



Referrals and admissions from paediatric and medical hospitals to a Child and Adolescent inpatient mental health service: A longitudinal analysis over the period of the COVID-19 pandemic



Rafferty G, Legris Z, Parker S, Doody B

Linn Dara Approved Centre, Cherry Orchard Hospital, Ballyfermot

Introduction

The admission of young people to inpatient psychiatric units represents those requiring a series of complex interventions or intense interventions that cannot be provided in the community. The reasons for admitting children and adolescents to inpatient units are laid out in the Child and Adolescent Mental Health Services (CAMHS) standard operating guidelines (2019) "Referrals accepted for admission will in general have a severe mental illness and where there is clear evidence that: » Intensive treatment is required that cannot be provided in the community or at home, such as when the mental illness affects all aspects of the young person's life. » There is a high level of risk due to mental illness that cannot be safely managed in the community and where admission would be expected to manage this risk."¹ The ongoing COVID-19 pandemic has impacted CAMHS markedly and in a variety of ways. Over the past 18 months we have witnessed a once in a generation global health emergency unfold. It has had profound consequences for economic and business sectors, health services and the social fabric of society. It is likely to continue to negatively impact mental well-being in both direct and indirect ways.² Prior to the pandemic, CAMHS inpatient units had a stable referral pattern; the data analysed below suggests changes to these patterns and aims to demonstrate the impact of COVID-19 on referrals to the Linn Dara Centre (LDAC). Our data provides clear information of the impact of the pandemic on the demands placed on inpatient units.

Method

LDAC is a 24 bedded inpatient unit with 8 dedicated eating disorder beds. Data analysed was obtained from information gathered from weekly referrals meetings in LDAC. The information collected includes age, referrer, treating community CAMHS team, reason for referral, and outcomes of referrals meeting. This provides a rich source for analysis of the patterns of referral and admission. We had access to the data sets for those admitted to LDAC and followed these over the study period; focusing length of time to admission and reasons for admission. We analysed referral data from 01/01/2019 to 31/07/2021. This data was kept confidential in accordance with GDPR regulations. The demographics of the referred and admitted young people is also available for analysis.

Results

Discussion

Table 1: Referrals and admissions during the study period

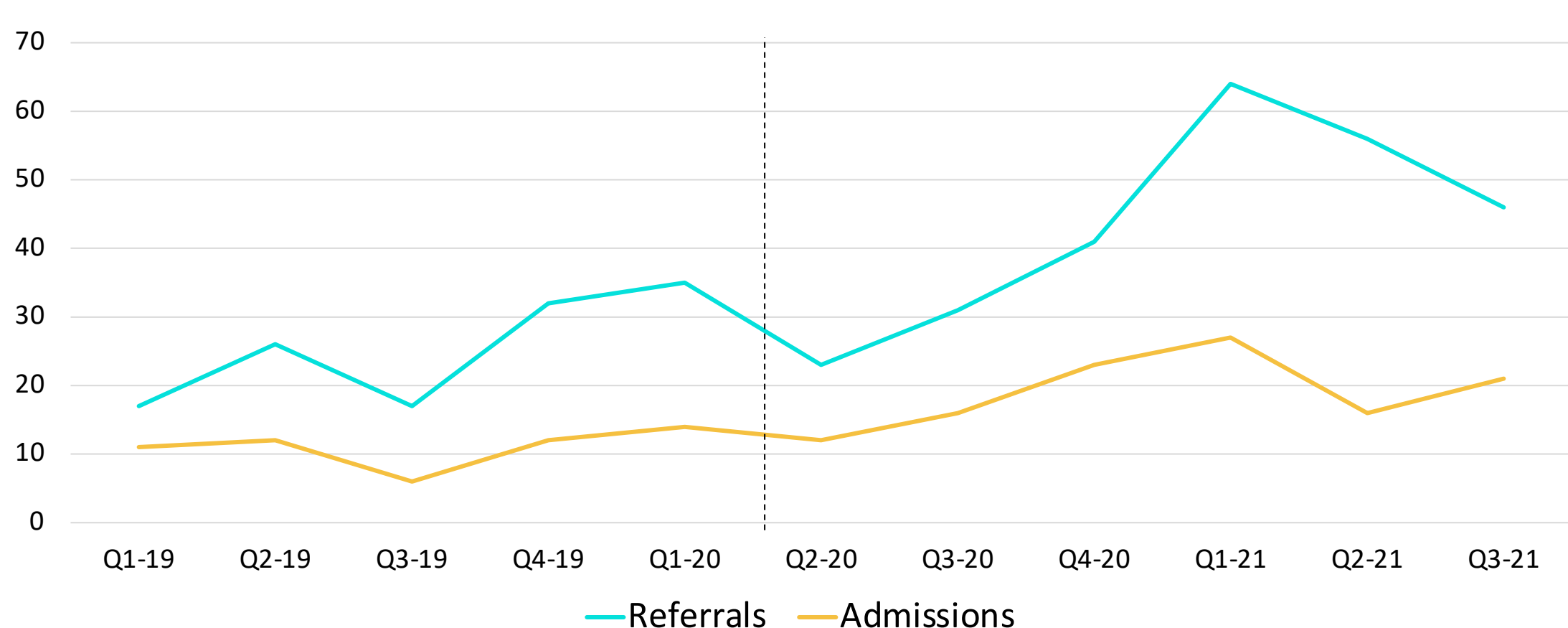


Table 2: Referrals for DSH / SI compared to total referrals during study period

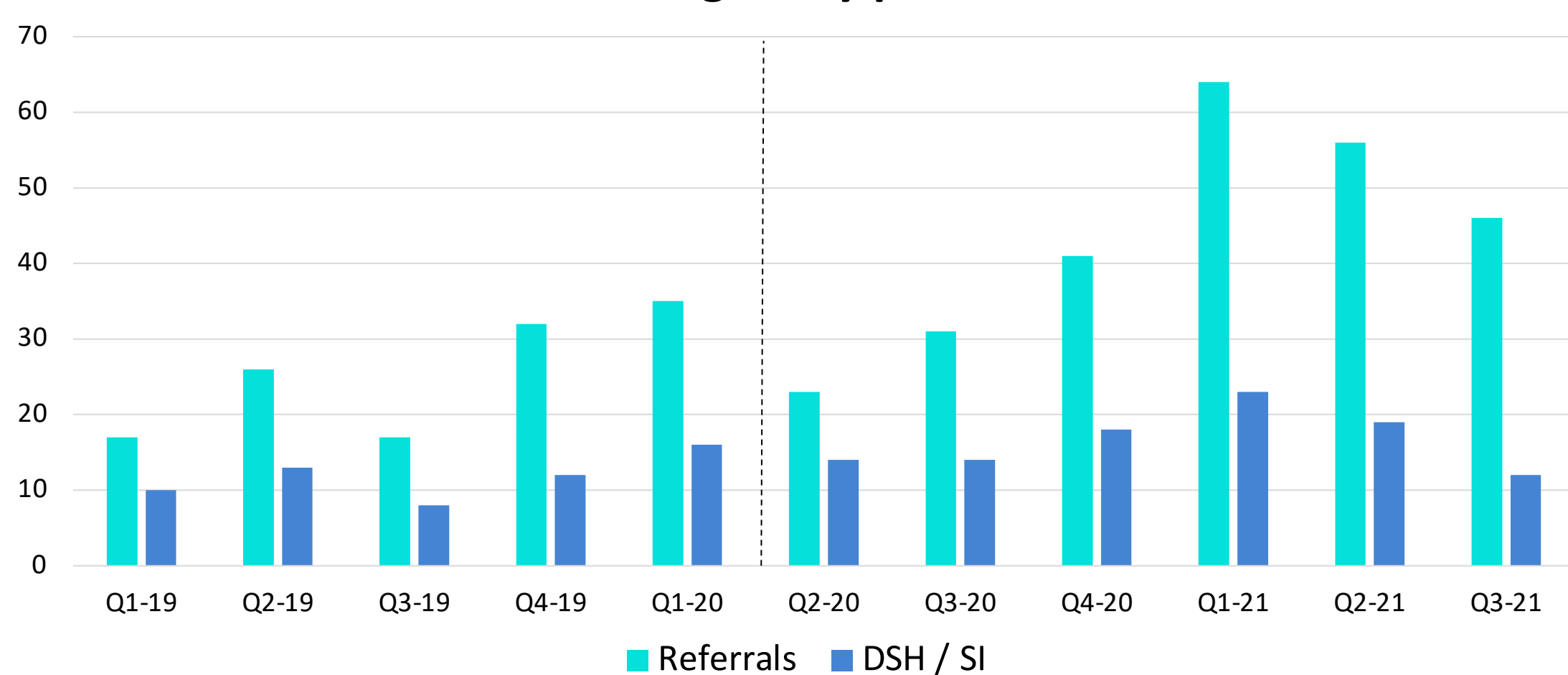
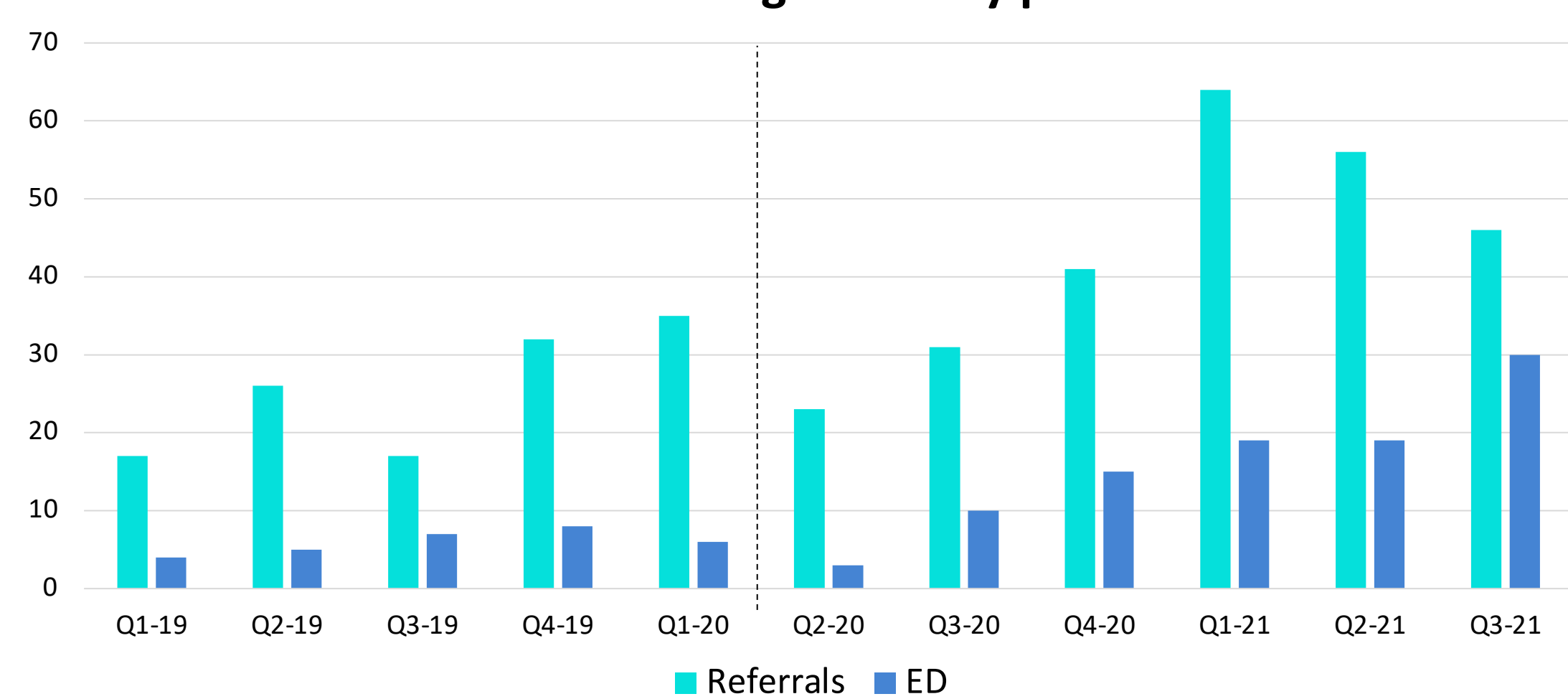


Table 3: referrals for eating disorders compared to total referrals during the study period



----- First COVID19 lockdown 27/03/2020

Table 1 summarises the various reasons for referrals and admissions to LDAC, from inpatient medical units. Q1 – Q4 represents the quarters, and these are present for 2019, 2020 and the first half of 2021. We noted a 141% increase in referrals and 162% increase in admissions between 2019 and 2020. The effect is more marked if one compares the second half of 2019 with the same period in 2020; essentially a pre-COVID-19 vs. COVID-19 comparison. As can be noted from tables 2 and 3 the presentations of DSH increased significantly initially, whilst a more delayed effect is noted with eating disorders.

The influence of the global COVID-19 pandemic has been multi-faceted, as have government responses to it (including imposition of various 'lockdown' measures). Several researchers in the Irish context have commented on the change of referral patterns over the pandemic.^{3,4} The child and adolescent population has been particularly affected by the current public health crisis. Whilst the physical health impacts of the pandemic on children and adolescents has been relatively minor, the mental health impact has been marked. This has been demonstrated at a community level, liaison psychiatric level, and with our data, increased demands on inpatient treatment are evident.

Multiple important rites of passage have been seriously disrupted; the transition from primary to secondary school, senior school to employment or third level, cultural practices (such as confirmations and grieving processes), to name a few. These changes, allied with the withdrawal of external supports to young people such as teachers, youth workers or sports or social club team leaders, has placed young people in increasingly vulnerable positions. This effect is compounded by parents not being able to go to work, families living in very close quarters and the normal safety valves no longer functioning. The COVID-19 pandemic and its sequelae is not without its effects on the adult population, particularly relating to addiction problems and domestic violence as well as financial insecurity.^{5,6} This has undoubtedly negatively impacted on the well-being of their children.

During the pandemic many GP practices were limited in those they could see. This lends increased significance to our data, as young people deprived of access to primary care have likely been forced towards crisis presentation in order to have their needs met. Therefore, examining referrals from inpatient units may illustrate the effect of COVID-19 on the wider health service, as well as CAMHS. What we have observed is a bi-modal presentation. Initially, with the first lockdown and early phases of the pandemic we noticed a rise in self-harm and suicidal ideation. This may represent an acute stress response to the pandemic, especially with the removal of protective factors such as school or peer support. In the latter part of the pandemic restrictions, we observed higher rates of eating disorders. We noted no change in psychotic or affective disorders, which is unsurprising.

Many commentators have noted a significant upward trend in presentations of eating disorders, during the second half of 2020 and in the first two quarters of 2021. There has also been an observed decrease in age of presentation.⁵ Our study examines referrals from acute medical units and therefore will only detect the most severe presentations. We postulate, however, that there is a lead-in time for eating disorders directly attributable to the onset of the COVID-19 pandemic.⁷ We are witnessing the impact on child and adolescent mental health of the pandemic, particularly with regard to social structure, routine and peer support. This particularly affects vulnerable individuals.

The provision of inpatient beds for eating disorder programmes is highlighted by the protracted wait of young people on acute medical wards needing admission. LDAC has 8 eating disorder beds and these are the only beds for the under 15 category and / or those requiring nasogastric feeding in Dublin, Leinster and southern Ulster. The ongoing impact of COVID-19 on the prevalence of eating disorders will need to be monitored to allow adequate service provision.

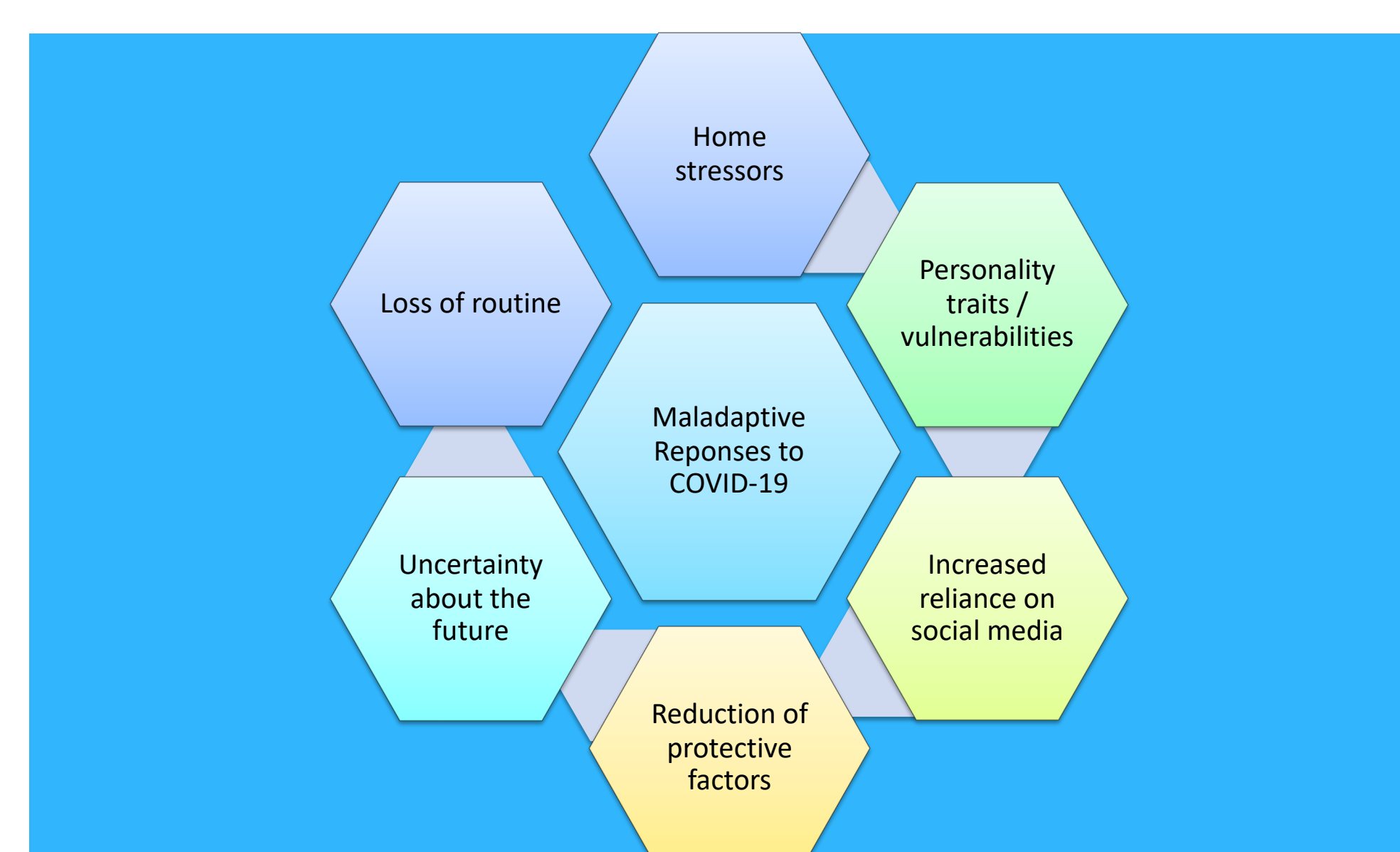


Figure 1: Psychosocial factors in the mental health responses to COVID-19

Conclusion

The pandemic has significantly increased referrals and admissions to LDAC. The increase is due to increased prevalence of suicidal ideation, deliberate self-harm and eating disorders. There would appear to be an immediate effect of the COVID-19 pandemic on self-harm and suicidality. The effect on eating disorders is delayed and may be more enduring.

References:

1. "Standard operating Guidelines in CAMHS" HSE 2019
2. McNicholas F, Lyne J, Mental health and the Covid19 Pandemic. Irish Journal of Psychological Medicine, September 2020
3. McNicholas F, Kelleher L, Hedderman E, Lynch F, Healy E, Thornton T, Barry E, Kelly L, McDonald J, Holmes K, Kavanagh G, Migone M. Referral patterns for specialist child and adolescent mental health services in the Republic of Ireland during the COVID-19 pandemic compared with 2019 and 2018. *BJPsych Open*. 2021 May 3;7(3):e91. doi: 10.1192/bjpo.2021.48. PMID: 33938419; PMCID: PMC8111180.
4. Tsunami of young people seeking mental health care but too few beds, say consultants Irish times 24th of August 2021
5. de Miranda, DM, da Silva Athanasio, B, de Sena Oliveira, AC, Silva, AC. How is COVID-19 pandemic impacting mental health of children and adolescents? *Int J Disaster Risk Reduct* 2020; 51: 101845. [CrossRef/Google Scholar](https://doi.org/10.1016/j.ijdrr.2020.101845)
6. Alana K. Otto, Jessica M. Jary, Julie Sturza, Catherine A. Miller, Natalie Prohaska, Terrill Bravender and Jessica Van Huyen Medical Admissions Among Adolescents With Eating Disorders During the COVID-19 Pandemic, *Pediatrics* September 2021, e2021052201; DOI: <https://doi.org/10.1542/peds.2021-052201>
7. 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):883-892