (n=1/14; 7%) was of the opinion that it was in fact an advantage since one did not have to spend money at STH and the remaining respondent (n=1/14; 7%) did not see it either as an advantage or disadvantage as he had not noticed any improvement in his condition since taking treatment.

# 16. RECOMMEND STH TO OTHER PATIENTS FOR TB TREATMENT

All fourteen respondents said that they would recommend STH to other patients for TB treatment. The reasons included availability of all facilities/ services at STH (n=9/14; 64%); free of cost services (n=9/14; 64%); cure or improvement in respondent's condition (n=4/14; 29%); availability of good quality of treatment (n=4/14; 29%); good/ proper care by doctors and staff (n=3/14; 21%); and belief that complete cure would be ensured at STH (n=1/14; 7%). Two respondents spontaneously mentioned that the availability of free facilities and availability of services combined with quality care was beneficial for poor patients [Graph 4][Annexure 3: Table 18].



# **GRAPH 4: REASONS FOR RECOMMENDING STH TO OTHER PATIENTS**

ACTION POINTS						
Areas of enquiry	Findings	Action points				
1. Initiation of treatment	<ul> <li>Delay in initiation as much as 21 days.</li> </ul>	<ul> <li>Although reasons for default may be many, a more rigorous follow up of diagnosed cases needs to be undertaken. If the patient does not initiate treatment within three days of diagnosis, field workers need to follow up with a phone call/ home visit.</li> </ul>				
2. Information given at time of initiation of treatment	<ul> <li>Low recall of information given</li> </ul>	<ul> <li>Along with other information, doctors need to emphasize on the need for adherence and seeking care immediately in case of side effects</li> <li>Information regarding disease, treatment duration, need for adherence and treatment completion needs to be reiterated by a trained health care provider.</li> </ul>				
3. Choice of DOT centre and time for DOT	<ul> <li>In most cases choice not made by patient although they are consulted in the choice.</li> <li>Mostly time decided by patients but convenience not asked in case of some respondents</li> </ul>	<ul> <li>Patients must be allowed to choose the DOT centre and the convenient time in order to minimize inconvenience and wage loss as reported by some of the respondents.</li> </ul>				
4. Privacy at DOT centre	<ul> <li>Need for more privacy expressed</li> </ul>	<ul> <li>Need to increase privacy at the DOT centre</li> </ul>				
5. Provision of breakfast at DOT centre	<ul> <li>Most respondents reported getting breakfast at DOT centre but did not have it at the centre. Thus whether patients receiving nutritional benefits is doubtful</li> </ul>	<ul> <li>The patients need to be counselled regarding the importance of nutrition for early recovery and avoiding the spread of infection.</li> </ul>				
6. Waiting time to see a doctor	<ul> <li>The waiting time ranged from one hour to six hours whereas the maximum agreeable time for most patients was up to an hour</li> </ul>	<ul> <li>Increase in the number of OPD days and area wise referrals to be made on allotted days. For eg: Doctors from Pilkhana and other surrounding area to refer their patients on</li> </ul>				

			Manday ata
			Since the Consultant is very
		k	ousy, these OPDs can be
		r	managed by other not so
		s	senior doctors.
		(	Complicated cases could
		t	then be referred to the
		c	consultant on Thursday.
		OR	,
		0	Having a morning and
		e	evening OPD on the current
		F	PPM day (Thursday).
		OR	
		o F	Roping in MBBS doctors
		\ \	who are willing to act as
		r	referral doctors for grass
		r	roots doctors in their area.
		0	Once screened, the patient
		C	can be referred to STH for
		C	diagnosis and treatment
		o F	Retrain grass roots doctors
		C	on suspicion, diagnosis and
		C	diagnostic algorithms either
		t	through meetings/
		ł	nandouts/ personal visits
		k	by FMO in order to
		c	decrease the burden of
		r	referral of non-TB cases to
		5	STH.
		0	Emergency cases to be
		r	referred at any time to the
		C	centre
		o F	Field workers to wait for
		t	the turn of their patients to
		S	see doctors.
7. Discomfort while taking	<ul> <li>Almost half of the</li> </ul>	0	More attention to be paid
seven tablets at one time	respondents faced some	k	by DOT provider in the
	discomfort while	i	nitial days of patients'
	consuming seven tablets at	t	treatment so that possible
	one time	i	nterruptions /default can
		k	be avoided.
8. Treatment costs	• While the cost of TB	0	DOT centres that are more
	treatment appeared to be	ā	accessible should be
	low, rew respondents had		assigned to reduce cost of
	to face the cost of	t	transport and loss of time.
	transportation.		Need to consider providing
	• Also respondents with co-	ľ	neip to patients with co-
		r	norbia conditions.
	cliabeles had to bear the		
	diabatas		
	diabetes.		

# DEFAULTERS AFTER INITIATION OF TREATMENT

#### **REPORT ON DEFAULTERS AFTER INITIATION OF TREATMENT**

Two respondents who had defaulted after initiation of treatment were interviewed, both of who were sputum positive, pulmonary TB patients. Since there were only two respondents, information from the interviews is presented as individual case studies.

# 1. **RESPONDENT 1**

Respondent 1 was initiated on treatment in June 2011 and was taking Category II treatment from a RNTCP DOT centre at Baltikuri Hospital. He had taken three weeks of treatment before defaulting. Respondent 1 was a 34 years old, married male. He had been living in Howrah since birth and was currently residing with his wife and children. He was unemployed at the time of the interview and had no personal income. His mother gave him 100 to 150 rupees and his monthly family income was Rs.2000.

He had been referred by a private doctor to STH because he was poor.

Before initiation of treatment, Respondent 1 was informed at STH that he should complete his treatment and not discontinue it otherwise his illness would worsen. When probed he also mentioned receiving information on the causative factors of the disease; the treatment would have to be observed; the importance of taking regular treatment for 6/8 months, and that diagnosis and treatment for TB were free. He was also told that he would receive breakfast, social help and doctor's consultation if he took treatment at STH. The respondent found the information easy to understand in terms of language and content.

The DOT centre was convenient for the respondent and chosen by the doctor/ staff at STH after consulting him. He was also consulted regarding the time he would go for DOT. He chose to go in the mornings for his medicines. He was observed while taking all seven tablets at the DOT centre. Respondent 1 said that his neighbours and community members had found out about his disease because he took treatment at the DOT centre, but he did not face any discrimination because of this disclosure.

He reported that he had been given three strips of medicines. After he took the medicines, he experienced side effects of nausea, vomiting and dizziness. The side effects scared him and he discontinued his treatment. Following his discontinuation a field worker from STH had come to meet him but he was not at home at that time. There was no repeat visit by any field worker after that. After discontinuing his treatment he had not take any treatment from any other provider or centre. The respondent was asked what would have been his requirements in order to complete his treatment at STH. He asked for provision of food rations to patients at least in the initial days since

the side effects of medicines made it difficult for them to work. When he was probed he also added that the transport charges for the patient and the accompanying person should be reimbursed.

On the whole the respondent was satisfied with clinical examination by the doctors and the attention paid to him by the doctors and staff at STH or DOT centre. He also did not report any complaints regarding the behaviour of DOT provider or doctors or staff at STH.

He found STH and the DOT centre to be clean and hygienic and the facilities for toilet, and water and seating arrangements at STH and DOT centre to be satisfactory.But he wanted more privacy to be maintained at the DOT centre and suggested that arrangements should be made for food rations for the family.

# 2. **RESPONDENT 2**

Respondent 2 was initiated on treatment in July 2011 and was taking Category I treatment from High Road Panchayat DOT centre<sup>5</sup>. He had completed two months of IP treatment before he defaulted The respondent was a 32 years old married male. He was living in Howrah since the last two years with his family. He was illiterate and was unemployed at the time of the interview and did not report any personal or family income.

He was a self referral to STH. He did not specify any reason for seeking care at STH.

Before initiating treatment, the respondent was informed at STH that he should complete his treatment and not discontinue it half way through otherwise his condition would worsen. He also reported receiving information that treatment needs to be observed; it was important that he takes regular treatment for 6/8 months and that diagnosis and treatment were free. He found the information easy to understand in terms of language and content.

The DOT centre was convenient for the respondent and chosen by the doctor/ staff at STH after consulting him. The time for DOT was chosen by the doctor/ staff at STH without consulting the respondent. The respondent went in the mornings for his medicines. He was observed while taking all seven tablets at the DOT centre.

Like Respondent 1, Respondent 2 also said that his neighbours and community members had found out about his disease because he took treatment at the DOT centre, but he did not face any discrimination because of this disclosure.

Respondent 2 discontinued his treatment because of misinformation. After completing his IP he was asked at the centre to give his sputum sample. However, since he did not have any expectoration he

<sup>&</sup>lt;sup>5</sup> The DOT centre was a public sector DOT centre and did not provide any nutritional supplements to its patients.

assumed that he would not be given any further treatment and as a result discontinued his treatment. When he was probed for other reasons for discontinuing treatment, the respondent said that he had felt better after two months of treatment. Also going for treatment at STH was affecting his work schedule. But the most important reason for discontinuation of treatment was that he had no expectoration and so assumed that he would not be given further treatment. The respondent expressed his willingness to complete treatment if the programme restarts the treatment.

No one had contacted the respondent with regard to his discontinuation of treatment. After discontinuing his treatment, the respondent did not take any treatment from any other provider or centre.

Respondent 2 was asked what would be his requirements if he had to complete the treatment. The respondent asked for monetary help of about Rs. 2000 to 3000 so that he could start a small business. He also wanted some breakfast to be provided since he was of the opinion that only medicines would not cure his illness. When he was probed about other pre requisites for continuing treatment under RNTCP, the respondent included food rations for the family; immediate medical attention in case of any side effects; convenient timings of DOT centre; and availability of all health care staff at all times.

On the whole, like Respondent 1, Respondent 2 was also satisfied with clinical examination by the doctors and the attention paid to him by the doctors and staff at STH or DOT centre. He also did not report any complaints regarding the behaviour of DOT provider or doctors or staff at STH. He found the STH and the DOT centre to be clean and hygienic and seating arrangements, the toilet and water facilities at STH and DOT centre to be satisfactory.

Respondent 2 did not have any suggestions to make except that some breakfast needs to be arranged.

AC	TION POINTS				
	AREAS OF ENQUIRY		FINDINGS		ACTION POINTS
1.	Information regarding importance of treatment completion	0	Respondents reported receiving information	0	Practice needs to be continued
2.	Choice of DOT centre and timing for DOT	0	Although choice of centre made in consultation, the time for DOT not chosen by both	0	Choice of DOT centre and convenient timings need to be decided in consultation with the respondents
3.	Observation of treatment	0	Treatment is observed	0	Practice needs to be continued
4.	Quality of care at STH and DOT centre	0	Respondents satisfied	0	Standard to be maintained
5.	Reasons for discontinuation of treatment	0	Experienced side effects and misinformation on part of respondent led to default	0	Lack of adequate communication between the DOT providers/ field workers and respondent led to discontinuation in both cases.
6.	Stigma and discrimination	0	No stigma reported even though neighbours and community members found out about respondents illness because of their visits to DOT centres	0	Although encouraging to know the two respondents did not face stigma, privacy at DOT centres should be ensured.
7.	Treatment seeking during default	0	No treatment sought from any other source after default		
8.	Defaulter retrieval process	0	Process is not adequate. Field worker visited respondent only once but did not repeat visit when contact with respondent could not be made. In case of second respondent no visit was paid	0	Both default cases could have been avoided. Process of defaulter retrieval has to be followed and strengthened. The field workers need to spend enough time with the patient to understand the problem. Repeated visits with supervisor may be necessary to solve the issues and bring patient back on treatment
9.	Requirements for continuing treatment at STH/RNTCP	0	Requirements of food rations and monetary help to start business , reimbursement of transport charges, availability of health staff, convenient DOT timings, immediate attention to side effects expressed	0	Depending on STH's capacities, (at least in some cases where there is no or very low income) food rations instead of nutritional supplements can be given since there is low acceptance of eating at the centre by patients

		<ul> <li>Need to emphasize to the patients that only medicines will not cure but a good diet is in their best interests and interest of their families.</li> </ul>
		<ul> <li>Patients need to be paid extra attention during the first few weeks of starting treatment in order to monitor for side effects.</li> </ul>
		<ul> <li>Patients should be asked to contact field worker/ DOT provider immediately.</li> <li>Patients need to be assured that side effects are common and remedial measures are available.</li> </ul>
		<ul> <li>Some screening procedure may be introduced to ascertain which respondents and family members could be given additional services/ facilities.</li> </ul>
10. Information given before initiation of treatment	<ul> <li>Most information given to the respondents</li> </ul>	<ul> <li>Need to emphasize that infection is air borne and the precautions that the patient needs to take in order to avoid transmission.</li> </ul>
11. Suggestions for improving services	<ul> <li>Provision of food rations expressed by one respondent</li> </ul>	<ul> <li>Appears to be an urgent need for some patients with no or low income.</li> </ul>

# **INITIAL DEFAULTERS**

# PATIENTS WHO HAD FAILED TO INITIATE TREATMENT AFTER DIAGNOSIS

Two patients who had failed to initiate treatment after diagnosis were interviewed. Since there are only two respondents, information from the interviews is presented as individual case stories.

# 1. RESPONDENT 1

Respondent 1 was diagnosed as sputum negative pulmonary patient and prescribed Category II treatment.

Respondent 1 was a 32 years old, unmarried male. He had been living in Howrah since birth and was currently living with his siblings. He was educated upto the 6<sup>th</sup> standard and was a rickshaw driver earning a monthly income of Rs 3000. He was the only earning member in his family.

Respondent 1 decided to seek care at STH because of his cough and breathlessness. He came to STH in July 2011 and was a self referral. The attending doctor told him after investigations that he had TB and would be started on treatment within two days.

The respondent recalled being told that he had TB and that he would have to take treatment for 6-8 months. When he was probed he also recalled being informed that his disease was curable; the diagnosis and treatment for this disease was free; his treatment would be observed at the DOT centre for which he would have to come thrice a week to the DOT centre in the first two months of treatment, the possible side effects of treatment, the centres where he could take treatment and the importance of completing treatment. He did not receive any information regarding the ill effects of interrupting and discontinuing treatment. He recalled being informed that he would get social help, breakfast and doctor's consultation if he took treatment at STH. He found the language and the contents of the information easy to follow.

Respondent 1 then chose his DOT centre after a discussion with the staff at STH. The centre was close by and accessible by foot. But there was no discussion about the time he would go to this centre to take his medicines.

Upon enquiry he felt that his neighbours and community members would come to know if he took treatment from the DOT centre but was not worried that he would be discriminated because of this disclosure.

On the whole, Respondent 1 was satisfied with the quality of care he received at STH. He was satisfied with the clinical examination by the doctors at STH and felt that the staff and doctors had been attentive towards him. He also found STH to be clean and hygienic and was satisfied with

facilities for toilet, drinking water and seating arrangements at STH. As such he did not find the need for any additional facilities at STH.

Despite this satisfaction, Respondent 1 decided not to take treatment at STH because he would have to make a lot of changes in his daily routine in order to take DOTS. He felt that he would be unable to drive his rickshaw on the days he had to come for DOT. Being the only earning member in his family he was worried that loss of wages thrice a week would not enable to him to take care of his household expenses. He was then probed to elicit any other reasons for his failure to initiate treatment at STH, at which time he also cited inconvenient timings of DOT centre and having to make a lot of work related changes as the other reasons.

Respondent 1 recalled being paid a visit by a field worker from STH to enquire about his failure to initiate treatment. After talking to him, the field worker told him that if he did not start his medication he would have health problems. She also added he should call her in case he had any side effects once he started his treatment. Respondent 1 felt that the field worker has tried to understand his problem

The respondent was not taking any treatment for TB from any other provider or centre after failing to initiate treatment at STH.

The respondent was asked regarding his requirements for him to initiate treatment at STH. He asked for food rations his family and he as procurement of food was a problem. When probed he also added four other requirements which were convenient timings of DOT centres, availability of health care staff at all times, periodic health checkups for himself and his family and the provision of tonic/ nutritional supplements.

# 2. RESPONDENT 2

Respondent 2 was diagnosed in March 2011 and prescribed Category I treatment.

Respondent 2 was a 25 year old, married male. He had been a resident of Howrah since birth and was currently living with his parents, wife and children. He was educated in Urdu medium till the 5<sup>th</sup> standard. He was an Ironsmith by profession and earned a monthly income of Rs 4000 approximately. Like Respondent 1, he was also the only earning member in his family.

Respondent 2 was in a lot of discomfort and was referred to STH by a relative who told him that he would be cured at the centre. He came to STH in March 2011.

The respondent said that he submitted three sputum samples and was told each time that the sample was not appropriate. He was asked to return a fourth time to give in another sample. However he had to leave town for work. When he returned after two months he went back to STH but was sent away by the nurse /staff there<sup>6</sup>.

Respondent 2 was asked if he had received any information at the STH. He did not recall receiving any information, but when he was probed, he reported being informed that his disease was curable; the diagnosis and treatment was free; and that the duration of treatment was 6 to 8 months. He was able to easily follow the given information in terms of its language and content. He also recalled being informed that he would get social help, breakfast and doctor's consultation if he took treatment at STH. But he did not receive any information regarding the ill effects of interrupting and discontinuing treatment.

No one had any discussions with the Respondent regarding the choice of DOT centre or the time he would come for DOTS. However, he was worried that if he took treatment from a DOT centre, his neighbours and community members would come to know about his disease and he would have to face discrimination because of it.

On the whole, Respondent 2 was satisfied with the quality of care he received at STH. He also found STH to be clean and hygienic and was satisfied with toilet, drinking water and seating arrangements at STH. He was satisfied with the clinical examination by the doctors at STH but felt that the staff and doctors should have been more attentive towards him.

Respondent 2 did not initiate treatment at STH because he was sent back by the nurse/staff at STH. He also added that his illness would have been disclosed if he took treatment at STH. The respondent was then probed for other reasons for failing to initiate DOTS at STH. He then stated that he found the procedure for getting treatment to be very complicated, he did not consider his illness to be serious and that he disliked the idea of someone observing his treatment.

Respondent 2 recalled being paid a visit by a field worker from STH to enquire about his failure to initiate treatment. After talking to him, the field worker told him that he would have to submit his sputum sample before his treatment could be initiated. The Respondent felt that the field worker had tried to understand his problem.

<sup>&</sup>lt;sup>b</sup> The Treatment Supervisor at STH was contacted to clarify the information. He clarified that Respondent 2 was diagnosed on the basis of an x ray since his sputum samples did not prove to be appropriate.

The respondent was not taking any treatment for TB from any other provider or centre after failing to initiate treatment at STH. When he was asked to state his requirements for him to initiate treatment at STH, Respondent 2 remarked wryly that for that he would first have to get a doctor's consultation. When probed, he replied in the affirmative to all of the following -reimbursement of transport costs for him and an accompanying person; rations for the family, immediate medical attention in case of side effects; convenient timings of DOTS centre, availability of health care staff at all times; periodic health checkups for himself and family; provision of tonic / nutritional supplements and supportive services for any other problems like HIV etc as his requirements for

initiation of treatment at STH.

When asked for suggestion regarding any additional facilities at STH, Respondent 2 remarked that he would have been able to suggest something if he had taken treatment at STH.

AC	ACTION POINTS						
Are	eas of enquiry	Findings		Action points			
1.	Information regarding	0	Respondents reported not	0	It is vital that Information		
	importance of treatment		receiving the information		about importance of		
	completion and availability		about importance of		treatment completion is		
	of additional services		treatment completion but		given to patients		
			received information about				
			availability of additional				
			services				
2.	Initiation of treatment after	0	One respondent initiated	0	Health care staff to be		
	diagnosis		treatment within		sensitized regarding		
			acceptable time		possible difficult cases.		
		0	In case of second		Such cases to be referred		
		_	respondent there appears		to supervisor for further		
			to be some communication		action		
			issues when respondent				
			was sent back when came				
			to submit fourth sample				
2	Choice of DOT contro and	0	Although choice of contro	0	Choice of DOT contro and		
5.	timing for DOT centre and	0	made in consultation with	0	timings need to be decided		
			respondent no discussion		huthe respondents		
			respondent, no discussion		by the respondents		
			DOTC with aith an				
			DUIS with either				
			respondent				
		0	Unsuitable DOT centre or				
			unsuitable timings for DOT				
			a reason for initial default				
4.	Quality of care at STH and	0	Respondents satisfied	0	Standards to be maintained		
	DOT centre						
5.	Reasons for initial default	0	Loss of wages due to	0	Lack of adequate		
			inability to work on days of		communication between		
			DOT and		the DOT providers/ field		
			miscommunication		workers and respondent		
			regarding submission of		led to failure to initiate		
			sputum sample reported		treatment.		
			spontaneously as reasons	0	Cases like the respondent		
			for initial default.		who reported inability to		
		0	Upon probing other		work on treatment days		
			reasons reported –need to		could be encouraged to		
			make a lot of changes in		take their doses at night.		
			daily routine in order to	0	Other reasons can be		
			take DOTS; inconvenient		solved after adequate		
			timings of DOT centres as		discussion with		
			reasons for initial default :		respondents.		

finding the procedure for	
getting treatment to be	
very complicated; not	
considering the illness to be	
serious enough and	
disliking the idea of	

			serious enough and disliking the idea of someone observing the treatment		
6.	Stigma and discrimination	0	Fear of possible disclosure reported as reason for default	0	Ensure privacy at DOT centre
7.	Treatment seeking during default	0	No treatment sought		
8.	Defaulter retrieval process	0	Process is not adequate. Field worker visited respondent only once but did not repeat visit. In case of second respondent field worker does not appear to have communicated or enquired enough with the respondent.	0	In both cases initial default could have been avoided. Default retrieval has to be strengthened. The field workers need to spend enough time with the patient to understand the problem. Repeated visits accompanied by supervisor may be necessary to solve the issues involved.
9.	Requirements for continuing treatment at STH/RNTCP	0	Food rations for family ; convenient timings of DOT centre ; health care staff being available at all times ; periodic free health checkups for respondent and family ; provision of tonics/nutritional supplements such as iron, vitamins for respondent and family ; reimbursement of transport costs for respondent and accompanying person ; immediate medical attention in case of any side effects ; supportive services for any other problems that respondent might be having like HIV,	0	Depending on STH's capacities, (at least in some cases where there is no or very low income) food rations instead of nutritional supplements can be given since there is low acceptance of eating at the centre by patients Need to emphasise to the patients that only medicines will not cure but a good diet is in their best interests and interest of their families. Patients need to be paid extra attention during the first few weeks of starting treatment in order to monitor for side effects.

	any addictions etc	0	Patients should be asked to
			contact field worker/ DOT
			provider immediately.
			Patients need to be assured
			that side effects are
			common and remedial
			measures are available.
		0	Some screening procedure
			to ascertain which
			respondents and family
			members could be given
			additional services/
			facilities.
10. Information given before	Most information given to the	0	Need to emphasize that
initiation of treatment	respondents		infection is air borne and
			the precautions that the
			patient needs to take.
11. Suggestions for improving	No suggestions made		
services			

# **KEY INFORMANT INTERVIEWS**

#### **KEY INFORMANT INTERVIEWS**

Key informant interviews were conducted with Medical Officers of three TUs. The Medical Officer of the fourth TU had only recently joined was not familiar with the PPM issues in the TU area and one of the programme staff spoke about the issues on PPM based on his experience. Besides these respondents, some of the STH staff- STH field workers (2), Treatment Supervisor (1) and the Medical Co-ordinator were interviewed to understand the issues affecting the PPM project undertaken by STH in Howrah.

# 1. INTERVIEW WITH STH STAFF

#### A. FIELD WORKERS:

Field workers from two areas – the one next to STH and the one farthest away from STH – were chosen to understand how referral of patients and treatment adherence were affected by the distance from the NGO as well as understanding the enablers and barriers faced by the field workers in their daily work.

Two field workers were interviewed. Both were females and had worked in STH for five years or more.

#### O PERCEPTIONS ABOUT PPS AND PPM

- a) Referrals by grass roots doctors are quite good. Fewer referrals are made by MBBS doctors.
- b) Most referrals are made after doctors have diagnosed patient and very few doctors refer on suspicion.
- c) Some doctors refer poor patient to STH, while a few doctors do not inform their patients that treatment available under RNTCP is free, so patients take treatment in the private sector for some time and default when they can no longer afford treatment.
- d) Some doctors in the field area that is far away from STH (Bankra) are reluctant to travel the distance to collect their incentives. STH has made arrangements for field workers to reach the incentives to doctors after they have expressed their reluctance to travel to STH to collect incentives. But some doctors travel to STH to collect the incentives.
- e) Sometimes a patient referred by a doctor is diagnosed as not having TB and referred back to the doctor. However, the doctor feels that the patient needs to be treated for TB and the patient responds well to the treatment. This further affects referral by the doctor.
- f) Feedback is not given by STH to the referring doctors on a very regular basis.

#### **O PERCEPTIONS ABOUT PATIENTS**

- a) Most patients are poor and daily wage earners.
- b) One area of concern is treatment default. The main reason for default is addiction - mostly alcoholic patients tend to default treatment. This has been tackled by STH by admitting patients to de-addiction centres for the whole treatment period.
- c) Patients who are daily wage earners find it difficult to come for treatment. This problem is seen more in Bankra area which comes under the Panchayat area and has 9 DOT centres, but has inconvenient timings since the centres close by 2 pm.
- d) In other areas, patients especially men, tend to discontinue after two months of treatment when they start feeling better.
- e) Home visits have to be paid and often patients need to be threatened to bring them back on treatment.
- f) Patients often refer other patients since they have had a good experience at STH.
- g) In Bankra area, since STH is far away, patients prefer to go directly or refer other patients directly to the PHCs for treatment.
- h) Community awareness regarding TB as a treatable disease has increased. This has resulted in decrease in the stigma and discrimination associated with the disease.

# **O PERCEPTIONS ABOUT PROGRAMME STAFF**

- a) Field workers are in regular touch with the programme staff at the various TUs to issue treatment boxes, update treatment cards, and regarding follow up of defaulting patients.
- b) A few programme staff members are not forthcoming with information regarding patients.

# O SPECIFIC PROBLEMS IN BANKRA

- a) Medical officer in Bankra area is not very happy since patients from his area are being referred and diagnosed at STH.
- b) Patients diagnosed at STH are not started on treatment unless letter from Medical Officer is issued. Sometimes if Medical Officer is not appointed or not available such patients are not initiated on treatment.
- c) Field worker at Bankra wanted to open a DOT centre after the public sector DOT centre closes down for the afternoon, in order to provide DOT to patients who have to go to work in the mornings. However, the DTO Howrah District refused saying that he would not be able to justify this since nine centres were already operational.

d) Defaulter retrieval by programme staff is not always rigorous resulting in defaulting by patients.

### A. TREATMENT SUPERVISOR

The Treatment Supervisor who had been working with STH for the last 5 years was interviewed in order to understand the challenges related to the field staff, the private doctors and the programme staff in the implementation of the PPM project.

# O PERCEPTIONS ABOUT PPS AND PPM

- a) Grass roots doctors are the first level of contact for people living in slums. Patients do not go to qualified or specialist doctors on their own unless referred by the grass roots doctors.
- b) While conducting interviews with the grass roots doctors as part of the present study, the Treatment Supervisor realized that many doctors are not aware regarding the services offered by STH.
- c) During their interview, several doctors complained that field workers jump the queue on PPM days with the result patients referred by them often have to wait a long time for their turn.
- d) Patients are not attended to properly when referred to STH.
- e) Doctors feel that once referred, patients are 'captured' by STH. Field workers are requested to refer back patients to the referring doctors in order to avoid this, but the problem still exists to some extent.

# **O PERCEPTIONS ABOUT FIELD WORKERS**

- a) Visits to private doctors have decreased ever since field workers have opened their own DOT centres.
- b) Feedback from the grass roots doctors surveyed was that the field workers were not paying them regular visits, their referral cards were not being replenished on time.
- c) Field workers need to accompany patients to DOT centres (other than those run by STH field workers) at the time of treatment initiation in order to familiarize the patients with the procedures.

# **O PERCEPTIONS ABOUT PROGRAMME OFFICERS**

a) STH is seen as an adversary by some MOTCs because patients are getting diagnosed at the STH centre.

- b) The MOTC at the District Hospital objects to treatment of migrant patients by STH even though such patients would be ignored by the system.
- c) Although STH is a DMC, the roles of Treatment Supervisor, Laboratory Supervisor and field workers at STH are not recognized by the RNTCP in areas coming under the four different TUs. Training and knowledge updates from the programme are denied to the STH staff.

# B. INTERVIEW WITH MEDICAL CO-ORDINATOR

PPM was initiated by the Medical Co-ordinator in 2004 with the help of the Consultant at STH in Howrah District. The reason for starting this initiative was the drug resistant cases who came for treatment at STH. Experience had showed that some of the reasons for this were the irrational treatment practices of private doctors and treatment default due to lack of supervision and monitoring by the programme staff. Attempts at involving the local programme officially were largely unsuccessful and an application had been submitted to the CTD for STH to operate as a DMC.

Over time private doctors practicing in STH's area of work had been sensitized about the RNTCP and invited to refer patients and be DOT providers. However, running the PPM initiative in Howrah remains a challenge.

# A. CHALLENGES INDENTIFIED IN UNDERTAKING THE PPM PROJECT

- a) Lack of willingness and initiative at the State level.
- b) Frequent transfers of District TB Officers making sustained dialogue difficult.
- c) Target driven programme leading to insecurities amongst the Medical Officers at some of the TUs when patients from their area are diagnosed in STH which falls under another TU.
- d) Freedom of choice given under the RNTCP to patients to get diagnosed and treated anywhere in India is not followed in practice.
- e) Inability to scale up the STH model due to lack of support from the RNTCP or availability of enthusiastic workers.
- f) Lack of funds available for running the PPM project. The project was solely dependent on European funding which could be unpredictable.

#### 1. INTERVIEWS WITH PROGRAMME STAFF

### O INCIDENCE OF TB

The incidence of TB appears to be decreasing on record in one of the TUs but it is difficult to get an accurate estimate considering the presence of a large migrant population in the area as well as a lack of figures from the private sector.

#### **O** EXPERIENCES WITH PATIENTS

One MO TC observed that DOT is difficult for patients who are daily wages earners and for people with addictions.

Patients need to be counseled each time they come for DOT in order to motivate them to continue treatment.

The MO TC of another TU commented that his TU had a large migratory population employed on a contractual basis at the various mills in the area. They come from nearby areas of West Bengal and Bihar and preferred to move to their native places after about three months of treatment at his TU. The programme staff counseled them about completing their treatment in Howrah itself. In case the patients are keen on going back to their native places they were transferred out.

#### **O OTHER PATIENTS TRANSFERRED OUT:**

a) Railway employees, either permanent or contractual, when admitted to the railway hospital in Howrah are registered under RNTCP, Howrah. After discharge they are transferred out.

#### O STIGMA:

- a) Stigma within families has gone down and is now restricted mostly to unmarried women who choose larger and distant DOT centres to avoid identification. They do not want health workers to make home visits but are adherent and keep contact through phone calls.
- b) Stigma at workplace continues to exist. Some factory employers ensure that patients employed with them complete treatment but are reluctant to renew contracts with such employees.

# **O PATIENTS WITH CO-MORBID CONDITIONS:**

The MO TC has tried to tackle the problem of co-morbidity at his centre. Patients above 40 years are screened for blood sugar. Ultrasound and x ray is also free for patients at the centre. They also keep anti diabetic and anti hypertensive drugs at their centre.

#### **O EXPERIENCES WITH PPM INITIATIVES:**

One of the MO TC was of the opinion that besides private practitioners, there was a need to involve private laboratories as well as to tap TB patients.

#### **O EXPERIENCES WITH PPS' INVOLVEMENT**

On the whole there is a communication gap and lack of dialogue between the private sector and the public sector.

MOTC of one of the TU shared his experience with initiating PPM activities in his TU

- a) He decided against calling private practitioners for meetings because such programmes centered around the "meal rather than the topic". Also, qualified doctors are busy with their chambers and find it difficult to make time to attend such meetings.
- b) Instead he decided to follow the "medical representative method" or the "cafeteria approach" by meeting doctors in their chambers, and explaining the programme in a nutshell. The private practitioners were given the choice of either referring patients to the centre or keeping the patients with them, in which case the medicines would be reached to them. Post his intervention, the MO has a list of 150-200 qualified doctors, who refer patients to the TU. Some of their assistants also provide DOT to their patients. A small number of doctors with good practice refer patients regularly.
- c) The TB HVs follow up with the referring doctors at least once a month. During the visits, they discuss cases and give feedback regarding patients, even about those who are taking DOT from the RNTCP DOT centre. In his experience, patients taking treatment at a RNTCP DOT centre often continue to go to the referring doctors for other health problems.
- d) Private practitioners have responded well and have a dialogue with the TB HVs and ask for updates related to the programmes.
- e) The MO feels that the success of the PPM initiative in his TU is because of the interpersonal approach adopted and attributes its sustenance to the regular follow up by TB HVs. According to the MO, for PPM to be successful the first visit should be made by programme officers and the consequent follow up visits can be made by TBHVs. His experience shows that qualified doctors do discuss cases with TB HVs as they are perceived by the doctors to have field experience.
- f) However, the MO has decided not to increase the number of such doctors as the increased work load can create discontent among the TB HVs.
- g) Involvement of the IMA in PPM has not been possible since sanction of funds from the District level is a problem.

a) Another MO TC was of the opinion that many qualified doctors lack in-depth knowledge of DOTS and the importance of Directly Observed Treatment. There is hence, a need to sensitize doctors and then hold periodic sensitization programmes.

#### **O EXPERIENCES WITH NGO INVOLVEMENT**

One MO TC commented that a large number of NGOs are functioning in the TU area. His opinion is that:

- a) NGOs can fill up gaps in services that the programme cannot provide. The MO gave an example of a patient who was bedridden for a long time. When he came to the TU he was referred to STH and had a timely operation for a non TB related problem. In the public sector it would have taken for the same intervention.
- b) NGOs can reach the community to the level that no one else can and involving NGOs can lead to successful PPM initiatives. However, MO feels that private partners such as NGOs need to be treated with equal respect and not high handedness. He gave an example where the Programme had approached two NGOs working in high TB prevalent areas of Howrah to participate in the PPM. However, this partnership was discontinued arbitrarily. Without the NGOs' support, programme's reach in the community is very limited and as a result the programme has suffered a setback in the area. The MO was of the opinion that NGOs should be given some support if not monetarily but at least through some appreciation, respect and acknowledgement.
- c) He also feels that it is important for government agencies to deliver what is promised otherwise the credibility of the programme would be adversely affected. For eg: as part of RNTCP's IEC activities, street plays and puppet shows were planned in schools. Accordingly, the programme had approached an NGO who had then helped in the planning of these programmes in various schools. However, at the last moment the programme was cancelled by the higher authorities due to some administrative reasons. This resulted in the programme losing credibility and also de-motivated the programme staff.

Another MO TC had the following opinion about the NGO involvement in the PPM initiatives.

- a) NGOs such as STH can help in monitoring and supervising private sector DOT providers.
- b) In case of patients who cannot come to the DOT centres due to their work or ill health, STH can go to their homes for DOT. The cost of giving DOT to each patient, including man hours spent and transport charges needs to be calculated and accordingly funding can be sought by STH from the local programme.

- c) The MO was of the opinion that one can work one's way around the various welfare schemes that exist. For example the BDO and Panchayat can be approached to provide food grains to the patient. Alternately, patients or their spouses can be employed temporarily under the 100 day scheme etc.
- d) NGOs can start small cottage industries where patients or their spouses/ family members can be employed to earn some income.
- e) STH functions as a DMC in one TU. As such the positivity rate of patients referred from STH to the TU is around 15-20%, largely because of the Consultant at STH. But since part of STH comes under one TU and the other under a second TU, the number of patients registered on treatment under the first TU is reduced as patients coming under the second TU are referred there for treatment.

#### O PERCEIVED LACUNAE IN THE RNTCP

One MO TC spoke at large about the lacunae he perceived in the RNTCP

- a) Doctors should be given the flexibility to make changes in the regimen.
- b) RNTCP is not being implemented even in the tertiary centres and medical colleges in West Bengal. Medical colleges are propagating daily medicines which create confusion among the doctors working in the public sector. Besides, few doctors who are working in the public sector do not refer TB patients to the RNTCP. Also, there is no government circular that inservice doctors should follow the RNTCP regimens.
- c) RNTCP is a TB control programme and not a patient oriented programme as it does not look for any associated factors such as blood sugar. The programme also does not take into consideration any social factors that interfere with the programme.
- d) IEC activities are the responsibility of one agency and implementation of the rest of the programme with other agencies, resulting in the programme not being effective.
- e) A senior officer, who can take responsibility for his decisions, should be put in charge of the RNTCP at the district level since TB is a major problem.
- f) At the local level, the programme officer should be given the freedom and flexibility to implement policies within the laid down regulations.
- g) Programme officials at local level should be allowed flexibility of approach to achieve targets according to their ground realities.
- h) At present there is lack of coordination between the contractual staff of TB HVs and the Municipality health workers.
- i) There should be one person who is responsible for the TB and HIV programmes, so that there is accountability.

#### O PERCEPTIONS ABOUT STH:

One of the MO TC was of the opinion that:

- a) There is a communication gap between the STH and the District. From what he has heard, STH is perceived as working beyond the designated zone which belongs to the District authority.
- b) The MO had himself referred patients to STH for services that are beyond the capacities and purview of the programme. From his experience he knows that patients travel for treatment from other districts and even other States to his hospital because it has a good reputation. Similarly in case of STH also patients come from afar for treatment but this is not taken too kindly at the District level.

Another MO TC said:

- a) Private practitioners are referring patients to STH instead of the TU because they are given monetary incentives for referral of patients. This is adversely affecting the case detection at the TU level.
- b) The positivity rate of patients referred from STH is too high.

Programme staff from another TU spoke on behalf of the Medical Officer who had joined the programme only two months ago and as such was unable to comment on the issues of PPM. He elaborated:

- a) Since STH was giving monetary incentives for referral of patients, many private practitioners form his TU were referring patients to STH and as a result the number of cases diagnosed in the TU were low. On the other hand, the number of patients registered for treatment was high since patients from his area diagnosed at STH were referred back to his TU for treatment.
- b) The programme has come across a lot of resistant cases who were treated for a few months by a particular qualified private practitioner in the area belonging to his TU. Most grass roots doctors referred patients to the said doctor who started all patients on private treatment. However, patients tended to discontinue treatment half way through. The programme staff wondered if it was possible for STH to have some dialogue with this doctor.

ACTION POINTS						
Торіс	Challenge/ problems identified	Action points				
1. Patients on DOTS	<ul> <li>Patients who are daily wage workers find it difficult taking treatment from RNTCP DOT centres</li> <li>Alcoholic patients default treatment</li> <li>Patients default after 2-3 months of treatment</li> </ul>	<ul> <li>DOT can be done at patient's home by a field worker from STH</li> <li>Create employment opportunities for patient/spouse</li> <li>Provide food rations for patient/family/children</li> <li>Dialogue with MO TC of all TUs for referral of alcoholic patients to STH for Indoor admission under the deaddiction programme</li> <li>Counselling by DOT providers at regular intervals to motivate patients to complete treatment.</li> </ul>				
<ol> <li>PPM with private practitioners</li> </ol>	<ul> <li>Low referrals by MBBS doctors</li> </ul>	<ul> <li>Programme officers need to meet the doctors and follow up to be done regularly by field workers</li> <li>Regular feedback to be given regarding referred patients</li> </ul>				
3. PPM with STH	<ul> <li>Miscommunication with programme officials of some TUs</li> </ul>	Senior staff from STH needs to personally meet the MO TCs for solving problems				
4. Role of STH field staff in PPM	<ul> <li>Reduced field visits by field workers after starting own DOT centres</li> <li>Lack of follow up activities with private practitioners</li> <li>Field workers get patients from their own area examined by doctors out of turn on PPM OPD days. As a result other patients miss their rightful turn and have to wait longer</li> </ul>	<ul> <li>Each field worker to list all doctors in area.</li> <li>An advanced tour plan to be drawn up and STS to monitor the visits made</li> <li>Documentation system to be developed to record number of referrals by private practitioners, number of those diagnosed and put on treatment, date of visit to the referring doctors, feedback given</li> <li>Issues discussed with private practitioners need to be prioritized and addressed accordingly with the help of supervisors, doctors, other staff</li> </ul>				

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# ANNEXURES

Number of patients		Frequency (n=31)	Percent
	10	3	10.0
	12	1	3.3
	15	3	10.0
	20	3	10.0
	25	3	10.0
	30	6	20.0
	40	4	13.3
	45	1	3.3
	50	5	16.7
	100	1	3.3
	Total	30	100.0
Not applicable	Not asked	1	
Total		31	

### TABLE 5.1: AVERAGE NUMBER OF PATIENTS SEEN IN A DAY MBBS DOCTORS

(Median 30; range 10-100)

Number of patients	Frequency (n=18)	Percent
5	1	5.6
7	1	5.6
8	1	5.6
15	2	11.1
20	1	5.6
25	1	5.6
30	5	27.8
35	2	11.1
45	1	5.6
50	2	11.1
55	1	5.6
Total	18	100.0

# TABLE 5.2: AVERAGE NUMBER OF PATIENTS SEEN IN A DAY-MD DOCTORS

(Median 30; range 5-55)

Number of patients	Frequency (n=31)	Percent
0	1	3.2
1	4	12.9
2	3	9.7
3	4	12.9
4	4	12.9
5	3	9.7
6	2	6.5
7	2	6.5
8	1	3.2
10	1	3.2
20	1	3.2
30	1	3.2
70	1	3.2
180	1	3.2
Not asked	1	3.2
No Response	1	3.2
Total	31	100.0

TABLE 6.1: NO OF TB PATIENT IN MONTH- MBBS DOCTORS

(Mean 13.69; range 0-180)

Number of patients	Frequency (n=18)	Percent
0	1	5.6
3	2	11.1
4	1	5.6
5	3	16.7
6	1	5.6
7	1	5.6
8	1	5.6
12	1	5.6
15	1	5.6
20	1	5.6
25	3	16.7
50	1	5.6
60	1	5.6
Total	18	100.0

(Mean 15.44; range 0-60)

# **TABLE 7: AWARENESS REGARDING RNTCP**

	Frequency	Percent		
Yes	45	91.8		
No	3	6.1		
A little	1	2.0		
Total	49	100.0		
Qualification of	Awareness regarding RNTCP			Total
------------------	---------------------------	------------------------------------	----------	-------------
respondents	Aware	Not aware A little/ not so much in		
			detail	
MD	17 (94.4%)	1 (5.6%)	0	18 (100.0%)
MBBS	28 (90.3%)	2 (6.5%)	1 (3.2%)	31 (100.0%)
Total	45 (91.8%)	3 (6.1%)	1 (2.0%)	49 (100.0%)

TABLE 7.1: QUALIFICATION OF RESPONDENT WITH AWARENESS REGARDING RNTCP

#### TABLE 8: WHETHER ATTENDED SEMINAR/AWARENESS/TRAINING PROGRAMME REGARDING RNTCP

	Frequency	Percent
Yes	24	49.0
No	23	46.9
Cannot remember	1	2.0
Not asked	1	2.0
Total	49	100

#### TABLE 9: OPINION REGARDING USE OF SPUTUM AS THE MAIN TOOL FOR DIAGNOSIS UNDER RNTCP

	Frequency	Percent
Appropriate	7	14.3
Sputum by itself is not enough	23	46.9
Other	1	2.0
No response	18	36.7
Total	49	100.0

#### TABLE 9.1: QUALIFICATION WISE OPINION ABOUT USE OF SPUTUM AS MAIN DIAGNOSTIC TOOL

Qualification		Total			
of	Appropriate	Appropriate Sputum by itself not Other No response			
respondents		enough			
MD	3 (16.7%)	6 (33.3%)	0	9 (50.0%)	18 (100.0%)
MBBS	4 (12.9%)	17 (54.8%)	1 (3.2%)	9 (29.0%)	31 (100.0%)
Total	7 (14.3%)	23 (46.9%)	1 (2.0%)	18 (36.7%)	49 (100.0%)

#### TABLE 10: OPINION REGARDING THRICE WEEKLY REGIMEN

	Frequency	Percent
Both regimens effective	9	18.4
Daily better than thrice weekly	7	14.3
Thrice weekly better than daily	1	2.0
Thrice weekly effective	12	24.5
Thrice weekly not effective	7	14.3
No decisive opinion	3	6.1
No response	10	20.4
Total	49	100.0

	Frequency	Percent
Useful	15	30.6
Useful but not practical	6	12.2
Useful but not properly implemented	3	6.1
No response	25	51.0
Total	49	100.0

#### TABLE 11: OPINION REGARDING DIRECT OBSERVATION OF TREATMENT

# TABLE 11.1: QUALIFICATION WISE OPINION REGARDING DIRECTLY OBSERVED TREATMENT

Qualification	Opinion about DOT				Total
of	Useful	Jseful Useful but not Useful but not properly			
respondents		practical	implemented		
MD	4 (22.2%)	2 (11.1%)	1 (5.6%)	11 (61.1%)	18 (100.0%)
MBBS	11 (35.5%)	4 (12.9%)	2 (6.5%)	14 (45.2%)	31 (100.0%)
Total	15 (30.6%)	6 (12.2%)	3 (6.1%)	25 (51.0%)	49 (100.0%)

# TABLE 12: OPINION REGARDING ADDRESS VERIFICATION AS A PREREQUISITE FOR STARTING TREATMENT

	Frequency	Percent
Good system	12	24.5
Not a good/ practical system	2	4.1
Not implemented practically	2	4.1
No response	33	67.3
Total	49	100.0

# TABLE 15.1: TYPES OF SERVICES PROVIDED BY STH

Type of services		Frequency (n=29)	Percent
	Free treatment	22	75.9
	Free diagnosis	16	55.2
	Nutritional Supplements/breakfast	10	34.5
	Free in-patient care	5	17.2
	Ambulance service	2	6.9
	Social help	1	3.4
	Mobile van for patients to travel	1	3.4
	Consultation	1	3.4
	Good arrangement for treatment	1	3.4
	Vaccinations	1	3.4
	Incentives to patients	1	3.4
	Better way to treat patients	1	3.4
Not applicable	Not aware of services	18	
	No response	1	
	Not asked	1	
Total		49	

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Number of services		Frequency (n=29)	Percent
	One service reported	8	16.3
	Two services reported	11	22.4
	Three services reported	7	14.3
	Four services reported		6.1
	Total	29	100.0
Not applicable	Not familiar with services of St Thomas Home	18	
	No response	1	
	Not asked	1	
Total		49	

### TABLE 15.2: NUMBER OF SERVICES PROVIDED BY STH REPORTED

# TABLE 16: ACTION TAKEN ON SUSPICION OF TB

Action taken on suspicion	Frequency	Percent
Always confirm by myself	19	38.8
Sometime confirm by myself & sometime refer to other institution /doctor	28	57.1
Always refer pt. to any other institution / doctor	2	4.1
Total	49	100.0

# TABLE 16.1: QUALIFICATION WISE ACTION ON SUSPICION OF TB

Qualification	Action on suspicion of TB			Total
of	Always confirm	Sometime confirm by	Always refer pt.	
respondents	by myself	myself & sometime refer	to any other insti	
		to other insti / doctor	/ doctor	
MD	9 (50.0%)	8 (44.4%)	1 (5.6%)	18 (100.0%)
MBBS	10 (32.3%)	20 (64.5%)	1 (3.2%)	31 (100.0%)
Total	19 (38.8%)	28 (57.1%)	2 (4.1%)	49 (100.0%)

# TABLE 17: PLACE WHERE PATIENTS REFERRED FOR DIAGNOSIS OF TB

Qualification		Total			
of	STH Private sector Private, govt No response				
respondents			and NGO		
MD	2 (11.1%)	10 (55.6%)	6 (33.3%)	0	18 (100.0%)
MBBS	0	10 (32.3%)	20 (64.5%)	1 (3.2%)	31 (100.0%)
Total	2 (4.1%)	20 (40.8%)	26 (53.1%)	1 (2.0%)	49 (100.0%)

Reasons for refe	Reasons for referral		Percent
	Affordability	17	59
	Proximity to chambers	14	48
	Patients' choice	10	34
	Good quality of diagnosis	7	24
	Definite authority		3
	Facilities available	1	3
	Specialist care available	1	3
	Refer upper respiratory tract to STH	1	3
	No response	1	3
Not applicable	Refer only to private sector	20	
Total		49	

Note: Multiple responses

Reasons for refe	Frequency(n=20)	Percent	
	Proximity to chambers	9	45
	Patients' choice	4	20
	Labs owned by respondents or part of	4	20
	establishment where respondent practices		
	Good quality of diagnosis	3	15
	Not area of expertise so refer to chest	1	5
	specialist		
	Weak/ Disabled patients referred to facilities	1	5
	with single storey near by		
	Patients can afford	1	5
	No response	1	5
Not Applicable	Refer to both private as well as public, NGO or	29	
	charitable centres		
Total		49	

# TABLE 23.1: ACTION REGARDING TREATMENT OF TB PATIENTS

Qualification of	Action rega	Total		
respondents				
	Refer some patients			
	to other insti/doctors	other insti/doctors		
MD	9 (50.0%)	1 (5.6%)	8 (44.4%)	18 (100.0%)
MBBS	24 (77.4%)	5 (16.1%)	2 (6.5%)	31 (100.0%)
Total	33 (67.3%)	6 (12.2%)	10 (20.4%)	49 (100.0%)

Type of patients r	eferred to STH or government facilities for	Frequency (n=38)	Percent
treatment			
	Poor patients	30	78.9
	Complicated cases	7	18.4
	Drug resistant cases	4	10.5
	Patients willing to go to these facilities		7.8
	Patients not showing improvement	1	2.6
	Adult patients	1	2.6
Not Applicable	Do not refer/treat all patients	10	
	Refer only to private sector	1	
Total		49	

TABLE 26. TYPE OF DATIENTS REFERRE	GOVERNMENT OF	R NGO EACILITIES	FOR TREATMENT
TABLE 20. TIPE OF PATIENTS REFERRE	, GOVERIVIEIVI OI	K NGO FACILITIES	FOR TREATIVIEIVE

Note: Multiple responses

### TABLE 27.1: QUALIFICATION WISE OPINION ON WHETHER PPM IS ADVANTAGEOUS FOR PATIENTS

Qualification of	PPM	Total		
respondents	Yes No No response			
MD	13 (72.2%)	3(16.7%)	2 (11.1%)	18 (100.0%)
MBBS	26 (83.9%)	3(9.7%)	2 (6.5%)	31 (100.0%)
Total	39 (79.6%)	6 (12.2%)	4 (8.2%)	49 (100.0%)

#### TABLE 29.1: QUALIFICATION WISE OPINION ON WHETHER PPM IS ADVANTAGEOUS FOR DOCTORS

Qualification of	PPM	Total		
respondents	Yes	No	No response	
MD	8 (44.4%)	5 (27.8%)	5 (27.8%)	18 (100.0%)
MBBS	19 (61.3%)	7 (22.6%)	5 (16.1%)	31 (100.0%)
Total	27 (55.1%)	12 (24.5%)	10 (20.4%)	49 (100.0%)

#### TABLE 31.1: QUALIFICATION WISE OPINION ON WHETHER PPM IS DISADVANTAGEOUS FOR PATIENTS

Qualification of	PPM d	Total		
respondents	Yes No No response			
MD	4 (22.2%)	11 (61.1%)	3 (16.7%)	18 (100.0%)
MBBS	2 (6.5%)	25 (80.6%)	4 (12.9%)	31 (100.0%)
Total	6 (12.2%)	36 (73.5%)	7 (14.3%)	49 (100.0%)

Qualification of		Total			
respondents	Yes	Yes No No response Not asked			
MD	4(22.2%)	11 (61.1%)	3 (16.7%)	0 (0%)	18 (100.0%)
MBBS	6 (19.4%)	18 (58.1%)	6 (19.4%)	1 (3.2%)	31 (100.0%)
Total	10 (20.4%)	29 (59.2%)	9 (18.4%)	1 (2.0%)	49 (100.0%)

# TABLE 33.1: QUALIFICATION WISE OPINION ON WHETHER PPM IS DISADVANTAGEOUS FOR DOCTORS

# TABLE 35.1: QUALIFICATION WISE WILLIGNESS TO REFER PATIENTS TO STH/RNTCP

Qualification of	Willing to refer patients to STH/RNTCP		Total
respondents	Yes	No	
MD	14 (77.8%)	4 (22.2%)	18 (100.0%)
MBBS	27 (87.1%)	4 (12.9%)	31 (100.0%)
Total	41 (83.7%)	8 (16.3%)	49 (100.0%)

# TABLE 38.1: QUALIFICATION WISE WILLIGNESS TO BE DOT PROVIDERS

Qualification of	Willing to be DOT provider		Total	
respondents	Yes	No	Will think about it	
MD	6 (33.3%)	12 (66.7%)	0 (0%)	18 (100.0%)
MBBS	15 (48.4%)	15 (48.4%)	1 (3.2%)	31 (100.0%)
Total	21 (42.9%)	27 (55.1%)	1 (2.0%)	49 (100.0%)

# **ANNEXURE 2: TABLES FOR REPORT ON GRASSROOTS DOCTORS**

		Frequency( n = 34)	Percent
1	MBBS (AM)	3	8.8
2	RUMP	3	8.8
3	BIAM (MD)(AM)	2	5.9
4	Pharmacist	2	5.9
5	RUMS	2	5.9
6	BIAMS	1	2.9
7	BIMAS	1	2.9
8	BSc BAMS	1	2.9
9	BSc BIAM	1	2.9
10	BSc DMS	1	2.9
11	BUMS, BIAM	1	2.9
12	BUMS, RUMS, FWT	1	2.9
13	C.M.S EDT	1	2.9
14	CMS, EDT, FWT, RUMP	1	2.9
15	DIAM	1	2.9
16	DIAMS DMLT (Kol)	1	2.9
17	DMS/BUMS	1	2.9
18	General Physician	1	2.9
19	ISC/BAMS	1	2.9
20	MBBA (ICM)	1	2.9
21	MD	1	2.9
22	Medical Representative	1	2.9
23	Pharmacist, RMP	1	2.9
24	RMP Unani	1	2.9
25	RMP+DMLT	1	2.9
26	RUMS/ MBBS. MD (AMC)	1	2.9
27	Unani Medicine	1	2.9
	Total	34	100.0
Not Applicable	Pre coded in schedule	43	55.8
Total		77	100.0

# TABLE 2.1: QUALIFICATION OF RESPONDENTS-OTHER

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Number		Frequency (n=76)	Percent
	2	1	1.3
	4	3	3.9
	5	2	2.6
	6	2	2.6
	7	2	2.6
	9	2	2.6
	10	10	13.2
	11	2	2.6
	13	1	1.3
	15	6	7.9
	16	1	1.3
	17	1	1.3
	18	3	3.9
	20	13	17.1
	23	2	2.6
	25	6	7.9
	30	4	5.3
	35	3	3.9
	45	1	1.3
	50	3	3.9
	60	1	1.3
	65	1	1.3
	70	1	1.3
	75	1	1.3
	80	1	1.3
	85	1	1.3
	100	2	2.6
	Total	76	100.0
Not applicable	No response	1	
Total		77	

# TABLE 4: AVERAGE NO OF PATIENTS SEEN IN A DAY

(Mean 25; Range 2-100)

Number		Frequency	Valid Percent
	0	18	25.7
	1	12	17.1
	2	17	24.3
	3	9	12.9
	4	1	1.4
	5	3	4.3
	6	3	4.3
	7	2	2.9
	10	1	1.4
	12	1	1.4
	13	1	1.4
	27	1	1.4
	45	1	1.4
	Total	70	100.0
Not applicable	No response	5	
	Not asked	2	
Total		77	

#### TABLE 5: NO. OF TB PATIENTS SEEN IN MONTH PRIOR TO INTERVIEW

# TABLE 7: SOURCES OF INFORMATION REGARDING RNTCP

Sources of information		Frequency (n=71)	Percent
	Seminar/ awareness/ training programme	46	64.8
	IEC	11	15.5
	Source at STH	9	12.7
	Government sources	6	8.5
	Colleagues	4	5.6
	Journals/books	2	2.8
	Patients	2	2.8
	I knew on my own	1	1.3
	Udit Nursing home	1	1.3
Not applicable	Not aware of RNTCP	6	
Total		77	

Note: Multiple responses

# TABLE 8.1: OPINION ABOUT THRICE WEEKLY IN COMPARISON WITH DAILY REGIMEN

Opinion about thrice weekly regimen	Frequency	Percent
Both are equally effective	14	18.2
Daily is more effective	17	22.1
Thrice weekly more effective	45	58.4
No response	1	1.3
Total	77	100.0

Quality of drugs	Frequency	Percent
Very good	14	18.2
Good	41	53.2
Neither good nor poor	1	1.3
Poor	4	5.2
No response	17	22.1
Total	77	100.0

### TABLE 8.2: OPINION ON QUALITY OF DRUGS UNDER RNTCP

#### TABLE 8.3: WHETHER ALL PATIENTS NEED OBSERVED TREATMENT

	Frequency	Percent
Yes	67	87.0
No	7	9.1
No response	3	3.9
Total	77	100.0

# TABLE 8.3.1: WHICH PATIENTS NEED TO BE OBSERVED?

Which patients need to be observed		Frequency (n=7)	Percent
	Adolescent	1	14.3
	Less educated or illiterate	3	42.9
	Poor patients	2	28.6
	Educate everyone and everything will be ok	1	14.3
	Total	7	100.0
Not applicable	All patients need observation	67	
	No response	3	
Total		77	

#### TABLE 8.4: OPINION ABOUT INDIVIDUALISED TREATMENT BOXES IN RNTCP

	Frequency	Percent
Good	63	81.8
No advantage	1	1.3
No response	13	16.9
Total	77	100.0

#### TABLE 8.5: OPINION ABOUT MAINTENANCE OF TREATMENT BOXES AND CARD BY DOT PROVIDER

	Frequency	Percent
Good practice	69	89.6
No need	1	1.3
No response	7	9.1
Total	77	100.0

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	Frequency	Percent	
Yes	67	87.0	
No	3	3.9	
Some advantage	1	1.3	
Cannot say	6	7.8	
Total	77	100.0	

# TABLE 8.6: DOES RNTCP HAVE AN ADVANTAGE OVER PRIVATE BECAUSE OF THE DEFAULT RETRIEVAL SYSTEM

#### TABLE 9.1: SOURCES OF INFORMATION REGARDING PPM

Source of information	Frequency (n=56)	Percent
Training programmes by STH	39	69.6
Consultant, field workers and DOT provider	10	17.9
Patients	4	7.14
Colleagues	1	1.8
General public	1	1.8
Howrah Hospital	1	1.8
Total	56	100.0

#### TABLE 10: APPROACHED BY STH REGARDING REFERRAL OF TB SUSPECTS/ PATIENTS

	Frequency	Percent
Yes	72	93.5
No	5	6.5
Total	77	100.0

### TABLE 11: APPROACHED BY RNTCP REGARDING REFERRAL OF TB SUSPECTS/ PATIENTS

	Frequency	Percent
Yes	4	5.2
No	73	94.8
Total	77	100.0

Services	Frequency (n=67)	Percent
Free treatment	42	62.7
Free diagnosis	33	49.3
Free nutritional supplement / breakfast	24	35.8
Free in-patient care	16	23.9
Social help	11	16.4
Many/all services free of cost	9	13.4
Medicine supply	8	11.9
All types of investigations	3	4.5
Good quality of care	3	4.5
In-patient care	1	1.5
Free consultation	1	1.5
General treatment	1	1.5
Referral for further treatment	1	1.5
Ambulance services	1	1.5
Transportation for patients to travel back & forth	1	1.5

TABLE 12.1: AWARENESS REGARDING SERVICES OFFERED BY STH

Note: Multiple responses

<b>TABLE 13.1</b>	1: INVESTIGATIONS	ADVISED FOR	DIAGNOSIS OF TR
14055 1311		ADVISED I ON	

Tests advised		Frequency (n=65)	Percent
	Sputum, x ray, Mantoux and blood tests	22	33.8
	Sputum, x ray and blood tests	14	21.5
	sputum, x ray and Mantoux	12	18.5
	Sputum and x ray	5	7.7
	Sputum, x ray, blood tests and others	3	4.6
	X ray, Mantoux and blood tests	3	4.6
	Only Sputum	1	1.5
	Sputum and Mantoux	1	1.5
	Sputum and blood tests	1	1.5
	Sputum, Mantoux and blood tests	1	1.5
	X ray and blood tests	1	1.5
	Sputum, x ray, Mantoux, blood tests and others	1	1.5
	Total	65	100.0
Not applicable	Do not advise investigations	12	
Total		77	

#### TABLE 16: PLACE OF REFERRAL FOR DIAGNOSIS OF TB

Investigations advised		Frequency (n=65)	Percent
	Both STH and private	27	41.5
	Both RNTCP/public and private	14	21.5
	Only private	11	16.9
	Both STH and public	7	10.8
	Only STH	4	6.2
	Only public	2	3.1
	Total	65	100.0
Not applicable	Do not advise investigations	12	
Total		77	

#### TABLE 16.1: PLACE OF REFERRAL FOR DIAGNOSIS WHEN DO NOT ADVICE INVESTIGATIONS

Places of referra	ıl	Frequency (n=12)	Percent
	Only STH	10	83.3
	Both STH and public	2	16.7
	Total	12	100.0
Not applicable	Advise investigations	65	
Total		77	

#### TABLE 20: ACTION REGARDING TREATMENT OF TB PATIENTS

Action taken	Frequency	Percent
Refer all for treatment	68	88.3
Refer some and treat some	8	10.4
Treat all	1	1.3
Total	100	100

# TABLE 20.1: PLACE OF REFERRAL FOR THOSE WHO REFER ALL PATIENTS FOR TREATMENT

Place of referral		Frequency (n=68)	Percent
	Only STH	28	41.2
	Both STH and public sector	15	22.1
	Both public and private	11	16.2
	Both STH and private	10	14.7
	Only public	2	2.9
	Only private	2	2.9
	Total	68	100.0
Not applicable	Refer some and treat some	8	
	Treat all	1	
Total		77	

Place of referral		Frequency (n=8)	Percent
	Both STH and private	4	50.0
	Both Public and private	3	37.5
	Only private	1	12.5
	Total	8	100.0
Not applicable	Refer all patients for treatment	68	
	Treats all patients on own	1	
Total		77	

# TABLE 20.2: PLACE OF REFERRAL FOR THOSE WHO REFER SOME AND TREAT SOME PATIENTS FOR TREATMENT

# TABLE 23: EVER REFER PATIENTS TO STH/RNT FOR DIAGNOSIS AND / TREATMENT

	Frequency	Percent
Yes	73	94.8
No	4	5.2
Total	77	100.0

#### TABLE 25: REASONS FOR PATIENTS' COMING BACK AFTER INITIATION OF TREATMENT

Reasons for patients' coming back		Frequency	Percent
		(n=60)	
	Give feedback	37	61.7
	Side effect management	30	50.0
	Concomitant disease management	10	16.7
	Complain about STH	1	1.7
	Consult regarding prescribed medicines	3	5.0
	Patients don't come back after initiation of treatment	12	
Not applicable	Not asked	1	
Total		77	

Note: Multiple responses

# TABLE 26: DO YOU RECEIVE FEEDBACK FROM STH ABOUT YOUR REFERRED PATIENTS

Receive feedback	< colored and set of the set of t	Frequency (n=66)	Percent
	Yes	47	71.2
	No	18	27.3
	Not asked	1	1.5
	Total	66	100.0
Not applicable	Do not refer patients to STH	11	
Total		77	

STH			
		Frequency (n=47)	Percent
	Very Satisfied	11	23.4
	Satisfied	35	74.5
	Neither satisfied nor dissatisfied	1	2.1
	Total	47	100.0
Not Applicable	Do not receive feedback	18	
	Not asked	1	
	Do not refer patients to STH	11	
Total		77	

# TABLE 26.1: HOW SATISFIED ARE YOU WITH FEEDBACK RECEIVED ABOUT YOUR REFERRED PATIENTS FROM STH

# TABLE 27: DO YOU RECEIVE FEEDBACK FROM RNTCP ABOUT YOUR REFERRED PATIENTS

Receive feedbac	:k	Frequency (n=36)	Percent
	Yes	1	2.8
	No	34	94.4
	Not asked	1	2.8
	Total	36	100.0
Not applicable	Do not refer to RNTCP	41	
Total		77	

# TABLE 27.1: HOW SATISFIED WITH FEEDBACK RECEIVED ABOUT REFERRED PATIENTS FROM RNTCP

		Frequency	Percent
	Satisfied	1	100.0
	Total	1	
	Do not receive feedback	34	
Not Applicable	Not asked	1	
	Do not refer to RNTCP	41	
Total		77	

#### TABLE 29: EXPECTATIONS FOR REFERRING PATIENTS TO STH/RNTCP

	Frequency	Percent
Yes	66	85.7
No	11	14.3
Total	77	100.0

#### TABLE 31: WILLING TO BE A DOT PROVIDER

	Frequency	Percent
Yes	41	53.2
No	36	46.8
Total	77	100.0

**TABLE 33: ADVANTAGES OF PPM FOR PATIENTS** 

	Frequency	Percent
Yes	74	96.1
No	2	2.6
No response	1	1.3
Total	77	100.0

#### **TABLE 34: ADVANTAGES OF PPM FOR PRIVATE DOCTORS**

	Frequency	Percent
Yes	70	90.9
No	4	5.2
No response	3	3.9
Total	77	100.0

# TABLE 35: DISADVANTAGES OF PPM FOR PATIENTS

	Frequency	Percent
Yes	10	13.0
No	66	85.7
No response	1	1.3
Total	77	100.0

#### **TABLE 36: DISADVANTAGES OF PPM FOR PRIVATE DOCTORS**

	Frequency	Percent
Yes	3	3.9
No	72	93.5
No response	2	2.6
Total	77	100.0

		Frequency (N=7)	Percent
	Rupees 500	3	42.9
	If 500 rupees could be given from STH and monthly salary from RNTCP	1	14.3
	STH is giving 300 rupees for the last 5 years. Should increase the amount to 500 rupees	1	14.3
	Not specified	1	14.3
	Not asked	1	14.3
	Total	7	100.0
Not	Current monetary incentives for referral satisfactory	52	
applicable	No need for incentives	11	
	No response on whether doctors should receive monetary incentives for referral of patients	3	
	No need but if that is the regulation then no problem	1	
	Not asked (it is okay to receive from RNTCP but not STH)	1	
	No response to question to whether current incentives for referral of patient is satisfactory	2	
Total		77	

#### TABLE 38.1: SATISFACTORY INCENTIVES FOR REFERRAL OF PATIENTS

# TABLE 38.2: SATISFACTORY INCENTIVES FOR DOT PROVISION

		Frequency (n=7)	Percent
	500 rupees	2	33.3
	A monthly salary would be good	2	33.3
	Not specified	1	16.7
	No response	2	33.3
	Total	7	100.0
Not	Current monetary incentives for referral satisfactory	52	
applicable	No need for incentives	11	
	No response on whether doctors should receive	3	
	monetary incentives for referral of patients		
	No need but if that is the regulation then no	1	
	problem		
	Not asked (it is okay to receive from RNTCP but not	1	
	STH)		
	No response to question to whether current	2	
	incentives for referral of patient is satisfactory		
Total		77	

Suggested PPM models	Frequency (N=77)	Percent
STH model	25	32.5
STH along with CME/ Chennai	20	26.0
Chennai Model / CME	14	18.2
Mumbai Model	4	5.2
Latin American Model	2	2.6
STH and Latin American Model	2	2.6
Mumbai and Chennai	2	2.6
STH and Vietnam	2	2.6
Chennai and Latin America	2	2.6
STH, Chennai and Latin American Model	1	1.3
Vietnam	1	1.3
STH and Mumbai	1	1.3
Not specified	1	1.3
Total	77	100.0

# **ANNEXURE 3: TABLES FOR PATIENTS TAKING TREATMENT UNDER RNTCP**

#### **TABLE 1: GENDER OF RESPONDENTS**

	Frequency	Percent
Male	10	71.4
Female	4	28.6
Total	14	100

#### TABLE 1.1: GENDER WISE CATEGORY OF TREATMENT

Sex	Category of treatment		Total
	Cat I	Cat II	
Male	8 (72.7%)	2 (66.7%)	10
Female	3 (27.3%)	1(33.3%)	4
Total	11 (100%)	3 (100%)	14

# **TABLE 2: AGE GROUP OF RESPONDENTS**

Age category	Frequency	Percent
18-25 years	7	50.0
26-35 years	1	7.1
36-45 years	2	14.3
46-55 years	1	7.1
56-65 years	2	14.3
66 and above	1	7.1
Total	14	100.0

#### TABLE 3: GENDER WISE MARITAL STATUS OF RESPONDENTS

Sex	Marital status			Total
	Unmarried	Married	Deserted	
Male	4 (57.1%)	5(83.3%)	1 (100%)	10
Female	3 (42.9%)	1(16.7%)	0	4
Total	7 (100%)	6 (100%)	1	14

#### TABLE 4: GENDER WISE EMPLOYMENT STATUS OF RESPONDENTS

Sex	Employment status		Total
	Employed	Dependent	
Male	7 (100%)	3(42.9%)	10
Female	0 (0%)	4(57.1%)	4
Total	7 (100%)	7 (100%)	14

TABLE 5: NUMBER OF YEARS RESIDING IN HOWRAH

	Frequency	Percent
Since birth	7	50.0
Ten or more than ten years	4	28.6
Less than ten years	3	21.4
Total	14	100.0

#### TABLE 6: WHO DO YOU RESIDE WITH IN HOWRAH

	Frequency	Percent
Alone	1	7.1
Parental or Marital family/ family member	11	78.6
Relatives	2	14.3
Total	14	100.0

### **TABLE 7: MONTHLY INCOME OF RESPONDENTS**

Income		Frequency (n=7)	Percent
	1800	1	14.3
	2100	1	14.3
	3000	1	14.3
	3500	1	14.3
	4000	1	14.3
	5000	1	14.3
	25000	1	14.3
	Total	7	100
Not applicable	Not employed	7	
Total		14	

(Median 3500, range 1800 to 25000 rupees)

# TABLE 7.1: MONTHLY FAMILY INCOME

	Frequency	Percent
1000	1	7.1
2000	1	7.1
2100	1	7.1
2500	1	7.1
3000	2	14.3
3500	1	7.1
4000	2	14.3
5000	2	14.3
6000	1	7.1
7000	1	7.1
25000	1	7.1
Total	14	100.0

(Median 3750, range 1000 to 25000 rupees)

TABLE 12:	DOES /	ANYONE A	ACCOMPAN	NY PATIE	NT TO DO	DT CENTRE
		_		_		

	Frequency	Percent
Yes	4	28.6
No	10	71.4
Total	14	100.0

# TABLE 12.1: GENDER WISE DISTRIBUTION OF WHETHER SOMEONE ACCOMPANIES PATIENT TO DOT CENTRE

	Sex		Total
	Male	Female	
Yes	1 (10%)	3 (75%)	4
No	9 (90%)	1(25%)	10
Total	10 (100%)	4 (100%)	14

#### TABLE 12.2: TIME TAKEN TO REACH DOT CENTRE

	Frequency	Percent
5 minutes	7	50.0
10 minutes	1	7.1
15 minutes	4	28.6
30 minutes	2	14.3
Total	14	100.0

#### TABLE 12.3: MODE OF TRANSPORT USED TO REACH THE DOT CENTRE

Mode of transport	Frequency	Percent
On foot	12	85.7
Bus	1	7.1
Rickshaw during water logging	1	7.1
Total	14	100.0

#### TABLE 12.4: WHETHER ALWAYS EAT BREAKFAST AT DOT CENTRE

Eat breakfast at I	DOT centre	Frequency	Percent
	Yes	2	18.2
	No	9	81.8
	Total	11	100.0
Not applicable	Do not receive breakfast	3	
Total		14	

		Frequency (n=9)	Percent
	Not hungry since I eat and go to centre	4	28.6
	Cannot eat after taking so many medicines	2	14.3
	Do not like to eat outside	1	7.1
	Would have been late for work	1	7.1
	Do not go to DOT centre because of old age, so	1	7.1
	breakfast is brought home		
	Total	9	100
Not applicable	Do not get breakfast	3	
	Eat breakfast at centre	2	
Total		14	

# TABLE 12.5: REASONS FOR NOT ALWAYS EATING BREAKFAST AT DOT CENTRE

### TABLE 12.6: CHANGES MADE IN DAILY ROUTINE TO COME TO DOT CENTRE

	Frequency	Percent
Did not have to make any changes	8	57.1
Had to forgo work	2	14.3
Needed to manage time	2	14.3
Hurry through household chores or else leave them unfinished	1	7.1
No response	1	7.1
Total	14	100.0%

# TABLE 13.1: LACK OF PRIVACY RESULTED IN NEIGHBOURS/ COMMUNITY MEMBERS FINDING OUT ABOUT ILLNESS

		Frequency (n=9)	Percent
	Yes	7	77.8
	No	2	22.2
	Total	9	100.0
Not applicable	Privacy maintained at DOT Centre	5	
Total		14	

#### TABLE 13: 2 DO NEIGHBOURS/COMMUNITY MEMBERS KNOW OR SUSPECT ABOUT ILLNESS

		Frequency (n=7)	Percent
	Yes	5	71.4
	No	2	28.6
	Total	7	100.0
Not	Patients whose illness was known to neighbours/	7	
applicable	community members		
Total		14	

Discomfort /problems faced		Frequency (n=8)	Percent
	Vomiting	3	28.6
	Nausea	2	14.3
	Dizziness	2	14.3
	Itching	1	7.1
	Bitter taste	1	7.1
	Uneasiness/ discomfort	1	7.1
	Choking sensation	1	7.1
	Weakness	1	7.1
Not applicable	No discomfort reported while consuming seven		
	tablets at one time	6	
Total		14	

#### TABLE 14.1: DISCOMFORT/PROBLEMS FACED WHEN CONSUMING ALL TABLETS AT ONE TIME

# TABLE 16.2: SUGGESTIONS REGARDING ADDITIONAL FACILITIES REQUIRED AT DOT CENTRES

	Frequency	Percent
No suggestions	10	71.4
More privacy at Howrah South Point	1	7.1
Medicines for diabetes	1	7.1
Facility for drinking water	1	7.1
Toilet facility	1	7.1
Total	14	100.0

# TABLE 17: PERSON WHO REFERRED TO STH

	Frequency	Percent
Private doctor/family doctor	7	50.0
Friend/colleague/neighbour/relative/patient	4	28.6
STH field worker	2	14.3
DOT provider (doctor)	1	7.1
Total	14	100.0

#### TABLE 18: REASONS FOR RECOMMENDING STH TO OTHER PATIENTS

	Frequency (N=14)	Percent
All facilities/benefits are available	9	64.3
Everything is free of cost	9	64.3
I am cured / Improvement in my condition	4	28.6
Good quality treatment	4	28.6
Good/proper care	3	21.4
Complete cure will be ensured	1	7.1

Note: Multiple responses

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