

A Study of Profile of Lost To Follow Up Tuberculosis Patients Attending The Department Of Pulmonary Medicine, Tertiary Care Hospital

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ABSTRACT

BACKGROUND: Tuberculosis is an infectious disease which is caused by bacillus *Mycobacterium tuberculosis*. It affects the lungs (pulmonary TB) typically and can also affect other sites (extrapulmonary TB). Incomplete ATT results in increased transmission rates, emergence of multidrug resistant strains of TB bacillus, extensively drug resistant strains and totally drug resistant strains that emerged in 2012 in India. Hence, the present study is enforced to identify the risk factors associated with lost to follow up among TB patients during treatment.

MATERIALS AND METHODS: This is a single centred hospital based observational study of 100 pulmonary tuberculosis patients who are lost to follow up attending Government hospital for chest and communicable diseases, Visakhapatnam, Andhra Pradesh in the period between February 2021 to January 2022

RESULTS: Most of the PTB patients who is lost to follow up were above 40 years of age, with mean age of 42.31 ± 6.36 years. Male predominance constituting about 70% of the study population. Alcoholism is the most found in 42% of the study populations. HIV co-infection is present only in 8% of the study population. 35% of the patients had completed higher secondary and above, 16% completed primary schooling and 49% are illiterates. Forgetfulness (20%), Ignorance (28%), Feeling better (33%), Drug side effects (14%), COVID 19 (3%) are the reasons for lost to follow up

CONCLUSION: Emphasis on the importance of treatment completion without interruption (mainly during continuation phase) regardless of feeling better and side effects of ATT drugs. Patient need to be educated on the possible ATT side effects and supported to handle them. Targeted interventions aimed at assuring persons who are alcoholics and smokers is recommended.

KEY WORDS: Lost to follow up, risk factors

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I. INTRODUCTION

Lost to follow up refers to A TB patient whose treatment was interrupted continuously for ONE month or more¹. Incomplete ATT results in increased transmission rates, emergence of multi drug resistant strains of TB bacillus, extensively drug resistant strains. Worldwide, the implementation of Directly Observed Treatment (DOT) has decreased treatment failure, relapse and drug resistance. However, non-compliance to DOT, due to patients not turning up for treatment has made it have less influence on decreasing TB incidence². According to WHO's report on worldwide plan to stop TB, poor treatment has caused evolution of *Mycobacterium tuberculosis* strains that are resistant to treatment with standard first line anti-TB medicines, resulting in multi drug resistance TB (MDR-TB) emergence in almost every part of the world³

II. MATERIALS AND METHODS

Study design: Single centered Hospital-based observational study

Study setting: Government hospital for chest and communicable diseases/Andhra medical college, Visakhapatnam, Andhra Pradesh.

Sample size: A total of 100 consecutive pulmonary tuberculosis patients who are lost to follow up were enrolled in the study according to the inclusion and exclusion criteria.

Period of study:

September 2019 to august 2021

INCLUSION CRITERIA :

- Patients with Pulmonary tuberculosis
- Patients who are lost to follow up
- Patients aged > 18 years
- Patients willing to participate in study

EXCLUSION CRITERIA:

- Patients with extra pulmonary tuberculosis
- Patients aged < 18 Years.
- Patient not willing to participate in study.

III. Methodology:

Retrospective study done on LTF patients with tuberculosis and estimating various factors that are responsible for loss to follow up.

Patients who attended chest out-patient and NTEP unit, who have history of lost to follow up for ATT

IV. Results

AGE AND SEX DISTRIBUTION :In the present study, most of the patients who is lost to follow up were above the age of 20years (73%). The peak incidence was in the age group above 40 years (37%).Male preponderance was observed in this study. Out Of 100 patients who completed treatment of pulmonary tuberculosis 70% were male and 30% were female

ALCOHOLISM:In the present study,42% of the patients were alcoholic and 58% of the patients were non-alcoholic

ALCOHOLISM	NO. OF PATIENTS
YES	42
NO	58

HIV COINFECTION:In the present study, 8% of the study population were coinfectd with HIV and 92% were not.

HIV	NO. OF PATIENTS
YES	8
NO	92

EDUCATION STATUS:In the present study, 35% of the study population were belong to Higher secondary and above, 16% completed Primary schooling and 49% were illiterates

EDUCATION STATUS	NO. OF PATIENTS
HIGHER SECONDARY AND ABOVE	35
PRIMARY	16
ILLTERATE	49

SOCIOECONOMIC STATUS:In the present study,8% were belong to upper middle class, 14% were belong to lower middle class,28% were belong to upper lower and 50% were belong to lower class according to modified kuppuswamy classification

MODIFIED KUPPUSWAMY CLASSIFICATION	NO OF PATIENTS
UPPER MIDDLE	8
LOWER MIDDLE	14
UPPER LOWER	28
LOWER	50

REASON FOR MISSING PILL

REASON	NO. OF PATIENTS
FORGETFULLNESS	20

LACK OF AWARENESS	28
FALSE BELIEF OF FEELING BETTER	33
DRUG SIDE EFFECTS	15
COVID 19	2
OTHERS	2

V. Discussion

The world health organization estimated the million people developed TB in 2021⁴. India accounts for most of the tuberculosis patient in the world⁴. So proper implementation of National Tuberculosis elimination program is necessary. Tuberculosis is nearly always curable if patients are treated with uninterrupted,

effective anti-tuberculous therapy. Thus treatment adherence is crucial for cure of the affected patients, which help in controlling the spread of infection and there by reducing the development of drug resistance. Incomplete adherence to the anti-tuberculous drugs has been identified as the important problem in the control of tuberculosis all over the world and major hinderance to the elimination of tuberculosis

VI. Conclusion

This study demonstrated the clinical profiles, demographic factors, social factors and patient factors which influence lost to follow up in TB treatment. The factors include false feeling of feeling better, Ignorance about the need for treatment compliance. In congruence with these, low socioeconomic status, family liabilities, daily wage, feeling of losing income from work on working age group males contribute to non-compliance. Decrease in the frequency of lost to follow up among patients with tuberculosis taking anti TB medications, will result in decreased transmission of tuberculosis among people, as well as the cost of providing treatment to new cases and lost to follow up patients. The morbidity and mortality of the TB patients can be

improved. The increasing trend of drug resistance to the antituberculosis treatment can be controlled. So further research and strategies to identify, address risk factors are warranted to maximize treatment success

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