Why should national TB programmes prioritise co-morbid mental health disorders in patients being treated for multi-drug resistant TB?

POLICY BRIEF

Policy recommendations

1. National TB treatment programmes (NTPs) should adapt and integrate the principles of the World Health Organization's Mental Health Gap Action Programme (mhGAP) into local NTP treatment guidance.

2. Routine, proactive mental health screening should be incorporated into NTP treatment guidance. We suggest TB programmes trial widely-available, free screening tools for common mental disorders as a starting point.

3. Robust research is needed to test clearly-defined psychosocial support interventions for people being treated for MDR-TB. Care packages could include psycho-social counselling (as opposed to just advice giving), group support, structured patient education and prescribing psychiatric medications.

Our recent study showed psychological counselling is acceptable to MDR-TB patients in Nepal, but needs investment in extra staff to be feasible to deliver. This image is from information, education and communication (IEC) materials developed as part of our psychosocial intervention in Nepal

Social stigma, poor drug adherence and low treatment success: 3 reasons we need to address mental disorders in MDR-TB patients

1. Emerging evidence suggests that people being treated for MDR-TB often have symptoms of mental disorders and suffer social stigma, discrimination and psycho-logical distress.[1]

2. Co-morbid (simultaneous) physical and mental disorders can interact and may significantly impair MDR-TB patients' adherence to treatment.[2]

3. With MDR-TB treatment success rates at just 50% globally[3] there is still much to do to reduce the rates of those lost to follow up.

Women in Nepal take part in a workshop to gather evidence on the effects of social stigma for MDR-TB patients

What are the risks of overlooking the mental wellbeing of MDR-TB patients?

Our experience of undertaking MDR-TB operational research in China, Pakistan, Bangladesh, Nepal and Swaziland has given us detailed insight into the challenges facing patients, their families, health professionals and wider health systems. We are increasingly concerned that psychosocial support, and in particular support focused on mental health, is not adequately addressed in national MDR-TB programmes. 2 factors influence the development of mental disorders in people with MDR-TB.[4]

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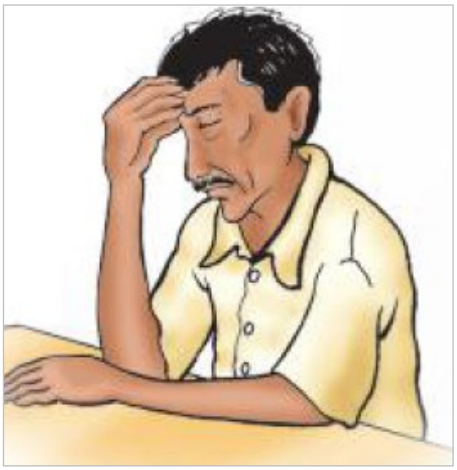
The powerful drugs needed to treat MDR-TB can lead to debilitating psychiatric side-effects.[5]

Disruption to livelihoods, especially for poorer patients, social withdrawal and stigma can cause further depression and anxiety.[6]



Images from materials developed as part of our counselling intervention in Nepal

Specific challenges for low and middle-income countries (LMICs)

WHO guidelines for MDR-TB programmes[7] recommend that psychiatric medication, individual counselling and/or group therapy may be necessary for individuals suffering from psychiatric disorders during MDR-TB treatment. There are, however, 6 significant challenges with delivering these recommendations in LMICs.

1. Many MDR-TB programmes lack the capacity and skills to identify those with psychosocial issues and provide suitable interventions.
2. There is a lack of psychometrically-validated screening tools for proactively identifying mental disorders in LIMCs.
3. Where TB programmes do offer 'counselling' as part of MDR-TB services, in our experience this can be little more than giving patients brief advice about adherence and possible drug side-effects.
4. Anti-depressant and anti-psychotic medication may not be available on the essential drug lists and are too expensive for many patients to afford privately.
5. When available, these drugs may be inappropriately prescribed and not adequately monitored for efficacy and tolerance.
6. The stigma of mental ill-health that exists in most cultures may also deter people with MDR-TB from disclosing their psychiatric symptoms. This means mental disorders may be missed by clinicians and, ultimately, by policy makers.

Will the new shorter MDR-TB treatment regimens lessen mental distress for patients?

WHO have recommended that national TB programmes consider shorter course treatment regimens of 9 to 12 months for MDR-TB. Shorter regimens may reduce patients' mental distress, limiting the period of social isolation. Added to this, the new shorter regimes also exclude the drugs that are most heavily associated with adverse psychiatric events.

However, it is not certain whether shorter treatment will lead to better mental wellbeing and better treatment adherence.

Where MDR-TB patients are lost to follow-up, this mostly occurs within the first 6 months of treatment, when mental distress is likely to be at its highest.[8]

The 9-month regimen trials will continue to be based on the directly observed treatment model which focuses heavily on administering treatments and less closely on the holistic welfare of patients.

What is needed now?

From our research and experience, we believe that a more committed and sophisticated approach is required to developing the evidence-base for patient support interventions.

1. These interventions should include management and support for co-morbid depression, anxiety and psychosis within routine MDR-TB treatment.

2. Research should focus on how we measure mental distress in these populations and demonstrate the impact of interventions on mental wellbeing and treatment adherence.

3. The current trial period for the new 9-month regimen offers a valuable opportunity for identifying the extent, timing and impact of mental disorders among people with MDR-TB.

> *Research should focus on how we measure mental distress in these populations and demonstrate the impact of interventions on mental wellbeing and treatment adherence*

A programme co-ordinator from our partner HERD in Nepal talks to a MDR-TB patient to explore the challenges patients face

Improving treatment adherence: evidence from Ethiopia

A recent study in Ethiopia[9] showed that after a structured counselling and patient education intervention, treatment non-adherence among a cohort of TB and MDR-TB patients reduced significantly by 10%. In the control group, non-adherence increased by 6%.

- The intervention consisted of 7 sessions of structured patient education and psychological distress counselling, delivered by TB health professionals over the first 4 months of treatment.
- Our own research in Nepal shows that brief psychological counselling delivered to MDR-TB patients by lay counsellors can be feasible for TB programmes with investment in extra staff.

Our TB and MDR-TB studies span 5 low- and middle-income countries

Bangladesh: We found that it is feasible to involve garment factories in TB control, improving case notification and treatment outcomes. Read more

Pakistan: Our research has shown that home-based TB care is feasible, effective and more acceptable to patients than health centre based care. Read more

Nepal: Our findings highlight the negative impact of MDR-TB treatment on patients' mental health, particularly for married women. Read more

China: Prolonged diagnosis and limited capacity at hospital laboratories are delaying the start of MDR-TB treatment for patients. Read more

Swaziland: Findings from our controlled study show that financial incentives for treatment supporters significantly improved TB treatment outcomes and death rates. Journal paper: Kliner M, Canaan M, Ndwandwe S, Busulwa F, et al. (2015) Effects of financial incentives for treatment supporters on tuberculosis treatment outcomes in Swaziland: a pragmatic interventional study. BMC Infectious Diseases of Poverty. doi:10.1186/s40249-015-0059-8

This policy brief is based on the COMDIS-HSD research paper: Walker I, Baral S, Wei X, Huque R, Khan A, Walley J, Newell J, Elsey H. (2017) Multidrug-resistant tuberculosis treatment programmes insufficiently consider comorbid mental disorders. The International Journal of Tuberculosis and Lung Disease. doi.org/10.5588/ijtld.17.0135.

- **Read our research paper:** Khanal S, Elsey H, King R, Baral S, Raj Bhatta B, Newell J. (2017) Development of a patient-centred, psychosocial support intervention for multi-drug resistant tuberculosis (MDR-TB) care in Nepal. PLOS ONE. doi.org/10.1371/journal.pone.0167559
- **Watch our video:** Treatment challenges for MDR-TB patients in Nepal: lessons from the field

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