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Original Paper

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Abstract
Purpose

Previous research has examined the suicide risk of the Irish Traveller population, but less is known about self-harm and suicidal ideation among this ethnic minority group, which are established risk factors for suicide. The aim of the current study was to compare the presentation-based self-harm and suicide-related ideation of Traveller to non-Traveller patients and describe any ethnic disparities in the aftercare of their presentation.

Methods

Data were obtained from the service improvement database of an Irish dedicated national programme for the assessment of those presenting to emergency departments (EDs) due to self-harm and suicide-related ideation. Presentation data from 24 EDs were analysed and Poisson regression was used to assess the age–sex-adjusted relative risk of hospital-presenting 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. 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.

Conclusions

Given that Irish Travellers are at higher risk of self-harm and suicide-related ideation presentations compared to other ethnic groups, EDs should be viewed as an important suicide intervention point. **AQ1**

Keywords

Irish Traveller
Minority
Self-harm
Suicidal ideation
Hospital
Ireland

Supplementary Information

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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 proposed that the Traveller community may have diverged from the Irish population in 1600 s [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 on a national level.

Objectives

The aims of the current study were to compare the presentation-based rates of self-harm and suicide-related ideation of Traveller to non-Traveller patients, and to describe any differences in the aftercare received AQ2.

Methods

Study design and setting

This is a population-based cohort study detailing presentation level 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 is governed by 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 254 out of 26 adult ED in Ireland, and 1 pediatric, operational 24 h 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.

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 data set.

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 sections.

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 [19] clinicians aim to provide among others: an individual Emergency Care Plan (ECP), involve next of kin in suicide prevention and awareness information, and inform patients' General Practitioners (GPs) through a written document within 24 h 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. 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 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 data set with demographic and suicide-related outcomes. 744 (3%) presentations were made by Irish Traveller patients. As presented in Tables 1 and 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 and 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 and 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 presentation-based rate due to both suicide-related ideation and self-harm was among the Asian population (Table S1). **AQ3**

Table 1

Hospital presentation-based rates 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 and 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 rate				
10–19 y	158.3 (145.9–171.5)	261.0 (139.0–446.4)	141.0 (102.1–190.0)	88.0 (58.0–128.1)
20–29 years	393.5 (371.8–416.0)	1018.3 (727.5–1386.7)	131.2 (103.9–163.5)	131.1 (92.3–180.8)
30–39 years	192.9 (179.8–206.7)	453.9 (254.0–748.6)	62.7 (48.4–79.9)	59.7 (38.2–88.8)
40–49 years	171.0 (158.8–184.0)	1054.9 (682.6–1557.2)	68.8 (48.2–95.2)	35.8 (17.2–65.8)
50 years+	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 ratio				
10–19 years	1 (Reference)	1.65 (0.95–2.86)	0.89 (0.65–1.21)	0.56 (0.38–0.82)
20–29 years	1 (Reference)	2.59 (1.89–3.55)	0.33 (0.27–0.42)	0.33 (0.24–0.46)
30–39 years	1 (Reference)	2.35 (1.41–3.92)	0.33 (0.25–0.42)	0.31 (0.21–0.46)
40–49 years	1 (Reference)	6.17 (4.14–9.19)	0.40 (0.29–0.56)	0.21 (0.11–0.39)
50 years+	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 rate				
10–19 years	133.5 (122.4–145.3)	494.7 (323.1–724.8)	102.7 (70.2–144.9)	45.5 (24.9–76.4)
20–29 years	504.2 (479.9–529.4)	1955.0 (1532.4–2458.1)	145.3 (113.5–183.3)	169.3 (124.4–225.2)
30–39 years	324.7 (307.0–343.2)	1851.9 (1395.1–2410.4)	76.2 (59.9–95.7)	120.3 (87.4–161.5)
40–49 years	217.9 (203.8–232.8)	1040.2 (651.9–1574.9)	120.1 (93.8–151.5)	81.8 (51.9–122.7)
50 years+	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 ratio				
10–19 years	1 (Reference)	3.71 (2.50–5.49)	0.77 (0.54–1.10)	0.34 (0.20–0.58)
20–29 years	1 (Reference)	3.88 (3.07–4.90)	0.29 (0.23–0.37)	0.34 (0.25–0.45)
30–39 years	1 (Reference)	5.70 (4.35–7.47)	0.23 (0.19–0.30)	0.37 (0.27–0.50)
40–49 years	1 (Reference)	4.77 (3.13–7.29)	0.55 (0.43–0.70)	0.38 (0.25–0.57)
50 years+	1 (Reference)	5.04 (3.03–8.40)	0.77 (0.58–1.02)	0.32 (0.14–0.71)

Table 2

	White Irish	White Irish Traveller	Non-Irish White	Black, Asian and 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 rate				
10–19 years	351.4 (332.8–370.8)	461.8 (292.8–693.0)	282.1 (225.6–348.4)	97.8 (66.0–139.6)
20–29 years	552.8 (527.1–579.4)	2469.5 (2002.6–3012.5)	141.1 (112.7–174.5)	159.5 (116.3–213.4)
30–39 years	283.0 (267.1–299.7)	1301.1 (941.6–1752.5)	129.3 (108.3–153.1)	89.5 (62.7–123.9)
40–49 years	259.1 (243.9–274.9)	1561.2 (1099.2–2151.9)	177.6 (143.4–217.6)	42.9 (22.2–75.0)
50 years+	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 ratio				
10–19 years	1 (Reference)	1.31 (0.87–1.98)	0.80 (0.65–1.00)	0.28 (0.19–0.40)
20–29 years	1 (Reference)	4.47 (3.64–5.48)	0.26 (0.21–0.32)	0.29 (0.21–0.39)
30–39 years	1 (Reference)	4.60 (3.39–6.23)	0.46 (0.38–0.55)	0.32 (0.23–0.44)
40–49 years	1 (Reference)	6.03 (4.34–8.36)	0.69 (0.55–0.85)	0.17 (0.09–0.29)
50 years+	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 rate				
10–19 years	155.2 (143.3–168.0)	570.8 (385.1–814.8)	128.3 (91.7–174.8)	48.8 (27.3–80.5)
20–29 years	507.3 (482.9–532.6)	2249.6 (1794.4–2785.2)	161.7 (128.0–201.5)	122.5 (84.8–171.2)
30–39 years	291.4 (274.7–308.9)	2188.6 (1689.1–2789.5)	60.8 (46.3–78.4)	62.9 (39.9–94.4)
40–49 years	181.3 (168.4–194.8)	1229.3 (803–1801.2)	101.5 (77.4–130.6)	56.9 (32.5–92.4)
50 years+	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 ratio				
10–19 years	1 (Reference)	3.68 (2.55–5.30)	0.83 (0.60–1.14)	0.31 (0.19–0.52)
20–29 years	1 (Reference)	4.43 (3.56–5.52)	0.32 (0.25–0.40)	0.24 (0.17–0.34)
30–39years	1 (Reference)	7.51 (5.85–9.64)	0.21 (0.16–0.27)	0.22 (0.14–0.33)
40–49 years	1 (Reference)	6.78 (4.59–10.03)	0.56 (0.43–0.73)	0.31 (0.19–0.52)
50 years+	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 presentation 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 presentation rates across all male ethnic patient groups (Table 1). The peak self-harm age specific presentation rates for both female and male Travellers were for those between 20 and 29 years (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 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 and 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 and Other patients).

Table 3

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

	White Irish <i>n</i> (%) ^a	White Irish Traveller <i>n</i> (%)	Non-Irish White <i>n</i> (%)	Black, Asian and Other <i>n</i> (%)	Sig. level
Type of presentation					
^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 <i>n</i> (%) ^a	White Irish Traveller <i>n</i> (%)	Non-Irish White <i>n</i> (%)	Black, Asian and Other <i>n</i> (%)	Sig. level
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	10,523 (69%)	334 (66%)	754 (76%)	158 (81%)	
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	11,948 (74%)	405 (76%)	688 (66%)	130 (63%)	
Emergency Care Plan given (ECP)					
Yes	10,946 (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 h					
Yes	12,673 (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) suggest 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 h 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 [9,20]. The risk of suicide-related ideation presentation was higher for female Travellers over the age of 50 and for male Travellers between the ages of 30–39 years. 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 [21]. This same study found that overseas born patients had lower rates of suicidal presentation than Australian born, and this is consistent with our findings of low rates for non-White Irish born patients.

Our research 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 [22]. 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 [14,16,23]. AQ4

Limitations

The current findings should be treated with caution due to a number of limitations. First, 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. Because our analysis was based on presentations rather than individuals, the observed rate ratios are a reflection of differences in the combined frequency of index and repeat presentations. Index presentations would have accounted for the majority of presentations during the 2-year study period. Based on the Registry that suggests that 1.3 self-harm presentations are made for each person (25), we can suggest same as an approximate to the NCPSHI presentation numbers. Future studies, therefore, should be conducted based on cohorts with individual data to provide individual-based incidence rates of self-harm and related ideation. Given that there were no available socioeconomic data within the NCPSHI data set for the years investigated, future studies should explore whether socioeconomic factors differentiate hospital presented rates for self-harm and suicide-related thoughts.

Furthermore, the NCPSHI is a dedicated service implemented in 254 out of the 26 adult EDs in Ireland; therefore, the data presented are 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. Considering the longstanding experience of discrimination, Irish Travellers may be reluctant to self-report their ethnicity in settings, such as hospitals. For this study, such reluctance would have led to under-recording of Irish Traveller presentations and, as a result, we would have under-estimated their excess risk of presenting to hospital with self-harm and suicide-related ideation. We have no information on whether this did or did not occur. There was a high level of data completeness for ethnicity, with only 4% of presentations recorded as unknown. The proportion of Unknown ethnicity in our study, which is larger than the 3% recorded for Irish Travellers, may likely include Traveller people that due to stigma were not identified as such. This may have contributed in underreporting the risk of self-harm and related ideation of this community. However, this study relied on ethnicity that was self-reported to a clinician during a psychosocial assessment in a private interview room, which is likely to minimise measurement bias.

We combined the Asian, Black and 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 [24] 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 [18], EDs should be viewed as a vital suicide intervention point for the Traveller community. Given that EDs are appropriate for implementing lifesaving interventions for those at high risk of suicide by connecting them to appropriate next care [26], 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 suicide-related behaviours and thoughts [22,27].

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 [28].

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 NCPSHI 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 NCPSHI 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 [29]. The recent NCPSHI Model of Care (MOC) recommends a number of services that can assess those who do not require physical interventions in EDs, such as Community Mental Health Teams (CMHT) and Suicide Crisis Assessment Nurses (SCAN), placed at GP practises [30]. The MOC further suggests that ED staff should be trained in identifying the needs of people with substance misuse and suggests that brief interventions for alcohol and drug use can help minimise the need of referrals to specialist addiction services. Since MOC identifies the Traveller community as a vulnerable group that seems to have EDs as the only resort for their mental health needs and previous research suggests high prevalence of alcohol and drug misuse among Travellers, the updated MOC aims to benefit Traveller people with substance misuse attending EDs in a suicidal crisis. In terms of the two main pillars of the programme given to the Traveller community (the emergency care plan 73%; the next of kin involvement 63%), future studies are needed to explore whether these intervention helped to reduce future suicidal behaviours, compared to those not receiving them at the ED level.

Given that the NCPSHI is not available in all 24/7 EDs of Ireland, further implementation initiatives should be considered to support those in need of suicide-related hospital interventions, such as the Traveller population, presenting in non NCPSHI services. **AQ5**

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Author contributions

KK and PC conceived the study. KK, PC, CD and NM designed the study. PC and KK were responsible for the statistical analysis and interpretation of results. KK, CD, NM and PC drafted the manuscript and all authors approved the final draft. KK had full access to all the data of this study and with PC they take responsibility for the accuracy of the data analysis.

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Declarations

Conflict of interest The first/corresponding author (Katerina Kavalidou) is the database manager of the data set (NCPSHI) used in this study. All authors declare that they have no conflict of interest and no relevant financial or non-financial interests to disclose.

Ethical approval 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.

Supplementary Information

Below is the link to the electronic supplementary material.

Supplementary file1 (DOCX 15 KB)

References

1. Pollock NJ, Naicker K, Loro A, Mulay S, Colman I (2018) Global incidence of suicide among Indigenous peoples: a systematic review. BMC Med 16(1):145. <https://doi.org/10.1186/s12916-018-1115-6>

2. Gov.ie (2017) Statement by An Taoiseach Enda Kenny TD on the recognition of Travellers as an ethnic group, Dáil Éireann. <https://www.gov.ie/en/speech/d29014-statement-by-an-taoiseach-enda-kenny-td-on-the-recognition-of-travel/> Accessed 10 Mar 2022

3. CSO (2016) Profile of Irish Travellers, Ethnicity and Religion. Central Statistics Office. <https://www.cso.ie/en/releasesandpublications/ep/p-cp8iter/p8iter/p8itd/>. Accessed 15 Oct 2021

4. Gilbert E, Carmi S, Ennis S, Wilson JF, Cavalleri GL (2017) Genomic insights into the population structure and history of the Irish Travellers. Sci Rep 7:42187. <https://doi.org/10.1038/srep42187>

5. CSO (2012) Life Expectancy Tables. Central Statistics Office. <https://www.cso.ie/en/interactivezone/statisticsexplained/birthsdeathsandmarriages/lifeexpectancytables/>. Accessed 15 October 2021

6. McGorrian C, Daly L, Fitzpatrick P, Moore RG, Turner J, Kelleher CC, All-Ireland Traveller Health Study T (2012) Cardiovascular disease and risk factors in an indigenous minority population. The All-Ireland Traveller Health Study. *Eur J Prev Cardiol* 19 (6):1444-1453. <https://doi.org/10.1177/1741826711428059>
7. Hamid NA, Fitzpatrick P, Rowan A, McGorrian C, Daly L, Kelleher CC (2013) Does the developmental plasticity hypothesis have application to Irish Travellers? Findings from the all Ireland Traveller Health Study birth cohort 2008–2011. *J Dev Orig Health Dis* 4(4):307–316. <https://doi.org/10.1017/S2040174413000160>
8. Parry G, Van Cleemput P, Peters J, Walters S, Thomas K, Cooper C (2007) Health status of Gypsies and Travellers in England. *J Epidemiol Community Health* 61(3):198–204. <https://doi.org/10.1136/jech.2006.045997>
9. McGorrian C, Hamid NA, Fitzpatrick P, Daly L, Malone KM, Kelleher C (2013) Frequent mental distress (FMD) in Irish Travellers: discrimination and bereavement negatively influence mental health in the All Ireland Traveller Health Study. *Transcult Psychiatry* 50(4):559–578. <https://doi.org/10.1177/1363461513503016>
10. Gray C, Donnelly J (2013) Unheard voices: the views of traveller and non-traveller mothers and children with ASD. *Int J Early Years Educ* 21(4):268–285. <https://doi.org/10.1080/09669760.2013.842160>
11. Jackson C, Bedford H, Cheater FM, Condon L, Emslie C, Ireland L, Kemsley P, Kerr S, Lewis HJ, Mytton J, Overend K, Redsell S, Richardson Z, Shepherd C, Smith L, Dyson L (2017) Needles, Jabs and Jags: a qualitative exploration of barriers and facilitators to child and adult immunisation uptake among Gypsies, Travellers and Roma. *BMC Public Health* 17(1):254. <https://doi.org/10.1186/s12889-017-4178-y>
12. Fournet N, Mollema L, Ruijs WL, Harmsen IA, Keck F, Durand JY, Cunha MP, Wamsiedel M, Reis R, French J, Smit EG, Kitching A, van Steenberghe JE (2018) Under-vaccinated groups in Europe and their beliefs, attitudes and reasons for non-vaccination; two systematic reviews. *BMC Public Health* 18(1):196. <https://doi.org/10.1186/s12889-018-5103-8>
13. Claffey C, Crowley D, Maclachlan M, Hout M-C (2017) Exploring Irish travellers' experiences of opioid agonist treatment: a phenomenological study. *Heroin Addiction Related Clin Problems* 19:73–80
14. Turner J, NicCharthaigh R, Quirke B, Kilroe J, Hamid na, Kelly C, Kelleher C, Moore RRG (2010) P50 “Pushing against the hill”: a qualitative study of Irish traveller health in the 21st century. *J Epidemiol Commun Health* 64:A53-A53. <https://doi.org/10.1136/jech.2010.120477.50>
15. Carew AM, Cafferty S, Long J, Bellerose D, Lyons S (2013) Travellers accessing addiction services in Ireland (2007 to 2010): analysis of routine surveillance data. *J Ethn Subst Abuse* 12(4):339–355. <https://doi.org/10.1080/15332640.2013.830943>
16. Van Hout M-C (2009) Irish travellers and drug use—an exploratory study. *Ethn Inequal Health Soc Care* 2:42–49. <https://doi.org/10.1108/17570980200900007>
17. All Ireland Traveller Health Study Our Geels (2010). Summary of findings. https://www.ucd.ie/t4cms/AITHS_SUMMARY.pdf Accessed 10 Mar 2022
18. Tanner B, Doherty A (2021) Suicidal ideation and behaviors among Irish Travellers presenting for emergency care: ethnicity as a risk factor. *Crisis*. <https://doi.org/10.1027/0227-5910/a000769>
19. HSE (2021) Self-harm & suicide related ideation. <https://www.hse.ie/eng/about/who/cspd/ncps/self-harm-suicide-related-ideation/>. Accessed 10 Mar 2022
20. McGorrian C, Quirke B, Kelleher CC (2011) Experience of discrimination is a significant associate of mental ill-health in Irish travellers. Findings from the all Ireland traveller health study. *J Epidemiol Community Health*. <https://doi.org/10.1136/jech.2011.142976c.33>
21. Stapelberg NJC, Svetlicic J, Hughes I, Turner K (2020) Suicidal presentations to emergency departments in a large Australian public health service over 10 years. *Int J Environ Res Public Health* 17(16):5920
22. Villani J, Barry MM (2021) A qualitative study of the perceptions of mental health among the Traveller community in Ireland. *Health Promot Int*. <https://doi.org/10.1093/heapro/daab009>
23. Van Hout MC, Hearne E (2017) The changing landscape of Irish Traveller alcohol and drug use. *Drugs: Education, Prevention and Policy* 24 (2):220–222. <https://doi.org/10.1080/09687637.2016.1197886>

24. Department of Health National Strategy to Reduce Suicide in Ireland, Connecting for Life, 2015–2024 <https://www.gov.ie/en/press-release/3a39c-minister-for-health-and-minister-for-mental-health-extend-national-suicide-reduction-strategy-to-2024/#:~:text=The%20Minister%20for%20Health%2C%20Stephen,Connecting%20for%20Life%2C%20to%202024>. Accessed 10 Mar 2022
25. Joyce, M, Daly, C, McTernan, N, Griffin, E, Nicholson, S, Arensman, E, Williamson, E, Corcoran, P (2020). National Self-Harm Registry Ireland Annual Report 2019. Cork: National Suicide Research Foundation. <https://www.nsrfl.ie/wp-content/uploads/2021/04/NSRF-National-Self-Harm-Registry-Ireland-annual-report-2019-Final-for-website.pdf>. Accessed Aug 2022.
26. Betz ME, Wintersteen M, Boudreaux ED, Brown G, Capoccia L, Currier G, Goldstein J, King C, Manton A, Stanley B, Moutier C, Harkavy-Friedman J (2016) Reducing suicide risk: challenges and opportunities in the Emergency Department. *Ann Emerg Med* 68(6):758–765. <https://doi.org/10.1016/j.annemergmed.2016.05.030>
27. Truong M, Paradies Y, Priest N (2014) Interventions to improve cultural competency in healthcare: a systematic review of reviews. *BMC Health Serv Res* 14:99. <https://doi.org/10.1186/1472-6963-14-99>
28. Al-Sharifi A, Krynicki CR, Upthegrove R (2015) Self-harm and ethnicity: a systematic review. *Int J Soc Psychiatry* 61(6):600–612. <https://doi.org/10.1177/0020764015573085>
29. Doyle L. KB, Morrissey J, Higgins A, Downes C (2020) Accessing help for self-harm and suicidal behaviour in the emergency department: the experiences of service users.
30. HSE (2022) Updating the National Clinical for the Assessment and Management of Patients presenting to the Emergency Department following Self-Harm. <https://www.hse.ie/eng/about/who/cspd/ncps/self-harm-suicide-related-ideation/moc/mhnep-self-harm-model-of-care.pdf>. Accessed 06 July 2022