A COMPARATIVE STUDY TO UNDERSTAND THE PSYCHOLOGICAL DISTRESS AND ITS ASSOCIATED FACTORS AMONG TB PATIENTS RECEIVING TREATMENT FROM GOVERNMENT AND PRIVATE FACILITY

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INTRODUCTION

- The most prevalent infectious agent-related cause of death and one of the top 10 global causes of death is **tuberculosis (TB**), a contagious disease that is a prominent source of vulnerability.
- As a chronic condition, tuberculosis always affects people physically, psychologically, and financially.
- Studies show that sadness is common in TB patients and may negatively affect their adherence to medication. Depression may develop in TB patients over time for several reasons.
- The main objectives of the study are to compare the doctor-patient relationship in relation to TB treatment between government and private facilities, to understand the factors that contribute to psychological distress, and to find out how common psychological distress is among tuberculosis patients.

Aim:

To understand the causes of the factors contributing to the psychological suffering that TB patients receiving treatment in both public and private hospitals are going through.

Objectives:

- To assess the prevalence of psychological distress among patients with tuberculosis.
- To understand the associated factors leading to psychological distress.
- To compare the doctor-patient relationship amongst government and private facilities in relation to TB care.

METHODOLOGY

- **Study design**: Cross-sectional, descriptive and observational study.
- **Study site**: This study was conducted with the TB patients of Jabalpur and Chhindwara districts of Madhya Pradesh (Deepak Foundation).
- **Eligibility criteria**: TB patients in the intensive phase (IP), DSTB patients suffering from pulmonary and extra pulmonary TB.
- **Sample size**: 170 TB patients.
- **Study tools**:

1) Questionnaire

2) Study Methodology

✓ *Primary data collection* : Face to face interviews, Field work, Doctors visit.

✓ *Secondary data collection* :NIKSHAY portal

3) 5 point Likert scale will be used to assess the level of psychological distress among TB patients, doctor-patient relationship and perceived stigma

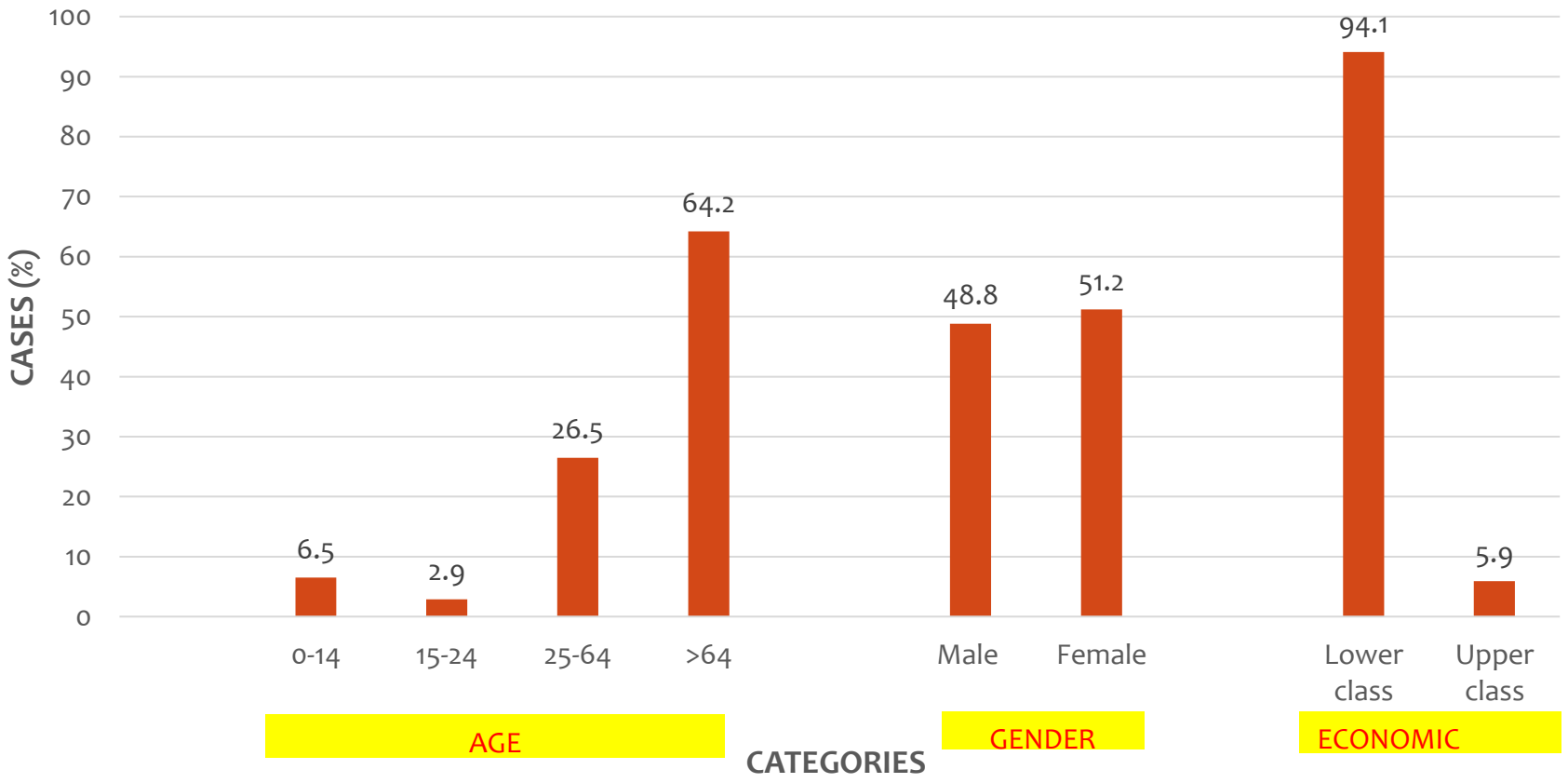
4) Socio economic class of the participant was measured by using Kuppuswamy scale.

DATA ANALYSIS

- **Study topic**: A Comparative study to understand the psychological distress and its associated factors among TB Patients receiving treatment from Government and Private facility in selected districts of Madhya Pradesh during the year 2020-2021.
- **Primary outcome**: Prevalence of psychological distress among TB patients
- **Secondary Outcome**: Socio economic class of patient, Patient doctor relationship, Perceived stigma, Severity of disease perceived by participant, Instance of substance use
- The analysis of data was done using SPSS software.
- To compare the doctor- patient relationship amongst government and private facilities in relation to TB care Mann Whitney U test was used as we had ordinal and categorical data.
- To understand the associated factors leading to psychological distress ordinal logistic regression was used.
- Multinomial regression was performed to determine the prevalence of psychological distress among TB patients.

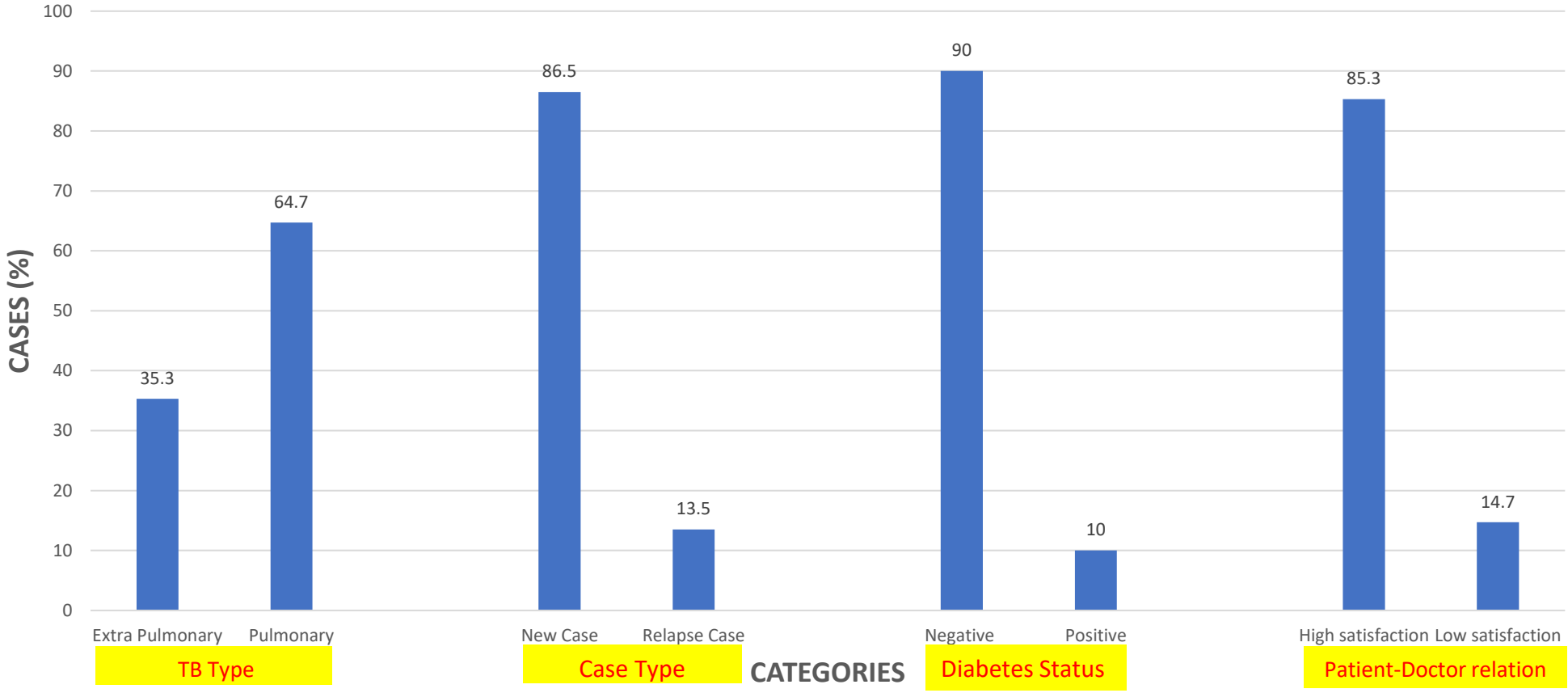
RESULTS

- Table1 : Socio-demographic characteristics of patients



- A total of 170 TB patients were interviewed in which proportion of male (48.8%) and female (51.2%) was almost equal. Almost all the patients belong to lower socio-economic class (94.11%).

Table 2: Health characteristics of TB patients



- In the study, 60 (35.3%) of the individuals had extra-pulmonary TB, whereas nearly two-thirds, or 110, had pulmonary TB.
- The bulk of research participants, 147 (86.5%), were in the new TB treatment category. Most participants are receiving care at government hospital 144. (84.7 percent).
- Nearly of study participants do not have diabetes 153 (90 percent).
- 145 of the participants, or 85.3%, expressed excellent satisfaction with the doctor.

TABLE 4

- **Objective:**

To understand the associated factors leading to psychological distress.

- **Methodology:**

Since we had ordinal data, we used ordinal logistic regression to understand the associated factors leading to psychological distress.

Variables	Score	Sig.
Economic class	0.107	0.048
substance used	1.438	0.045
new case or relapse	1.028	0.311
Facility	0.006	0.94
distance	0.227	0.634
travelling cost	10.719	0.057
diabetes status	9.046	0.003
severity of illness	3.812	0.049
degree of doctor patient relationship	5.534	0.067
Degree of stigma	2.523	0.112

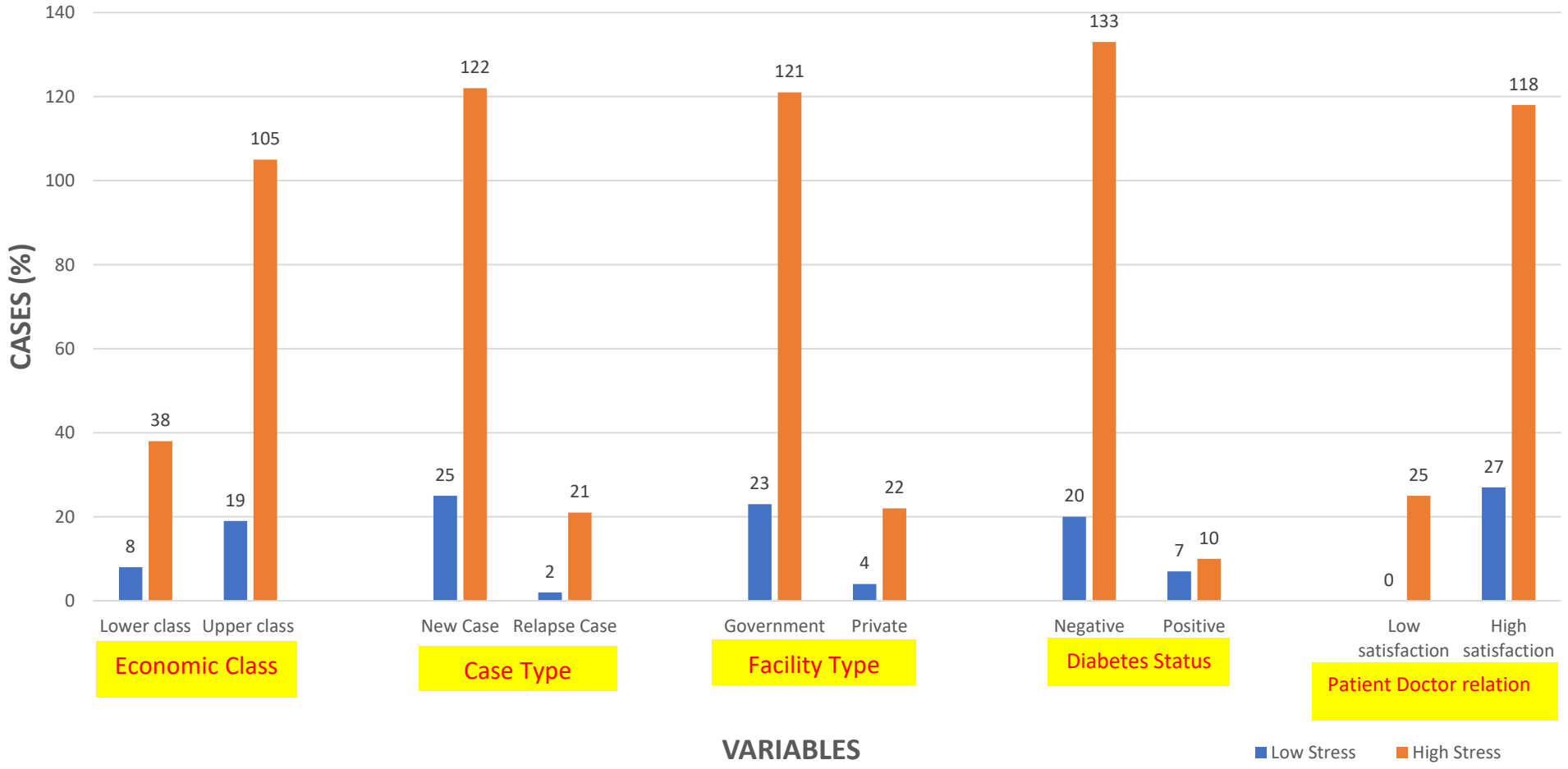
- **Conclusion:**

✓ Ordinal Logistic Regression Analysis revealed that Economic class, substance used, diabetes status, severity of illness were the associated factors leading to psychological distress.

✓ While new case or relapse, facility taking treatment, physical accessibility, travelling cost, degree of doctor patient relationship and degree of stigma were not associated factors leading to psychological distress.

TABLE 5 (Primary Outcome)

- **Objective:** To assess the prevalence of psychological distress among patients with TB.
- **Methodology: Here** we used Multinomial Regression to assess the prevalence of psychological distress among patients with TB.



- **Conclusion:**

✓ Patients from higher socioeconomic classes are 15% less likely than those from lower classes to experience psychological anguish.

✓ Compared to their counterparts, patients who used tobacco, alcohol, or cigarettes had a 1.718 percent higher likelihood of experiencing psychological discomfort.

✓ Compared to their peers, patients who tested negative for diabetes had a 72% lower likelihood of experiencing psychological discomfort.

✓ When compared to individuals with mild symptoms, those who had a severe perception of the severity of their illness were twice as likely to experience psychological distress. In contrast, individuals who perceived their condition as being moderately severe had 1.7 times the likelihood of being psychologically upset.

DISCUSSION

- In all, 170 samples that complied with inclusion/exclusion requirements and were recommended by the Deepak foundation under the National Tuberculosis Elimination Program in the Madhya Pradesh districts of Chhindwara and Jabalpur were included in the study.
- The results of data analysis showed that tuberculosis patients had signs of psychological discomfort.
- It was due to poor economic class, substance used, diabetes status, and severity of illness. While new case or relapse, facility taking treatment, physical accessibility, travelling cost, degree of doctor patient relationship and degree of stigma were not associated factors leading to psychological distress.
- The disease's physical weakness might cause frequent absences from the workplace, which increases financial hardship. Prior to the diagnosis, the patients' anxiety, insomnia, irritability, and restlessness were detected during the interview.
- Due to the complexities of the condition and the ambiguity of diagnosis, they experienced a fear of death, poor sleep, and food, as well as a diminished interest in social engagement. Patients first feel relieved and comfortable after receiving a diagnosis, but they quickly become nervous, irritated, and sad as they worry about the nature of the disease, its complications, and prognosis.
- No significant effect on doctor patient relationship based on type of facility was seen.
- Psychological distress was found in diagnosed tuberculosis individuals, and it should be studied further in a larger population. Psycho education, prompt intervention in the form of correct diagnosis, and targeted treatment are all necessary.
- Due to a lack of social and family support, as well as the stigma connected with the condition, poor treatment compliance is most typically found when treating these cases. To manage tuberculosis, it is necessary to prevent and cure tuberculosis patients.
- For a better prognosis and management of the condition, co morbid sickness should be recognized. If a patient with tuberculosis has a concomitant ailment, the appropriate referral should be made.

CONCLUSION

- Nearly one in four tuberculosis patients experience depression, making it a common consequence.
- When assessing TB patients, doctors and DOTS providers should have a high index of suspicion for depression.
- People with lower socioeconomic status are more likely to experience depression. It is recommended that all TB patients have a psychological examination at least once while undergoing treatment and that those who require it have access to the proper counselling and care.
- The staff at the DOTS center and the patient's caretakers should be made aware of the symptoms of depression, and if the patient displays any, they should refer them to a counsellor or psychiatrist.
- Prospective research with repeated assessments is advised to monitor the development of depressed symptoms over time in TB patients, starting on the day of the diagnosis itself.

RECOMMENDATIONS

- Proper training of Doctors and other workers should be given.
- Both public and private workers should be given instruction of maintaining and monitoring patient records, reminders, side effects of medication and follow-ups.
- Guidelines and gaps in this organization can be revised.
- Policy upgradation.

DOCTOR AND PATIENT VISITS

Thank you