

EVALUATION OF RISK FACTOR ASSOCIATED WITH DRUG-RESISTANT TUBERCULOSIS IN YEMEN: THE RESULT FROM GOVERNANCE WITH A HIGH RATE OF DRUG RESISTANCE

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Background: Although the world health organization reported Yemen to consider to have low burden drug resistance, this is due to the high shortage of diagnostic method and drug treatment regimen available in Yemen. Therefore our study aimed to evaluate the risk factor associated Drug Resistance Tuberculosis (DR-TB) and to identify the shortage in TB management.

Method: In this prospective study, 115 DR-TB patients enrolled in drug resistance program in four major TB centers in Yemen between January 2014 until December 2016. All patients were followed, and the treatment outcome was reported.

Result: A total of 135 patients with drug-resistant TB were registered in the four main TB centers in Yemen. Most patients were from Aden TB center (35.17%). The end of treatment reported a success rate of 77.4 %. Majority of patients were resistant to one drug (43.5%). 30 patients (26.1%) were resistant to two drugs, 21 % patients (18.3%) were resistant to two drugs. 21 patients (18.3%) were resistant to 3 drugs. 14 patients (12.2%) were resistant to 4 drugs. A total of 30 patients (26.1%) reported one or more adverse events during the intensive phase of treatment. In the multivariate logistic regression analysis, revealed that comorbidity (p-value = 0.049, AOR = 4.73), base lungs cavity (p-value = 0.016, AOR = 25.09), abnormal level of creatinine level (p-value = 0.031, AOR = 4.1), positive culture end of intensive phase (p-value = 0.009, AOR = 8.83) were associated with unsuccessful treatment outcome of drug resistance patients.

Conclusion: A low success rate of 74% was achieved at the end of treatment. Therefore, the study has not achieved the success rate set out in goals of stop TB strategies (75%), end TB strategy (90%) and the United National Sustainable Development Goals (80%). Considering the risk factor associated with DR-TB in Yemen is essential because it may increase the success rate especially in the high shortage of unavailability of second-line treatment or lab diagnostic method.

BIOGRAPHY

Ammar Ali Saleh Jaber has completed his PhD from Universiti Sains Malaysia. Currently, he is a lecturer in Universiti Sains Malaysia. He completed his bachelor's degree from Rajiv Gandhi University of Health Science and master's degree from Jamia Hamdard University in India. He is a member of the Pharmacy Council of India. He works as a pharmacy lecturer in Lebanese International University for three years and is the head of the clinical pharmacist in Yemen International Hospital for one year. He has published more than 6 papers in reputed journals.

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