

**INDEX OCCURRENCE OF DRUG RESISTANT TUBERCULOSIS
(MDR-TB)
ON TUBERCULOSIS PATIENTS IN GRESIK DISTRICT, EAST JAVA**

ABSTRACT

Introduction: The bacteria that causing tuberculosis can become resistant to antimicrobial drugs which used to kill the TB germs. The resistance of M. Tuberculosis germ to anti-tuberculosis drugs (OAT) is a state in which germs can no longer be killed by first-line OAT, at least to isoniazid and rifampicin. Indonesia is on 8th out of 27 countries that have a high burden of TB - MDR. Gresik district is not among the big 10 districts in East Java, which has the highest TB incidence, but Gresik is a district with the highest proportion of TB - MDR cases among TB cases in East Java in 2015.

Methods: the research design of this study was case – control. The case population of the study were all patients with TB-MDR in Gresik in 2015, and the control population were all patients with TB in Gresik in 2015 and declared as cured.

Results: Based on the analysis using multiple logistic regression, index of incidence of MDR-TB obtained as PMO (OR = 8.470 CI95% (1.704 - 42.096), regularity (OR = 17.905 CI95% (3.704 - 86.553), side effects of drugs (OR = 8.115 CI95% (1.503 - 43.882), the result of previous treatment (OR = 6.860 CI95% (1.480 - 31.790) and DM (OR = 7.486 CI95% (1.465 to 38.253)

Conclusion: It can be concluded that the index of incidence of TB-MDR was - 4.359 + 2.137 (PMO (not exist)) + 2.885 (regularity (irregular)) + 2.094 (drug side effects (positive)) + 1.926 (previous treatment outcomes (failed or drop out)) + 2.013 (diabetes mellitus (exist))

Keywords: TB-MDR, Risk Factors, Gresik District

**INDEKS KEJADIAN TUBERKULOSIS RESISTEN OBAT (TB-MDR)
PADA PENDERITA TUBERKULOSIS DI KABUPATEN GRESIK
JAWA TIMUR**

ABSTRAK

Pendahuluan: Kuman yang menyebabkan tuberkulosis dapat menjadi resisten terhadap obat antimikroba yang digunakan untuk membunuh kuman TB. Resistansi kuman *M.tuberculosis* terhadap obat anti tuberculosi (OAT) adalah keadaan di mana kuman tersebut sudah tidak dapat lagi dibunuh dengan OAT lini pertama, setidaknya terhadap isoniazid dan rifampicin. Indonesia menduduki rangking ke 8 dari 27 negara-negara yang mempunyai beban tinggi TB - MDR. Kabupaten Gresik tidak termasuk ke dalam 10 besar kabupaten di Jawa Timur yang mempunyai insiden TB terbanyak, namun Kabupaten Gresik merupakan kabupaten dengan proporsi kasus TB – MDR diantara kasus TB tertinggi di Jawa Timur pada tahun 2015.

Metode: Penelitian ini menggunakan desain penelitian *case – control*. Populasi kasus penelitian adalah seluruh penderita TB-MDR di Kabupaten Gresik pada tahun 2015, dan populasi kontrol adalah seluruh penderita TB pada tahun 2015 yang dinyatakan sembuh di Kabupaten Gresik.

Hasil: Berdasarkan hasil analisis menggunakan regresi logistik ganda, didapat indeks kejadian TB-MDR yaitu PMO (OR = 8,470 CI95% (1,704-42,096), keteraturan (OR = 17,905 CI95% (3,704-86,553), efek samping obat (OR = 8,115 CI95% (1,503-43,882), hasil pengobatan sebelumnya (OR = 6,860 CI95% (1,480-31,790) dan DM (OR = 7,486 CI95% (1,465-38,253)

Kesimpulan: Dapat disimpulkan bahwa indeks kejadian TB-MDR adalah $-4,359 + 2,137$ (PMO(tidak ada)) + $2,885$ (keteraturan(tidak teratur)) + $2,094$ (efek samping obat (positif)) + $1,926$ (hasil pengobatan sebelumnya (gagal/*drop out*)) + $2,013$ (diabetes mellitus(ada))

Kata Kunci : TB-MDR, Faktor risiko, Kabupaten Gresik