



## Commentary

## The complex picture of self-harm during the COVID-19 pandemic

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Self-harm is one of the strongest predictors of suicide. There have been increased concerns regarding the impact of the COVID-19 pandemic on self-harm in Europe [1] and in other places globally [2], following research showing that population mental health has deteriorated during the pandemic [3,4]. In *The Lancet Regional Health - Europe*, Jollant F et al. [5] examined the impact of COVID-19 on self-harm hospitalisations in France through comprehensive analysis of the French national database *Programme de Médicalisation des Systèmes d'Information* (PMSI). They identified 53,583 self-harm hospitalisations during January to August 2020, and found an overall 8.5% decrease in self-harm hospital admission compared to the same period in 2019. The decrease started from the middle of March 2020 when the national lockdown was implemented, while it did not occur in January, February and in early March before the lockdown. Such patterns of decreased self-harm hospitalisations in 2020 were confirmed by further historical comparison to 2017 and 2018. Jollant F et al. [5] also showed that the decrease was more obvious in younger age groups (<19 years old) and in women. Among those with self-harm admitted to hospital, however, there were increased numbers of severe cases (including self-harm by firearm, jumping from height, drowning), intensive care stay, and self-harm mortality [5]. The study has provided new evidence on the presentation of self-harm as a result of the policy effects of COVID-19, and will have important implications on the management of self-harm across populations during the COVID-19 pandemic.

The findings of decreased self-harm during the COVID-19 in France were consistent to those in the UK. Carr et al. [6] analysed the UK national representative data from Clinical Practice Research Data-link (CPRD), including 14 million individuals and found that the recorded incidence of self-harm during 1st March to 10th September 2020 was significantly lower than expected, in England by 18.0% and in Northern Ireland, Scotland and Wales by 9.0%. The reduced

incidence of self-harm was particularly marked in people aged < 45 years and in women [7].

There are some theories to explain the decrease in self-harm during the COVID-19 pandemic and lockdown periods, particularly in younger age groups, including so-called “pulling-together effect or honeymoon effect” [8], less academic pressure and peer bullying due to the school closedown, more parental care and attention given to children, and increased hospital attendance due to emerged COVID-19 [5]. However, one should bear in mind that the reduction in the recorded incidence of self-harm or in presenting to hospital could be, at least partially, due to a report bias. Patients and their family members might be reluctant to go to the hospital due to fears for being infected by COVID-19 virus. Self-harm represents a diagnostic code with a wide spectrum of severity. For the milder forms of self-harm, the shutdown of public transport and public health messaging discouraging all but essential travel may have represented important factors in their under-representation. And those with the highest barriers to accessing healthcare, for instance lack of a family car or personal internet, may have been most affected. This could be partially reflected in that the self-harm decrease was marked in the most deprived areas [6,7]. These possible factors would particularly affect the report of less severe cases and thus some milder cases of self-harm would be missed out hospitalisations and records in health electronic databases. Other studies from health care settings [9] also showed decreased self-harm referrals to liaison psychiatry. However some population-based questionnaire surveys found that the rate of self-harm during the COVID-19 pandemic was stable, or even increased in Europe [4]. While the PMSI and CPRD datasets are required for further analysis covering the whole picture until at least the end of 2020 (which included the 2nd wave pandemic) to see whether self-harm increased following the initial decrease like suicide events in Japan [8], there is a need of more population-based studies to assess the impact of the COVID-19 pandemic on self-harm in Europe.

Nevertheless, the current national study by Jollant F et al. [5] showed a significantly increased number of self-harm hospitalizations in older people aged 75 and over in France, which would be mostly hit by COVID-19 hospitalizations and mortality. Unlike younger people, elderly suffer from increased social isolation and are more vulnerable to any pandemic and other crises (e.g., political movement) in terms of mental health. Many elders live alone in Europe [10], which would make self-harm relatively easier to be carried out. Based on the current findings of the PMSI, we should pay

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more attention in older people to prevent self-harm in future during the COVID-19 pandemic and lockdown periods.

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RC as the sole author of this comment, contributed to all aspects of the manuscript.

### Declaration of interests

Dr Ruoling Chen has nothing to disclose.

### References

- [1] Henry N, Parthiban S, Farroha A. The effect of COVID-19 lockdown on the incidence of deliberate self-harm injuries presenting to the emergency room. *Int J Psychiatry Med* 2020;91:217420982100doi[doi]. doi: 10.1177/0091217420982100.
- [2] Leske S, Kolves K, Crompton D, Arensman E, de Leo D. Real-time suicide mortality data from police reports in Queensland, Australia, during the COVID-19 pandemic: an interrupted time-series analysis. *Lancet Psychiatry* 2021;8(1):58–63 doi: S2215-0366(20)30435-1 [pii].
- [3] Pierce M, Hope H, Ford T, et al. Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population. *Lancet Psychiatry* 2020;7(10):883–92 doi:S2215-0366(20)30308-4 [pii].
- [4] O'Connor RC, Wetherall K, Cleare S, et al. Mental health and well-being during the COVID-19 pandemic: longitudinal analyses of adults in the UK COVID-19 Mental Health & Wellbeing study. *Br J Psychiatry* 2020;1–8 doi[doi]. doi: 10.1192/bjp.2020.212.
- [5] Jollant F, Roussot A, Corruble E, Chauvet-Gelinier JC, Falissard B, Mikaeloff Y, et al. Hospitalization for self-harm during the early months of the Covid-19 pandemic in France: a nationwide study. *Lancet Regional Health - Europe* 2021 in pressdoi: https://doi.org/10.1016/j.lanpe.2021.100102.
- [6] Carr MJ, Steeg S, Webb RT, et al. Effects of the COVID-19 pandemic on primary care-recorded mental illness and self-harm episodes in the UK: a population-based cohort study. *Lancet Public Health* 2021 doi:S2468-2667(20)30288-7 [pii].
- [7] Kapur N, Clements C, Appleby L, Hawton K, Steeg S, Waters K, Webb R. Impact of the Covid-19 pandemic on the frequency of primary care-recorded mental illness and self-harm episodes in the UK: population-based cohort study of 14 million individuals. *Lancet Psychiatry* 2020 doi:S2215-0366(20)30528-9 [pii].
- [8] Tanaka T, Okamoto S. Increase in suicide following an initial decline during the COVID-19 pandemic in Japan. *Nat Hum Behav* 2021;5(2):229–38 doi[doi]. doi: 10.1038/s41562-020-01042-z.
- [9] Chen S, Jones PB, Underwood BR, et al. The early impact of COVID-19 on mental health and community physical health services and their patients' mortality in Cambridgeshire and Peterborough, UK. *J Psychiatr Res* 2020;131:244–54 doi: S0022-3956(20)30984-5 [pii].
- [10] Chen R, Wei L, Hu Z, Qin X, Copeland JR, Hemingway H. Depression in older people in rural China. *Arch Intern Med* 2005;165(17):2019–25 doi:165/17/2019 [pii].