

GUEST EDITORIAL

The Saudi National Mental Health Survey: Filling critical gaps in methodology and data in mental health epidemiology

This issue of the journal brings together a collection of the first set of papers from a landmark mental health epidemiological study in the largest country in the Middle East: the Saudi National Mental Health Survey (SNMHS). While there have been sporadic psychiatric epidemiological studies reported from Saudi Arabia in the past (e.g., Abumadani, 2019; Alharbi, Almalki, Alabdan, & Haddad, 2018; Hickey, Prymachuk, & Waterman, 2016), the SNMHS is by far the most systematic evaluation to date of the patterns and correlates of mental disorders in the country. Adding to the importance of the study is the fact that it was carried out in conjunction with the World Health Organization's (WHO) World Mental Health (WMH) Survey Initiative. The latter helped guarantee that the survey was carried out using rigorous internationally comparable standards and created easy access to valuable international comparisons. Based on these features, the SNMHS will serve as a valuable benchmark for studies in the region and elsewhere.

As pointed out by the authors, Saudi Arabia differs from other high-income countries in several important ways: a relatively young population, government based on strict Islamic law, associated with high levels of religiosity, limited female economic participation along with relatively low participation in the labour force despite wages comparable to men (Omair et al., 2020). There is also currently a high level of government spending on wages, but a commitment to make the transition to a knowledge economy and reduce entitlements as a source of income. This commitment is occurring in conjunction with recent admirable reforms to increase female empowerment and one of the most dramatic increases in the proportion of the population attending university of any country in the world (World Bank, 2020).

The mental health system also, unlike other high-income countries, presents several challenges: a lower per capita ratio of mental health professionals than in other high-income countries; a greater concentration of mental health care in large institutions, with a focus on inpatient care; and a relatively low proportion of overall government health spending dedicated to mental health.

The studies serve both as an excellent introduction to the epidemiology of mental disorders in Saudi Arabia and as a primer in mental health epidemiology more broadly. Several innovative, rigorous, and

best-in-class approaches to population-based mental health research deserve mention: a systematic approach to translation and adaptation of an international survey instrument to ensure cultural applicability, strict quality control, the use of audio computer-assisted self-interviewing for sensitive areas of questioning, adaptation of the sampling design with mid-stream corrections to contain costs (without compromising on representativeness), and an inclusion of an embedded clinical reappraisal study for selected conditions to increase validity by recalibrating the prevalence estimates produced by the larger study. Additionally, the collection of DNA samples from very carefully phenotyped samples will enable future collaboration in large-scale genetic analyses.

The studies also highlight the challenges in such large scale internationally comparable mental health epidemiological studies and underscore the nontrivial nature of such an undertaking. The SNMHS is positioned to provide comparable data to other countries in the region that have used similar approaches as part of the WHO's WMH Surveys, most notably Lebanon (Karam et al., 2006) and Iraq (Alhasnawi et al., 2009), and with other in-progress WMH surveys in Iran and Qatar. This will provide a rich picture of mental health in a region that is undergoing very rapid transitions, while experiencing conflicts that in some cases have resulted in with large scale displacements of populations. Mental health issues will clearly need more attention from health systems in these areas than they have received thus far.

The SNMHS finds that about one in three adults in Saudi Arabia has experienced a diagnosable mental disorder in the course of their lifetime and nearly one in four adults have a lifetime risk of developing a such a disorder. The study reveals a surprisingly high prevalence of separation anxiety disorder, especially among adults, obsessive compulsive disorder, especially at subthreshold levels, and social phobia. While alcohol disorders are understandably rare given the Islamic faith, overall substance use disorders are comparable to other settings due largely to abuse of prescription medications. Six percent of adults have suffered from major depressive disorder in their lifetime. Separation anxiety disorder and attention-deficit/hyperactivity disorder are considerably more common than in other high-income countries.

Abbreviation: WMH, World Mental Health.

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One-fifth of respondents were in an active episode of a mental disorder at some time in the 12 months before the survey.

While these numbers are a matter of concern, even more sobering is the fact that a large majority of these conditions were said to have begun in childhood or early adulthood, nearly one in four were considered serious, and of those with a mental disorder in the past year four out of 10 had more than one condition. About 40% of all those with a disorder in the past 12 months that had more than one condition, accounted for more than half of all serious cases.

The treatment gap in mental disorders in Saudi Arabia remains large with less than one-third of people with a lifetime disorder receiving any type of treatment. And those individuals who obtained treatment typically did so only after a substantial delay. Even among those with a disorder in the past 12 months only about one in seven received treatments. Equally, if not more, concerning is that less than half of these patients received treatment that would be considered even minimally adequate based on accepted treatment guidelines. Unlike in most other settings, women do not seem to be more likely to receive treatment.

Finally, the SNMHS suggests that more recent cohorts may be more likely to have a mental disorder than previous cohorts. This means that already inadequate services might leave behind even more people in the future than today unless changes are made now.


There are several ways the health system could respond to these challenges given that cost-effective solutions have been documented to exist that can be used to scale up mental health interventions. First, primary care providers need to be trained in the recognition and management of common mental disorders through implementation and scale up of WHO's mental health gap action programme (mhGAP) (World Health Organization, 2018). Second, a shift is needed in resources from large-scale institution-based care to primary care while integrating services to provide truly integrated people-centered health-care services (World Health Organization, 2016) that ensure early detection, compliance with evidence-based treatment guidelines, and continuity of care. Third, a health promotion campaign will be needed to increase awareness among the general public about early symptoms of mental health conditions and reduce stigma. Such a campaign should be implemented, though only after putting in place the system changes needed to absorb the increased demand that the campaign will create. Engagement of both religious and political leaders should be included in this campaign to ensure wide reach of the message. Fourth, it will be important to invest in mental health implementation research to identify barriers to seeking care, adhering to treatment, and practical strategies designed for the local setting to scale-up and improve quality of services.

The high prevalence of mental disorders and the huge gap in treatment documented in the current studies must be recognized by policy makers as placing a huge burden on families and caregivers and coming at an enormous societal cost. The impact on future generations is likely to be immense. If the promise of leaving no one behind in the Sustainable Development Agenda and Universal Health

Coverage is to be fulfilled, these results must be a clarion call to the country to take notice and, more importantly, take action.

KEYWORDS

epidemiology, gender, methodology, public mental health

Somnath Chatterji 

Department of Data and Analytics, World Health Organization, Geneva, Switzerland

Correspondence

Somnath Chatterji, Department of Data and Analytics, World Health Organization, Geneva, Switzerland.
Email: chatterjis@who.int

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ORCID

Somnath Chatterji  <https://orcid.org/0000-0002-3085-6550>

REFERENCES

- Abumadani, M. S. (2019). Mental health research in the Kingdom of Saudi Arabia: A review of trend and visibility over four decades. *Journal of family & community medicine*, 26, 163–167.
- Alharbi, H., Almalki, A., Alabdan, F., & Haddad, B. (2018). Depression among medical students in Saudi medical colleges: A cross-sectional study. *Advances in Medical Education and Practice*, 9, 887–891.
- Alhasnawi, S., Sadik, S., Rasheed, M., Baban, A., Al-Alak, M. M., Othman, A. Y., ... Iraq Mental Health Survey Study Group. (2009). The prevalence and correlates of DSM-IV disorders in the Iraq Mental Health Survey (IMHS). *World Psychiatry*, 8, 97–109.
- Hickey, J. E., Prymachuk, S., & Waterman, H. (2016). Mental illness research in the Gulf Cooperation Council: A scoping review. *Health Research Policy and Systems*, 14, 59.
- Karam, E. G., Mneimneh, Z. N., Karam, A. N., Fayyad, J. A., Nasser, S. C., Chatterji, S., & Kessler, R. C. (2006). Prevalence and treatment of mental disorders in Lebanon: A national epidemiological survey. *Lancet*, 367, 1000–1006.
- Omar, M., Alharbi, A., Alshangiti, A., Tashkandy, Y., Alzaid, S., Almahmud, R., ... Binhazzaa, S. (2020). The Saudi women participation in development index. *Journal of King Saud University—Science*, 32, 1233–1245.
- World Bank. (2020). *Women, business and the law 2020*. Washington, DC: World Bank. <https://doi.org/10.1596/978-1-4648-1532-4>
- World Health Organization. (2016). *Framework on integrated people centred health services*. Geneva, Switzerland: World Health Organization. Retrieved from http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_39-en.pdf?ua=1
- World Health Organization. (2018). *mhGAP operations manual*. Geneva, Switzerland: World Health Organization. Retrieved from https://www.who.int/mental_health/mhgap/operations_manual/en/