

## Original Research

# National analysis of hospital-presenting suicidal ideation and self-harm among males

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### Abstract

**Objectives:** There is evidence of increasing rates of hospital presentations for suicidal crisis, and emergency departments (EDs) are described as an intervention point for suicide prevention. Males account for three in every four suicides in Ireland and are up to twice as likely as females to eventually die by suicide following a hospital presentation for suicidal crisis. This study therefore aimed to profile the characteristics of ED presentations for suicidal ideation and self-harm acts among males in Ireland, using clinical data collected by self-harm nurses within a dedicated national service for crisis presentations to EDs.

**Methods:** Using ED data from 2018–2021, variability in the sociodemographic characteristics of male presentations was examined, followed by age-based diversity in the characteristics of presentations and interventions delivered. Finally, likelihood of onward referral to subsequent care was examined according to presentation characteristics.

**Results:** Across 45,729 presentations, males more commonly presented with suicidal ideation than females (56% *v.* 44%) and less often with self-harm (42% *v.* 58%). Drug- and alcohol-related overdose was the most common method of self-harm observed. A majority of males presenting to ED reported no existing linkage with mental health services.

**Conclusions:** Emergency clinicians have an opportunity to ensure subsequent linkage to mental health services for males post-crisis, with the aim of prevention of suicides.

**Keywords:** Emergency department; gender; men's health; self-harm; suicidal ideation

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### Introduction

Every year, 700,000 people die by suicide, and men account for three in every four suicides in many nations worldwide including Ireland (Turecki *et al.*, 2019; Central Statistical Office 2022). Established theoretical models highlight that suicidal ideation and self-harm are clear prospective risk factors for death by suicide (Ribeiro *et al.* 2016). Emergency departments (EDs) play an essential role in assessment, management, and potential intervention among individuals presenting with suicidal ideation or self-harm (Fawcett and O'Reilly 2022). There is growing evidence that individuals who are experiencing suicidal ideation (but have not engaged in an act of self-harm) present to EDs, although there is limited research focused on ideation presentations in comparison to self-harm, especially for males (Fawcett and O'Reilly 2022). Males presenting to EDs with suicidal ideation are over twice as likely as females to subsequently die by suicide (Ross *et al.* 2023).

This underscores a clear need to better understand the nature and characteristics of crisis presentations to EDs by males experiencing suicidal ideation.

Self-harm is also associated with later risk of death by suicide (Turecki *et al.* 2019), and rates of self-harm appear to be rising among males (Toftagen *et al.* 2022). Prior research has suggested rates of hospital-presenting self-harm are higher among women than men (Perry *et al.* 2012). However, recent research in the Irish context documented near-equal rates of self-harm presentations among males and females, with higher rates among males aged 20–39 (Griffin *et al.* 2019). This suggests a need for research that moves beyond simplistic comparisons between males and females (Toftagen *et al.* 2022). We presently lack essential understanding of diversity between males, such that we might identify which males are most vulnerable to present to EDs in crisis, or problematic outcomes thereafter. Addressing this gap is important considering males are three times more likely than females to die by suicide after a hospital presentation for self-harm (Geulayov *et al.* 2019).

Analysis of national clinical data for suicidal ideation and self-harm collected in EDs provides a crucial opportunity to

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understand the profile of Irish males seeking emergency care in the context of suicidal ideation or self-harm. Based on a national health service initiative, Ireland developed a dedicated national clinical programme for those presenting to EDs with suicidal ideation or self-harm, termed the National Clinical Programme for Self-harm and Suicide-related Ideation (NCP SHI 2021). This study therefore aimed to profile the presentation characteristics, clinical information, interventions delivered, and subsequent referral pathways of all males presenting to EDs with suicidal ideation or self-harm in Ireland.

## Methods

### Setting and participants

A retrospective cohort study was conducted involving analysis of data from the NCP SHI (a full description of the NCP SHI is available elsewhere; NCP SHI 2021). In brief, the NCP SHI is a nationwide service of the Irish Health Service Executive (HSE) for mental health care and is currently implemented in all hospitals in Ireland that have 24/7 operational hours (26 hospitals in total). Clinical Nurse Specialists (CNSs) for self-harm (often called self-harm nurses) along with Non-Consultant Hospital Doctors (NCHDs, or internationally 'junior doctors'), assess patients with any suicide-related outcome referred by ED staff at the first entry point of presentation. Following assessment, CNSs import de-identifiable clinical information into pre-specified electronic templates for submission to the NCP SHI.

This study is reported according to the STROBE checklist for observational studies (see Supplementary Material 1; von Elm *et al.* 2008). The NCP SHI programme captures de-identifiable and anonymised data, and as such all cases represent presentations, rather than individuals. No General Data Protection Regulation (2018) standards are relevant to this study, as anonymised and aggregated NCP SHI data are not considered personal data (Podda 2021). This study comprises presentations to EDs participating in the NCP SHI from 1<sup>st</sup> January 2018 to 31<sup>st</sup> December 2021. All procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

### Outcome measures

In defining ideation presentations, clinicians collect information on suicidal ideation (where someone is thinking about suicide regardless of whether they have formulated a specific suicide plan). For self-harm presentations, only non-accidental self-harm acts are recorded via mutually exclusive pro-forma categories. In the NCP SHI, self-harm is defined as the direct physical outcome of a deliberate self-harm act, irrespective of its suicidal intention/motive. Clinicians record the following acts: self-cutting, non-accidental drug overdose, non-accidental overdose poisoning, attempted hanging, attempted drowning, shooting, jumping from height and others.

The sociodemographic data captured in the current study, based on the assessment information captured by ED clinicians, are gender (male/female/non-binary); age recorded in 10-year age bands, here collapsed to young males ( $\leq 25$  years), middle-aged males (26–49 years) and older males ( $\geq 50$  years); and ethnic background.

Clinical characteristics of presentations included the time of presentation to ED; referral source; substances (i.e., drugs, alcohol,

both or neither) contributing to the presentation but not used as a self-harm method; whether the individual reported current attendance of mental health services; delivery of a biopsychosocial assessment; general practitioner notification; collection of collateral history; delivery of an emergency care plan; and notification of next-of-kin where available.

### Statistical methods

Descriptive statistics were used to firstly examine differences in proportions of males and females presenting with suicidal ideation or acts of self-harm. Next, among males only, descriptive cross-tabulations and corresponding chi-square analyses were conducted to examine differences in the characteristics of each type of presentation according to age, ethnicity, time of presentation, and referral source. Next, within each type of presentation, differences in clinical characteristics across young ( $\leq 25$  years), middle-aged (26–49 years) and older ( $\geq 50$  years) males were examined. Effect sizes (ES) are presented (Phi for binary variables and Cramér's  $V$  for nominal variables with more than two categories). Finally, exclusively among males assessed in ED without existing linkage with mental health services, the factors associated with odds of subsequent referral to ongoing care were examined via binary logistic regression. Independent variables entered were age category, presentation type, and substance involvement. Missing data were removed using listwise deletion throughout analyses. Given the large number of comparisons conducted (26 in total), a Bonferroni-adjusted alpha level was set at 0.002 to determine the cut-off for statistical significance. All analyses were conducted with SPSS version 26.

## Results

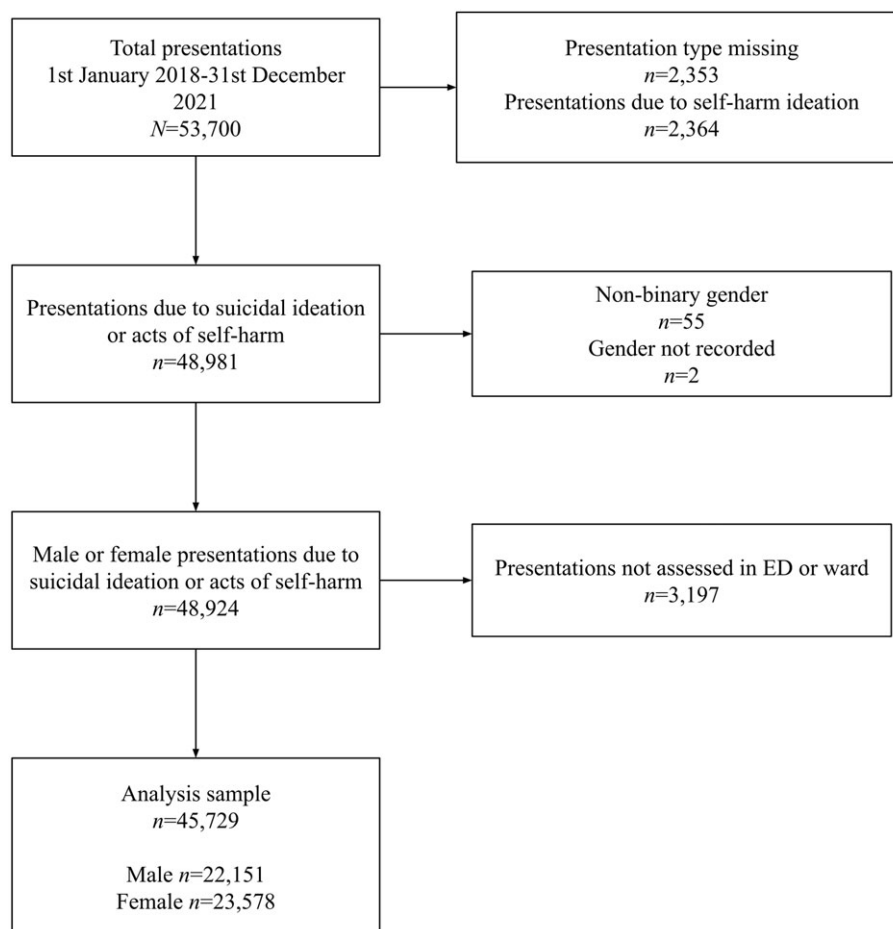
### Overall presentations

Among the 53,700 total recorded presentations in the NCP SHI database for 2018–2021, 91% ( $n = 48,981$ ) presented and were assessed with suicidal ideation or self-harm. Figure 1 summarises the presentations excluded to derive the analysis sample.

Overall, self-harm acts represented a greater proportion of presentations (55%,  $n = 25,029$ ) relative to suicidal ideation (45%,  $n = 20,700$ ). Significant variability was observed in these proportions by gender ( $\chi^2 = 835.91$ ,  $df(2)$ ,  $p < 0.001$ ,  $V = .14$ ). Across presentation types, 11,565 (56%) males presented with suicidal ideation ( $v. 9135$  females, 44%); and 10,586 (42%) males presented with self-harm acts ( $v. 14,443$  females, 58%). For all subsequent results, presentation types were delineated according to suicidal ideation and self-harm acts among males only ( $n = 22,151$ ).

### Male presentation characteristics

As presented in Table 1, over half of male presentations were made by individuals aged 26–49 years for both suicidal ideation (53%) and self-harm (51%). A greater proportion of young male ( $\leq 25$  years) presentations were for self-harm (33%) than suicidal ideation (27%), while presentations for suicidal ideation were more common among males aged  $\geq 50$  years (20%) than self-harm (16%). Most presentations for both suicidal ideation (95%) and self-harm (95%) were made by white males, with little variation in ethnicity across types of presentation. Male presentations typically occurred after hours on weekdays for both suicidal ideation (41%) and self-harm (44%) while a higher proportion of suicidal ideation presentations occurred during office hours on weekdays (35%) relative to self-harm presentations (29%). Overall, the most



**Figure 1.** Study flow diagram.

common referral source was presentation via self-referral or a family member or friend, both for self-harm (75%) and suicidal ideation presentations (68%). Presentations following a general practitioner referral were more common among males with suicidal ideation (19%) than self-harm (7%).

Next, self-harm presentations were delineated according to type of self-harm by age group:  $\chi^2 = 198.44$ ,  $df(12)$ ,  $p < 0.001$ ,  $V = 0.10$ . Results are presented in Fig. 2. Overall, the highest proportions of self-harm presentations involved drug and alcohol-related overdose, followed by cutting, at all ages. The least common self-harm method was attempted drowning (3% at all age categories). Marginal variability in types of self-harm was observed across age categories. For example, cutting presentations were observed more among young males (31%) relative to middle-aged (24%) and older males (17%), whereas overdose was observed more across the age categories (38% young males; 44% middle-aged males; 51% older males).

Next, for each type of presentation, the involvement of substances, current attendance of mental health services, and interventions delivered were examined by age group.

#### *Suicidal ideation presentations*

Firstly, regarding presentations for suicidal ideation, drug and alcohol involvement was observed more in young males (20%), relative to older males (4%), whereas the influence of alcohol

alone was observed more in older males (36%) relative to young males (12%). Overall, presenting males typically did not have pre-existing linkage with mental health services. Across age groups, a higher proportion of young male presentations were not currently linked with services (74%) relative to older males (67%). In addition, higher proportions of young male presentations involved a general practitioner letter notification (76%), obtaining of collateral history (75%), and implementation of an emergency care plan (67%) relative to male presentations in older age bands. Finally, proportionally more middle-aged (27%) and older males (26%) requested no involvement of their next-of-kin relative to younger males (16%). A higher proportion of young male presentations involved the delivery of emergency care planning to next-of-kin (see Table 2).

#### *Self-harm presentations*

Results for self-harm presentations mirrored those of suicidal ideation. Namely, drug and alcohol influence was proportionally higher among younger (24%) and middle-aged (26%), relative to older males (7%), who typically presented under the influence of alcohol alone. As with ideation presentations, while males across age groups were typically not engaged with mental health services, this was highest among younger males presenting with self-harm acts (with 73% not engaged with services). In turn, with some

**Table 1.** Delineation between male suicidal ideation, and self-harm presentations by demographic characteristics and referral source

	Suicidal ideation <i>n</i> (%) <sup>a</sup> <i>n</i> = 11,565	Self-harm <i>n</i> (%) <sup>a</sup> <i>n</i> = 10,586	Chi-square, <i>V</i> <sup>b</sup>
<b>Age group</b>			
≤ 25 years	3062 (27)	3430 (33)	$\chi^2 = 115.93$ , <i>df</i> (2), <i>p</i> < 0.001, 0.07
26–49 years	6177 (53)	5423 (51)	
≥50 years	2321 (20)	1718 (16)	
<b>Ethnicity</b>			
Asian	44 (<1)	37 (<1)	$\chi^2 = 12.23$ , <i>df</i> (4), <i>p</i> = 0.020, 0.02
Black	77 (<1)	51 (<1)	
Mixed ethnicity	127 (1)	92 (<1)	
White	10,585 (95)	9752 (95)	
Irish traveller	355 (3)	389 (4)	
<b>Time of presentation</b>			
Mon–Fri office hours	4096 (35)	3040 (29)	$\chi^2 = 144.87$ , <i>df</i> (3), <i>p</i> < 0.001, 0.08
Mon–Fri after hours	4772 (41)	4704 (44)	
Weekend until 8pm	1477 (13)	1345 (13)	
Weekend after 8pm	1217 (11)	1482 (15)	
<b>Referral source</b>			
Mental health services	99 (<1)	60 (<1)	$\chi^2 = 931.26$ , <i>df</i> (5), <i>p</i> < 0.001, 0.21
Police	765 (7)	682 (6)	
General practitioner	2218 (19)	697 (7)	
Self/family/friend	7795 (68)	7934 (75)	
Voluntary organisation	56 (<1)	47 (<1)	
Other	622 (5)	1160 (11)	

<sup>a</sup>Proportions generated following the omission of missing data.

<sup>b</sup>Cramer's *V* effect sizes (ES) interpretation: ES ≤ 0.2 = weak, 0.2 < ES ≤ 0.6 = moderate and ES > 0.6 = strong.

variability across age categories, all varieties of intervention were more commonly observed among young male presentations (see Table 3).

### Predictors of referral to ongoing care

Next, we examined likelihood of referral on to subsequent care (irrespective of service) among males assessed in ED who were not already linked in with mental health services (i.e., *n* = 16,558 presentations). Overall, 84% (*n* = 13,987) of presentations without existing mental health service linkage were referred to subsequent care.

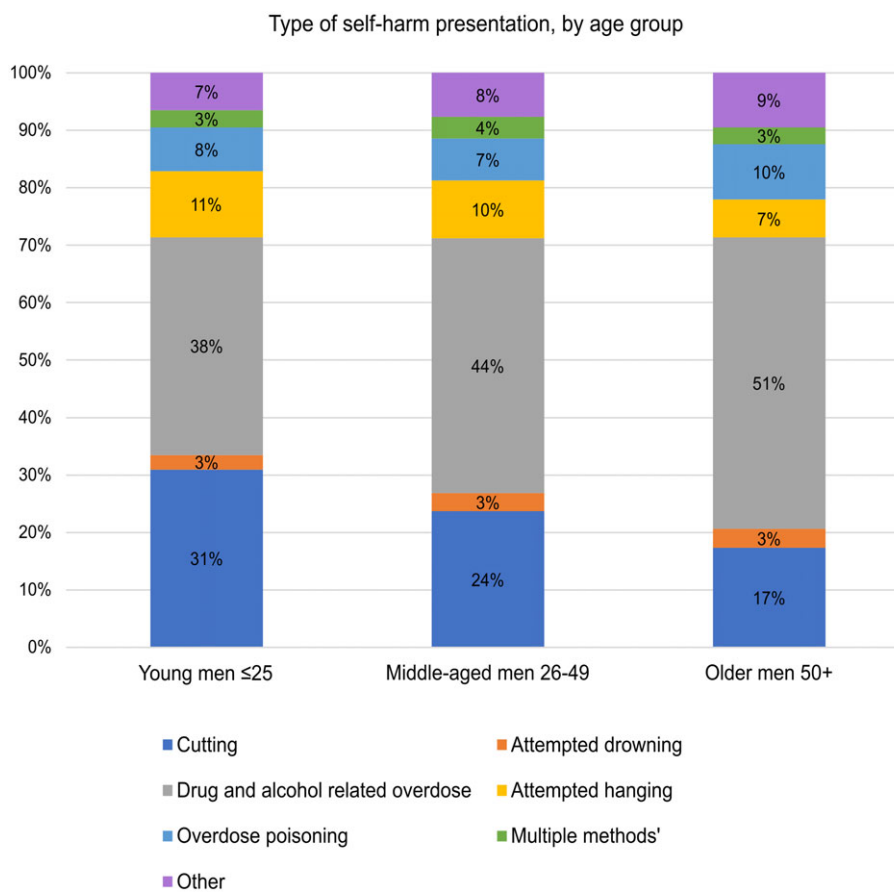
Results of the binary logistic regression modelling the odds of onward referral are presented in Table 4 below. Odds of referral were lower for middle-aged and older males, relative to younger males. Suicidal ideation presentations were associated with 20% greater odds of referral to subsequent care than presentations for self-harm acts. Finally, presentations featuring circumstantial alcohol and/or drug use were also more likely to have been referred to subsequent care relative to presentations without any substance involvement.

### Discussion

This study aimed to provide an in-depth profile of crisis presentations to EDs by males in Ireland, specifically in the context of suicidal ideation or acts of self-harm. Variability was

observed in the characteristics of males across presentation types. In all cases, presentations by males aged 26–49 were most common, mirroring the age range of typical male suicide decedents in Ireland (Central Statistical Office 2022). Males typically presented to EDs autonomously or following direction of a family member/friend, especially when presenting for self-harm. Across age categories, the most common type of self-harm observed was drug and alcohol-related overdose (most common in older males), followed by cutting (most common in younger males).

Across presentations, males typically reported no existing engagement with mental health services (particularly young males). While precipitating factors in male crises were not recorded in this database, this may reflect the known role of interpersonal stressors as proximal to suicidality among males ostensibly in the absence of prior help-seeking (Mallon *et al.* 2019), historical mental health conditions or self-harm (McMahon *et al.* 2024). Encouragingly, young males and those presenting with ideation were most likely to be referred on to subsequent care. This may reflect a greater openness to subsequent service involvement among young men and/or those with suicidal ideation, especially if suicidal ideation was the result of an intense, but short-term stressor as help-seeking commonly follows crisis among males (Seidler *et al.* 2021b). Notwithstanding this, premature disengagement from community mental healthcare is common particularly among young males, and is often facilitated by a lack of connection with mental health practitioners (Seidler *et al.* 2021a). This



**Figure 2.** Types of self-harm presentations by age group.

highlights a clear need to ensure timely and targeted engagement with subsequent services to help alleviate crisis, and potentially prevent subsequent suicides among males. Elsewhere, research has shown the benefits of services for males in crisis that focus on person-centred, non-judgmental and practical support, enabling males to regain control of their lives (Jackson *et al.* 2022). These could therefore reflect core active ingredients in suicide prevention for males that should be prioritised by services receiving referrals for males from ED.

Novel results were identified concerning variability in the characteristics of crisis presentations among males, by age. When considering suicidal ideation and self-harm presentations, alcohol and drug influence was more likely in younger males, where circumstantial alcohol influence alone was more typical of older males. Drug and alcohol-related overdose was also the most common method of self-harm act observed in this study. Results are consistent with prior evidence that self-poisoning is a common method of self-harm, particularly in young males (Toftagen *et al.* 2022; Russell *et al.* 2010), and alcohol use disorders increase the likelihood of presentation to ED following suicide attempt (Gentil *et al.* 2020). Acute alcohol intoxication and substance dependence more broadly amplify vulnerability to suicide among males, especially in conjunction with impulsivity and a socialised tendency towards risk-taking among males (Richardson *et al.* 2021).

Results highlight the importance of a prevention approach to male suicide which looks to better understand risky drug and alcohol use among young males, particularly in the context of overdoses. This means better delineating when an overdose may be

tied to a desire for escape, or an effort to numb emotional distress, and perhaps indicates suicidal ideation among males who may be reticent to disclose suicidality (Wilson *et al.* 2020). By comparison, non-suicidal self-harm drug and alcohol overdoses may reflect accidental or unintentional self-poisoning (i.e., taking too much) or risky decision making whilst intoxicated. In terms of early intervention, this highlights a need for mental health services to effectively identify patterns of distress management that feature substance use to help encourage more adaptive means of coping and ensure substance abuse does not contribute to the escalation of distress in males. Further, it is imperative clinicians delineate the intentions and contexts (i.e., precipitants or contributory factors) of substance-related overdoses in young males to ensure suicidal ideation does not go overlooked or undetected. In contexts where community services are less accessible or unavailable, online interventions could be leveraged to disseminate harm reduction information targeted to males to encourage more adaptive means of distress management when using substances.

A general practitioner notification, collection of collateral history and emergency care plan were all more commonly conducted in presentations by younger males. While involvement or notification of next-of-kin was common overall, a request for no involvement of next-of-kin was proportionally highest middle-aged and older males. This may be a function of concurrent findings that males typically presented to EDs autonomously and/or with a family member or friend. Presentations referred by a family member or friend here may reflect instances where informal supports witnessed the conduct or aftermath of self-harm in males; significant carer distress associated with this has been highlighted

**Table 2.** Comparing characteristics of young, middle-aged, and older male presentations for suicidal ideation

Characteristic	Young males (≤25 years) n (%) <sup>a</sup>	Middle-aged males (26–49 years) n (%) <sup>a</sup>	Older males (≥50 years) n (%) <sup>a</sup>	Chi-square, <i>V</i> <sup>b</sup>
<b>Substance involvement</b>				
Alcohol and drugs	607 (20)	1189 (19)	86 (4)	$\chi^2 = 955.87$ , <i>df</i> (6), $p < 0.001$ , 0.20
Alcohol only	378 (12)	1516 (25)	827 (36)	
Drugs only	499 (16)	888 (14)	50 (2)	
None/not recorded	1578 (52)	2584 (42)	1358 (59)	
<b>Currently attending mental health services</b>				
No	2267 (74)	4405 (72)	1545 (67)	$\chi^2 = 36.94$ , <i>df</i> (2), $p < 0.001$ , 0.06
Yes	790 (26)	1759 (29)	774 (33)	
<b>Biopsychosocial assessment</b>				
No	109 (4)	254 (4)	104 (5)	$\chi^2 = 3.09$ , <i>df</i> (2), $p = 0.210$ , 0.02
Yes	2941 (96)	5907 (96)	2309 (96)	
<b>General practitioner letter sent &lt;24 hours</b>				
No	734 (24)	1811 (30)	711 (31)	$\chi^2 = 37.54$ , <i>df</i> (2), $p < 0.001$ , 0.06
Yes	2289 (76)	4283 (70)	1587 (69)	
<b>Collateral history obtained</b>				
No	757 (25)	2121 (34)	771 (33)	$\chi^2 = 90.92$ , <i>df</i> (2), $p < 0.001$ , 0.09
Yes	2293 (75)	4040 (66)	1538 (67)	
<b>Emergency care plan</b>				
No	1017 (33)	2285 (37)	895 (39)	$\chi^2 = 19.11$ , <i>df</i> (2), $p < 0.001$ , 0.04
Yes	2033 (67)	3876 (63)	1414 (61)	
<b>Next of Kin (NOK) notified</b>				
NOK/friend present, given ECP	1231 (43)	1579 (27)	594 (27)	$\chi^2 = 349.18$ , <i>df</i> (6), $p < 0.001$ , 0.13
NOK/friend phoned	1090 (38)	2168 (37)	784 (36)	
Request no NOK involvement	451 (16)	1552 (27)	561 (26)	
No NOK/carer	120 (4)	507 (9)	238 (11)	

<sup>a</sup>Proportions generated following the omission of missing data.

<sup>b</sup>Cramer's *V* effect sizes (ES) interpretation:  $ES \leq 0.2$ =weak,  $0.2 < ES \leq 0.6$  = moderate and  $ES > 0.6$  = strong.

in previous studies (Robinson and Bailey 2021). These findings suggest a need to elucidate the role of informal supports in encouraging ongoing engagement with care by males post-crisis, and how this can be managed without significant collateral distress among carers. Concurrently low rates of referral to EDs from other sources (i.e., mental health services, general practitioners) also likely reflects the nature of life-threatening crisis situations, where help-seeking should justifiably commence with emergency services rather than community care.

### Limitations and future directions

Regarding study limitations, no NCPSHI data were available for the study period to clarify whether individuals represent repeat or one-off presentations. This prevented us from identifying whether individuals presented in crisis on multiple occasions between 2018–2021; however, previous research on the same dataset has suggested that 1.3 self-harm presentations are made for each person, which may have been mirrored in the present study (Kavalidou *et al.* 2023). The self-harm data imported in the NCPSHI database for the study period also precluded

understanding of whether acts of self-harm represent non-suicidal self-injury, or suicide attempt. This is important to address in future as the intended lethality of these behaviours could act as a marker of a subsequent risk of suicide. Finally, a proportion of the presentations in this study occurred following the onset of the COVID-19 pandemic given our sampling frame from 2018–2021. This may restrict the extent to which the characteristics of presentations observed here can be used as a model for future time periods, given the impacts of lockdowns and other social distancing measures on population mental health and opportunities for help-seeking.

The limitations of this study highlight clear future directions for the improvement of data capture in ED settings that will enhance the specificity and impact of research that relies on accurate and high-quality data. Firstly, a clinical dataset such as the NCPSHI should capture the intention behind acts of self-harm (i.e., suicidal or non-suicidal) from both the subjective (patient) and clinician perspectives, which could aid in delineation of suicide attempts from non-suicidal self-injury. Previous research in a UK clinical setting indicated lethality and suicidal intent were common among males presenting with

**Table 3.** Comparing characteristics of young, middle-aged and older male presentations for self-harm

Characteristic	Young males (≤25 years) n (%) <sup>a</sup>	Middle-aged males (26–49 years) n (%) <sup>a</sup>	Older males (≥50 years) n (%) <sup>a</sup>	Chi-square, V <sup>b</sup>
<b>Substance involvement</b>				
Alcohol and drugs	829 (24)	1387 (26)	120 (7)	$\chi^2 = 694.81, df (6), p < 0.001, 0.18$
Alcohol only	605 (18)	1515 (28)	642 (37)	
Drugs only	587 (17)	727 (13)	59 (3)	
None/not recorded	1409 (41)	1794 (33)	897 (52)	
<b>Currently attending mental health services</b>				
No	2511 (73)	3867 (71)	1174 (68)	$\chi^2 = 13.36, df (2), p = 0.010, 0.04$
Yes	916 (27)	1554 (29)	542 (32)	
<b>Biopsychosocial assessment</b>				
No	157 (5)	254 (5)	76 (4)	$\chi^2 = 0.20, df (2), p = 0.910, 0.01$
Yes	3254 (95)	5145 (95)	1632 (96)	
<b>General practitioner letter sent &lt;24 hours</b>				
No	848 (25)	1598 (30)	553 (33)	$\chi^2 = 37.66, df (2), p < 0.001, 0.06$
Yes	2533 (75)	3745 (70)	1146 (67)	
<b>Collateral history obtained</b>				
No	909 (27)	1823 (34)	533 (31)	$\chi^2 = 49.48, df (2), p < 0.001, 0.07$
Yes	2502 (73)	3576 (66)	1175 (69)	
<b>Emergency care plan</b>				
No	1105 (32)	2025 (38)	723 (42)	$\chi^2 = 52.05, df (2), p < 0.001, 0.07$
Yes	2306 (68)	3374 (63)	985 (58)	
<b>Next of Kin (NOK) notified</b>				
NOK/friend present, given ECP	1345 (42)	1426 (29)	427 (27)	$\chi^2 = 273.06, df (6), p < 0.001, 0.12$
NOK/friend phoned	1250 (39)	1944 (39)	689 (43)	
Request no NOK involvement	513 (16)	1183 (24)	327 (21)	
No NOK/carer	125 (4)	458 (9)	155 (10)	

<sup>a</sup>Proportions generated following the omission of missing data.

<sup>b</sup>Cramer’s V effect sizes (ES) interpretation: ES ≤ 0.2=weak, 0.2 < ES ≤ 0.6 = moderate and ES > 0.6 = strong.

**Table 4.** Logistic regression predicting referral versus non-referral among males from presentation age, type, and substance involvement

Characteristic (reference category)	B	SE	OR [95% CI]	p
<b>Age (young males ≤ 25 years)</b>				
Middle-aged males (26–49 years)	−0.55	0.06	0.58 [0.52, 0.64]	< 0.001
Older males (50+ years)	−0.77	0.07	0.46 [0.41, 0.53]	< 0.001
<b>Presentation type (self-harm)</b>				
Suicidal ideation	0.18	0.04	1.20 [1.10, 1.31]	< 0.001
<b>Substance involvement (none/not recorded)</b>				
Alcohol and drugs	0.53	0.06	1.70 [1.50, 1.93]	< 0.001
Alcohol only	0.82	0.06	2.27 [2.02, 2.54]	< 0.001
Drugs only	0.42	0.07	1.52 [1.32, 1.74]	< 0.001

deliberate self-harm (Haw *et al.* 2003). This is critical to capture as one of the strongest predictors of suicide is a history of intentional suicidal behaviour (Franklin *et al.* 2017). Given the high rates of presentations featuring drug and alcohol-related overdoses in this study, ED data collection should also aim to capture the intentions and drivers behind each instance of alcohol/drug-related presentations, to best delineate alcohol and/or drug-related suicide attempt relative to or non-suicidal self-harm.

In addition, information should be collected regarding the main precipitants of suicidal ideation and/or self-harm acts. Suicidal ideation and self-harm can be precipitated by acute interpersonal stressors such as intimate relationship breakdown, especially in males (Evans *et al.* 2016; McMahon *et al.* 2024; Shiner *et al.* 2009; Wilson *et al.* 2024). Crises can also represent the escalation of longer-term mental illness that may feature suicidal ideation or self-harm as a means of, respectively, cognitive or behavioural distress management (Toftthagen *et al.* 2022). The NCPShI is now expanding to general practitioner and Suicide Crisis Assessment Nurse services that capture psychosocial information such as relationship crisis, bereavement, mental or physical illness and

polysubstance use history. Including data collection regarding these factors at NCPSHI ED services will inform their association with acute crisis at the hospital level, which is a clear predictor of subsequent death by suicide in Ireland and the UK (Geulayov *et al.* 2019; Griffin *et al.* 2023).

Worldwide, the importance of data sources on hospital presentations due to self-harm and suicidal thoughts is highlighted in guidelines and commissions aiming to prevent suicide (Moran *et al.* 2024). Ireland has been leading this work based on national hospital coverage through the National Self-Harm Registry, the NCPSHI (utilised in this study) and the Northern Ireland Registry of Self-Harm. The deployment of CNSs to capture assessment information regarding self-harm for the NCPSHI could represent a key model for other nations aiming to combine comprehensive data monitoring and empathic clinical care to aid in the emergency response to suicidal or self-harm crises. Comprehensive data monitoring and evidence-based service refinement are especially critical to ensure males in crisis are met with life-saving care.

**Supplementary material.** The supplementary material for this article can be found at <https://doi.org/10.1017/ipm.2024.71>.

**Data availability.** Requests for NCPSHI data should be addressed to the programme manager of the NCPSHI, [rhona.jennings@hse.ie](mailto:rhona.jennings@hse.ie).

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