ABSTRACT

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Title	Depression and its associated factors in persons with multidrug-resistant		
	tuberculosis in Myanmar		

Abstract

Background: Both multidrug-resistant tuberculosis (MDR-TB) and depression are major public health problems. Depression is identified as an important potential co-morbidity in persons with TB, yet data in many settings are scarce.

Objectives: The present study aimed to estimate the prevalence of depression in persons with MDR-TB in Yangon, Myanmar, and to identify the potential risk factors of depression for those MDR-TB participants.

Methods: A cross-sectional survey was conducted in MDR-TB participants, registered between January 2018 and January 2020 at Aung San MDR-TB treatment center in Yangon, during a routine clinic follow up visit. Patients Health Questionnaire-9 (PHQ-9) (previously validated in Myanmar for persons with chronic conditions) was used to screen for depression. Univariable and multivariable logistic regression were performed to identify associations.

Results: Of 732 registered persons at the study site, (not known to have transferred or died by the time of the study), 329 (45.0%) were enrolled in the study (65.4 % male, mean age \pm SD: 40.0 years \pm 14.2). Sixty-six percent were in continuation phase. Complete data were obtained for all variables. The prevalence of depressive symptoms (PHQ9 \geq 10) was 10.3% (95%CI: 7.3-14.1) and co-morbid conditions in study participants were 33.7% for moderate or severe malnutrition (BMI<17.0 kg/m²), 12.2% for HIV, and 16.1% for reported diabetes. In multivariable analysis, financial hardship as a result of MDR-TB symptoms/treatment

(aOR=2.63, 95%CI: 1.12-6.67), female sex (aOR=2.09, 95%CI: 0.94-4.65), suffering one or more current respiratory symptoms (aOR=6.72, 95%CI: 2.41-18.76), high education level (aOR=4.26, 95%CI: 1.70-10.70), and reported diabetes (aOR=3.05, 95%CI: 1.16–7.99) were independently associated with increased risk of depressive symptoms.

Conclusion: A relatively high prevalence of depressive symptoms was identified among MDR-TB participants in this study. It is recommended to implement/strengthen regular follow up assessment of depression in persons with MDR-TB by health care professionals using simple, standardized, short, validated tools.