Author’s response to reviews

Title: Psychological distress and its relationship with non-adherence to TB treatment: findings from a multicentre clinical trial

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Psychological distress and its relationship with non-adherence to TB treatment: findings from a multicentre clinical trial

We would be grateful if you would consider the attached manuscript for publication in BMC Infectious Diseases. It focuses on a topic of global public health importance and the only large study to examine the relationship between psychological distress and anti-TB treatment adherence. Its findings suggest that screening and counselling for psychological distress amongst patients seeking care for TB in sub-Saharan Africa will likely improve clinical outcomes, such as adherence, cure, and morbidity. Screening and counselling for psychological distress and associative disorders is not routinely available in TB clinics, especially in high burden settings.

Our study was performed in 1502 patients who presented to primary care TB clinics across five different sites in four countries (South Africa, Zimbabwe, Zambia, and Tanzania). We used a standardised, validated questionnaire for psychological distress (the Kessler K-10 scale), and reviewed patients’ adherence to anti-TB treatment and clinical outcomes at two- and six-months after enrolment.

Our large, multicentre study had the following key findings:

(i) Psychological distress, the severity of the patient’s symptoms, morbidity, health literacy, and alcohol use at diagnosis were each independently associated with non-adherence to treatment;

(ii) Severe psychological distress (K10 score ≥ 30) was common (22%) amongst patients with symptoms of pulmonary TB. In Harare and Lusaka, over half of patients met the criterion for severe psychological distress;

(iii) Heavy alcohol usage, female gender, morbidity score, and previous TB were associated with increased levels of psychological distress amongst patients with symptoms of TB, however, TB status was not;

(iv) HIV-infection and heavy alcohol usage are associated with TB patients taking longer to seek care.
The study is novel in the following ways:

(i) It is the first study to directly link psychological distress with non-adherence to anti-TB treatment;
(ii) It is the first study to link psychological distress with an objective and quantitative clinical morbidity index, which itself is highly predictive of mortality;
(iii) It is the first to demonstrate very high rates of psychological distress in patients presenting to primary care TB clinics in Southern Africa.

The topic is important and timely, and we look forward to receiving your feedback. It is of high interest to infectious diseases practitioners, public health experts, and mental health practitioners.

Best wishes,

Grant Theron Keertan Dheda