

Short Communication

An Urgent Request for Evidence-Based Mental Health Intervention Research in Low-Income and Middle-Income Countries

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The rise in mental health issues is a global phenomenon. The World Health Organisation (WHO) has published data that shows the global burden of mental disorders continues to grow and claim that the health systems throughout the world are struggling to respond adequately to the needs of people with mental health disorders.¹ Approximately 85% of the world population resides in 153 low-income and middle-income countries (LMICs). Further, more than 80% of people who have mental disorders are located in LMICs.² However, it is estimated that 90-95% of mental health resources, including human resources for psychological therapies are being delivered in countries that only account for 5% of the population.³ This is a global inequity and it is unjust. This article serves as a desperate call to researchers to urgently engage in evidence-based psychological therapies interventions in LMICs. This is not as an attempt to reallocate existing provision of mental health resources, but to reduce the treatment gap by advocating opportunities for all.

Mental health disorders are the leading cause of disability worldwide as measured in disability adjusted life years (DALYs), accounting for nearly a quarter (22%) of all days lived with disability.⁴ As populations age, the burden of non-communicable diseases, such as mental disorders, is rising. Mental and neurological disorders combined account for over a third (37%) of the disability burden associated with chronic non-communicable diseases.⁵ The DALYs due to mental illness grew by 38% in the twenty years between 1990 and 2010.⁴ That growth is expected to continue, because mental disorders are most commonly diagnosed in the adult years, and as populations age, they become more susceptible to neurological disorders such as dementia and Parkinsonism. Interestingly, the WHO (2011) predicted that, by 2030, mental health

problems, particularly depression, will be the leading cause of mortality and morbidity globally.¹ Currently, more than 300 million people suffer from depression globally and it contributes to 800,000 suicides per year.¹ Depression alone is likely to be the third leading cause of disease burden in low-income countries and the second highest cause of disease burden in middle-income countries.⁶

There is a clear association between the mental health of a child and the development of mental health disorders as an adult.^{1,7,8} Mental health issues are estimated to affect 10-20% of youth in LMICs,⁹ although this statistic is thought to be highly conservative as it fails to take account of any co-variation of factors, such as lack of supply side barriers or demand side barriers. Further, confounding factors like the normalisation each individual society has placed on the impact of stressful life events and experiences will have a significant bearing on how mental health is seen, the stigma attached to it and how statistical information is recorded and interpreted.^{7,10} Interestingly, between 1992 and 2001, published research from LMICs contributed just 5% of the mental health research-related articles to the internationally indexed literature on mental health.¹⁰ However, despite this clear and apparent need, evidence-based research and sustainable interventions for children and adolescence with mental health issues as well as the aging populations in LMICs are restricted and limited.^{2-4,7}

Stressful trigger events that are associated with an increase in mental health disorders are often very different in LMICs than high-income countries (HICs). For example, children and adolescents in LMICs that have experienced either man-made (such as civil conflict or war) or natural disasters (such as flooding or

drought), are at greater risk from a variety of mental health issues, the most common of which are elevated anxiety and mood disorders, suicide and suicidal ideation, acute stress reactions including post-traumatic stress disorders, sleep disruption, as well as a decreased sense of self and identity from loss (of place or person) and grief reactions.¹⁰⁻¹³ Interestingly, neuroscience research has comprehensively documented that prolonged exposure to the stress hormone, cortisol, can damage areas of the brain associated with memory, movement and mental health.¹⁴ Therefore, it is hardly surprising that suicide rates in a number of LMICs are some of the highest in the world.^{8,13}

Stigma is a known factor that inhibits access to psychological therapies. About 8 in 10 people with depression had experienced discrimination, usually within familiar settings such as with family members, friends, work relationships, marriage and divorce and with other interpersonal relationships.⁶ Nearly forty percent of people with depression will not reach out for things they truly consider important in their personal and work life, out of fear (anticipated stigma) that they may be discriminated against.⁶ This hinders progress, as the tendency is to hide family members with mental illness out of embarrassment, rather than bring them forward to access the treatment and care they need. Such individuals are thus, often at increased risk of suffering human rights abuses. Therefore, in the author's opinion, those that engage with evidence-based intervention research should include a programme of mental health awareness training to aid the ongoing sustainability of that intervention.

Despite huge strides in recent years, the treatment gap remains enormous and represents a gross inequity that exists with people's ability to access mental health provisions in LMICs. The most vulnerable groups appear to be child and adolescent and the aging populations, although the data available from various government statistics are lacking and there is little on the ground evidence-based intervention research being published that shows sustainable steps forward. The associated consequence of this is critical gaps in knowledge and a failure to adequately understand global mental health needs, especially in poorer socioeconomic countries. Given the growing burden of mental health across the globe and an increasing population size, both high-income countries as well as LMICs could benefit from the identification of successful, low-cost sustainable evidence-based interventions, particularly those that include the family and community-based provisions. As global citizens, academic researchers and clinicians, we have a responsibility to address this global injustice and inequity, ensuring that mental health provision is available to those in need by developing sustainable interventions.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

REFERENCES

1. World Health Organisation (WHO). Mental Health Action Plan 2013-2020. Web site. https://www.who.int/mental_health/publications/action_plan/en/. Accessed October 29, 2019.

2. Jacob K, Sharan P, Mirza I, et al. Mental health systems in countries: Where are we now? *Lancet*. 2007; 370: 1061-1077. doi: 10.1016/S0140-6736(07)61241-0

3. Patel V, Xiao S, Chen H, et al. The magnitude of and health system responses to the mental health treatment gap in adults in India and China. *Lancet*. 2016; 388: 3074-3084. doi: 10.1016/S0140-6736(16)00160-4

4. Lim SS, Vos T, Flaxman AD, et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: A systematic analysis for the Global Burden of Disease Study 2010. *Lancet*. 2013; 280: 2224-2260. doi: 10.1016/S0140-6736(12)61766-8

5. Bloom DE, Cafiero-Fonseca ET, McGovern ME et al. The macroeconomic impact of non-communicable diseases in China and India: Estimates, projections, and comparisons. *The Journal of the Economics of Ageing*. 2014; 4: 100-111. doi: 10.1016/j.jcoa.2014.08.003

6. Lasalvia A, Zoppi S, Van Bortel T, et al. Global pattern of experienced and anticipated discrimination reported by people with major depressive disorder: A cross-sectional survey. *Lancet*. 2013; 9860: 55-62. doi: 10.1016/S0140-6736(12)61379-8

7. Global Forum for Health Research, World Health Organisation (WHO). Research capacity for mental health in low- and middle-income countries: Results of a mapping project. https://www.who.int/mental_health/MHRC_FullText.pdf. Accessed October 29, 2019.

8. Uddin R, Burton NW, Maple M, Khan SR, Khan A. Suicidal ideation, suicide planning, and suicide attempts among adolescents in 59 low-income and middle-income countries: A population-based study. *Lancet Child Adolesc Health*. 2019; 3: 223-233. doi: 10.1016/S2352-4642(18)30403-6

9. Kieling C, Baker-Henningham H, Belfer M, et al. Child and adolescent mental health worldwide: Evidence for action. *Lancet*. 2011; 378: 1515-1525. doi: 10.1016/S0140-6736(11)60827-1

10. Saxena S, Paraje G, Sharan P, Karam G, Sadana R. The 10/90 divide in mental health research: Trends over a 10-year period. *Br J Psychiatry*. 2006; 188: 81-82. doi: 10.1192/bjp.bp.105.011221

11. Patel V, Araya R, Chatterjee S, et al. Treatment and prevention of mental disorders in low-income and middle-income countries. *Lancet*. 2007; 370: 991-1004. doi: 10.1016/S0140-6736(07)61240-9

12. Vibhakar V, Allen LR, Gee B, Meiser-Stedman R. A systematic review and meta-analysis on the prevalence of depression in children and adolescents after exposure to trauma. *Journal of Affective Disorders*. 2019; 245: 111-120. doi: 10.1016/j.jad.2019.04.044

13. World Health Organisation (WHO). Mental Health Action Plan 2013-2020. Web site. https://www.who.int/mental_health/publications/action_plan/en/. Accessed October 29, 2019.

Disorders. 2019; 255: 77-89. doi: [10.1016/j.jad.2019.05.005](https://doi.org/10.1016/j.jad.2019.05.005)

13. Koyanagi A, Oh H, Carvalho AF, et al. Bullying victimization and suicide attempt among adolescents aged 12-15 years from 48 countries. *J Am Acad Child Adolesc Psychiatry.* 2019; 58: 907-918. doi: [10.1016/j.jaac.2018.10.018](https://doi.org/10.1016/j.jaac.2018.10.018)

14. Haynes LE, Griffiths MR, Hyde RE, Barber DJ, Mitchell IJ. Dexamethasone induces limited apoptosis and extensive sublethal damage to specific subregions of the striatum and hippocampus: Implications for mood disorders. *Neuroscience.* 2001; 104(1): 57-69. doi: [10.1016/s0306-4522\(01\)00070-7](https://doi.org/10.1016/s0306-4522(01)00070-7)