



Hospital-presenting self-harm during January-December 2020

Data Briefing, July 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 15 hospitals during January-December 2020, compared to presentations made to the same hospitals in the equivalent months of 2018 and 2019.

These 15 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, though only one Dublin hospital could be included. In 2018 and 2019, these hospitals accounted for 45% 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 5,432 self-harm presentations to the 15 hospitals during January-December 2020, equivalent to 14.8 self-harm presentations per day. A total of 11,169 self-harm presentations to these 15 hospitals were recorded for the 24 months of 2018-2019, equating to a rate of 15.3 per day. Therefore, the rate of hospital-presenting self-harm was 3% lower during 2020 compared to 2018-2019 (Rate ratio=0.97, 95% confidence interval=0.94, 1.00).

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

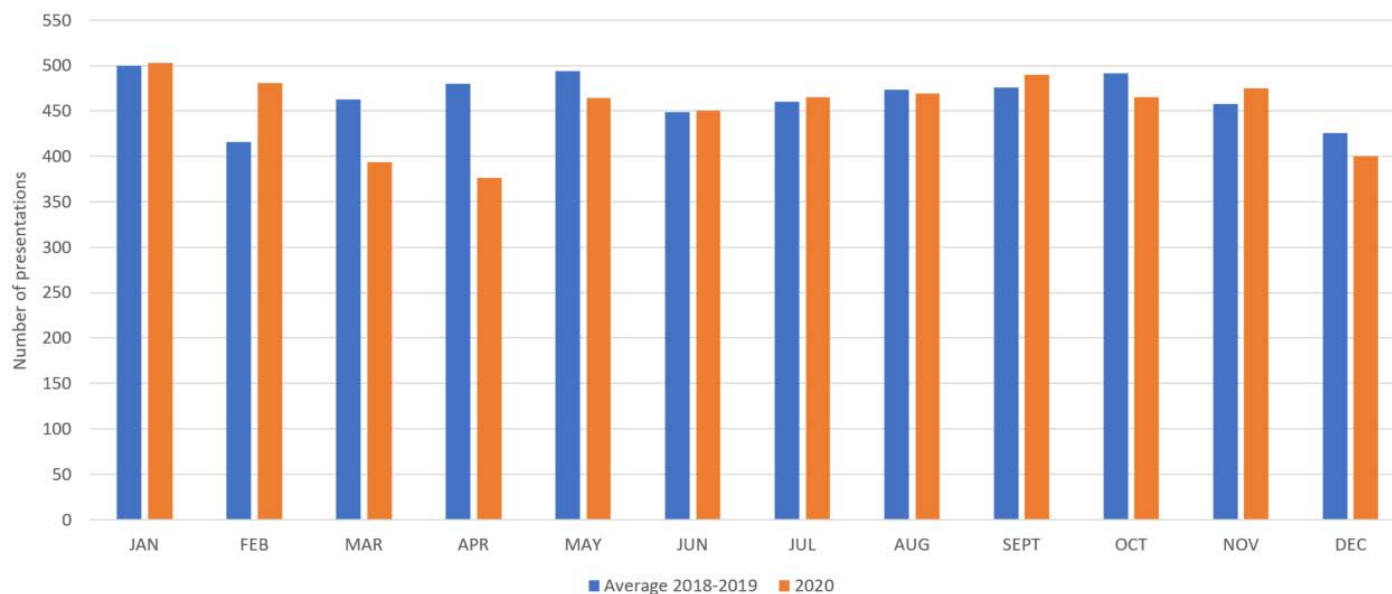


Figure 1: Monthly self-harm presentations to 15 hospitals in Ireland during 2018-2019 and 2020

In March 2020, the first month of the outbreak of COVID-19 in Ireland, there were 394 self-harm presentations to the 15 hospitals. The daily rate was 12.7, which is 15% lower than the rate of 14.9 per day in March 2018-2019 (see table 1).

The Irish government’s stay-at-home restrictions came into force on March 27th. April 2020 saw 376 self-harm presentations to the 15 hospitals. The daily rate was 12.5 which is 22% lower than the daily rate of 16.0 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 – 6% lower at 15.0 per day compared to 15.9 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 to the 15 hospitals during that month was just 5% lower than it was in October 2018-2019. The Level 5 restrictions lasted throughout November 2020 during which time the rate of hospital-presenting self-harm to the 15 hospitals was 4% higher than it was in the same month in 2018-2019. Restrictions were lifted for most of December and the rate of hospital-presenting self-harm to the 15 hospitals during that month was 6% lower than it was in December 2018-2019. The differences observed for October-December in 2020 versus 2018-2019 were not statistically significant.

Table 1: Monthly self-harm presentations to 15 hospitals during 2020 and 2018-2019

Month	Number (daily rate) in 2020	Average number (daily rate) in 2018-2019	Rate ratio (95% confidence interval)
January	503 (16.2)	999 (16.1)	1.01 (0.90, 1.12)
February	481 (16.6)	831 (14.8)	1.12 (1.00, 1.25)
March	394 (12.7)	925 (14.9)	0.85 (0.76, 0.96)
April	376 (12.5)	960 (16.0)	0.78 (0.70, 0.88)
May	464 (15.0)	988 (15.9)	0.94 (0.84, 1.05)
June	450 (15.0)	898 (15.0)	1.00 (0.89, 1.12)
July	465 (15.0)	920 (14.8)	1.01 (0.90, 1.13)
August	469 (15.1)	947 (15.3)	0.99 (0.89, 1.11)
September	490 (16.3)	952 (15.9)	1.03 (0.92, 1.15)
October	465 (15.0)	983 (15.9)	0.95 (0.85, 1.06)
November	475 (15.8)	915 (15.3)	1.04 (0.93, 1.16)
December	400 (12.9)	851 (13.7)	0.94 (0.83, 1.06)
Total	5432 (14.8)	11169 (15.3)	0.97 (0.94, 1.00)

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 and April.

Key Findings

- Overall, the rate of hospital-presenting self-harm to the 15 hospitals with available data was 3% lower in 2020 than it was in 2018-2019.
- In March 2020, during the outbreak of COVID-19 in Ireland, the rate of hospital-presenting self-harm was 15% lower than in March 2018-2019.
- During the 'stay-at-home' month of April 2020, the rate was 22% lower than in April 2018-2019.

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