

Incidence of self-harm and suicide-related ideation among the Irish Traveller indigenous population presenting to hospital emergency departments: evidence from the National Clinical Programme for Self-Harm

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Abstract

Purpose

Previous research has examined the suicide risk of the Irish Traveller population, but less is known about the prevalence of suicidal behaviours and thoughts of this ethnic minority group recorded at hospital level. The aim of the current study was to compare the incidence of hospital-presenting self-harm and suicide-related ideation of Travellers to non-Traveller patients and describe any ethnic disparities in the aftercare of their presentation.

Methods

A population-based study was conducted for the years 2018–2019. Data were obtained from the service improvement dataset of an Irish dedicated national programme for the assessment of those presenting to emergency departments (EDs) due to self-harm and suicide-related ideation.

Results

24,473 presentations were recorded with 3% of the presentations made by Irish Travellers. Female Traveller patients had 3.04 (95% CI 2.51 – 3.68) higher risk for suicide-related ideation and 3.85 (95% CI 3.37 – 4.41) for self-harm, compared to White Irish female patients. Male Traveller patients had 4.46 (95% CI 3.86 – 5.16) higher risk for suicide-related ideation and 5.43 (95% CI 4.75 – 6.21) higher rates for self-harm presentations. The highest rate ratios for self-harm were observed among older Traveller patients [male: 9.23 (95% CI 5.93 – 14.39); female: 6.79 (95% CI 4.37 – 10.57)]. A higher proportion of Traveller patients requested no next of kin involvement, compared to other ethnicities.

Conclusion

Given that Irish Travellers are at higher risk of suicide-related hospital presentations, compared to other ethnic groups in Ireland, EDs should be viewed as an important suicide intervention point.

Introduction

A systematic review on the global incidence of suicide among Indigenous populations has indicated notable rate disparities mainly in Brazil, Canada, Australia, Taiwan and the Philippines [1]. The same study highlighted the need for suicide prevention policies to be trauma-informed given the systemic discrimination that Indigenous people face, leading to social and health inequities. In 2017 the state of Ireland officially recognised the Irish Traveller people as an ethnic minority group [2]. There are 30,987 Traveller people in Ireland (0.7% of all Irish residents), with smaller populations based elsewhere, mainly in the United Kingdom.[3] Irish Travellers are more urbanised than the general population (77% live in cities, compared to 62% of the general population). A study with genotype data compared Irish Travellers to settled Irish and European Roma, and presented that the Traveller community diverged from the Irish population in 1600s [4].

There are multiple health disparities between the Irish Traveller and the non-Traveller population, most notably that Traveller people have a significantly lower life expectancy (Traveller males: 62, females: 70; Non-Traveller males: 78, females: 83) [5]. Furthermore the Traveller population has a higher incidence of physical illnesses [6], and infant mortality [7], as well as experiencing poorer self-reported health and long-term illness [8], compared to the non-Traveller

population. In addition, the Traveller population also experience a disproportionate prevalence of anxiety and depression compared to the settled Irish population [8]. Survey research indicates that 39% of Irish Traveller males and 41% of females report mental ill health, with 12% of Traveller people reporting frequent mental distress (defined as experiencing ≥ 14 days of poor mental health in the preceding month); both of which increased with age and are associated with poor physical health and previous experience of discrimination [9].

Considering the social determinants of health and help-seeking, there is extensive literature describing a multitude of barriers for Travellers in engaging with the healthcare services, with discrimination commonly cited as the main impediment. Discrimination in the form of healthcare staff attitudes [10], but also indirect discrimination whereby lower levels of literacy and limited understandings of health are not accommodated for within the health services [11]. Other barriers to engagement with health services are lack of information around services [12] and shame and fear of being shunned by other Travellers [13].

In tandem with high prevalence of mental ill health in the Traveller population, concerns are growing over increasing drug use and the normalisation of these behaviours within this community. The Irish Traveller community has reported increased drug availability and use since the early 2000s [14], and the number of Irish Travellers accessing addiction services in Ireland increased by 163% between 2007, and 2010 [15, 16]. Alcohol is the most common substance issue for the Travelling community [15]. Other drugs commonly misused are illegal drugs among men and prescription drugs, particular opiates, among women [15]. According to the All-Ireland Traveller Health Study [17], the Traveller community reported greater use of hospital services including emergency and mental health services, compared to the settled Irish population, but with significantly poorer quality of healthcare experiences [6].

There is a paucity of published research describing the incidence of hospital-presenting self-harm and suicidal ideation among the Travelling population in Ireland. A single site study of suicidal ideation and behaviours found that Traveller patients accounted for 4.3% of presentations made to hospital for emergency care, while Travellers represent 1.6% of the local area population. In addition, 14.8% of self-harm and suicidal ideation hospital episodes were from the Traveller community [18]. The authors concluded that members of the Travelling community were more likely than the general population to present following attempting hanging and to receive a referral from critical care for inpatient psychiatric treatment [18]. There is, however, no research examining the characteristics of Traveller people or the aftercare received following an episode of hospital-presenting self-harm or suicidal ideation in a national level.

Objectives

The aims of the current study were to compare the incidence of hospital-presenting self-harm and suicide-related ideation by Traveller to non-Traveller patients, and to describe any differences in the aftercare received.

Methods

Study design and setting

This is a population-based cohort study including presentation data of self-harm and suicide-related ideation obtained through the database of a national emergency department service in Ireland. Specifically, the National Clinical Programme for Self-Harm and Suicide-Related Ideation (NCPSHI), that belongs to the Health Service Executive (HSE; healthcare system of Ireland) is a dedicated mental health program in 24 adult emergency departments (ED) [19]. The NCPSHI service is currently implemented in 24 out of 26 adult ED in Ireland, operational 24 hours a day/7 days a week. For the current study, all available data for the period of January 1, 2018 to December 31, 2019 were analysed. The study time period selected following the establishment of a national database from January 1st, 2018. The study used

anonymised and de-identifiable presentation data and was conducted in accordance with the principles of the Declaration of Helsinki [20].

Participants and Data source

The Clinical Nurse Specialist (CNS) and Non-Consultant Hospital Doctor (NCHD) in each hospital of the NCPSHI programme assess patients who present following an act of self-harm or express suicidal or self-harm ideation. Patients are referred to them by the ED staff who triage patients at the first entry point of presentation. The programme clinicians assess patients and collect anonymised presentation data for service improvement. The data are collected through pre-specified electronic templates for all hospitals and imported in the national database monthly. As the nature of the NCPSHI database is for service improvement purposes, individuals are not identified (name or date of birth) and only the characteristics of all the suicide-related attendances are contained in the dataset.

The sociodemographic information of age, gender, and ethnicity are self-reported and recorded by the clinicians. The list of ethnic groups mainly follows the Irish national 2016 census categories and includes the ethnic populations of: White Irish; White, any other; White Irish Traveller; Asian or Asian Irish - Chinese; Black or Black Irish - any other background; Black or Black Irish - African; Other, mixed background; Unknown/Not Specified.

In terms of the suicide-related outcomes recorded, the electronic templates cover three separate outcomes: self-harm acts, suicidal ideation and self-harm ideation. The direct physical outcome of a suicide attempt, irrespective of its suicidal intent is coded as a self-harm act (including cutting, drug-related acts, attempted hanging, attempted drowning, shooting, jumping from height and other). Considering the ideation outcomes, when a patient is thinking about suicide, regardless of intensity or suicide plan, this person is recorded as having suicidal ideation. Self-harm ideation presentations on the other hand refers to those who have direct thoughts of self-harming without any co-occurring thoughts of taking their own life. Given the small number of self-harm ideation presentations, in the current study the two patient groups attending EDs with ideation (suicidal and self-harm ideation) are combined in the rate section.

For the clinical characteristics of each presentation, information is obtained on whether the individual is currently attending any mental health service and the organisation/professional that referred the patient to ED. Patient information on the involvement of any substance (alcohol and/or drugs) contributing to the suicide-related presentation is further added in the electronic template, based on the medical examination conducted during the clinical assessment process.

Based on the aims of the NCPSHI, which mainly focus on a compassionate biopsychosocial assessment and providing appropriate interventions within the ED [21] clinicians aim to provide among others: an individual Emergency Care Plan (ECP), involve next of kin in suicide prevention and awareness information, and inform General Practitioners (GPs) through a written document within 24 hours of assessment. The three NCPSHI interventions outlined above have been used in the current analyses.

Statistical analysis and outcome measures

During the calendar years 2018 and 2019, the NCPSHI operated in 24 hospital emergency departments recording presentations due to self-harm and suicide-related ideation for an average of 21 months. In order to estimate the coverage of the NCPSHI during the study period, reference was made to the National Self-Harm Registry Ireland (called Registry hereafter), which recorded data on self-harm presentations to 35 acute hospitals in 2018 and 33 acute hospitals in 2019. The Registry data indicated that the NCPSHI had 75.8% coverage of all hospital-presenting self-harm in Ireland during 2018–2019. As the Registry does not capture ideation presentations, we assumed that the

NCPSHI had the same coverage of hospital-presenting suicide-related ideation during this time. We applied this percentage to the age-sex-specific population figures for ethnic groups derived by the National Census of 2016. These adjusted population figures were used as denominator data and were applied to the numerator data from the NCPSHI in order to estimate the national annual rate of hospital-presentations due to self-harm and due to suicide-related ideation.

Annual presentation rates were estimated per 100,000 persons in age-specific groups (10–19 years, 20–29 years, 30–39 years, 40–49 years and 50+ years). Direct age-standardisation was applied to estimate the annual presentation rate per 100,000 persons aged 10+ years with 95% confidence intervals. Poisson regression was used to assess the age-sex-adjusted relative risk of hospital-presenting self-harm and suicide-related ideation by ethnic group, using rate ratios (with 95% confidence intervals), and White Irish persons as the reference group.

Ethnic differences on clinical and aftercare characteristics were tested using χ^2 tests. Data analysis was performed with the Statistical Package for Social Sciences SPSS version 26 (SPSS Inc., Chicago, IL, USA) and STATA.

Results

For the current study period, 24,473 self-harm and suicide-related ideation presentations were recorded in the NCPSHI dataset with demographic and suicide-related outcomes. 744 (3%) were Irish Traveller patients. As presented in Tables 1 & 2, Traveller female patients had 3.04 (95% CI 2.51 – 3.68) higher risk for suicide-related ideation and 3.85 (95% CI 3.37 – 4.41) for self-harm presentations (ref group: White Irish female patients). The risk of both ideation and acts seemed to be increasing with age for Traveller females and the highest risk was seen in those 50 years and older [suicide-related ideation: 7.67 (95% CI 4.60 – 12.78) and self-harm: 6.79 (95% CI 4.37 – 10.57); Tables 1 & 2]. Traveller males had 4.46 (95% CI 3.86 – 5.16) higher risk of suicide-related ideation and 5.43 (95% CI 4.75 – 6.21) age adjusted rate ratio for self-harm presentations (Tables 1 & 2). Although the highest risk of self-harm was observed for the oldest age group of Traveller males 9.23 (95% CI 5.93 – 14.39), those between 30 and 39 years of age had the highest risk of suicide-related ideation when compared to White Irish males (5.70). Within the Black, Asian and Other/Mixed ethnic groups, the lowest rate of hospital-presentations due to both suicide-related ideation and self-harm was among the Asian population (Table S1).

Table 1

Annual rate of hospital presentations per 100,000 (95% CI) due to suicide-related ideation and rate ratios (95% CI) by sex and ethnicity in 2018–2019

	White Irish	White Irish Traveller	Non-Irish White	Black, Asian & Other
Female				
Age-adjusted rate	175.3 (169.9-180.7)	646.9 (512.0-781.8)	89.4 (77.3-101.4)	64.5 (49.3–79.7)
Age-adjusted rate ratio	1 (Reference)	3.04 (2.51 – 3.68)	0.43 (0.38 – 0.49)	0.35 (0.29 – 0.43)
Age-specific rate10-19y	158.3 (145.9-171.5)	261.0 (139.0-446.4)	141.0 (102.1-190.0)	88.0 (58.0-128.1)
20-29y	393.5 (371.8-416.0)	1018.3 (727.5-1386.7)	131.2 (103.9-163.5)	131.1 (92.3-180.8)
30-39y	192.9 (179.8-206.7)	453.9 (254.0-748.6)	62.7 (48.4–79.9)	59.7 (38.2–88.8)
40-49y	171.0 (158.8-184.0)	1054.9 (682.6-1557.2)	68.8 (48.2–95.2)	35.8 (17.2–65.8)
50y+	71.8 (66.6–77.2)	550.1 (307.9-907.2)	67.1 (47.2–92.4)	37.3 (12.1–87.0)
Age-specific rate ratio10-19y	1 (Reference)	1.65 (0.95 – 2.86)	0.89 (0.65 – 1.21)	0.56 (0.38 – 0.82)
20-29y	1 (Reference)	2.59 (1.89 – 3.55)	0.33 (0.27 – 0.42)	0.33 (0.24 – 0.46)
30-39y	1 (Reference)	2.35 (1.41 – 3.92)	0.33 (0.25 – 0.42)	0.31 (0.21 – 0.46)
40-49y	1 (Reference)	6.17 (4.14 – 9.19)	0.40 (0.29 – 0.56)	0.21 (0.11 – 0.39)
50y+	1 (Reference)	7.67 (4.60 – 12.78)	0.93 (0.67 – 1.30)	0.52 (0.22 – 1.25)
Male				
Age-adjusted rate	235.0 (228.7-241.3)	1084.4 (915.8-1253.1)	104.3 (91.4-117.2)	81.7 (65.8–97.5)
Age-adjusted rate ratio	1 (Reference)	4.46 (3.86 – 5.16)	0.38 (0.34 – 0.42)	0.36 (0.30 – 0.42)
Age-specific rate10-19y	133.5 (122.4-145.3)	494.7 (323.1-724.8)	102.7 (70.2-144.9)	45.5 (24.9–76.4)
20-29y	504.2 (479.9-529.4)	1955.0 (1532.4-2458.1)	145.3 (113.5-183.3)	169.3 (124.4-225.2)
30-39y	324.7 (307.0-343.2)	1851.9 (1395.1-2410.4)	76.2 (59.9–95.7)	120.3 (87.4-161.5)
40-49y	217.9 (203.8-232.8)	1040.2 (651.9-1574.9)	120.1 (93.8-151.5)	81.8 (51.9-122.7)
50y+	118.9 (112.0-126.1)	599.8 (335.7-989.2)	91.2 (67.9-119.9)	38.1 (14.0–82.9)
Age-specific rate ratio10-19y	1 (Reference)	3.71 (2.50 – 5.49)	0.77 (0.54 – 1.10)	0.34 (0.20 – 0.58)
20-29y	1 (Reference)	3.88 (3.07 – 4.90)	0.29 (0.23 – 0.37)	0.34 (0.25 – 0.45)

	White Irish	White Irish Traveller	Non-Irish White	Black, Asian & Other
30-39y	1 (Reference)	5.70 (4.35 – 7.47)	0.23 (0.19 – 0.30)	0.37 (0.27 – 0.50)
40-49y	1 (Reference)	4.77 (3.13 – 7.29)	0.55 (0.43 – 0.70)	0.38 (0.25 – 0.57)
50y+	1 (Reference)	5.04 (3.03 – 8.40)	0.77 (0.58 – 1.02)	0.32 (0.14 – 0.71)

Table 2

Annual rate of hospital presentations per 100,000 (95% CI) due to self-harm and rate ratios (95% CI) by sex and ethnicity in 2018–2019

	White Irish	White Irish Traveller	Non-Irish White	Black, Asian & Other
Female				
Age-adjusted rate	275.0 (268.2-281.8)	1204.5 (1031.0-1377.9)	156.7 (140.8-172.7)	79.4 (62.7–96.2)
Age-adjusted rate ratio	1 (Reference)	3.85 (3.37 – 4.41)	0.50 (0.45 – 0.55)	0.28 (0.24 – 0.33)
Age-specific rate10-19y	351.4 (332.8-370.8)	461.8 (292.8-693.0)	282.1 (225.6-348.4)	97.8 (66.0-139.6)
20-29y	552.8 (527.1-579.4)	2469.5 (2002.6-3012.5)	141.1 (112.7-174.5)	159.5 (116.3-213.4)
30-39y	283.0 (267.1-299.7)	1301.1 (941.6-1752.5)	129.3 (108.3-153.1)	89.5 (62.7-123.9)
40-49y	259.1 (243.9-274.9)	1561.2 (1099.2-2151.9)	177.6 (143.4-217.6)	42.9 (22.2–75.0)
50y+	108.0 (101.7-114.5)	733.4 (448.0-1132.7)	106.9 (81.4-137.9)	44.7 (16.4–97.4)
Age-specific rate ratio10-19y	1 (Reference)	1.31 (0.87 – 1.98)	0.80 (0.65 – 1.00)	0.28 (0.19 – 0.40)
20-29y	1 (Reference)	4.47 (3.64 – 5.48)	0.26 (0.21 – 0.32)	0.29 (0.21 – 0.39)
30-39y	1 (Reference)	4.60 (3.39 – 6.23)	0.46 (0.38 – 0.55)	0.32 (0.23 – 0.44)
40-49y	1 (Reference)	6.03 (4.34 – 8.36)	0.69 (0.55 – 0.85)	0.17 (0.09 – 0.29)
50y+	1 (Reference)	6.79 (4.37 – 10.57)	0.99 (0.76 – 1.29)	0.41 (0.19 – 0.92)
Male				
Age-adjusted rate	216.5 (210.4-222.6)	1300.3 (1113.4-1487.2)	103.8 (90.7-116.8)	58.8 (44.9–72.6)
Age-adjusted rate ratio	1 (Reference)	5.43 (4.75 – 6.21)	0.39 (0.35 – 0.44)	0.26 (0.21 – 0.32)
Age-specific rate10-19y	155.2 (143.3-168.0)	570.8 (385.1-814.8)	128.3 (91.7-174.8)	48.8 (27.3–80.5)
20-29y	507.3 (482.9-532.6)	2249.6 (1794.4-2785.2)	161.7 (128.0-201.5)	122.5 (84.8-171.2)
30-39y	291.4 (274.7-308.9)	2188.6 (1689.1-2789.5)	60.8 (46.3–78.4)	62.9 (39.9–94.4)
40-49y	181.3 (168.4-194.8)	1229.3 (803–1801.2)	101.5 (77.4-130.6)	56.9 (32.5–92.4)
50y+	86.6 (80.8–92.8)	799.7 (488.5-1235)	85.9 (63.3-113.8)	31.7 (10.3–74.1)
Age-specific rate ratio10-19y	1 (Reference)	3.68 (2.55 – 5.30)	0.83 (0.60 – 1.14)	0.31 (0.19 – 0.52)
20-29y	1 (Reference)	4.43 (3.56 – 5.52)	0.32 (0.25 – 0.40)	0.24 (0.17 – 0.34)

	White Irish	White Irish Traveller	Non-Irish White	Black, Asian & Other
30-39y	1 (Reference)	7.51 (5.85 – 9.64)	0.21 (0.16 – 0.27)	0.22 (0.14 – 0.33)
40-49y	1 (Reference)	6.78 (4.59 – 10.03)	0.56 (0.43 – 0.73)	0.31 (0.19 – 0.52)
50y+	1 (Reference)	9.23 (5.93 – 14.39)	0.99 (0.74 – 1.33)	0.37 (0.15 – 0.88)

The suicide-related ideation age specific rates were highest in the 40–49 age group of Traveller females (1054.9 per 100,000) and in the 20–29 age band of male Travellers (1955 per 100,000). The latter age-group seem to have the highest ideation rates across all male ethnic patient groups (Table 1). The peak self-harm age specific rates for both female and male Travellers were for those between 20 and 29 years old (2469.5 per 100,000 and 2249.6 per 100,000 respectively). Following a similar pattern with the suicide-related ideation presentation for males, the highest rate for self-harm was among those 20–29 years old across all male ethnic groups (Table 2).

Significant differences were found between the ethnicities, with Traveller people having a high proportion of self-harm acts (61%), compared to the rest of ethnic groups (Table 3). Significance was found in the self-harm methods, with attempted hanging being more prevalent among Irish Travellers (9%), compared to White Irish (4%), Non-Irish White (4%) and Asian, Black & Other patients (3%). When considering substances recorded as a contributory factor to the ED presentation, 59% of Traveller patients used alcohol or/and drugs, which was significantly different compared to the rest of ethnic groups (50% of White Irish; 45% of Non-Irish White; 30% of Asian, Black & Other patients).

Table 3

Clinical characteristics and interventions between Traveller and non-Traveller ED patients for years 2018–2019

	White Irish n (%) ^a	White Irish Traveller n (%)	Non-Irish White n (%)	Black, Asian & Other n (%)	Sig. level
Type of presentation					
Self-harm acts	8760 (54%)	327 (61%)	582 (56%)	92 (45%)	$\chi^2 = 22.593$, df (6), $p = .001$
Self-harm ideation	729 (5%)	15 (3%)	55 (5%)	11 (5%)	
Suicidal ideation	6682 (41%)	192 (36%)	406 (39%)	103 (50%)	
Methods used in self-harm acts					
Cutting	2061 (24%)	75 (23%)	119 (20%)	22 (24%)	$\chi^2 = 24.532$, df (9), $p = .004$
Drug-related	5450 (62%)	193 (59%)	370 (64%)	54 (59%)	
Attempted hanging	383 (4%)	30 (9%)	23 (4%)	3 (3%)	
Other ^b	866 (10%)	29 (9%)	70 (12%)	13 (14%)	
Substance misuse as a contributory factor					
Yes	8147 (50%)	316 (59%)	470 (45%)	61 (30%)	$\chi^2 = 63.280$, df (3), $p = .001$
No	8024 (50%)	218 (41%)	573 (55%)	145 (70%)	
Type of substance contributing to the ED presentation					
Alcohol and Drugs (used in combination)	2227 (27%)	133 (42%)	87 (19%)	10 (16%)	$\chi^2 = 75.862$, df (6), $p < .001$
Alcohol only	4368 (54%)	137 (43%)	319 (68%)	37 (61%)	
Drugs only	1552 (19%)	46 (15%)	64 (14%)	14 (23%)	
Currently attending mental health services					
Yes	4707 (31%)	172 (34%)	234 (24%)	38 (19%)	$\chi^2 = 37.179$, df (3), $p < .001$
No	10523 (69%)	334 (66%)	754 (76%)	158 (81%)	
^a Percentages presented are based on the omission of missing values.					
^b Other includes: attempted drowning, jumping from height, other, shooting, multiple methods.					

	White Irish n (%) ^a	White Irish Traveller n (%)	Non-Irish White n (%)	Black, Asian & Other n (%)	Sig. level
Referred by					
Emergency services	715 (4%)	29 (5%)	55 (5%)	12 (6%)	$\chi^2 = 64.157$, df (12), $p < .001$
Mental health services	103 (< 1%)	1 (< 1%)	3 (< 1%)	1 (< 1%)	
General Practitioner	2205 (14%)	49 (9%)	198 (19%)	43 (21%)	
Other/Voluntary Org	1193 (7%)	50 (9%)	99 (10%)	20 (10%)	
Self/family/supportive friend	11948 (74%)	405 (76%)	688 (66%)	130 (63%)	
Emergency Care Plan given (ECP)					
Yes	10946 (68%)	392 (73%)	760 (73%)	133 (65%)	$\chi^2 = 20.282$, df (3), $p < .001$
No	5225 (32%)	142 (27%)	283 (27%)	73 (35%)	
General Practitioner (GP) letter sent within 24 hours					
Yes	12673 (79%)	423 (80%)	790 (76%)	158 (77%)	$\chi^2 = 5.614$, df (3), $p = .13$
No	3377 (21%)	107 (20%)	248 (24%)	48 (23%)	
Next of Kin Involvement (NOK)					
NOK/friend given ECP and written advice on care/ suicide prevention	6232 (42%)	184 (37%)	383 (40%)	68 (37%)	$\chi^2 = 139.286$, df (9), $p < .001$
NOK/friend phoned and given advice on care/ suicide prevention	4839 (33%)	129 (26%)	255 (26%)	57 (31%)	
Pt. requests no NOK involvement	2875 (19%)	138 (28%)	207 (21%)	32 (17%)	
Pt. states no NOK/ Carer	837 (6%)	45 (9%)	122 (13%)	27 (15%)	
^a Percentages presented are based on the omission of missing values.					
^b Other includes: attempted drowning, jumping from height, other, shooting, multiple methods.					

While the biggest proportion of all ethnic groups was not attending any mental health service, Traveller people seemed to be more in contact with mental health care at the time of their ED presentation (34%), compared to the rest of ethnicities (Table 3). While the ED referral pattern was similar across ethnicities, a higher proportion of Traveller patients had self/supportive other referrals (76%).

Data on the emergency care plan (ECP), suggests that 35% of Asian, Black and Other ethnicity patients (combined group) left without receiving one (Table 3). No significant differences were found between the ethnic groups and the second NCPShI intervention of a letter sent to the person's GP within 24 hours after presentation. Finally, in relation to the intervention of involving a patient's next of kin in providing advice on care and suicide prevention (NOK), a highest proportion of the Traveller group requested no NOK involvement, compared to rest of ethnicities (28%; Table 3)

Discussion

Male and female Traveller patients, older than 50 years of age, had the highest risk of presenting with self-harm in Irish EDs. This finding may be associated with the mental distress experienced by the eldest Travellers, due to discrimination or poor physical health [22, 9]. The risk of suicide-related ideation was higher for older female Travellers over the age of 50 and for male Travellers between the ages of 30 to 39 years old. Although there is no previous research on ideation hospital presentations for ethnic minorities per se, an Australian study has indicated that Indigenous persons had 2.8 (95% CI 2.62–2.93) higher rates of suicidal presentations (self-harm, non-suicidal self-injury, suicidal ideation combined) than non-Indigenous people [23]. Same study found that overseas born patients had lower rates of suicidal presentation than Australian born, and this is in consistence with our findings of low rates for non- White Irish born groups.

Our research further supports existing evidence which suggests that there is a high prevalence of alcohol and drug misuse in the Traveller community, [15, 16] while the request of Traveller patients not to involve any significant other in suicide prevention interventions, may reflect cultural stigma when experiencing emotional pain [24]. In terms of the high substance misuse prevalence, psychosocial perspectives view this misuse among the Traveller community as the outcome of multiple factors, such as: the social acceptability of alcohol; the limited understanding of dependency and complacency about problematic use within the community; unemployment; lack of employment; lack of educational opportunities; the ongoing loss of Traveller identity in Irish society; and, diminishing anti-drug culture among the Traveller community [16, 25, 14].

Limitations

The current findings should be treated with caution due to a number of limitations. Firstly, the data analysed are presentation-related and not individual based, therefore there is a possibility that an individual was presented more than once in this cohort. Furthermore, the NCPShI is a dedicated service implemented in 24 out of the 26 adult ED's in Ireland, therefore the data presented is not a complete national profile. Moreover, our findings should be treated with caution, as they reflect the risk associated with those presenting to an ED and not with people experiencing suicidality in the community level.

Although we tried to control for any ethnicity bias by excluding the Unknown ethnic groups from the rates section, it should be noted that the demographic information of ethnicity was self-reported to the clinicians and we could not control the underreporting of any ethnicity group. We combined the Asian, Black & Other ethnic groups in the main analyses but as we are aware that mixing cultures and ethnicities may result in bias as there are not homogenous, supplementary tables provide information on these ethnic groups in more detail (supplementary Table S1). The availability of data that ranged between 11 and 24 months for the study period, is related to a number of factors, mainly: the absence of a CNS in specific periods due to maternity or sick leave, and due to lack of recruitment for the specific posts.

Interpretation/ Generalisability

To our knowledge this is the first study exploring emergency department presentations due to suicide-related outcomes for Irish Travellers at a national level. Ireland's National Strategy to Reduce Suicide, 2015-2024, *Connecting for Life* [26] highlights the traveller population as a priority group with vulnerability to an increased risk of suicidal behaviour. Considering the finding that a significant proportion of Irish Travellers do seek help for their suicidal behaviours and thoughts in Irish hospitals, EDs should be viewed as a vital suicide intervention point for the Traveller community. Given that EDs could act an appropriate environment to stabilise suicidal crisis [27], the development of cultural competency training of the ED staff for the Irish Traveller culture may help to improve their post-ED help-seeking for suicidal-related behaviours and thoughts [24,28].

Considering the lack of Irish evidence on the risk of self-harm for ethnic groups, our results of the lowest risk of self-harm for Asian patients could only be compared with UK findings, highlighting that Asian people, specifically males, are least likely to present with self-harm or repeated self-harm compared to other ethnicities [29].

Based on the need to explore ethnic inequities, both in clinical practice as well as in research investigations for self-harm, our findings among different ethnic groups provide space for implementing tailor made suicide prevention policies. Furthermore, in the absence of ethnicity data in self-harm and suicide statistics in Ireland, the use of the NCP SHI data is important, as it is the first national database to systematically capture the risk of suicide-related outcomes among ED patients of different ethnicities. Further Irish health services should record ethnicity as a core data item.

The NCP SHI is to our knowledge the first dedicated ED service for self-harm and ideation internationally implemented and qualitative analysis has indicated that service users feel that this service is compassionate and the lack of this programme in other EDs results in negative impacts for patients [30]. Given that the NCP SHI is not available in all 24/7 EDs of Ireland, further implementation initiatives should be considered in order to support those in need of suicide-related hospital interventions presenting in non NCP SHI services.

Declarations

Competing Interests: The first/corresponding author (Katerina Kavalidou) is the database manager of the dataset (NCP SHI) used in this study. All authors declare that they have no conflict of interest and no relevant financial or non-financial interests to disclose.

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Author contributions

Katerina Kavalidou and Paul Corcoran conceived the study. Katerina Kavalidou, Paul Corcoran, Caroline Daly and Niall McTernan designed the study. Paul Corcoran and Katerina Kavalidou were responsible for the statistical analysis and interpretation of results. Katerina Kavalidou, Caroline Daly, Niall McTernan and Paul Corcoran drafted the manuscript and all authors approved the final draft. Katerina Kavalidou had full access to all the data of this study and with Paul Corcoran they take responsibility for the accuracy of the data analysis.

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Ethical standards

This research study was conducted retrospectively from anonymised and de-identifiable presentation data obtained for service improvement purposes. The manuscript does not present individual patient data and the study was conducted in accordance with the principles of the 1964 Declaration of Helsinki and its later amendments. The anonymised and de-identifiable presentation data reported in this article will be made available following publication, to those who will provide a data request to the corresponding author. To gain access, data requestors will need to sign a data access agreement.

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