

# A Descriptive study of Tuberculosis Treatment Dropouts of Rural Area

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## ARTICLE DETAILS

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## ABSTRACT

**Introduction-** Tuberculosis is a communicable disease & one of the top 10 causes of death worldwide. It typically affects the lungs (pulmonary TB) but can also affect other parts (extrapulmonary TB). With timely diagnosis and treatment with first-line antibiotics for 6 months, TB can be cured. Geographically, most TB cases in 2018 were occur in South-East Asia (44%) & the largest share of the global burden were India (27%), China (14%) and the Russian Federation (9%). TB treatment dropout is one cause of the treatment failure of Tuberculosis (TB). **Objective-** The aim of the study is to assess the Socio-demographics, Knowledge about Tuberculosis, Nutritional Knowledge. TB cases history in their family and Social relationship of Tuberculosis treatment dropouts. **Methodology-** This study was based on a descriptive study with a sample of 15 Tuberculosis treatment Dropouts individuals of Chirgaon, Varanasi District. Respondents had selected through the Snowball Sampling Technique. Data were collected by interview method by using A Semi-Structured Interview Schedule. **Results-** In this study Maximum respondents (73.3%) were male and approx two-thirds of the respondents were married. Maximum study subjects (33.3%) belonged to 42 and above age group and more than one-third of the respondent's (40%) education level was Primary (Upto 8<sup>th</sup> standard) only. All the treatment dropouts' individuals were known that Tuberculosis is curable disease. More than two-thirds of the respondents (53.4%) had not known the causes of TB. Data reveals that one-third of the respondents told that another TB patient was there in their family. 20% of respondents had told that Family members had started looking them at hate. **Conclusion-** Based on the research results, it can be concluded that dropouts TB treatment were aware of the harm of treatment dropouts but due to lack of complete knowledge about TB, they think that symptoms end the disease.

## 1. Introduction

Tuberculosis is a curable disease that can be prevented (Herrero MB et al, 2015) still patients are leaving their treatment in the middle and it is important community health issue in India. Tuberculosis is caused by slow-growing bacteria called Mycobacterium tuberculosis and when these bacteria enter the lungs, it called infection but not disease. These infections may later wake up weeks, months or decades later causing active TB disease (C. Monica et al, 2017). Transmission of TB occurs from a person with active pulmonary TB by coughing, sneezing or talking that are subsequently inhaled by contact people (ECDC Scientific Advice, 2017). Tuberculosis disease is usually treated with 4 anti-TB medications for at least six months. After starting treatment, people usually begin to feel better 2-4 weeks. It's very important to finish the whole course of antibiotics. If treatment is not completed, it could start spreading the disease again or even impossible to treat (HealthED, 2016). However, various obstacles are found that hinder the goal of the treatment program, such as patients dropping out from treatment (Nrs. Kumboyono, 2016).

Tuberculosis is an old public health problem in India and worldwide. India has been engaged in TB control activities for more than 50 years, yet TB treatment dropout is one causes of potential treatment failure. India has more than a million missing cases every year that are not registered and most remain either undiagnosed and treated in the private sector. The estimated incidence rate (new cases per year) of TB is 2.8 million cases in 2015 (217 per 100000 population). India accounts for one-fourth of the global Tuberculosis burden. Globally, an estimated 10.0 million (range, 9.0–11.1 million)

people fell ill with TB in 2018, a number that has been relatively stable in recent years. Geographically, most TB cases in 2018 were in the WHO regions of South-East Asia (44%), Africa (24%) and the Western Pacific (18%), with smaller percentages in the Eastern Mediterranean (8%), the Americas (3%) and Europe (3%). Eight countries accounted for two thirds of the global total: India (27%), China (9%), Indonesia (8%), the Philippines (6%), Pakistan (6%), Nigeria (4%), Bangladesh (4%) and South Africa (3%). These and 22 other countries in WHO's list of 30 high TB burden countries accounted for 87% of the world's cases (Aitchison, 2019). Now, our country is better prepared to address TB better than before with an advanced and effective interventions and technologies for diagnosis, treatment and care of TB (National & Control, 2017). The Government of India launched a direct benefit transfer (DBT) scheme, the 'Nikshay Poshan Yojana' nationwide from 1 April 2018. Under this scheme, all notified patients with TB nikshay portal receive 500 rupees per month throughout the course of treatment for TB (Patel BH. et al, 2019).

With this background, the aims of the study to assess the Socio-Demographics, Knowledge about Tuberculosis, Nutritional Knowledge and Eating Habits of the TB Patients, TB cases history in their family and Social relationships of Tuberculosis treatment dropouts' individuals.

## 2. Methodology

A community based cross sectional study (Descriptive Study) was carried out with the aim of to assess the Knowledge of Tuberculosis treatment dropouts, TB cases in their family, to assess their social relationship, education level and

occupation. 15 Tuberculosis treatment dropouts' individuals from Chiraigaon of Varanasi district were selected for this study following the snowball sampling techniques. A Semi-Structured Interview Schedule was used to collect the data from study subjects. Data was entered, tabulated and analysed using the MS Excel.

**3. Results**

In this study, 15 Tuberculosis treatment dropouts' individuals were selected. Out of which maximum respondent were male (73.3%) and rest of the respondents were female (26.7%). One-third (33.3%) of the study subjects belongs to above 42 years of age & less than one-third of the respondents (26.7%) belongs to 19-26 years of age group. 20% & 20% respectively belongs to 27-34 & 35-42 years of age group. Approx two-third (66.7%) of the treatment dropouts individual were married & rest of individuals were unmarried (33.3%). More than one-third of the respondents (40.0%) were completed Primary education only & 20% respondents had never go in the school. Only 6.7% & 13.3% respondents had done Secondary and Senior Secondary education. One-fifth of the subjects (20%) had completed Graduation. Two-fifth of the respondents (40%) were doing nothing (in the sense of occupation) & 13.3% respondents were students. Rest of the respondents were self-employed (Farmer/ Washerman/ Shop).

**Table-1 Knowledge about Tuberculosis**

Knowledge about Tuberculosis	Knows	Not Knows
Is TB Curable Disease?	100	0
Causes of TB	46.6	53.4
Symptoms of TB	66.6	33.4
Should Treatment be discontinued after the symptoms ends	53.4	46.6

Table-1 shows that all the respondents (100.0%) had known that Tuberculosis is curable disease, but more than half of the study subjects (53.4%) had not known the causes of TB. One-third of the respondents (33.4%) had not known the symptoms of Tuberculosis.

**Table-2 Nutritional Knowledge and Eating habits of the TB Patients**

Food items	Should Taken	Should Not Taken
Rice & Dal	86.6	13.4
Fish/Mutton	100	0
Green Vegetables	93.3	6.7
Alcohol	46.6	53.4
Fruits	93.3	6.7
Tea/Coffee	93.3	6.7
Spicy food	46.6	53.4

Table-2 shows that Knowledge about food habits of the TB treatment dropout and this table reveals that nearly half of the study subjects (46.6%) told that they can take Alcohol but a person with TB should avoid Alcohol in any form & Tobacco and tobacco products. Maximum treatment dropouts (93.3%) had not aware that they should avoid excess of tea and coffee. Approximately, half of the respondent (46.6%) had not knowledge about they should not take spicy food.

**Table-3 Reasons behind treatment dropouts**

Reasons of treatment dropouts	No. (%)
Feeling healthy in the middle of the treatment	53.4
Financial Problem	40
other (no benefits of treatment, Moving another place)	6.6

Table-3 reveals that the reasons behind treatment dropouts and the result shows that More than half of the respondents (53.4%) thought that symptoms ends then disease ends & more than one-third of the study subjects (40.0%) dropouts to the treatment because they face difficulties of finance at the time of treatment. However, lack of information may also play a role: only 53.4% individuals of this rural study were aware that the government clinic offered free TB treatment. India has an official policy of "free care" for tuberculosis.

More than half of the study subjects (60.0%) had not felt well due to treatment dropouts. More than two-third of the respondents (73.3%) wants retreatment. 40.0% respondents told that another TB patient also lives in their households and out of 40.0% respondents 20% study subjects told that members of their households had completed their treatment only.

Data reveals that respondent feel changes in their family member's behaviour due to Tuberculosis. More than one-third of the treatment dropout's individual (40.0%) feel more concern from the members of their family and 20% respondents feel hate from the side of family members. Rest of the respondents told that there was no behavioural changes came from the side of family member. 13.4% respondent told that due to TB, they faced humiliations from the side of society.

**4. Discussion**

Tuberculosis accounts for approximately two million deaths per year worldwide (W. Caiaffa, E. Colosimo,2008).15 Tuberculosis treatment dropouts' individuals were selected through the Snowball Sampling Techniques. Many studies had confirmed that Tuberculosis is curable disease and this is very similar to this study. In this study All respondents were aware that Tuberculosis is curable disease. According to this study, nearly half of the respondents told that treatment should be discontinued after the symptoms ends and more than half of the respondents told that the reasons behind dropping out was feeling healthy in the middle of treatment. Treatment Dropping out can be no solution to adverse effects of drugs, feeling healthy in the middle of treatment, boredom of treatment and drug consumption, and moving to another place or city, and this needs to be immediately rectified (Nrs, Kumboyono,2016).

**5. Conclusion**

In many countries it is a growing problem, due to HIV, due to insufficient application of control measures, and due to economic decline (Faisalabad,2009).Based on study results and data analysis, it can be concluded that Respondents were not aware about Government clinic offered free treatment of Tuberculosis. Social stigma of Tuberculosis is high in rural society, Patients face humiliations from the side of society. Due to lack of complete knowledge they think that symptoms end the disease ends. Indian government should work more on advertisement of awareness about Tuberculosis.

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