

Letter to the Editor

Access to inpatient psychiatric care during the COVID-19 pandemic: Observations from Sri Lanka and implications for future crises



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1. Inpatient psychiatric services during the COVID-19 pandemic

Amidst mounting challenges brought on by the pandemic, a rise in mental health issues was anticipated. However, findings on mental healthcare utilization during the pandemic have been variable (Duden et al., 2022). To prepare for future crises, we need to understand how psychiatric admission rates changed during the pandemic.

In Ontario, Canada, psychiatric hospitalizations declined by 30% immediately after the pandemic onset, but returned to near pre-pandemic rates by March 2021 (Saunders et al., 2021). Similarly, in Denmark, the largest decrease in inpatient admissions (19%) occurred three weeks into the first lockdown (Rømer et al., 2021). In Spain, admission rates decreased by 38% (Gómez-Ramiro et al., 2021). In Sweden, psychiatric emergency visits dropped by 16% and 15% in the first and second waves, but hospital admission rates remained unchanged (Hamlin et al., 2022). Comparable data from Asian countries are relatively sparse, but a 2% reduction in bed occupancy rates in psychiatric hospitals in Japan, and an 8% reduction in inpatient admissions for schizophrenia in Korea in 2020 have been reported (Kim, 2022; Usuda et al., 2021). Moreover, Indian psychiatrists reported that during the pandemic, private-sector inpatient admissions declined by an average of 76.7% (Grover et al., 2020). In terms of disorder-specific trends, several studies reported that the greatest decline was in anxiety disorders (Saunders et al., 2021; Gómez-Ramiro et al., 2021), whereas increases in substance-related admissions were noted (Gómez-Ramiro et al., 2021).

2. Psychiatric admission trends in Sri Lanka

We conducted a retrospective study to identify psychiatric admission trends at six tertiary care hospitals in Sri Lanka between 2018 and 2022. Monthly admission rates were extracted from the admission registers of inpatient psychiatric units. Age (years) was classified into four groups: 'Less than 18', '18–39', '40–64', and '65 and above'. Negative binomial regression was used to test the effect of each COVID-19 wave on admission rates. For this analysis, the 2018–2022 period was split into

five: (1) pre-pandemic: January 2018–February 2022; (2) first wave: March–September 2020; (3) second wave: October 2020–March 2021; (4) third wave: April 2021–February 2022; and (5) post-third wave: March–December 2022. This study received an exemption from ethics review.

Over 2018–2022, there were 40,340 psychiatric admissions in total (52.6% male). Compared to pre-pandemic levels, admission rates dropped by 26% ($p < 0.001$) in the first wave, 42% ($p < 0.001$) in the second wave, and 40% ($p < 0.001$) in the third wave, and although there was a rise in 2022 after the third wave, the rates did not return to pre-pandemic levels, remaining 15% lower ($p = 0.007$, see Fig. 1). Male admission rates showed slightly greater reductions during each wave. Among the age categories, the greatest pandemic-related reduction in admissions was observed in the elderly (≥ 65 years) group. There was no significant effect of seasonality on admission rates ($p = 0.233$).

3. Discussion of the findings

Similar to observations in some other countries (Saunders et al., 2021; Rømer et al., 2021), psychiatric inpatient admission rates in Sri Lanka dropped compared to pre-pandemic levels, to an even greater degree than in other countries. While several studies have shown the greatest admission rate drop during the initial lockdown (Saunders et al., 2021; Rømer et al., 2021), in Sri Lanka, this occurred during the second wave. Regarding age groups, in Sri Lanka, the greatest reduction was seen among the elderly, consistent with findings from the UK (Tromans et al., 2020). In some developed countries, admission rates returned to near pre-pandemic levels after the lockdown, whereas Sri Lankan rates lagged, remaining 15% lower even by the end of 2022.

In parallel with this, a time-series analysis of self-harm and suicide in Sri Lanka also found a reduction in hospital admissions for self-poisoning during lockdowns (Rajapakse et al., 2023). In contrast, there was no evidence that suicide rates were altered.

Several reasons would have contributed to the marked drop in admissions in Sri Lanka. Due to travel restrictions, many patients may have been unable to access services, whereas some patients may have avoided

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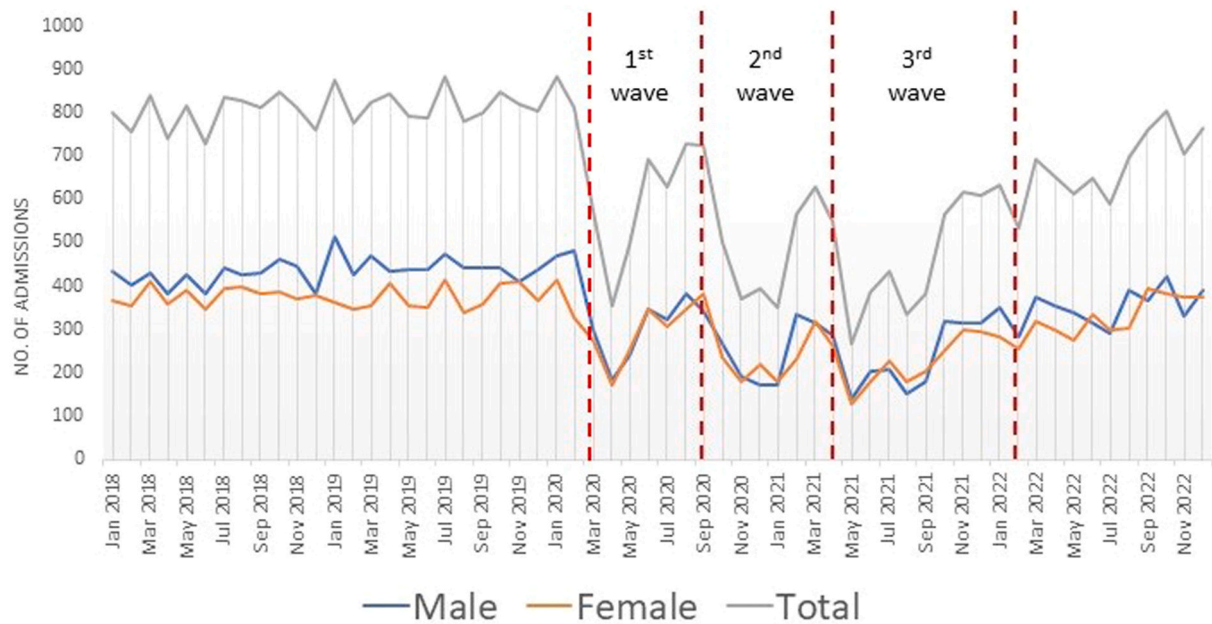


Fig. 1. Total and gender-wise monthly admission rates at six inpatient centres in Sri Lanka between 2018 and 2022. The three waves of the COVID-19 pandemic in Sri Lanka are demarcated by dotted red lines.

hospitals for fear of COVID-19 infection. At psychiatric inpatient units, the number of admissions had to be limited, to reduce congestion and contagion, and due to limited availability of staff and resources.

4. Implications for future crises

The curtailed access to mental health services during a crisis may be construed as a violation of patients' right to health. This is especially important as psychiatric patients are a vulnerable group. Measures that can be used in the future are widening telepsychiatry services, organizing outreach programs, and strengthening community-based services. However, in many Asian countries such as Sri Lanka, telepsychiatry services are in infantile stages, and therefore, psychiatrists must play a more active role in establishing such services (Narvaez, 2022). The effects of a pandemic are far-reaching; for instance, in Sri Lanka, the drop in psychiatric admissions had deleterious effects on undergraduate psychiatric education as well (Baminiwatta et al., 2022). Thus, policymakers, healthcare providers, mental health advocates and educators must draw from the insights gained through this analysis to improve and strengthen mental healthcare systems, ensuring that services are accessible and responsive to future pandemics.

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Declaration of Competing Interest

There are no conflicts of interest to report.

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References

Baminiwatta, A., et al., 2022. Perceived impact of the COVID-19 pandemic on psychiatric training among final-year medical undergraduates in Sri Lanka: an online survey of

- students from Eight Universities. *Acad. Psychiatry* 46, 729–734. <https://doi.org/10.1007/s40596-022-01667-4>.
- Duden, G.S., Gersdorf, S., Stengler, K., 2022. Global impact of the COVID-19 pandemic on mental health services: A systematic review. *J. Psychiatr. Res* 154, 354–377. <https://doi.org/10.1016/j.jpsychires.2022.08.013>.
- Gómez-Ramiro, M., et al., 2021. Changing trends in psychiatric emergency service admissions during the COVID-19 outbreak: report from a worldwide epicentre. *J. Affect. Disord.* 282, 26–32.
- Grover, S., et al., 2020. Impact of COVID-19 pandemic and lockdown on the state of mental health services in the private sector in India. *Indian J. Psychiatry* 62 (5), 488–493. <https://doi.org/10.4103/psychiatry.IndianJPsychiatry.568.20>.
- Hamlin, M., et al., 2022. Changes in psychiatric inpatient service utilization during the first and second waves of the COVID-19 pandemic. *Front. Psychiatry* 13, 829374. <https://doi.org/10.3389/fpsy.2022.829374>.
- Kim, A.M., 2022. Psychiatric hospitalization in Korea, 2011–2020: the impact of the Mental Health Act revision of 2017 in consideration of the COVID-19 pandemic. *Asian J. Psychiatry* 68, 102934. <https://doi.org/10.1016/j.ajp.2021.102934>.
- Narvaez, R.A., 2022. Benefits and challenges of telepsychiatry services in SouthEast Asian nations during the COVID-19 era: An integrative review. *Asian J. Psychiatry* 73, 103114. <https://doi.org/10.1016/j.ajp.2022.103114>.
- Rajapakse, T., et al., 2023. The Impact of the COVID-19 pandemic and lockdowns on self-poisoning and suicide in Sri Lanka: an interrupted time series analysis. *Int J. Environ. Res Public Health* 20 (3), 1833. <https://doi.org/10.3390/ijerph20031833>.
- Rømer, T.B., et al., 2021. Psychiatric admissions, referrals, and suicidal behavior before and during the COVID-19 pandemic in Denmark: a time-trend study. *Acta Psychiatr. Scand.* 144 (6), 553–562.
- Saunders, N.R., et al., 2021. Acute mental health service use following onset of the COVID-19 pandemic in Ontario, Canada: a trend analysis. *Can. Med. Assoc. Open Access J.* 9 (4), e988–e997.
- Tromans, S., et al., 2020. Patterns of use of secondary mental health services before and during COVID-19 lockdown: observational study. *BJPsych Open* 6 (6), e117.
- Usuda, K., et al., 2021. The impact of COVID-19 on inpatient wards at psychiatric hospitals in Japan. *Asian J. Psychiatry* 62, 102720. <https://doi.org/10.1016/j.ajp.2021.102720>.

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