

# Newer Drug Resistant Tuberculosis Cases in a Sanatoria- A Discussion

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## Abstract

Routine admissions and treatment of tuberculosis cases in Sanatoriums has been largely discontinued in India. But, with emergence of newer drug resistant Mycobacterium tubercle bacilli and possibility of cross-infections due to those resistant microbes, treatment in sanatoriums becomes a necessity. As of now, there is slow progress in the field of research in newer, effective and cheaper anti-tubercular drugs to treat newer types of drug resistant cases. So, it is even more necessary to treat drug resistant patients in Sanatoriums.

## DISCUSSION

Presently, India shares 1/5th of the total number of tuberculosis patients existing in the world.

Among various types of tuberculosis infections, pulmonary tuberculosis happens to be the one that spreads commonly through droplet infection caused by coughing, talking, sneezing, yawning, singing etc. There are also other ways, through which, it can spread from one person to another.

It has been a long time since the sanatorium based treatment for tuberculosis was shelved off in India. The reason for doing so was, cross infections in sanatorium remaining same as in domiciliary conditions. But, presently, with new emerging drug resistance cases, cross infection can put a strain on our society<sup>1</sup>.

Statistical features indicate further increase in number of tuberculosis patients in near future. This may be due to cross infection, increasing number of difficult to manage immune-suppressive conditions, newer types of emerging drug resistant tubercle bacilli, poor drug quality, poor program planning and its execution. Most of the reasons can be taken care of more easily than the problem of newly emerging drug resistant cases. It is because of slow progress in the field of research in newer, effective & cheaper anti-tuberculosis drugs. In India, multidrug resistance strains amongst new cases are estimated at 2- 3% and amongst re-treatment cases it is 14-17%<sup>2</sup>. About 10% of multidrug resistant cases are extensively drug resistant<sup>3</sup>.

Usually, it is estimated that 1/3rd of tubercular patients get cured without drugs, and next 1/3rd become chronic patients and remaining 1/3rd die. With the recent emergence of newer types of drug resistance, first and second 1/3rd of the populations are more certain to get incapacitated or die, than before. Newer types of drug resistant cases, definitely needs to be restricted by preventive specialists by encouraging those patients, who harbor them, to check into a tuberculosis sanatorium at the earliest. These newer varieties of drug resistant tubercle bacilli are more dangerous than the usual ones, because of absence of new, effective and cheap anti-tuberculosis drugs, even though both cross infect through same modes.

So, the economic burden due to spurt of new cases of resistant tuberculosis will be felt more than before.

All these conditions need to be addressed at the earliest.

But, Sanatorium treatment will be no doubt, difficult to implement, given the expenditure involved in it. But, direct and indirect benefits reaped, will be more than the investments made to set up sanatoriums and run it. This will be a step towards fulfillment of the social responsibility summed up in the slogan, "Health for all". In absence of that, there will be a definite increase in the drug resistant tuberculosis cases than before. Most of them re-join their jobs merely on the basis of medical fitness to perform bare minimum physical work needed for the job, irrespective of their sputum status in certain situations and places<sup>4</sup>.

A newer drug resistant tuberculosis patient is as likely to spread highly infectious organisms like other tuberculosis patients. But, to treat a person infected with newer forms of drug resistant bacilli is relatively more difficult. Therefore the patient becomes a matter of concern in open environs than in closed ones. We can save unaffected population to a certain extent from contracting such dangerous air borne disease and also save lost man days and therefore the financial output by encouraging those patients to get admitted to tuberculosis sanatorium.

### **CONCLUSION**

Sanatorium treatment for drug resistant tuberculosis is better than domiciliary treatment due to newer cases of drug resistance along with other accompanying co-morbidities. Need of effective, newer and cheaper drugs are also felt at present in this scenario, to tackle the spread more effectively.

### **References**

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