



No Education/ Education up to School Level (Class- XII)	Education Higher Than School Level	Total
21	2	23
91%	9%	100%

[p-value: 2.7366X10<sup>-6</sup><0.05; significant]  
Table-1e: Occupational Status of the MDR TB Cases

Doing Job Involving Manual Labour	Not Doing Job/ Doing Job Not Involving Manual Labour	Total
10	13	23
43%	57%	100%

[p-value: 0.2230>0.05; not significant]  
Table-1f: Family Incomes (in Rupees/Month) of the MDR TB Cases

≤10000	>10000	Total
17	6	23
74%	26%	100%

[p-value: 0.0268<0.05; significant]

Figure-3 gives a qualitative idea about the influences of the six criteria on the occurrence of MDR TB at Domjur, according to the results of the binomial test.

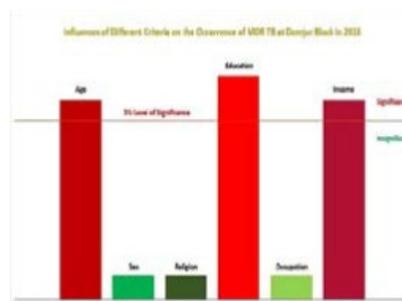


Figure-3: Graph Showing Qualitatively the Impacts of Different Criteria on the Occurrence of MDR TB at Domjur [Here, lower the p-value, higher is the corresponding bar. The expression used for drawing the graph is: ((100(1 - p)) - 75), where p1 is given by equation (1).] Tables- 1a-1f and figure-3 depict that age, educational status and family income had significant influences on the occurrence of MDR TB at Domjur, the significance of the influence of educational status being the maximum. Tables- 1a-1f and figure-3 also show that sex, religion and occupational status did not have significant influence on the occurrence of MDR TB at Domjur.

Thus, the following two moves by the pertinent authority can help in lessening the occurrence of MDR TB:

- Making arrangements for public education, up to college (undergraduate) and, if possible, university (graduate and higher) levels.
- Taking steps for increasing the income of people to ensure good nutritional status.

The collected data pertaining to the clinical profile and some management indicators of the MDR TB patients, are as follows: Table-2 shows the signs & the symptoms of the MDR TB patients.

Cough	Low Grade Fever	Weight Loss	Respiratory Distress	Chest Pain	Loss of Appetite	Weakness	Night Sweat	Haemoptysis
23	16	15	6	11	11	6	5	5
100%	70%	65%	26%	48%	48%	26%	22%	22%

[HIV: Human Immunodeficiency Virus; CBNAAT: Cartridge Based Nucleic Acid Amplification Test; AFB: Acid Fast Bacillus.]  
Table-2: Signs & Symptoms of the MDR TB Cases

Sputum Culture Done		Diagnosis Done & Treatment Started in Proper Time		Medicine Supplied in Proper Time		Regular Visit by Health Staff		Regular ntake of Medicine by Patient		Total
Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
19	4	22	1	23	0	19	4	16	7	23
83%	17%	96%	4%	100%	0%	83%	17%	70%	30%	100%

Table 4: Factors Essential for Offering Quality Treatment to the MDR TB Patients

Tables- 3 & 4 depict the indicators corresponding to the management of the MDR TB patients by the health centre at the Domjur Block. The regularity of intake of medicine by the patient depends not only on the patient's own awareness and initiative, but also on the degree to which the patient has been motivated by the relevant health personnel; hence it is also a valid indicator pertaining to the management of the MDR TB patients.

The indicators in the tables- 3 & 4 reflect the following:

- The RNTCP was going on reasonably well at the Domjur Block, in 2018.
- However, a lot was yet to be achieved, particularly with regard to motivating the patient to regularly take medicine, performing AFB test, doing sputum culture, the practice of regularly visiting the patient by the health staff, performing CBNAAT, doing chest X-ray, and diagnosing the disease & starting the treatment in proper time; hence, there is no room for complacency.

**Conclusion**

This project has attempted to throw some light on the relationships between the occurrence of MDR TB and some criteria associated with the socio-demographic profile of MDR TB patients and also on the performance of the RNTCP, with only a small amount of data. A more comprehensive picture about the occurrence of MDR TB could have been obtained, if other criteria related to the sociodemographic profile of the MDR TB patients were also incorporated in the study. Besides, if a control group of non-MDR TB patients were included, the results would have been more accurate. Moreover, if other blocks were also considered, higher number of patients would have been available for study, and hence, the scope of the work would have increased. If possible, all these assignments can be taken up in future. If data on other indicators pertaining to the management of the MDR TB patients by the health centre, were available,

a more comprehensive idea about the performance of RNTCP could have been had. This task can also be accomplished in future, if possible.

Government Of West Bengal.

#### References

1. Government of West Bengal. (2020). Official Website Of Howrah District,

2. Retrieved from <http://www.howrah.gov.in/adminunits/Domjur.html>

3. Mello, F. C. de Q., Silva, D. R., & Dalcolmo, M. P. (2018). Tuberculosis: where are we? *Jornal Brasileiro de Pneumologia*, 44(2), 82.