

A SOCIO ECONOMIC STUDY ON THE PLHAS with TB IN PUDUCHERRY

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ABSTRACT

PLHAS/TB implies to the People Living with HIV AIDS with Tuberculosis. The emergence of Human Immune deficiency virus (HIV) has paved the way for the resurgence of Mycobacterium tuberculosis infection pulmonary as well as extra pulmonary. Multidrug resistant (MDR) and other rarer forms of TB have also become more prevalent. As a result, HIV and TB Co-infection is on the rise more, so in the developing countries like India.

Because the HIV infection weakens the immune system, people with TB infection and HIV infection are at very high risk of developing TB disease. All HIV-infected people should be tested for TB. If they have TB infection, they need preventive therapy as soon as possible to prevent them from developing TB disease. If they are diagnosed with active TB disease, they must take medicine to cure the disease.

One third of the 42 million people living with HIV/AIDS worldwide are co-infected with tuberculosis. Approximately 90% of the people living with HIV die within a few months of becoming sick with TB, if they do not receive proper TB treatment. HIV is rapidly spreading in India, which has the largest number of TB cases in the world. There are already 180,000 Indians living with HIV who are also infected with TB. Bellary, being the 2nd highest in the state of Karnataka for HIV infection also records more number of TB cases among the HIV infected persons. In order to know the prevalence of TB among HIV infected persons, surveillance of HIV-TB co-infection started in the year 2000. A total of 7182 persons were screened for HIV infection when they attended Voluntary Counseling and Testing Centre (VCTC) at Vijayanagar Institute of Medical Sciences (VIMS), Bellary. All of them were counseled and tested for HIV infection from the year 2000 to 2003. Pre test and post test counseling is done for all persons who attend VCTC. 2168 (30.18%) persons turned out to be positive for HIV in serum by Enzyme linked immunosorbent assay (ELISA) test. The HIV infected persons were screened for TB infection, wherever it is indicated. 540 persons were found positive for acid fast bacilli in sputum smear examination by Ziehl-Neelson (ZN staining) method. Directly Observed Treatment program for TB cases is implemented in the hospital to treat the infected persons. Effective surveillance for the past four years starting from the year 2000 to 2003 in this area indicates that 24.91% (540) of TB cases among the HIV positives (2168), with an incidence of 29.44% (88/299) in the year 2000, 25.38% (133/524) in the year 2001, 26.95% (162/601) in the year 2002, and 21.10%(157/744) in the year 2003. Proper surveillance, counseling and awareness programs are very much essential to combat this curable disease in HIV infected persons.

(Source: Department of Microbiology, Vijayanagar Institute of Medical Sciences, Bellary., India)

Thus the present paper aims to bring out the Socio-Economic Conditions of the People Living with HIV AIDS (PLHAs) with Tuberculosis in the union territory of Puducherry.

INTRODUCTION

The emergence of Human Immuno deficiency virus (HIV) has paved the way for the resurgence of Mycobacterium tuberculosis infection pulmonary as well as extra pulmonary. Multi Drug Resistant (MDR) and other rarer forms of TB have also become more prevalent. As a result, HIV and TB Co-infection is on the rise more, so in the developing countries like India.

HIV is the most powerful risk factor for progression from Mycobacterium tuberculosis infection to TB disease. The risk of development of TB in HIV infected patients in India is 6.9/100 person as compared to 10% life time risk of developing TB in HIV negative persons. This is especially important in India where 40% of adult population is latently infected with M.Tuberculosis. TB in turn accelerates the progression of HIV infection to AIDS defining stage and shortens the survival of such patients and is the leading cause of death accounting for one-third of deaths due to AIDS worldwide. Despite the existence of effective drugs, TB continues to be major health problem and kills more than a million people every year.

The following are some of the important research studies carried out

Effectively treating TB will not solve the worldwide AIDS crisis, but it will significantly reduce its burden - Dr. Peter Piot, Director, UNAIDS.

The TB and HIV/AIDS epidemics fuel one another and are inextricably linked: the weakened immune system of an individual living with HIV increases the likelihood of developing TB, and the development of active TB accelerates the progression of HIV disease towards full-blown AIDS.

TB is unique among HIV-associated infections because it is at once contagious, treatable, and potentially preventable. Most TB cases in people with HIV are from reactivation of old infections. However, since tuberculosis is spread by casual contact, people with HIV/AIDS can also contract new or primary TB infection. These new infections can progress rapidly to active disease, rather than follow the typical course of years of dormancy.

TB is the leading killer of people with AIDS. In fact, tuberculosis is the first manifestation of AIDS in over 50 percent of cases in the developing world. People who are infected with TB and are HIV positive are 3 to 10 times more likely to develop TB than people without HIV infection.

One-third of HIV-infected people worldwide are co-infected with TB, and TB is responsible for the death of one out of every three people with HIV/AIDS worldwide.

Escalating tuberculosis rates over the past 10 years in many countries, particularly in sub-Saharan Africa and parts of Southeast Asia are largely attributable to the HIV/AIDS epidemic.

First meeting of the global working group o Tb/HIV, 9-11 April 2001, Geneva & Strategic framework to decrease the burden of Tb/HIV. Switzerland. WHO/CDS/TB/2001.293Source - [//www.who.int/gtb/publications/TBCatalogue.html](http://www.who.int/gtb/publications/TBCatalogue.html)

WHO has given a high priority to decrease the burden of HIV/TB and has established a Global TB/HIV Working Group which met in Geneva, Switzerland in 2001, in Durban, South Africa in 2002 and in Montreux, Switzerland in 2003. It is one of the working groups instituted under the Global Stop TB

partnership, launched by the WHO, Director-General in November 1998. During the first meeting, the working group reviewed and endorsed the WHO Strategic Framework to Decrease the Burden of TB/HIV.

UNAIDS. United Nations Position Paper on HIV/AIDS and Drug Use. 1998. Available at <http://www.unaids.org/publications/documents/specific>

Studies have demonstrated that HIV transmission among injecting drug abusers can be prevented and that the epidemic already has been slowed and even reversed in some cases. HIV prevention activities which have had an impact on HIV prevalence and risk behaviour include HIV/AIDS education, access to condoms and clean injecting equipment, counseling and drug abuse treatment.

Report of the Final Regional Meeting of National AIDS and TB Programme Managers Chiang Mai, Thailand, 14-16 December 2001. SEA-AIDS-132

In **India**, a national policy to coordinate common activities for HIV/AIDS and TB has been formulated by the National AIDS Control Organization (NACO) and the Central TB Division (CTD). TB and HIV/AIDS are reciprocally included in the national policies of the two programs. Activities including sensitization and training of key staff from both programs are underway. *Ad hoc* HIV prevalence surveys among TB patients were carried out in selected sites. The following tools were developed: 1) Treatment guidelines for TB in HIV-infected individuals, 2) TB/HIV guide for health workers and 3) A TB/HIV training manual for medical officers. Voluntary counselling and testing (VCT) services at the sub-district level (AIDS programme) will incorporate screening for TB symptoms and referral to diagnosis and treatment of TB and AIDS care. The recently-appointed national HIV/TB consultants are expected to facilitate the local coordination of service delivery, referral, NGO involvement, cross-training and infection control in the six high HIV prevalence states.

METHODOLOGY

STATEMENT OF THE PROBLEM:

The method of investigation depends upon the nature of the conditions of the HIV with TB affected persons. The conditions of HIV with TB affected persons are extensional and experimental in a nature. Vast majority of the HIV with TB affected persons suffer from mental pains starting from minor anxiety to serious psychosis. And other mental problems frustration in life loneliness fear of death and consequent anxieties lack of companion worries about the future of their children.

According to this the researcher would like to contribute the analysis of social economic conditions awareness HIV and TB and the treatment available for HIV and TB psychological impact of the affected persons and impact of their normal life and measures for necessary actions and ensure the rights to enjoy normal humane life.

SCOPE OF THE STUDY:

The study helps to understand the level of the socio economic conditions psychological conditions of the person affected HIV with TB.

Objectives of the study

- To know about the demographic characteristic of the respondents
- To find out the socio economic conditions of the affected
- To study the awareness of HIV with TB
- To study the psychological impact of the affected and study the treatment available

RESEARCH DESIGN:

The research design adapted in this study is descriptive design, since the study attempts to describe the various characteristic of socio economic conditions, level of awareness, and knowledge of treatment and psychological impact of persons affected with HIV with TB

UNIVERSE:

The researcher collected the data from the 80 PLHA's through the NGO's working for them in Pondicherry.

SAMPLING:

Tools of Data collection:

The researcher adopted a self prepared interview schedule consist of personal data, psychological conditions and awareness and treatment for HIV with TB

Pre Test:

To find out suitability of the interview schedule pretest was conducted with 10 respondents in Pondicherry

Problem encountered by the researcher:

The researcher had faced some difficulties in collecting data from the respondents. The researcher found difficulties to get the correct information from the respondent since they hesitate.

Limitation:

The study has got certain limitations which are listed below

- Hesitation on the part of respondent came out with their opinion
- The study does not reflect those who are not included in the study.

FINDINGS OF THE STUDY

- ❖ With regard to the age of the respondents, it can be derived that higher percentage of HIV patients living with TB belong to the age group of 31-40 years.

- ❖ Majority of respondents suffering with HIV are females, which shows the occurrence of the disease among both the sexes.
- ❖ With regard to marital status, though more than half of the respondents who are with HIV with the plight of TB are married, still there are respondents who are unmarried and widowed as well as separated and divorced, which makes question on their condition of existence.
- ❖ Majority of the respondents are worshipping Hindu religion.
- ❖ Majority 52.5% of the respondents reside from rural area which shows the percentage of occurrence of the disease is high in rural area.
- ❖ Majority of the respondents are from nuclear family.
- ❖ Nearly half of the respondents (45%) are illiterates which depict the educational background of the respondents, make a query on their lack in knowledge of the disease and its effects.
- ❖ Majority (52.5%) of the respondents are employed as Cooley which shows the Socio-Economic background of most of the respondents.
- ❖ It is clear that majority of the respondents (35%) are earning nearly 2000-3000 per month which is a meager amount, as well as only 1.2% are earning above 6000, which depicts the poor economic condition of the respondents.
- ❖ With regard to the years of the treatment of the respondents, nearly half of the respondents (42.5%) are undergoing the treatment for one year and other halves of the respondent's years of vary in large.
- ❖ Though majority 80% of the respondents are aware of the deadly disease HIV/AIDS, but still 20% of the respondent did not have awareness and knowledge on the disease, which is notable and has to be taken in to consideration.
- ❖ The respondents has acquired the knowledge of HIV/AIDS through various means, still, hospital stands at the top and television in the 2nd place where the awareness has been provided at high level.
- ❖ Nearly 3/4th of the respondents agree that HIV/AIDS is a communicable and incurable disease, still 1/4th of the respondents did not agree to it, which shows their level of awareness over the disease and its effects.
- ❖ With regard to respondents knowledge on ways of spread of disease HIV/AIDS, major population are aware still few percentage of the respondents did not have any knowledge with regard to spread of the disease HIV/AIDS, which shows the respondents knowledge and awareness towards the disease.
- ❖ Though nearly half of the respondents (42.5%) did not have any idea on the reasons of spread of the disease HIV/AIDS, other half has expressed the reason as it is due to sex with multiple partners, blood transfusions and unspecialized needles.
- ❖ Though major population has awareness of the preventive measures for HIV/AIDS, still few percentages of respondents did not have awareness which shows their lack of knowledge and awareness towards the disease HIV/AIDS.
- ❖ Nearly all the respondents except very few agreed that HIV/AIDS can be prevented thus by avoiding multiple partner, using disposable syringes and having safe sex which shows respondents awareness on disease & its prevention.
- ❖ Many of the respondents (87.5%) are aware of the TB disease.
- ❖ Though majority 75% felt continuous cough for 3weeks as a symptom for TB, Still 25% did not agree to it, which shows the difference in opinion towards the symptom for TB.
- ❖ Majority of the respondents have an opinion that TB is a communicable disease, still there notable percentage of respondent did not accept that, which shows that awareness level on TB and difference in opinion within the respondents.

- ❖ Major respondents felt that TB Bacteria infection would be acquired easily when people are in densely populated area. From this, it can be understood that opinion of respondents on the TB Bacteria is as a communicable disease, especially high is dense populated areas.
- ❖ Majority 66.2% of the respondents did not agree that children can be prevented from TB through BCG of vaccination.
- ❖ Majority of the respondents (91.2%) felt that the disease TB can be prevented by covering the nose and mouth of the infected person while coughing, which shows their ignorance and lack of awareness towards the disease.
- ❖ Majority of the respondents who are suffering with HIV/AIDS expressed that TB is not an opportunist disease of HIV/AIDS, from which we are able to understand respondent's knowledge of the disease.
- ❖ Majority of respondents are aware that intake of medicine for HIV/AIDS is a life time process, which shows their knowledge toward the disease.
- ❖ Majority of respondents are aware that the patient goes through the ART treatment if he has less than 200 CT4 in his body, through we could able to understand their regular and prompt medication.
- ❖ Majority of the respondents are aware that the TB and HIV both disease of can be treated simultaneously, which shows their knowledge towards of the disease.
- ❖ Majority of the respondents are aware that the HIV has free treatment and only little bit of the respondent are not aware of it. It shows the increase in knowledge in the treatment of the disease.
- ❖ Majority of the respondents are not aware that the TB affected person has to intake the medicine within seven days of identification. This shows the low level of awareness about the disease.
- ❖ It is clear that majority of the respondents are unaware and lacks the knowledge of the disease and its consequences.
- ❖ Majority of the respondents (83.8%) agreed that DOTS as a free treatment provided to TB patients in Government hospitals, which is notable phenomena still rest of respondents disagreed towards it which shows the difference in their knowledge over the disease and treatment provided.
- ❖ Major population agrees that they discontinue the treatment for TB and HIV/AIDS due to their economic problem, i.e., lack of necessary financial resources for the treatment.
- ❖ It is happy to see that majority of the respondents (53.8%) are not being neglected by their family members and friends due to his/her disease, still nearly half of the respondent (43.8%) agreed that they face neglection from their family members and friends since being infected by TB and HIV/AIDS, which is a pathetic condition and has to be taken under consideration.
- ❖ Major population of the respondents agreed that they feel difficulty in visiting the hospital.
- ❖ It is clear that more than half of the respondents felt that ART Hospital will expose the HIV infected, but other half didn't agree over it, which shows the difference in opinion with the respondent towards the ART Hospital.
- ❖ Major share of the respondent agreed that they faced difficulties since because their partner is also infected.
- ❖ Majority 86.2% of the respondent's agreed that they have fear over their Children's future which shows their feel of insecurity and the social recognition of their children.
- ❖ Majority of the respondents agree that they felt good difference after having counseling with a counselor which shows the reach and effectiveness of counseling among the respondents.
- ❖ It is clear that majority 57.5% agreed that their partner hesitate to have sexual intercourse after knowing about their disease.
- ❖ It is happy to knew that major share (58.8%) of the respondents expressed that their children's didn't face any difference by the community since because for the reason that they are the children's of the infected.

- ❖ Majority of the respondents (95%) agreed that the preventive measures for HIV/AIDS and TB can protect them from infection. They have a strong belief on it which is a significant factor.

RECOMMENDATIONS

1. Appoint a senior official to focus on addressing TB/HIV co infection

This individual could serve as a point of contact for external partners and donors and ensure that appropriate technical assistance is delivered to the 14 countries. Specific actions should include briefings for all relevant U.S. government staff—including staff in the target countries— on the TB/HIV situation and ensuring that plans are developed to coordinate TB and HIV/AIDS programs for maximum impact. DOTS treatment programs for tuberculosis can serve as a primary entry point for identifying people who are HIV positive and eligible for antiretroviral treatment. Voluntary counseling and testing for HIV/AIDS should be integrated into expanded DOTS programs.

2. Establish coordinating bodies for TB/HIV in the 14 target countries

The Office of the Global AIDS Coordinator should work with the WHO to establish coordinating bodies in the 14 target countries to carry out joint planning and resource mobilization for HIV/TB. These bodies should build on the country coordinating mechanisms (CCMs) of the Global Fund to Fight AIDS, Tuberculosis and Malaria.

3. Expand DOTS to reach all HIV-infected individuals

In the context of HIV/AIDS, expanding access to DOTS TB treatment in the 14 target countries is essential in order to meet the president's goals for treatment, prevention, and care. Expanding DOTS to provide treatment to all patients with active TB who are HIV positive would:

- Prolong the life span and improve overall quality of life for over 222,000 additional HIV infected individuals sick with TB;
- Reduce the spread of TB among people with HIV/AIDS who are most vulnerable to developing active TB disease; and
- Prevent new TB infections in hundreds of thousands of others who are HIV negative, particularly those at greater risk (including health care workers, caretakers, and family members of people with HIV/AIDS and TB), and the general population.

4. Integrate DOTS and VCT

The PEPFAR targets are to treat 500,000 people with HIV/AIDS in 2004 and 2 million by 2008. A major challenge is to identify people who are HIV positive and who are candidates for antiretroviral treatment. In nearly all of the PEPFAR countries, DOTS treatment programs can serve as a primary entry point to identify people eligible for ARV treatment. Integrating expanded DOTS programs with voluntary counseling and testing (VCT) for HIV/AIDS has additional benefits in terms of preventing HIV infection.

- *Identify Candidates for ARV Treatment:* The approximately 213,000 HIV-infected TB patients detected and being treated for TB under DOTS (Table 1) represent less than half of the estimated HIV-positive individuals with active TB in the 14 countries. Expanding DOTS treatment programs to reach all HIV-positive people with active TB, and linking TB patients to VCT programs could identify over 435,000 HIV-infected individuals annually who would be potential candidates for ARV treatment.
- *Help prevent new HIV infections:* Providing voluntary counseling and testing for HIV/AIDS to TB patients offers patients an entry point into the continuum of care, support, and treatment for HIV/AIDS. Access to VCT will help reduce the spread of HIV/AIDS by making patients aware of their HIV status. All TB patients should also be introduced to HIV/AIDS prevention methods.

Based on the WHO's estimates, an additional \$58.2 million will be needed annually to effectively integrate VCT into DOTS programs in the 14 PEPFAR countries.¹⁴ This includes the cost of HIV VCT for all patients detected with TB, and strengthened coordination between TB and HIV/AIDS programs, including referral linkages.

In some cases there may also be opportunities for combining actual delivery efforts of ARVs and anti-TB drugs. Standard TB treatment—DOTS—involves taking a combination of anti-TB drugs under the regular observation and support of a trained health worker or community volunteer for six to eight months. DOTS can provide a model for ARV delivery, and in some cases there may be opportunities for joint delivery efforts of ARVs and anti-TB drugs.

Country programs should be monitored and evaluated on their success ensuring TB patients are linked to VCT for HIV/AIDS, and ensuring all other appropriate linkages are in place between TB and HIV/AIDS programs.

5. Prioritize the development of new diagnostic tools and treatment for TB in HIV infected individuals

Better TB diagnostic tools and anti-TB drugs are needed to increase efficiency of diagnosis and treatment of co-infected people. People with HIV/AIDS who have TB are more likely to be missed by common diagnostic methods used to detect both active TB disease and latent TB infection. For this reason, new and better diagnostic methods are particularly important in regions with high levels of TB/HIV co-infection. Also, certain widely used standard TB drugs interact with ARVs. New TB drugs that avoid such interactions and shorten treatment time are critical, and would be particularly beneficial for those with HIV/AIDS. Research and development efforts—including those being undertaken by the Global Alliance for TB Drug Development to bring forward new and better anti-TB drugs, as well as efforts to develop improved diagnostic tools—should receive expanded support.

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