

## **A study to access various factors influencing and awareness about pharmaco/chemorefractory tuberculosis [M/XDR-TB] in tuberculosis patients attending Government hospital of G R Medical College, Gwalior**

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### **Introduction**

Drugs resistance in tuberculosis comprises a. Multi drug resistance tuberculosis WHO defines MDR-TB as the strain which is at least resistant to isoniazid and rifampicin with or without resistant to other anti tubercular drugs. b. Extensively Drugs resistance TB: - Cases of TB that are resistant to almost all second line drugs termed extensively drugs resistant. Thus a person infected with MDR-TB & XDR-TB will be unable to be cured by short course chemo therapy which relies chiefly on these two drugs. Primary drug resistance occurs mainly to a single drug and combination of drug lessens the chances of drug resistance. In all countries and specially those where the number of cases of TB is rising rapidly because of the association with HIV the development of resistant strain, the development of resistance strain of TB is a serious concern. In 2008 about 0.5 million people worldwide are estimated to be infected with strain of drug resistant TB. An accurate picture of drug resistance is not available because few countries do not have an available drug resistance surveillance system. It is estimated that primary MDR-TB in India is around 3%. The drug resistance retreatment cases are 12-17%. Although the level of MDR-TB in the country is low in relation to percentage and proportion, it translates into a large absolute number. The most serious danger MDR-TB is that, it is much more difficult to treat even where second line drugs are available, treatment of MDR, TB can take at least two years and the results are poor. The magnitude of the crisis remains to be determined with the dip in the laboratory capabilities for conducting quality assured susceptibility tests especially for second line drugs.

### **Objectives**

1. To study the causative factors behind drug resistance in TB.
2. To study conventional doses and their effectiveness in TB patients.

3. To study determinants and prevalence of anti-tubercular drug resistance among new TB patients and also amongst previously treated ones.

4. To provide guidelines for the potential improvement of management in M/XDR TB patients.

### **Methodology**

(A) Study Design: The present study will be an institution based cross-sectional descriptive study with qualitative and quantitative components. Subjects will be selected from population reporting to the tertiary care centre. A study form will be pre-tested before the actual study begins. (B) Study Area: The study is to be carried out at TB OPD and TB ward running at J A Group of Hospital of GR Medical College. (C) Study Subject: Approximately 22-25 patients per day are undergoing TB screening. Subjects will be selected by random sampling method from the patients attending the clinic during the study period. (D) Consent: After explaining the nature, process, purpose and other relevant details of the study, verbal informed consent will be obtained from the subject. (E) Instrument Used For Assessment: A pre-designed, pre-tested, semi-structured questionnaire will be used for data collection. b. Selection of respondent: Study subjects who will visit the hospital during the study duration will be randomly selected. c. Data Analysis: After collection, data will be analyzed by using various required statistical methods like percentage, proportions, graphs, and tables by using suitable statistical software.

### *Implication of the study*

1. It will help in understanding drug resistance in TB which will help in framing new policies and also to know about the myth regarding the problem and to make a strategy to overcome this.

2. Ongoing evaluation of disease trends provides a more direct effect of program effectiveness and may be used to determine the appropriateness of the selected intervention strategies for a particular setting.