

THE IMPACT OF COVID-19 ON MENTAL HEALTH PRESENTATIONS TO TEMPLE STREET CHILDREN'S UNIVERSITY HOSPITAL EMERGENCY DEPARTMENT

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1. INTRODUCTION

- On March 12th, 2020, the Irish government implemented disease containment measures due to the COVID-19 pandemic leading to widespread social isolation and absence of daily routine [1].
- Evidence gathered after the SARS epidemic showed that 33.4% of quarantined children availed of mental health services due to anxiety and adjustment disorders, underscoring the impact of epidemics on paediatric mental health [2].
- We carried out a prospective cohort study that aimed to highlight the impact of COVID-19 on paediatric mental health presentations to the Emergency Department (ED) at Temple Street Children's University Hospital (TSCUH).

2. METHODS

ED mental health presentations from 2019 (n=79) and 2020 (n=60) were compared. Ten variables were prospectively gathered for presentations from March to April 2020 including – reason for ED presentation, preliminary diagnoses and prevalence of suicidal intent. We retrospectively reviewed presentations in the same timeframe in 2019 and compared findings.

3. RESULTS

- Results indicated a **24.1%** ↓ in ED presentation numbers from 2019 to 2020.
- Proportions of psychiatric ED presentations during TSCUH out-of-hours ↓ by **7.5%**.
- Proportions of re-presentations to ED ↑ by **43.0%**.

Table 1: Total Presentation Numbers and Demographic Details for 2019 and 2020 ED psychiatric presentations.

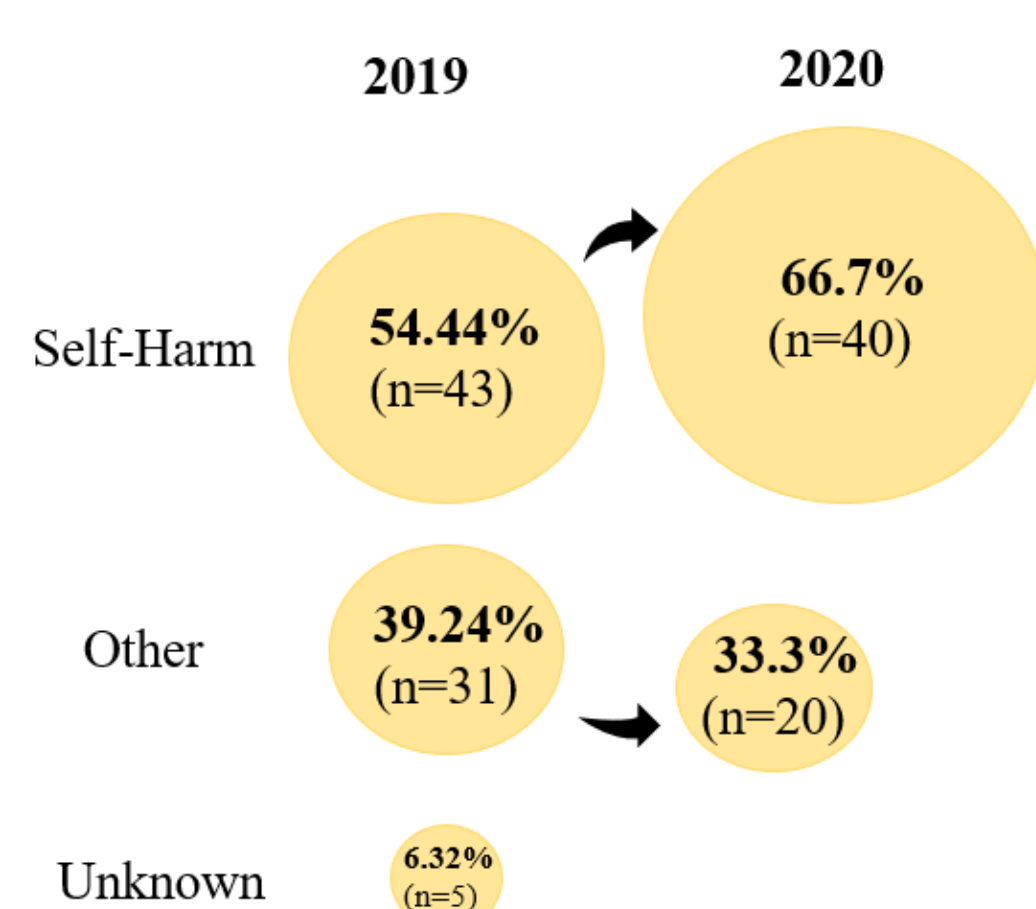
Demographic Details	March & April 2019	March & April 2020
Total Presentations	100 (n=79)	100 (n=60)
Gender Profile		
Male	27.8 (n=22)	36.7 (n=22)
Female	72.2 (n=57)	63.3 (n=38)
Age Profile (Years)		
Minimum, Maximum	6, 15	10, 15
Range	9	5
Median (IQR)	14 (2)	14 (2)
Time of ED presentation		
Normal working hours	32.5 (n=25)	40 (n=24)
Out of hours	67.5 (n=52)	60 (n=36)

Table 2: Trends in Patient History for Psychiatric ED presentations in 2019 and 2020.

	March and April 2019	March and April 2020
New presenter	60.8 (n=48)	31.7 (n=19)
Previous presenter	25.3 (n=20)	68.3 (n=41)
Unknown	13.9 (n=11)	–
Total	100 (n=79)	100 (n=60)

REASON FOR ED PRESENTATION.

- Self-harm presentations ↑ by **12.3%**.



TRENDS IN PRELIMINARY DIAGNOSES

- A **26.97%** increase in the percentage of ED presentations with multiple, defined by at least two, preliminary diagnoses was seen in 2020.
- Increases in the proportions of ED presentations with **emotional (15.3%), behavioural (16.8%) and neurodevelopmental (14.7%)** disorders was observed.

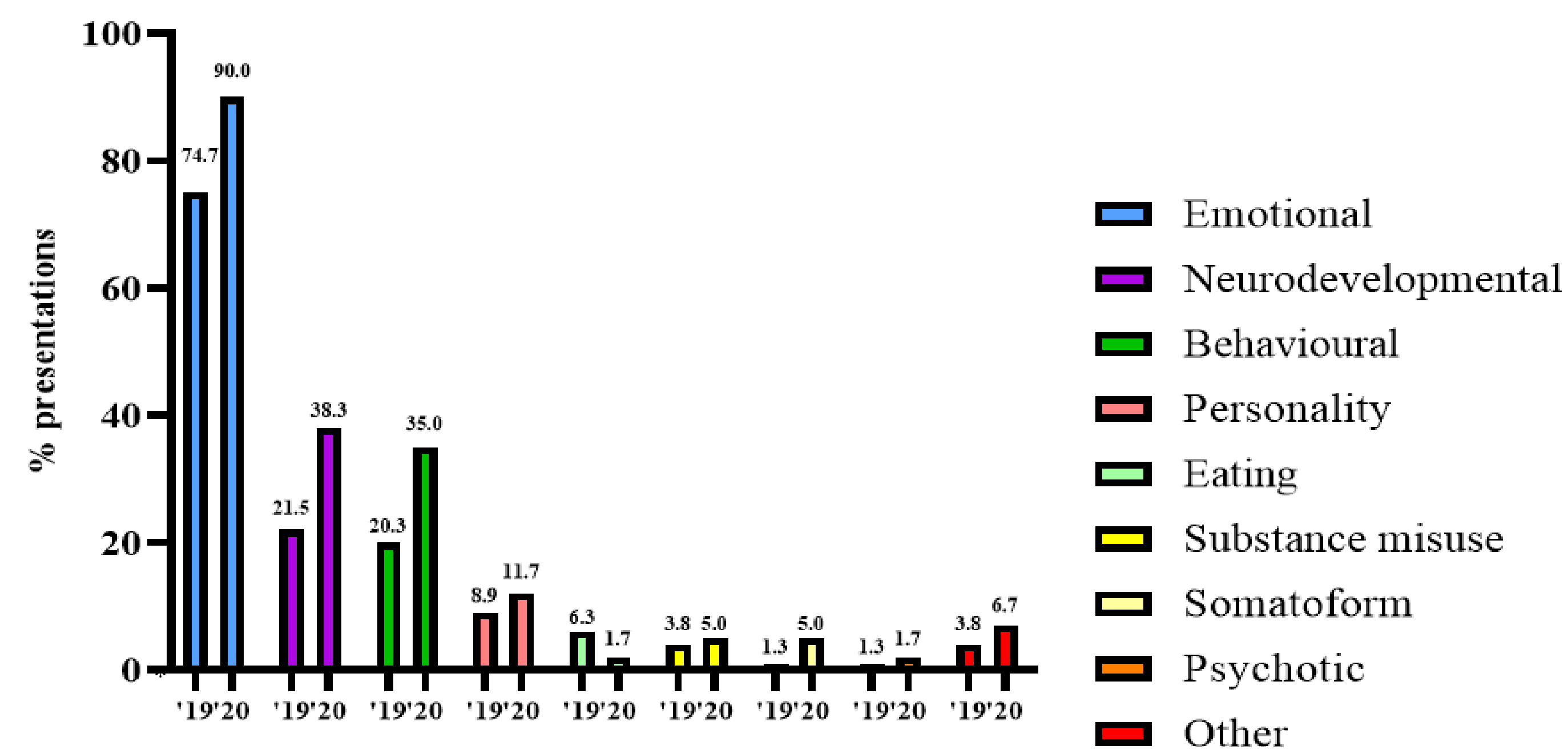


Figure 1: Trends in preliminary diagnoses from 2019 to 2020. Figure presents the percentage of presentations with a specific disorder. For example, 74.7% (n=35) of psychiatric ED cases presented in March & April 2019 had an emotional disorder.

TRENDS IN ED PRECIPITANTS

- Increases in the proportion of ED psychiatric presentations listing a **row with a family member (9.8%), row with a friend (6.2%) and social isolation (7.2%)** as an ED precipitant were observed in 2020. The proportion of ED psychiatric presentations listing **school pressure (18%)** as a precipitant decreased.

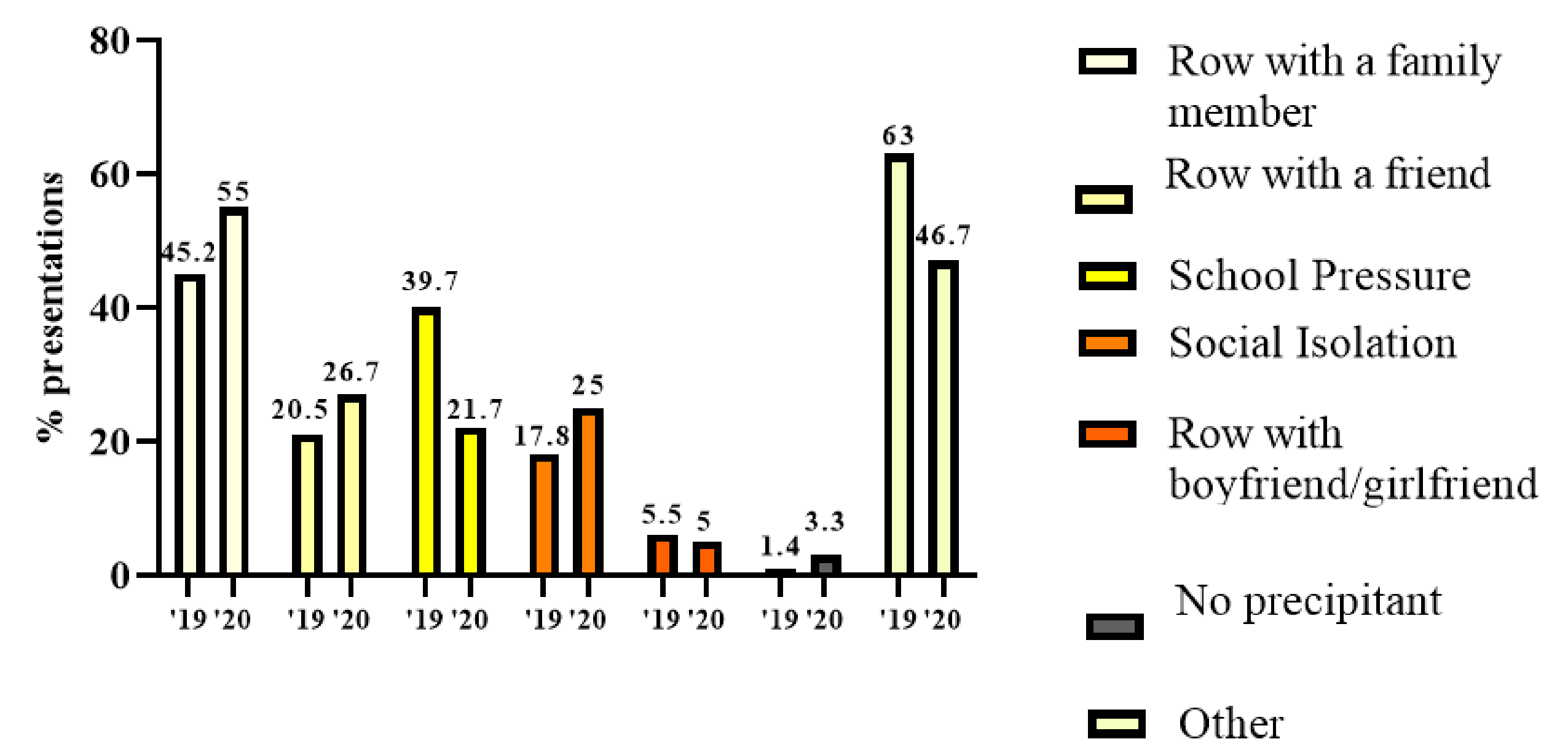
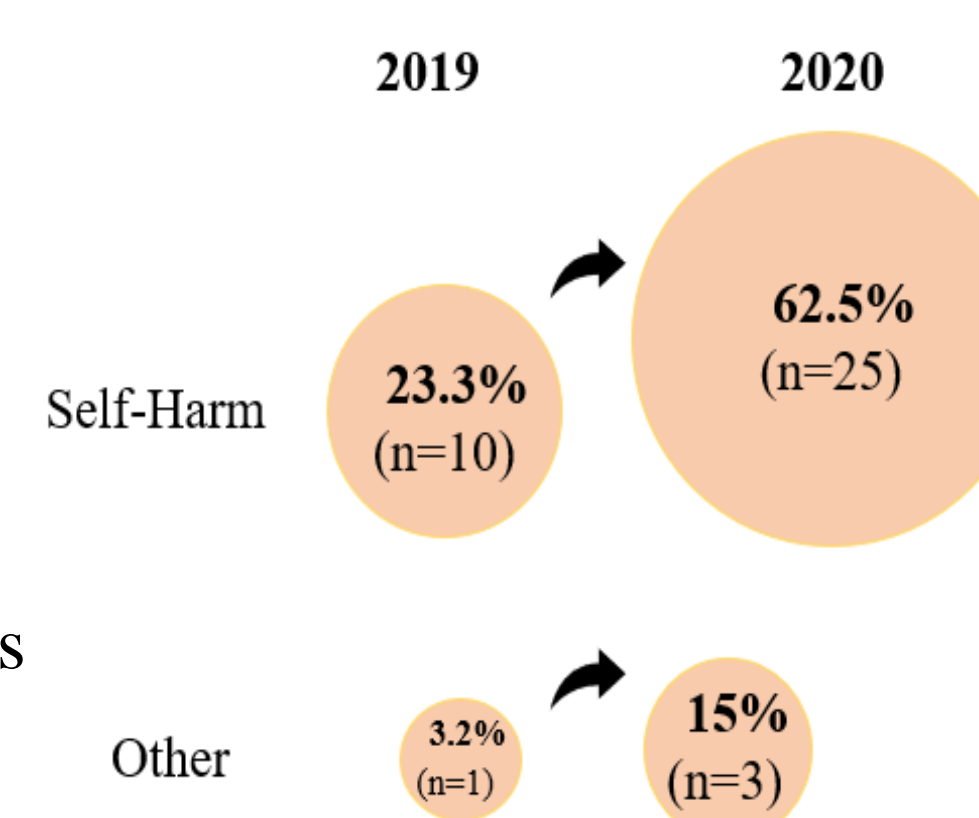


Figure 2: Trends in ED precipitants from 2019 to 2020. Figure presents the percentage of ED presentations listing a specific precipitant. For example, 45.2% (n=33) of psychiatric ED presentations in March & April 2019 listed row with a family member as an ED precipitant.

SUICIDAL INTENT AMONGST PSYCHIATRIC ED PRESENTATIONS

- Suicidal intent amongst all ED psychiatric presentations ↑ by **32.8%**.



- Amongst **self-harm** presentations specifically, suicidal intent ↑ by **39.2%**.

- ED psychiatric presentations with a **family history of self-harm** ↑ by **14.9%** in 2020.

- ED psychiatric presentations from **care** ↑ by **7.6%** in 2020.

- Use of **psychotropic medication** amongst ED psychiatric presentations ↑ by **30.6%** in 2020.

- ED psychiatric presentations stating their presentation was **effected by the COVID-19 pandemic** ↑ by **46.5%** from March to April 2020.

4. CONCLUSIONS

These findings indicate higher numbers of complex presentations to this ED during the COVID-19 pandemic compared to the same timeframe in 2019. These findings underscore the safeguarding of appropriate mental health service provisions during COVID-19. They may also delineate the effect of COVID-19 on increasing mental health issues in children and adolescents already at high risk. Further research is needed to explore the reasons for these findings, with a view to proactively manage these vulnerable cases, especially with the imminent risk of further COVID-19 outbreaks here in Ireland.