

Understanding the Coping Mechanisms of People Living with HIV / AIDS (PLHIV) Co-Infection with Tuberculosis (TB) in the State of Telangana, India

Shamnu *

Prof. Saraswati Raju Iyer **

Abstract

The impact of TB co-infection among PLHIV and the implications for TB and HIV control has been acknowledged as a global public health challenge. The present study is an attempt to understand the coping mechanisms of People living with HIV/AIDS (PLHIV) Co-infection with Tuberculosis (TB) in Telangana State, with Specific objectives to understand the coping mechanisms of the PLHIV and family members to deal with co-infection. The research design adopted for the study is Descriptive research design. Different aspects affecting the families affected with co-infection clients were studied through interview schedules. The hypothesis of the research study is that Co-infection of TB among PLHIVs impact their health, socio-economic status and well-being leading many families into vicious circle of poverty. The sample size is 519 clients who are co-infected and on ART medication in different ART centres in the state of Telangana. The hypotheses were tested by using statistical tests such as chi-square and cross tabulation. The data was analyzed and interpreted with the help of percentages and chi-square. Based on the major findings conclusions were drawn. The study revealed that coping mechanism of PLHIV co-infected with Tuberculosis especially extending psycho-social support is very essential part of health management strategies.

Key words : People living with HIV (PLHIV), National AIDS Control Organization (NACO), Revised national tuberculosis control programme (RNTCP), Tuberculosis (TB) co-infection, support group meetings

*Ph.D. Research Scholar, Department of Sociology and Social Work, Acharya Nagarjuna University, Guntur, Andhra Pradesh

** Professor, Department of Sociology and Social Work, Acharya Nagarjuna University, Guntur, Andhra Pradesh.

Introduction

As per the Global TB report 2019 worldwide, around 10 million people fall ill with tuberculosis (TB) each year. TB is one of the top 10 causes of death, and the leading cause from a single infectious agent (*Mycobacterium tuberculosis*), ranking above HIV/ AIDS. The disease can affect anyone anywhere. The disease is spread when people who are sick with TB expel bacteria into the air; for example, by coughing. It typically affects the lungs (pulmonary TB) but can also affect other sites (extrapulmonary TB). A relatively small proportion (5-10%) of the estimated 1.7 billion people infected with *M. tuberculosis* will develop TB disease during their lifetime. However, the probability of developing TB disease is much higher among people living with HIV.

The impact of TB co-infection among PLHIV and the implications for TB and HIV control, has been acknowledged as a global public health challenge. TB and HIV co-infection is when people have both HIV infection, and also either latent or active TB disease. When someone has both HIV and TB each disease speeds up the progress of the other. In addition to HIV infection speeding up the progression from latent to active TB, TB bacteria also accelerate the progress of HIV infection.

India is the country with the highest burden of TB. According to the TB India report 2019 of Central TB division, the estimated TB incidence in India is 27 lakh. The characteristics of the affected population largely remain similar with majority of the affected individuals being in the age group of 15-69 years and 2/3rd being males. HIV co-infection among TB was nearly fifty thousand cases amounting to TB HIV co-infection rate of 3.4%. Government of India has launched a single window delivery of TB and HIV services for all People Living with HIV in the ART centres, wherein intensified case-finding through screening all ART centre

As per the NACO fact sheet of 2019, Intensified TB case finding has been implemented nationwide at all HIV Care centres (at Integrated Counselling and Testing Centres (ICTCs) and ART centres. As of December, 2018, 540 ART centres and 1120 link ART centres are operating in the country. Nearly 1 lakh TB/HIV patients were initiated on daily drug regimen nearly 5 lakh PLHIV were initiated on TB preventive therapy till December 2018

As per the India TB report of 2019, there are around 52139 PLHIV notified. As per the state reports there are 40779 which is around 78% who know of their HIV status. NACO MPR suggests that PLHIV tested positive for TB are around 5.1% i.e 2065 clients. There are around 1796 clients TB-HIV co-infected patients initiated on ART and 1819 initiated on CPT prophylaxis in the state of Telangana

Objectives

HIV infection impacts the health and socio-economic status of PLHIVs and their families. Stigma, disease burden and dual infection act as the vicious circle of poverty leading many families into malnutrition and into acute poverty. Two decades of ART programme in India, Government and civil society has invested for improving the access to HIV testing and treatment. Objective of the research study is to understand the impact of Tuberculosis (TB) co-infection among people living with HIV (PLHIV) and their families in the state of Telangana with Specific objectives to understand the issues faced by the PLHIV's such as aspects related to their adherence and health, financial implications, socio-economic factors impacting their health and well-being; to understand the impact of the co-infection on their spouses, children and other family members; to study the coping mechanisms of the PLHIV and family members to deal with co-infection and to understand the stigma and discrimination faced at personal, institutional and society level by the PLHIV's.

Material and Methods

The design for the research study is descriptive in nature. Different aspects affecting the families affected with co-infection clients were studied through interview schedules. The hypothesis of the research study is that "Co-infection of TB among PLHIVs impact their health, socio-economic status and well-being leading many families into vicious circle of poverty". Inclusive criteria of the research study is all the PLHIV's co-infected with TB and alive during the period of 2015-2019 in the state of Telangana. Under the exclusive criteria children below 15 years of age and PLHIV died with co-infection during the period 2015 -2019 are excluding from the study. The sample size is 519 clients who are co-infected and on ART medication in different ART centres in the state of Telangana. Consent is taken from

the clients for recording the details in the interview schedule. Primary data is collected from the clients through structured interview schedule and purposive sampling technique was used for data collection. Interviews are conducted with the co-infected clients attending the ART centres. The structured interview schedule is having four options for each of the questions. Areas of the study are understanding the basic profile of the PLHIV, socio-economic status, coping mechanism, knowledge about the treatment to co-infection and adherence mechanisms, stigma and discrimination faced (by self, institutional and in society), challenges faced in accessing HIV and TB testing and care services. The interview schedule is translated in Telugu language for asking the questions to the clients. Collected data is imported to SPSS, statistical tests such as chi-square and cross tabulation methods are applied to get inferences.

Results

Out of the total sample of 519 clients, 61% i.e. 317 are male PLHIV and 39% 202 are female PLHIV. Among the 317 male clients - 76% are married, 16% are living single, 4% are widowers and 3% are separated from their spouses. Among 202 female clients - 51% are married, 8% are single, 36% are widows and 4% are separated from their spouses. Most of the respondents are working as agricultural labour for livelihood which is 34% and 39 % are daily wagers. 46% of the male population and 55% of the female population are illiterates, 41% of the male population and 36% of the female population have completed the primary education. 43% of the respondents reported on not getting enough sleep during TB treatment reasons for not getting enough sleep are sweating, headache, fever, nausea and vomiting. 19% of the respondents reported of not having social life while 27% are not comfortable with their looks. 94% of the respondents reported of getting support from the family members, 34% are part of support group meeting and hence getting peer support along with the support from the family members. 57% of the respondents reported of not getting support from the neighbors and relatives. 99% of the respondents reported that counselling is one of the best coping mechanism during their fight with TB co-infection.

Conclusion

While most of the PLHIV are suffering with side effects and physical weakness during TB treatment, support from the families is becoming quite vital. Interventions working with the TB co-infected clients should focus on creating enabling environment besides family settings. Safety nets and support systems should be made available in the neighborhood and in community. Counselling and support group meetings are the key coping up mechanism that should be made available for all the clients at the ART or DOT centers and in community.

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