Comment

Mental, neurological, and substance use disorders in China and India

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Main text

Mental, neurological, and substance use (MNS) disorders represent a major and increasing global health challenge. The issue has so far failed to receive the attention afforded to the protection of physical health and has, crucially, received lower levels of funding in all countries of the world.[1] Notable among these are the growing economies of China and India where rapid development over recent decades is likely to have contributed to increased prevalence of MNS disorders. The most recent 2013 Global Burden of Disease (GBD) study estimated that, added together, China and India represent an astonishing one-third of the global mental health burden.[2,3] Responsible factors include the rising levels of inequality in the two countries and rapid changes in social structure and community cohesion.[4] At the same time, as levels of urbanization have increased, large numbers of people have been exposed to environmental and psychological stressors including pollution, noise, poor housing and social isolation.[5] To date, relatively little progress has been made in collecting data on the scale of the problem.

In The Lancet Psychiatry, Amanda Baxter and colleagues report prevalence of MNS disorders for China and India as part of the "China-India Mental Health Alliance" landscaping paper series.[6] The authors drew on findings from the GBD 2013 study to derive estimates of prevalence for 15 disorders in 1990 and 2013. These disorders included schizophrenia, bipolar disorder, depressive disorders (including major depressive disorder (MDD) and dysthymia), anxiety disorders, attention-deficit/hyperactivity disorder (ADHD), conduct disorder, autism spectrum disorder (ASD), alcohol dependence, drug use disorders, dementia and epilepsy.

The results suggest that in 2013 the most common MNS disorders were similar in the two countries. For males, these were MDD, anxiety disorders and alcohol dependence and, for females, anxiety disorders, MDD and dysthymia. The authors estimate that at any one time during 2013, MDD and anxiety affected roughly 41 million and 40 million people, respectively, in China and 49 million and 37 million people, respectively, in India. There were also some important differences between the

two countries, with the far higher prevalence of schizophrenia in China being of particular note. Comparing the estimates against those for 1990, the authors identified two important developments. First, the number of people affected by MNS disorders grew more rapidly over the period in India (consistent with India's greater rate of population growth) and, second, disorders with onset in younger age groups experienced much lower growth in China (including *decreases* in the number of cases of ADHD and conduct disorder). However, it is worth noting that these trends over time were not statistically significant.

The work provides the best and most reliable estimates of the prevalence of MNS disorders in China and India to date. These estimates are vital to ensuring successful public health planning in the two countries. The results must however be viewed in the context of the limitations of the available information. Population representative prevalence data were found to be highly limited, particularly so in India (average coverage of just 1% by the authors' estimation). Very few national-level studies were identified (one study in China, none in India) and data were unevenly distributed across disorders, age groups, regions and epidemiological parameters. Nonetheless, identifying these gaps in the available data is beneficial in itself.

Despite the uncertainties, it is clear that the prevalence of MNS disorders in China and India is substantial and the number of people affected has grown considerably over recent decades. The problem may worsen further as both populations continue to age. The data presented in this paper can help to develop surveillance strategies for MNS disorders in the two countries. The challenge now is to harness recent improvements in awareness and developments in evidence, to which this study adds. The inclusion of mental health in the Sustainable Development Goals (SDGs), which will define the development agenda until 2030, is an encouraging move. Reflecting the growing importance of global mental health, SDG goal 3 ("Ensure healthy lives and promote well-being for all at all ages") includes targets encouraging countries to "by 2030, reduce by one third premature mortality from noncommunicable diseases through prevention and treatment and promote mental

health and well-being" and to "strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol".[7] It remains to be seen how seriously these commitments will be taken; little will be achieved without considerable long-term investment and political will. The SDGs can at least play an important role in focusing the efforts of the public health and development communities. The positive news for China and India is that MNS disorders are highly treatable and preventable using interventions that are practical and affordable.[8] The protection of mental health must now be made a priority in both countries. Understanding the extent of the problem is an important step.

Contributors

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Conflicts of interest

I declare no conflicts of interest.

Role of the funding source

Not applicable.

References

1. Collins PY, Patel V, Joestl SS, et al. Grand challenges in global mental health. *Nature* 2011; **475**: 27–30.
2. Global Burden of Disease Study 2013 Collaborators. Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet* 2015; **386**: 743–800.
3. Charlson FJ, Baxter AJ, Cheng HG, et al. The burden of mental, neurological, and substance use disorders in China and India: a systematic analysis of community representative epidemiological studies. *Lancet* 2016, doi:10.1016/S0140-6736(16)30590-6.
4. Friedli L. *Mental Health, Resilience and Inequalities*. Copenhagen: WHO Regional Office for Europe, 2009.
5. Gong P, Liang S, Carlton EJ, et al. Urbanisation and health in China. *Lancet* 2012; **379**: 843–52.
6. Baxter AJ, Charlson FJ, Cheng HG, et al. Prevalence of mental, neurological, and substance use disorders in China and India: a critical literature review and implications for public health. *Lancet Psychiatry* 2016.
7. UNSC. *Technical report by the Bureau of the United Nations Statistical Commission (UNSC) on the process of the development of an indicator framework for the goals and targets of the post-2015 development agenda (working draft)*. New York, NY: United Nations Statistical Commission, 2015.
8. Patel V, Chisholm D, Parikh R, et al. Addressing the burden of mental, neurological, and substance use disorders: key messages from Disease Control Priorities, 3rd edition. *Lancet* 2016; **387**: 1672–85.