Mental health comorbidity in low-income and middle-income countries: a call for improved measurement and treatment

Considerable progress has been made over the past decade in epidemiological and intervention research, service delivery, and increasing awareness of and appreciation for the importance of mental health in low-income and middle-income countries (LMICs). A key example of this progress is the WHO's Comprehensive Mental Health Action Plan 2013–2020.[1] As global mental health moves forward into areas of implementation science, health systems strengthening, and policy making, we believe it is necessary to highlight what, in our opinion, is a major gap in the field: the lack of information on the prevalence and treatment of co-occurring mental health, substance use, and other psychosocial problems.

In high-income countries (HICs), published literature shows that comorbidity of common mental health problems is the rule, not the exception. Depression, anxiety, and post-traumatic stress disorder frequently occur together,[2] and mental health problems are common among people with alcohol and other substance use disorders, and those individuals who have or perpetrate interpersonal violence.[3] On the basis of data from our studies, including an ongoing one in Zambia (Kane JC, Murray, LK, unpublished), we suspect co-occurrence of mental health, substance use, and psychosocial problems is similarly prevalent in LMICs, albeit not well documented. Not surprisingly, our data also suggest that, similar to HICs,[4] comorbidity of mental health problems is common among people with physical health issues, such as HIV and disabilities (Kane JC, Murray, LK, unpublished).

The lack of information and attention on comorbidity in LMICs results from multiple issues. First, many studies focus on a single disorder of interest (eg, depression alone) and are not designed to assess co-occurring symptoms or conditions. This narrow focus impedes our understanding of comorbidity and undermines our ability to improve the understanding of the cause. Second, treatment for mental health in LMICs has also been primarily focused on a single problem. As suggested elsewhere,[5] such siloed treatment models are not only inefficient, given the need for extensive and complex referrals, but also greatly inhibit scale-up and sustainability. Third, studies or programmes that have an interest in assessing comorbidity often lack both validated assessment tools that cut across disorder types and the time needed to collect the data. Finally, studies that do measure multiple outcomes tend not to report how often these conditions co-occur and interact, or how interventions affect multiple conditions among people with comorbidities.[6]

We propose three approaches to improve our understanding of comorbidity in LMICs. First, more explicit attention in this area is warranted. This approach includes publication of existing data on comorbidity, building the measurement of comorbidity into study designs a priori (including accounting for this measurement in sample size calculations), and crucially, increasing financial support from key stakeholders and funders to assess and treat comorbidity. Second, brief, pragmatic tools are needed to measure symptoms and problems across a range of conditions to help us improve the understanding of who has these problems, how they change and influence each other, and how treatment might affect their course. An example of this second approach in HICs is the measurement of patient-reported outcomes (PROs) within Center for AIDS Research Network of Integrated Clinical Systems, a collaboration of eight clinics that have already treated more than 30 000 patients with HIV in the USA. Every 4–6 months, while queuing for clinical care, patients complete PRO assessments that include validated measurement tools for depression, anxiety, and substance use. Data are used for clinical care and research.[7] In LMIC settings, our team and our partners are using item response theory to help refine and improve practical tools that improve the assessment of comorbidity. For example, in Ukraine, we used item response theory to reduce successfully an 83-item questionnaire covering depression, anxiety, and post-traumatic stress, to 20 items.[8]

Finally, a fundamental shift in treatment approach is needed. LMIC health systems are increasingly being modelled after those in HICs, in which treatment of specific disorders is done by a specialist in a single problem area (eg, specific provider or clinic for anxiety distinct from a provider or clinic for substance use). Mimicking this approach in LMICs seems both misguided,

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given the likelihood of comorbidity and limited availability of professionals with specialised training, and unfeasible, given the dearth of infrastructure and resources. Therefore, we reiterate the call for a shift to multiproblem, modular transdiagnostic approaches that offer a single provider the tools to address comorbidities in a flexible manner,[9] rather than single disorder treatments. Treatments should be integrated within existing primary care settings (WHO's mhGAP intervention guide represents a current effort)[10] and other front line community-based settings from diverse sectors (eg, education, cultural and religious),[11] when possible. This approach could increase efficiency, and ensure appropriate identification and treatment of comorbid physical health conditions (eg, diabetes, HIV, and disabilities), which frequently co-occur with each other and with common mental health problems.[4]

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