

## Adolescents Presenting with Mental Health Crises

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### Abstract

#### **Aims**

The aim of the study is to examine emergency mental health (MH) presentations and assessments of adolescents (16-18) presenting to a Dublin adult emergency department (ED).

#### **Methods**

Clinical data was collected on all patients over a 12 month period.

#### **Results**

Seventy seven adolescents presented, the majority out of hours (n=58, 75%) and with either self-harm (n=34, 44%) or suicidal ideation (n=28, 36%), where females significantly outnumbered males (89% vs 66%; p=.028). Other presentations included low mood, anxiety and behavioural problems, and following assessment from an adult mental health service team member, 55% (n=39) were given an Axis I psychiatric diagnosis. Almost all adolescents were discharged following assessment (n=68, 96%), the majority being referred on to Child and Adolescent Mental Health Service (CAMHS) (55, 78%).

#### **Conclusion**

Crisis presentations to EDs often occur in adolescents with co-existing psychiatric disorders, and require skilled and therapeutic assessment. Knowledge of appropriate services for onward referral is essential, and highlight the importance of a close collaborative between adult EDs and CAMHS.

### Introduction

The World Health Organization (WHO) advised that mental health disorders are one of the leading causes of disability worldwide, and disproportionately affect adolescents<sup>1</sup>. At a time of prime physical health, adolescents' morbidity and quality of life is dictated by mental well-being (or illness). Recent data show escalating rates of mental health difficulties among adolescents in Ireland including acute psychiatric presentations and self-harm<sup>2</sup>. Currently in Ireland, both out of hours CAMHS and urgent access to psychiatric beds for under 18s are inadequate<sup>3</sup>. Young people aged 16-18 with an acute MH issue often are left with no option other than assessment in an adult ED or attendance at a walk-in adult psychiatric service where they are reviewed by members of the adult psychiatry emergency cover<sup>4</sup>. Given the peak rate of self-harm presentations continue to occur in the 15-19 years age group, ensuring urgent access in a time of crisis to adequate and appropriate MH assessment should be a major public health priority<sup>5</sup>.

### Methods

The aim of this study is to examine all acute psychiatric presentations of adolescents aged 16-18 years to an adult ED in Dublin over a twelve month period. A study proforma was used to collect standardised clinical data on the

patients who had a psychiatric assessment during the study timeframe (March 2017 – February 2018). Data was anonymised and entered into SPSS for analysis.

## Results

There were 77 presentations of which 71 (92%) were first time presentations. The mean age of the group was 16.7 (SD 0.5, 16.2 – 17.1). The majority of the presentations were female (n=45, 58%). (Table 1)

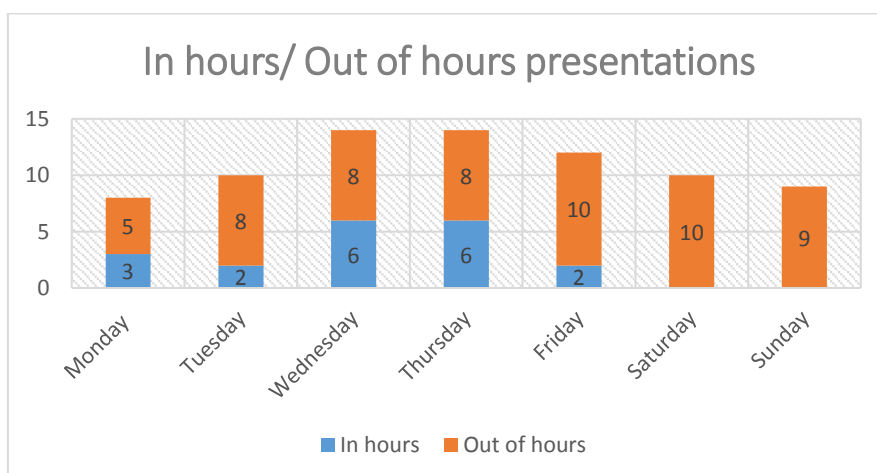
**Table 2: Acute Mental Health Presentations (N=77)**

<b>Age</b> (n = 77)	<b>Mean</b> = 16.7 years <b>Range</b> = 16.2-17.1, <b>SD</b> = 0.5	
<b>Gender</b> (n = 77)	45 (58%) Female 32 (42%) Male	
<b>Source referral</b>	Self: 58, 75% GP: 16, 21% Police: 3, 4%	
<b>Time of Presentation</b> (n=77)	58 (75%) ONWH 19 (25%) normal working hours	19, 25% weekend
<b>Presence of DSH</b> (n = 77)	Yes 34 (44%) Method: OD 26, 76%; Cutting: 7, 21% Attempted hanging: 1	
<b>Presence of Suicidal Ideation (SI)</b> (n = 77)	Yes 28 (36%)	
<b>Repeat presentation</b> (n = 77)	Yes 6, 8%	
<b>Prior MH Contact</b> (n = 77)	Yes, CAMHS 25, 35% Yes, Primary care MH: 20, 28% None: 32, 37%	
<b>Assessment</b> (n = 77)	Axis I Dx: 39, 55% Axis II: Autistic Spectrum disorder: 6, 9% Axis III. Medical Diagnosis: 10, 13% Axis IV: Psycho-social issues: 51, 66%	
<b>Discharge Plans</b> (n= 77)	13 (18%) to Primary Care 55 (78%) to CAMHS OPD 2 (5%) medical ward admission 1 (3%) Inpatient AMHS admission	

*Clinical Descriptives, N=77.*

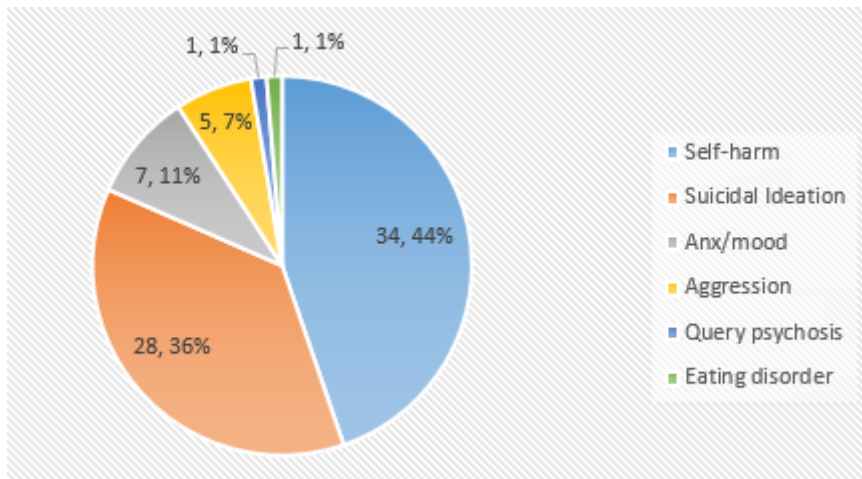
A fifth of adolescents (n=16, 21%) were referred by their GP. Three individuals (4%) were brought in by the police and the rest were self-referrals (n=58, 75%). Sixteen individuals arrived by ambulance – predominantly cases of overdose and self-cutting with suicidal ideation. Most of the presentations were outside of normal working hours, including at weekends (n=58, 75%)(Fig1).

**Fig. 1: Number of in hours and out of hours presentations**



Nearly half of the presentations (n=34, 44%) were in relation to self-harm (Fig.2). Although self-harm was more frequent in females (n=23, 68%,) than males (n=11, 32%,), this was not statistically significant ( $\chi^2 = 1.500, p=0.22$ ). The majority of the adolescents self-harmed by overdose (n=26, 76%; females outnumbering males by 2:1). Seven patients (21%) self-harmed by cutting, and one by attempted hanging. Alcohol or illicit drugs were taken by 8 people (24%) at the time of the self-harm act, with a life-time prevalence in nearly half of the adolescents (n=30, 42%).

**Fig. 2: Reason for referral**



In addition to those presenting with actual self-harm a significant number of adolescents (n=28, 36%) presented with suicidal ideation, significantly more common in females than males (89 vs 66%;  $\chi^2 = 4.816; p=.028$ ).

The remaining presentations (n=15) were in relation to low mood and anxiety (n=7), and aggression or challenging behaviour in the context of autistic spectrum disorder, conduct disorder or attention deficit hyperactivity disorder (n=5). One person who presented had a drug induced psychosis and one with medical complications secondary to anorexia nervosa. (Fig.2)

Six patients (8%) presented on more than one occasion, with self-harm (n=3), with suicidal ideation (1) or aggressive behaviour (n=2).

At the time of the assessment in 51 (66%) of the cases some psycho-social stressors such as family issues, growing up in foster or residential care, sexual abuse, exam stress, bullying were identified.

Comorbid medical diagnoses were documented in 10 (13%) of the cases. These included Wolff Parkinson White syndrome, Crohn’s disease, Pierre-Robin sequence, hypothyroidism, asthma, eczema, severe acne.

The majority of attendees (54%) were previously known to mental health services, either CAMHS or an intellectual disability service (n=25, 35%) or primary care counselling services (n=20, 28%), such as Pieta House, Jigsaw, SASSY, or attending a private psychotherapist. Thirty-three patients (46%) had no prior MH contact. There was no significant difference between prior MH contact and time of presentation, adolescents from all groups were equally likely to present during or outside normal working hours.

Out of hours assessments were conducted by a member of the AMHS, often with little prior child psychiatry experience. By day assessments were conducted by a self-harm nurse, or AMHS team member. Thirty-nine adolescents (55%) were given a psychiatric diagnosis, predominantly mood/anxiety disorder (n=31, 44%), post MH assessment. Externalising disorders such as ADHD, conduct disorder, oppositional defiant disorder were seen in 5 (7%) of the adolescents. There were two cases of eating disorders and one presentation of a drug induced psychosis. An Axis II personality disorder was given or queried in 25 cases (63%).

There was a small cohort of adolescents (n=6, 9%) with autistic spectrum disorder (ASD) who presented during the study period. These cases were complex, often with additional comorbid MH diagnosis; ADHD (2), mood disorder (2), and cognitive deficits, ranging from mild (3) to moderate (2). The reasons for their presentations varied from suicidal

ideation and self-harm to high level of aggression, possibly linked to a hypomanic episode. One patient presented twice, and required an admission to an adult inpatient psychiatric unit.

Almost all of the adolescents (n=68, 96%) were assessed and discharged from ED. An overwhelming majority (55, 78%) were referred for ongoing treatment at CAMHS, intellectual disability service or the forensic service. Fewer than 1 in 5 were discharged back to their GPs (13, 18%) with a recommendation of counselling. Two adolescents required medical admission and one was admitted to an acute adult psychiatric unit (n=3, 4%).

## Discussion

This study focused on the emergency department psychiatric presentations of 16 to 18 year old adolescents over a year period to a large Dublin hospital. Although the study period was short, findings are consistent with other similar Australian studies<sup>6,7</sup>. The most common reason for presenting to ED in this age group was acute self-harm (44%), followed closely by adolescents who have suicidal thoughts in the absence of any self-harm (36%). Consistent with national data from the Self-Harm Registry<sup>5</sup>, presentation was more frequent in females; over-dose being the most common method. Self-cutting is generally more often in males than females but interestingly in our cohort this was not the case. Engagement in self-harm is associated with a much higher risk of later suicide than in the general population, with estimated rates of 0.5% and 2% after 1 year and above 5% after 9 years<sup>8</sup>. The co-existence of a psychiatric disorder increases this risk, and so a careful assessment at the time of presentation, accompanied by appropriate referral for specialist treatment essential<sup>9</sup>. Ideally such an assessment should be conducted by mental health staff with expertise working with adolescents and knowledge of the appropriate services.

Hospital emergency departments provide a safe and accessible environment for patients with acute mental health crisis. In fact in the UK the view has been proposed that 'There is no other resource as responsive and potentially capable as an NHS emergency department, nor will there ever be'<sup>10</sup>. In Ireland, currently, out of hours access to CAMHS is restricted to paediatric EDs for patients aged up to 16. Consistent with National Institute for Health and Care Excellence (NICE) and Royal College of Psychiatrists' guidelines<sup>11,12</sup> adolescents presenting with self-harm under the age of 16 out of hours are admitted to a paediatric ward, and assessed by suitable trained CAMHS the following day. This allows for a comprehensive physical and psychosocial assessment to be conducted in a calm and therapeutic manner, and to identify and commence a treatment plan. Data from an Irish paediatric ED study concurs with this, where 88% of presentations were admitted<sup>13</sup>.

Both clinical guidelines and practice are less clear for people aged 16- and 17 presenting with self-harm, despite being a group known to have high rates of self-harm, to experience a greater risk of suicide following attempts, and to be recognised as a group who generally fall through a mental health care gap<sup>12</sup>. In the UK, some of this lack of clarity has been ascribed to the position of adolescents aged 16 and above being viewed as autonomous decision makers, with presumed capacity to legally give or refuse intervention. In the Irish system, this is even more contentious as this view applies to patients aged above 16, but only in the case of physical illness, and they are viewed as children under the Mental Health Act 2001<sup>14</sup>. Concern about a blanket recommendation to admit all adolescents who self-harm may also be linked with the very high rates of self-cutting in this age group, both with and without associated psychological distress, including suicidal ideation. Furthermore, it is recognised that not all would benefit from an admission. The UK College of Psychiatrists' recommendation of safe discharge over routine admission, unless 'in any doubt', is understandable in this light<sup>12</sup>. This was the case in this study where the vast majority of adolescents presenting were not admitted.

MH service provision in the UK include access to emergency MH beds for adolescents. However, there are no emergency psychiatric beds for children and adolescents in Ireland. This means that after being medically cleared in ED and if in need of further psychiatric evaluation and observation, the young person needs to be kept in ED, admitted to a medical (adult) ward, or admitted to an adult psychiatric unit until an appropriate adolescent inpatient bed becomes available. In this study 2 patients required medical admission, and contrary to Mental Health Commission (MHC) regulations<sup>4</sup>, one was admitted to an adult psychiatry unit.

Presentations with suicidal ideation but in the absence of any self-harm was the second most common reason for attending the ED in our cohort, occurring in over a third (36%). There is little recommendation in the literature on the management of suicidal ideation especially in young people<sup>15</sup>. There might be an argument that this group carries less risk than adolescents who have actually engaged in self-harm. Others might rightfully argue that the risk of self-harm remains high and studies suggest that more than a third of the people experiencing suicidal ideation progress to making a suicide plan, with most attempts occurring in the first 12 months<sup>16</sup>. Therapeutic engagement,

consistency of care, ongoing assessment, crisis planning and active systems of support are all seen as practice principles for the management of suicidal ideation<sup>17</sup>. This inevitable means close coordination between community based and hospital services.

Oftentimes therapeutic opportunity is greatest at the time of a crisis and a therapeutic assessment might change the trajectory of continuous and repetitive self-harm or risk taking behaviour. Compassionate assessment and onward referral to appropriate services is viewed by service users as important, and facilitates engagement when made in a timely fashion<sup>18</sup>. However, the perception for some service users is that the ED is the least useful source of support due to perceived punitive staff attitudes, lack of understanding, and lack of knowledge about self-harm<sup>19</sup>. This may even be more pronounced amongst adolescents<sup>20</sup>. In the absence of adolescent specific training amongst adult orientated staff, this perceived knowledge gap will even be greater.

The existing reality of poorly co-ordinated CAMHS out of hours will mean that adult EDs will continue to play an important role for young people presenting with MH crisis in Ireland. Current under resourcing of CAMHS and increasing referrals year on year are associated with long waiting lists and contribute to delays in engagement, failed transfers and older adolescents falling through the 'gap'<sup>3, 21</sup>. Crisis will continue to present to the EDs and close working relationship between CAMHS, AMHS and paediatric and adult hospitals need to be prioritised. Adult EDs need to have suitably trained staff with both child and adult MH expertise, able to sensitively assess youths and knowledgeable of the range and referral criteria for CAMHS community services. The National Clinical Programme for the Assessment and Management of Patients Presenting to Emergency Departments following Self-harm established in 2014 includes the roll out of self-harm nurses working in every emergency department<sup>22</sup>. In addition to providing expert assessment, and management, part of their role is to ensure follow up of cases seen to facilitate engagement<sup>22</sup>. Ensuring adequate child MH training amongst this staff cohort will be essential. Of equal importance is to understand perceptions and experiences of adult ED staff as to their knowledge gaps and barriers to a more effective delivery of care to this vulnerable group.

#### **Declaration of Conflicts of Interest:**

The authors have no conflicts of interest to declare.

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#### **References:**

1. World Health Organization. The World Health Report 2002 – Reducing Risk, Promoting Healthy Life. WHO; 2002, <http://www.who.int/whr/2002/en>.
2. Griffin E, McMahon E, McNicholas F, Corcoran P, Perry IJ, Arensman E. Increasing rates of self-harm among children, adolescents and young adults: a 10-year national registry study 2007–2016. *Social psychiatry and psychiatric epidemiology*. 2018; 53(7):663-71.
3. [https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/seanad\\_public\\_consultation\\_committee/reports/2017/2017-10-18\\_report-on-children-s-mental-health-services\\_en.pdf](https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/seanad_public_consultation_committee/reports/2017/2017-10-18_report-on-children-s-mental-health-services_en.pdf)
4. Mental Health Commission Annual Report 2018, [https://www.mhcirl.ie/File/2018\\_AR\\_Incl\\_OIMS.pdf](https://www.mhcirl.ie/File/2018_AR_Incl_OIMS.pdf)
5. National self-harm registry Ireland. Annual report 2017, <https://www.hse.ie/eng/services/list/4/mental-health-services/connecting-for-life/publications/nsrf-national-self-harm-registry-ireland-2017.pdf>
6. Stewart C, Spicer M, Babl FE. Caring for adolescents with mental health problems: challenges in the emergency department. *J Paediatr Child Health*. 2006; 42(11): 726-30.
7. Hopper SM, Pangestu I, Cations J, Stewart C, Sharwood LN, Babl FE. Adolescents in mental health crisis: the role of routine follow-up calls after emergency department visits. *Emerg Med J*. 2011; 28(2):159-60.
8. Owens D, Horrocks J, House A. Fatal and non-fatal repetition of self-harm. Systematic review. *Br. J Psychiatry*. 2002 Sept; 181:193-9.

9. Bachmann S. Epidemiology of Suicide and the Psychiatric Perspective. *Int. J. Environ. Res. Public Health*. 2018;15:1425. doi: 10.3390/ijerph15071425. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
10. Parity of mental and physical health in hospitals. RCPsych submission by the Paediatric Liaison Network. 2014 <http://www.sebastiankraemer.com/docs/Kraemer%20Parity%20of%20mental%20and%20physical%20child%20health.pdf>
11. NICE. Self-harm in over 8s: short-term management and prevention of recurrence. 2014 July. <https://www.nice.org.uk/guidance/cg16/chapter/1-Guidance>
12. Managing self-harm in young people. CR 192. Royal College of Psychiatrists. 2014 October. [https://www.rcpsych.ac.uk/docs/default-source/improving-care/better-mh-policy/college-reports/college-report-cr192.pdf?sfvrsn=abcf1f71\\_2](https://www.rcpsych.ac.uk/docs/default-source/improving-care/better-mh-policy/college-reports/college-report-cr192.pdf?sfvrsn=abcf1f71_2)
13. Lynch F, Kehoe C, MacMahon S, McCarra E, McKenna R, D'Alton, A, Barrett E, Twohig A, McNicholas F. Paediatric Consultation Liaison Psychiatry Services (PCLPS)-what are they actually doing?. *Ir Med J*. 2017; 110(10): 652-655.
14. <http://www.irishstatutebook.ie/eli/2001/act/25/enacted/en/html>
15. Robinson J, Cox G, Malone A, Williamson M, Baldwin G, Fletcher K, O'Brien M. A systematic review of school-based interventions aimed at preventing, treating, and responding to suicide-related behavior in young people. *Crisis*. 2013; 34(3):164-82.
16. Kessler RC, Borges G, Walters EE. Prevalence of and risk factors for lifetime suicide attempts in the National Comorbidity Survey. *Arch Gen Psychiatry*. 1999 Jul; 56(7):617-26.
17. Rice SM, Simmons MB, Bailey AP, Parker AG, Hetrick SE, Davey CG, Phelan M, Blaikie S, Edwards J. Development of practice principles for the management of ongoing suicidal ideation in young people diagnosed with major depressive disorder. *SAGE Open Med*. 2014 Nov;2: 2050312114559574
18. Hopkins C, Niemiec S. Mental health crisis at home: service user perspectives on what helps and what hinders. *Journal of psychiatric and mental health nursing*. 2007 May;14(3):310-8.
19. National Collaborating Centre for Mental Health (UK). "Self-harm: the short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care." British Psychological Society, 2004
20. Owens C, Hansford L, Sharkey S, et al. Needs and fears of young people presenting at accident and emergency department following an act of self-harm: secondary analysis of qualitative data. *Br J Psychiatry* 2016;208:286–91.
21. <https://www.oireachtas.ie/en/debates/question/2019-03-13/8/>
22. <https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/national-clinical-programme-for-the-assessment-and-management-of-patients-presenting-to-emergency-departments-following-self-harm.pdf>