



Hospital-presenting self-harm during January-October 2020

Data Briefing, April 2021

The COVID-19 pandemic and associated measures to address it have led to an increase in individual and population level risk factors for self-harm and suicide. These include anxiety, social isolation, loneliness, sudden bereavement, job loss, economic uncertainty, substance misuse, fear of infection and restrictions on health activities and access to healthcare services (Burke et al., 2020; Fancourt et al., 2020; Niedzwiedz et al., 2020; O'Connor et al., 2020; Yang et al., 2020). As a result, there are concerns that the pandemic may result in an increase in self-harm and suicide. Recent data from 21 high- and middle-income countries show that suicide numbers remained unchanged or declined in the initial months of the pandemic (Pirkis et al 2021). Furthermore, research from England showed a 18% decrease in hospital-presenting self-harm during 12 weeks of lockdown from March 2020, compared to the equivalent period of 2019 (Hawton et al., 2021). Ongoing surveillance is important to monitor the impact of the pandemic on self-harm and suicide, as the long-term mental health and economic effects become clearer.

The National Self-Harm Registry Ireland (NSHRI), operated by the National Suicide Research Foundation (NSRF) and funded by the Health Service Executive National Office for Suicide Prevention, collects data on self-harm presentations to hospital emergency departments in the Republic of Ireland. This data briefing provides information on the monthly number of self-harm presentations to 18 hospitals during January-October 2020, compared to presentations made to the same hospitals in the equivalent months of 2018 and 2019.

These 18 hospitals provide nationally-representative data given they are spread across the country and are located in the centres of large cities, in city suburbs and in large towns. In 2018 and 2019, these hospitals accounted for 61% of the national number of self-harm presentations recorded by the NSHRI. It should be noted that the data presented for 2020 are provisional and subject to change.

The NSHRI recorded a total of 6,219 self-harm presentations to the 18 hospitals during January-October 2020, equivalent to 20.4 self-harm presentations per day. During the same ten months of 2018-2019, a total of 12,879 self-harm presentations to these 18 hospitals were recorded, equating to a rate of 21.2 per day. Therefore, the rate of hospital-presenting self-harm was 4% lower during these months in 2020 compared to 2018-2019 (Rate ratio=0.96, 95% confidence interval=0.93, 0.99).

There were significant reductions in hospital-presenting self-harm in March, April and October 2020 (Figure 1).

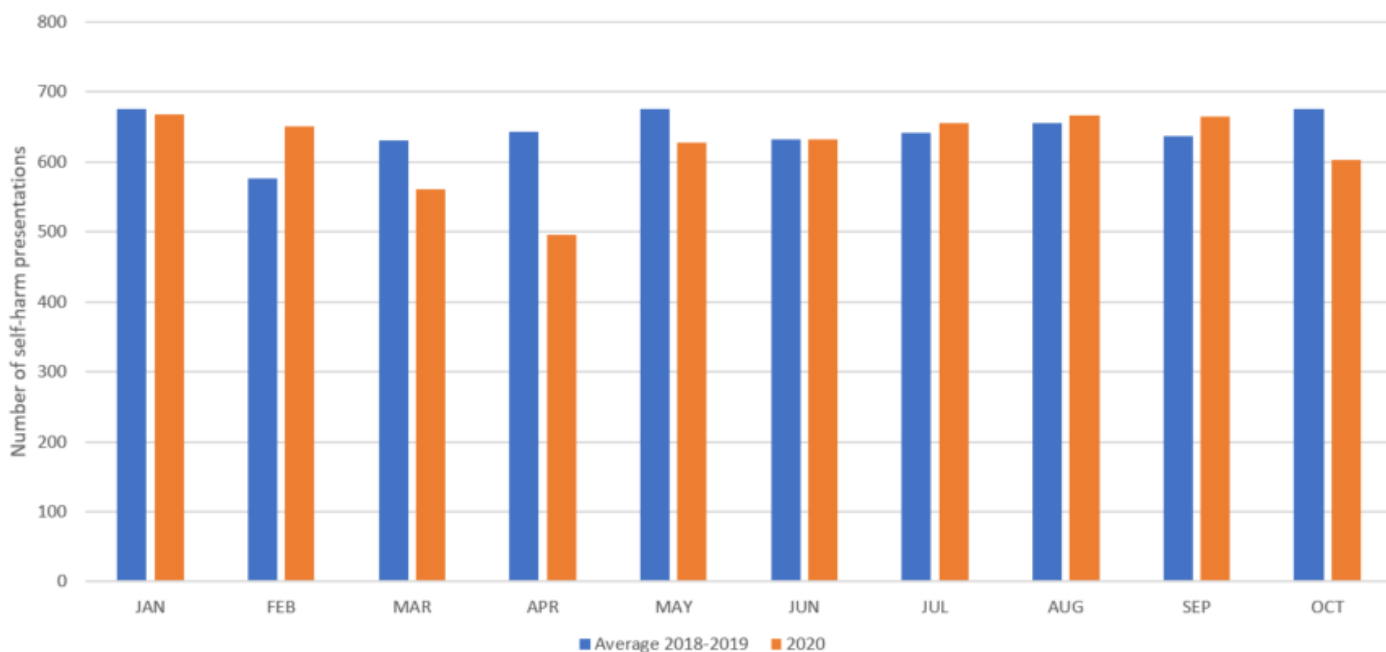


Figure 1: Monthly self-harm presentations to 18 hospitals in Ireland during January-October 2018-2019 and 2020

In March 2020, the first month of the outbreak of COVID-19 in Ireland, there were 560 self-harm presentations to the 18 hospitals. The daily rate was 18.1, which is 11% lower than the rate of 20.3 per day in March 2018-2019 (Table 1).

The Irish government’s stay-at-home restrictions came into force on March 27th. April 2020 saw 495 self-harm presentations to the 18 hospitals. The daily rate was 16.5 which is 23% lower than the daily rate of 21.4 in April 2018-2019. While the stay-at-home restrictions continued until mid-May 2020, the rate of self-harm presentations was close to usual levels that month – 7% lower at 20.2 per day compared to 21.8 per day in May 2018-2019.

As was the case in January 2020, the rate of self-harm presentations in the months from June to September 2020 was almost identical to the rate observed in the same months of 2018-2019. This pattern of a return to usual levels is similar to reports on the impact of COVID-19 on hospital-presenting self-harm in other high-income countries (John et al., 2020, Hawton et al., 2020).

During October 2020, the second wave of COVID-19 in Ireland reached its peak and the government increased restrictions culminating in the introduction of Level 5 restrictions on October 21st. The daily rate of hospital-presenting self-harm during the month was 19.4 per day, 11% lower than the rate of 21.8 presentations per day in October 2018-2019.

Table 1: Monthly self-harm presentations to 18 hospitals during January-October 2020 and 2018-2019

Month	Number (daily rate) in 2020	Average number (daily rate) in 2018-2019	Rate ratio (95% confidence interval)
January	667 (21.5)	1350 (21.8)	0.99 (0.90, 1.08)
February	650 (22.4)	1152 (20.6)	1.09 (0.99, 1.20)
March	560 (18.1)	1260 (20.3)	0.89 (0.80, 0.98)
April	495 (16.5)	1285 (21.4)	0.77 (0.69, 0.85)
May	627 (20.2)	1350 (21.8)	0.93 (0.84, 1.02)
June	632 (21.1)	1263 (21.1)	1.00 (0.91, 1.10)
July	655 (21.1)	1283 (20.7)	1.02 (0.93, 1.12)
August	666 (21.5)	1311 (21.1)	1.02 (0.93, 1.12)
September	665 (22.2)	1273 (21.2)	1.04 (0.95, 1.15)
October	602 (19.4)	1352 (21.8)	0.89 (0.81, 0.98)
Total	6,219 (20.4)	12,879 (21.2)	0.96 (0.93, 0.99)

Note: The rate ratio (RR) is the daily rate for a period in 2020 divided by the daily rate in the same period of 2018-2019. RRs equal or close to one indicate that the rate in 2020 was equal or similar to the rate in 2018-2019. RRs greater than one indicate that the rate in 2020 was higher than in 2018-2019. RRs less than one indicate that the rate was lower in 2020. The difference between the rate in 2020 and 2018-2019 is statistically significant if the 95% confidence interval for the RR does not include the value one, which is the case for March, April, October and the total period.

Key Findings

- Overall, the rate of hospital-presenting self-harm in January-October 2020 was 4% lower than the rate in the same period of 2018-2019.
- In March 2020, during the outbreak of COVID-19 in Ireland, the rate of hospital-presenting self-harm was 11% lower than in March 2018-2019.
- During the 'stay-at-home' month of April 2020, the rate was 23% lower than in April 2018-2019.
- In October 2020, when the second wave of COVID-19 peaked and Level 5 restrictions were introduced, the rate of hospital-presenting self-harm was 11% lower than in October 2018-2019.

For further information, please contact:

Dr Paul Corcoran,
 Head of Research,
 National Suicide Research Foundation
 E-mail: pcorcoran@ucc.ie

References

- Burke, T.;** Berry, A.; Taylor, L.K.; Stafford, O.; Murphy, E.; Shevlin, M.; McHugh, L.; Carr, A. Increased Psychological Distress during COVID-19 and Quarantine in Ireland: A National Survey. *J. Clin. Med.* 2020, 9, 3481. doi.org/10.3390/jcm9113481
- Fancourt D,** Steptoe A, Bu, F. Trajectories of anxiety and depressive symptoms during enforced isolation due to COVID-19: longitudinal analyses of 36,520 adults in England. *Lancet Psychiatry* 2020 doi.org/10.1101/2020.06.03.20120923
- Hawton K,** Casey D, Bale E, Brand F, Ness J, Waters K, Kelly S, Geulayov G. Self-harm during the early period of the COVID-19 pandemic in England: comparative trend analysis of hospital presentations. *Journal of affective disorders.* 2021 Mar 1;282:991-5.
- John A,** Pirkis J, Gunnell D, Appleby L, Morrissey J. Trends in suicide during the covid-19 pandemic. *BMJ* 2020; 371 :m4352. doi: <https://doi.org/10.1136/bmj.m4352>
- Niedzwiedz CL,** Green MJ, Benzeval M, *et al.* Mental health and health behaviours before and during the initial phase of the COVID-19 lockdown: longitudinal analyses of the UK Household Longitudinal Study. *J Epidemiol Community Health* 2020. doi: 10.1136/jech-2020-215060
- O'Connor R,** Wetherall K, Cleare S, McClelland H, Melson A, Niedzwiedz C, *et al.* Mental health and wellbeing during the COVID-19 pandemic: Longitudinal analyses of adults in the UK COVID-19 Mental Health & Wellbeing study. *The British Journal of Psychiatry* 2020: 1-17. doi:10.1192/bjp.2020.212
- Pirkis J** *et al.* Suicide trends in the early months of the COVID-19 pandemic: an interrupted time-series analysis of preliminary data from 21 countries. *Lancet Psychiatry* 2021 [https://doi.org/10.1016/S2215-0366\(21\)00091-2](https://doi.org/10.1016/S2215-0366(21)00091-2)
- Yang S,** Lin H, Zhu J, Chen Y, Wang N, Zhao Q, Fu C. Depression and anxiety symptoms among returning workers during the COVID-19 period in East China. *Soc Psychiatry Psychiatr Epidemiol.* 2020 Nov 24:1–8. doi: 10.1007/s00127-020-01983-w