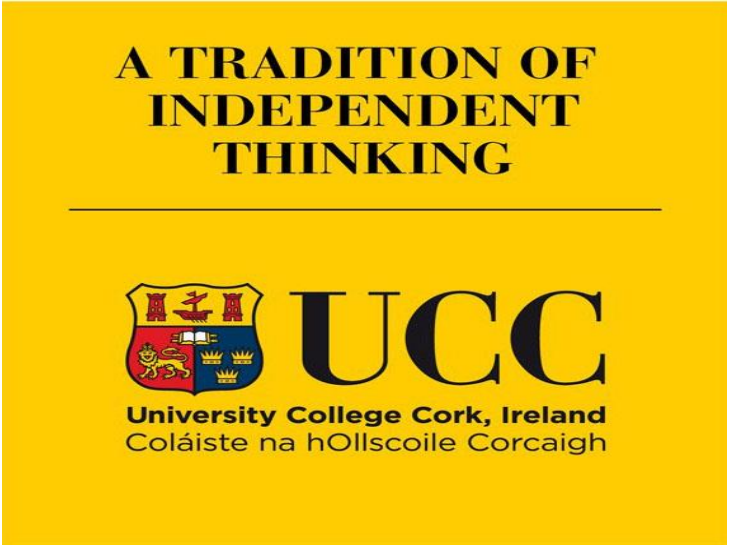




**National Suicide
Research Foundation**



Restricting access to means: Public health approaches to reduce drug- and alcohol-related self-harm

Dr Eve Griffin,
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National Suicide Research Foundation, Cork, Ireland

Lisbon Addictions Conference, 24th November 2022

Hospital-treated self-harm

- Self-harm is the strongest predictor of future suicide
- Emergency departments are an important point of **intervention**
- On-going monitoring can detect trends at an earlier point than suicide data

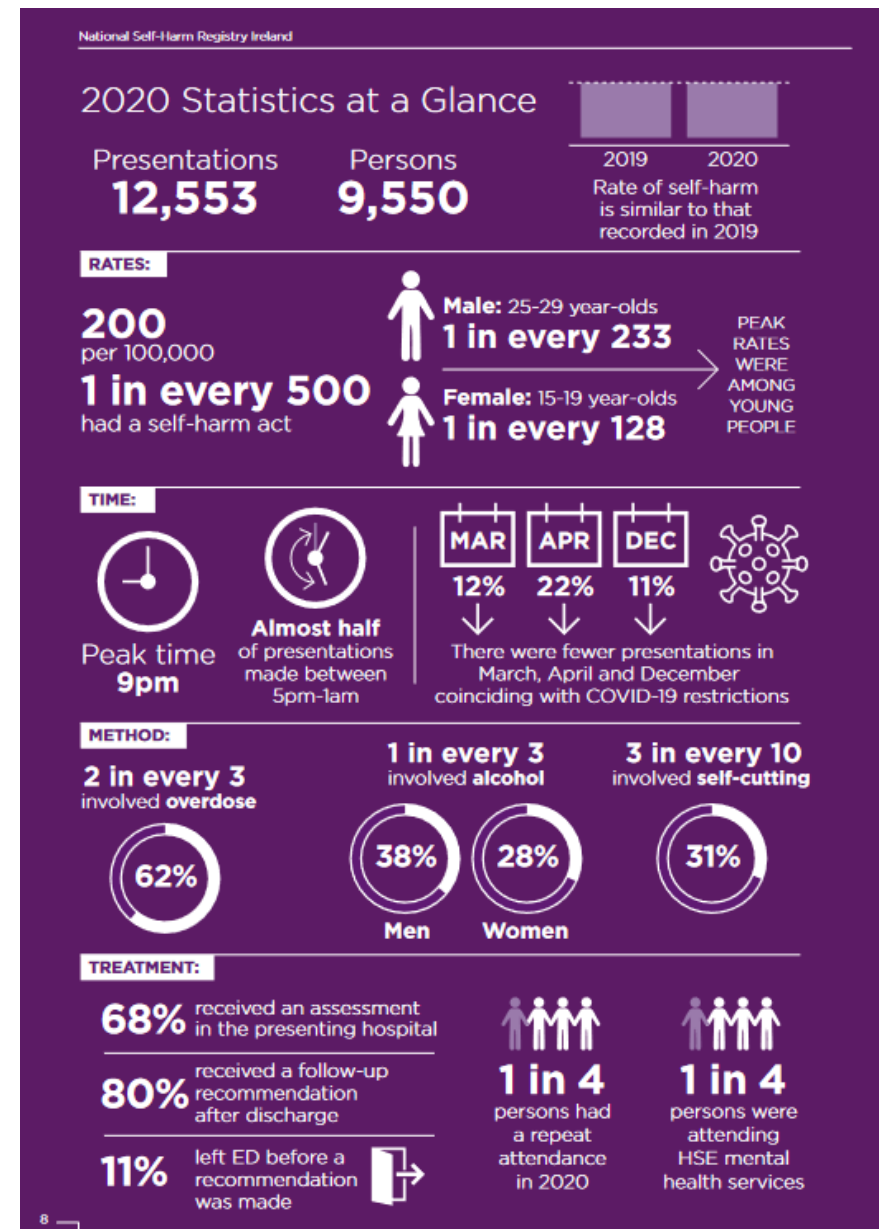
Self-harm is defined as

‘an act with **non-fatal outcome** in which an individual **deliberately initiates a non-habitual behaviour**, that without intervention from others will cause self harm, or deliberately ingests a substance in excess of the prescribed or generally recognised therapeutic dosage, and which is aimed at realising changes that the person desires via the actual or expected physical consequences’.

(Schmidtke et al, 2006)

Hospital-treated self-harm

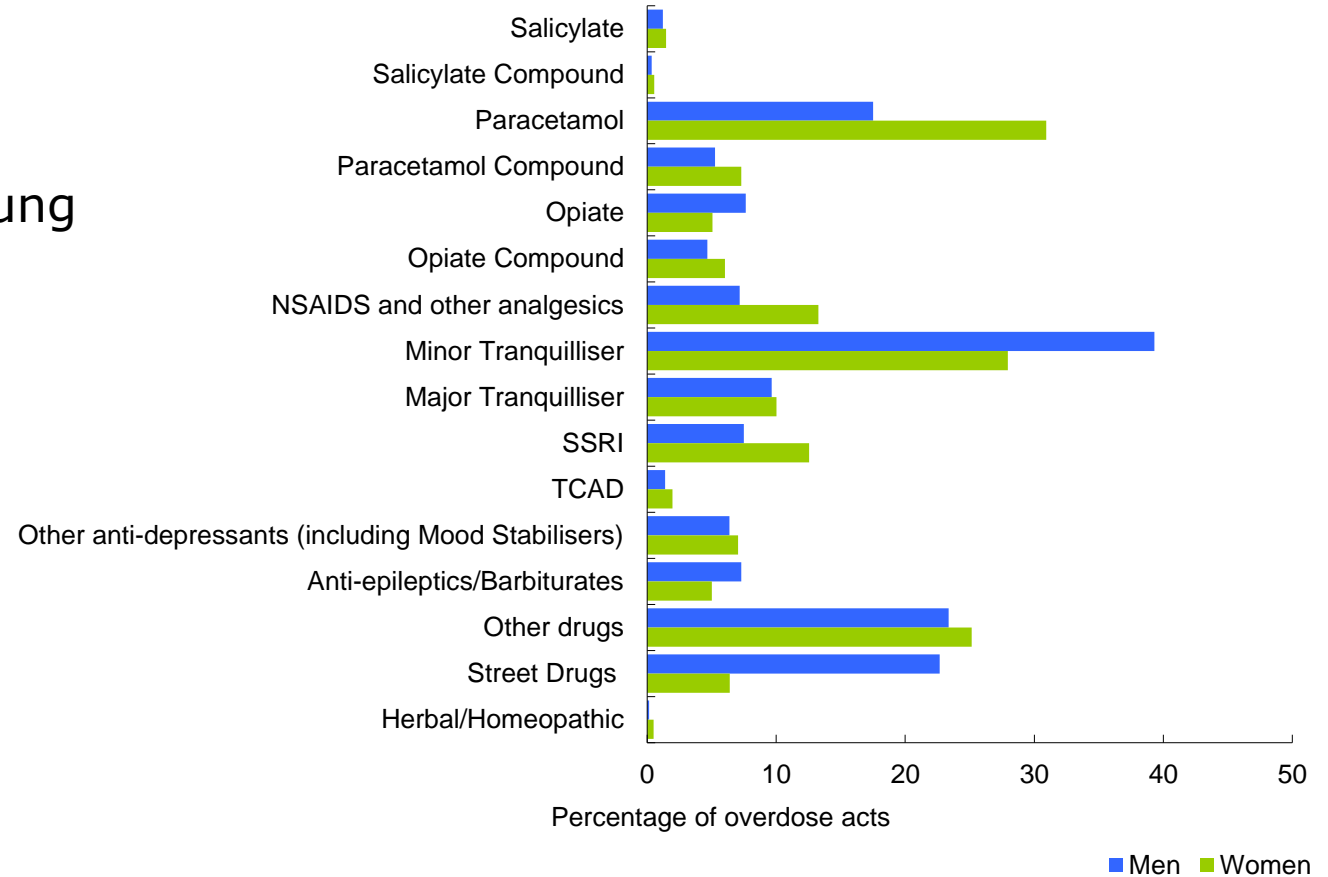
- Self-harm is the strongest predictor of future suicide
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Intentional drug overdose (IDO)

62% of all self-harm presentations

- Most common among women and young people
- 47% involve multiple drug types
- Median number of tablets = 20
- 40% also involve alcohol



Case fatality associated with IDO

Increased risk of death due to IDO:

- Gender (Male CFR=1.7)
- Age (45+years CFR=5.6)
- Multiple drugs (6+ drug types CFR=60.5)
- Drug type
 - Tricyclic antidepressants (CFR=15.1)
 - Opioids (CFR=12.9)
 - Antidepressants (CFR=4.46)
 - Illegal drugs (CFR=4.02)

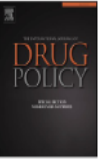
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Research Paper

A national case fatality study of drugs taken in intentional overdose

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Trends in paracetamol IDO among young people

	Incidence rate ratio (95% CI)	Observed cases	Expected cases	Excess (95% CI)	<i>p</i> value
Males					
10–17 years	1.11 (0.96–1.28)	415	373	42 (–13–106)	0.142
18–24 years	0.89 (0.82–0.98)	913	1020	–107 (–183 to –25)*	0.011
Females					
10–17 years	1.23 (1.15–1.31)	2070	1684	386 (254–527)*	≤0.001
18–24 years	1.08 (1.02–1.14)	2095	1944	151 (32–278)*	0.012

*Indicates statistical significance

+23% in 10-17yrs
+8% in 18-24yrs

Social Psychiatry and Psychiatric Epidemiology (2021) 56:773–781
<https://doi.org/10.1007/s00127-020-01981-y>

ORIGINAL PAPER



Paracetamol-related intentional drug overdose among young people: a national registry study of characteristics, incidence and trends, 2007–2018

Caroline Daly¹ · Eve Griffin^{1,2} · Elaine McMahon^{1,2} · Paul Corcoran^{1,2} · Roger T. Webb^{3,4} · Darren M. Ashcroft^{3,5} · Ella Arensman^{1,2,4}

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Abstract

Purpose Incidence rates of hospital-presenting self-harm are highest in people under 25 years and are reportedly increasing in some countries. Intentional drug overdose (IDO) is the most common self-harm method among young people, with paracetamol the drug most frequently used. This study aimed to describe the characteristics, incidence, and temporal trends in paracetamol-related IDO among young people.

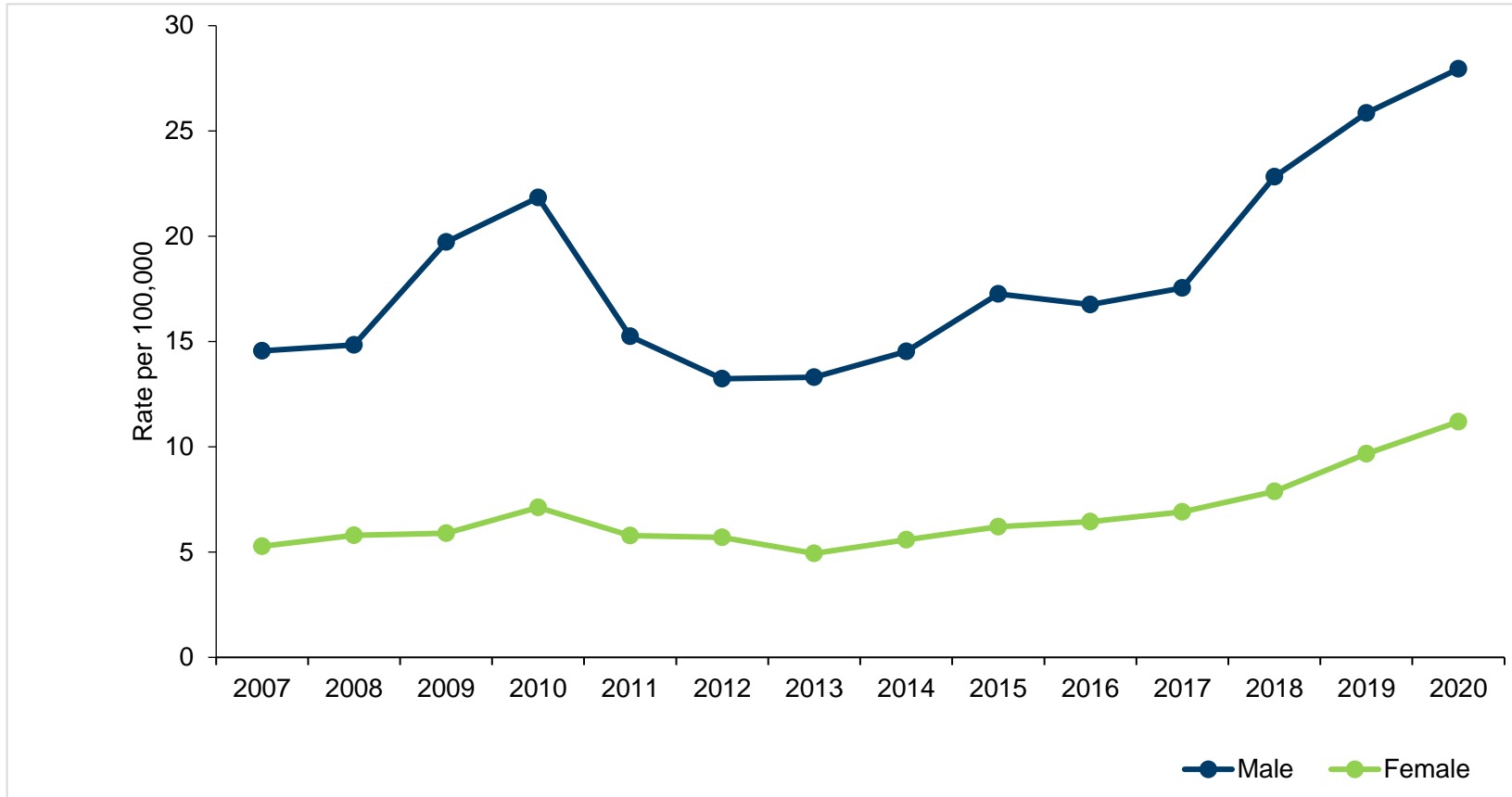
Methods Data from the National Self-Harm Registry Ireland on hospital-presenting self-harm by individuals aged 10–24 years during 2007–2018 were examined. Annual IDO rates per 100,000 were calculated by age and gender. Joinpoint regression analyses and incidence rate ratios were used to examine trends in the incidence of paracetamol-related IDO.

Results During the study, 10,985 paracetamol-related IDOs were recorded. The incidence of paracetamol-related IDO among young people increased by 9% between 2007 and 2018 (IRR 1.09 95% CI 1.00–1.19), with the highest annual percentage change (APC) in females aged 18–24 years (APC 1.2%). Conversely, rates of paracetamol-related IDO among males aged 18–24 years decreased significantly (APC 1.6%). Between 2013 and 2018, excesses of 386 and 151 paracetamol-related IDOs were observed in females aged 10–17 and 18–24 years, respectively, and 42 excess presentations were observed for males aged 10–17 years. There were 107 fewer presentations than expected for males aged 18–24 years.

Conclusion The increase in paracetamol-related IDO among specific groups of young people, particularly young females is an issue of growing concern. Interventions targeting IDO among young people are needed, incorporating measures to address the availability of paracetamol and aftercare following IDO.

Keywords Drug overdose · Self-harm · Paracetamol · Policy · Pharmaco-epidemiology

IDO involving illegal/street drugs



More prevalent among older men and those experiencing homelessness

~ 10% increase in cocaine involvement p.a.

~ 15% increase in cannabis involvement p.a.

Alcohol-related self-harm

- Risk factors for alcohol involvement in self-harm
 - Male gender
 - Age 45-54 years
 - Drug overdose
 - Presenting out-of-hours
 - Less likely to receive psychiatric care
- Risk factors for alcohol involvement in suicide
 - Age 25-34 years
 - Male gender
 - History of drug or alcohol abuse

Journal of Public Health | pp. 1-7 | doi:10.1093/pubmed/tdz049

The involvement of alcohol in hospital-treated self-harm and associated factors: findings from two national registries

Eve Griffin¹, Ella Arensman^{1,2}, Ivan J Perry², Brendan Bonner³, Denise O'Hagan³, Caroline Daly¹, Paul Corcoran^{2,4}

¹National Suicide Research Foundation, University College Cork, Cork, T12 Y802, Ireland

Research Trends



Alcohol Involvement in Suicide and Self-Harm

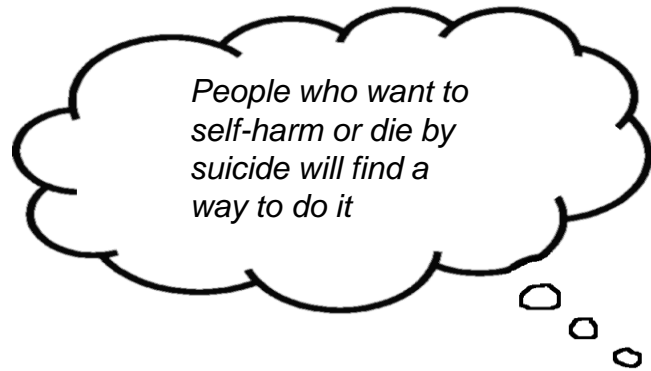
Findings From Two Innovative Surveillance Systems

Celine Larkin¹, Eve Griffin¹, Paul Corcoran^{1,2}, Carmel McAuliffe³, Ivan J. Perry², and Ella Arensman^{1,2}

Restricting access to means



Can restricting access to means of suicide and self-harm help reduce rates?



MYTH!

- Consistent evidence that restricting access to lethal means is associated with a decrease in suicide and that substitution to other methods appears to be limited (Zalsman et al, 2016)
- Reducing access to frequently used sites for suicide. Evidence from 18 studies showed a consistent reduction of suicide following restricted access and increased safety of the sites involved (Pirkis et al, 2015)

Reducing access to medications used in overdose



Co-proxamol


- 84% reduction in three years following withdrawal from Irish market (Corcoran et al., 2010)

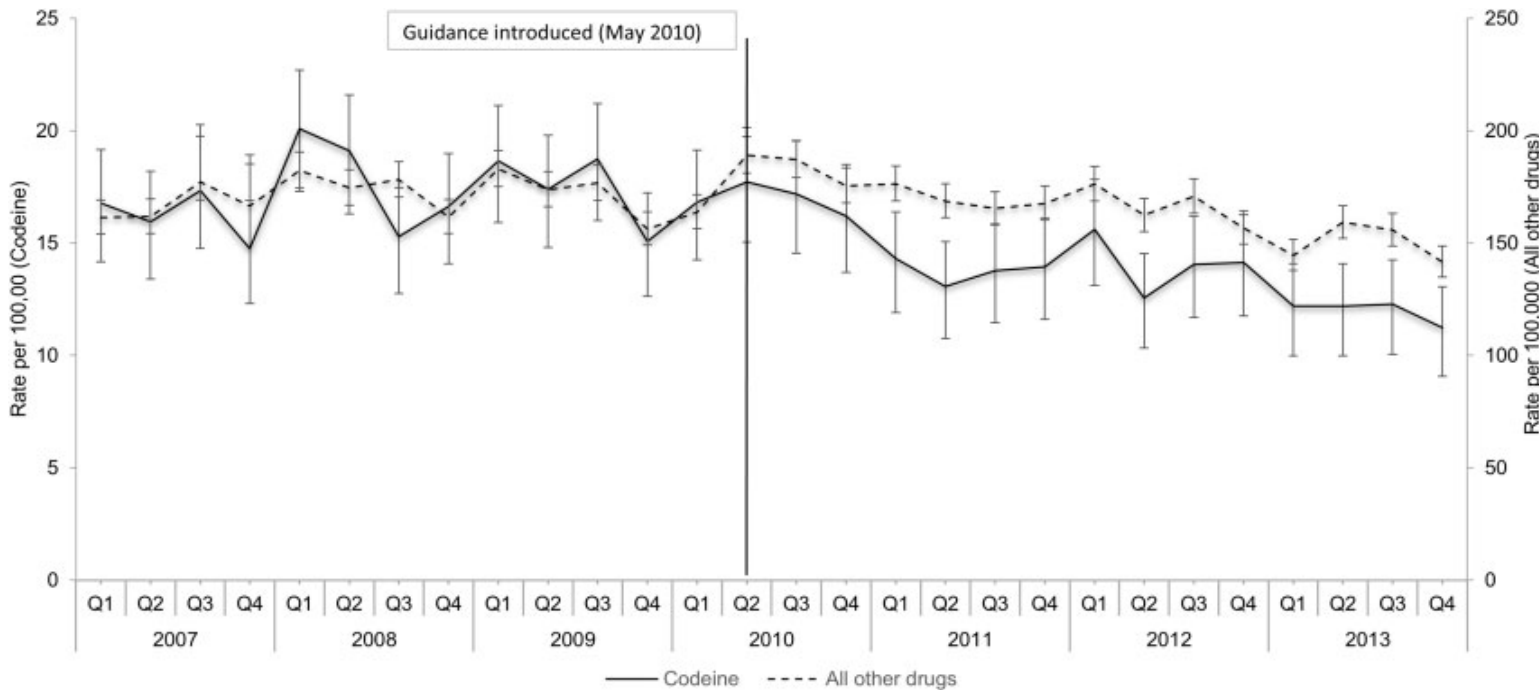
Paracetamol

- Reductions in intentional drug overdose and suicide deaths in UK (Hawton et al, 2001; 2013)
- Smaller pack sizes in Ireland did not reduce quantity of tablets taken, when compared with UK (Hawton et al, 2011)
- 17% reduction in hospital admissions after age limit applied in Denmark (Morthorst et al, 2020)

Restricting access to codeine

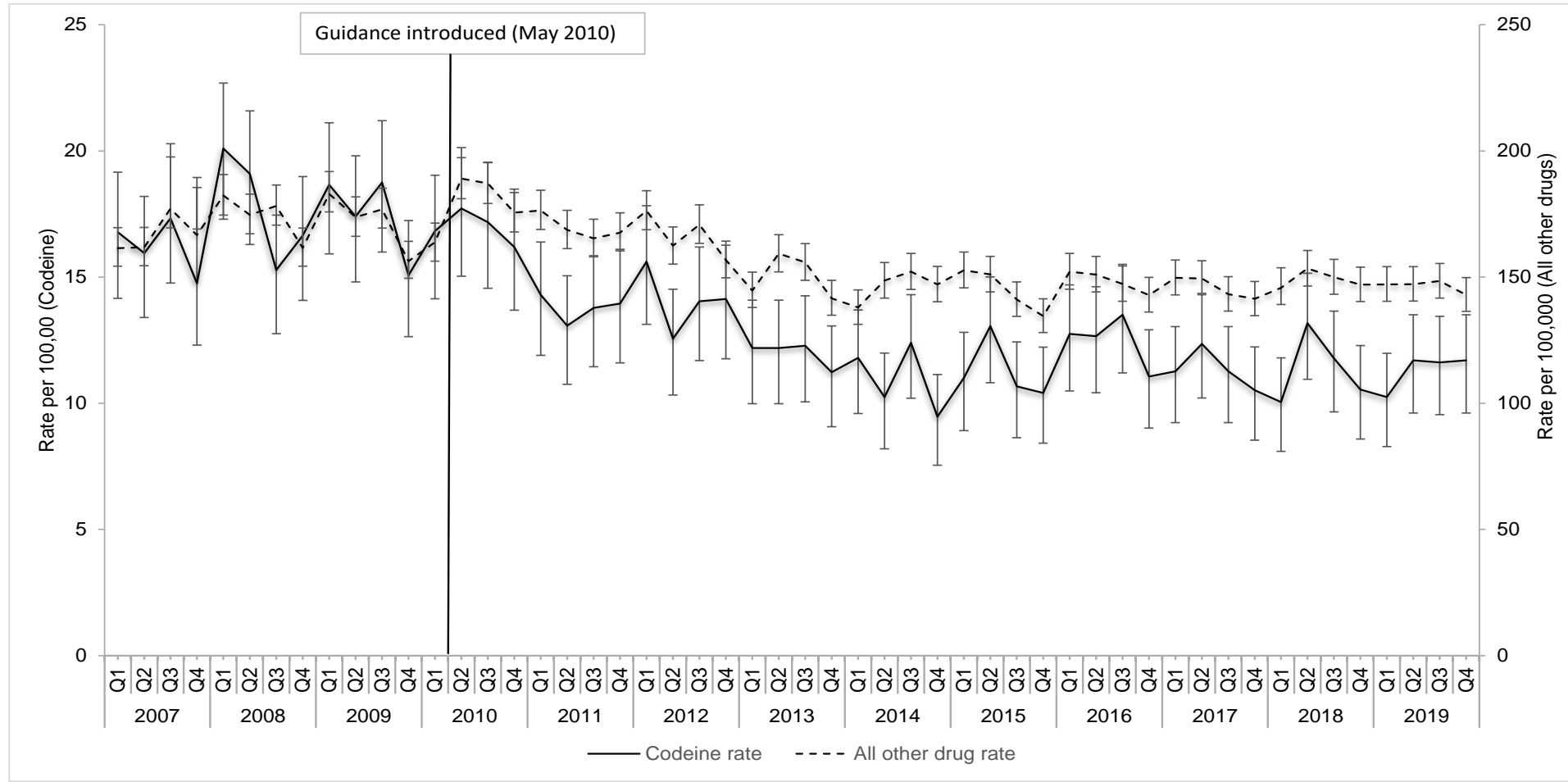
The impact of guidance on the supply of codeine-containing products on their use in intentional drug overdose

Emma Birchall¹, Ivan J. Perry², Paul Corcoran^{2,3}, Caroline Daly³, Eve Griffin ^{2,3,*}



- Rate of codeine-related IDO 20% lower in three years following guidance
- 3% decrease in IDO involving other drugs
- Larger impact in females

Restricting access to codeine



Alcohol-related self-harm



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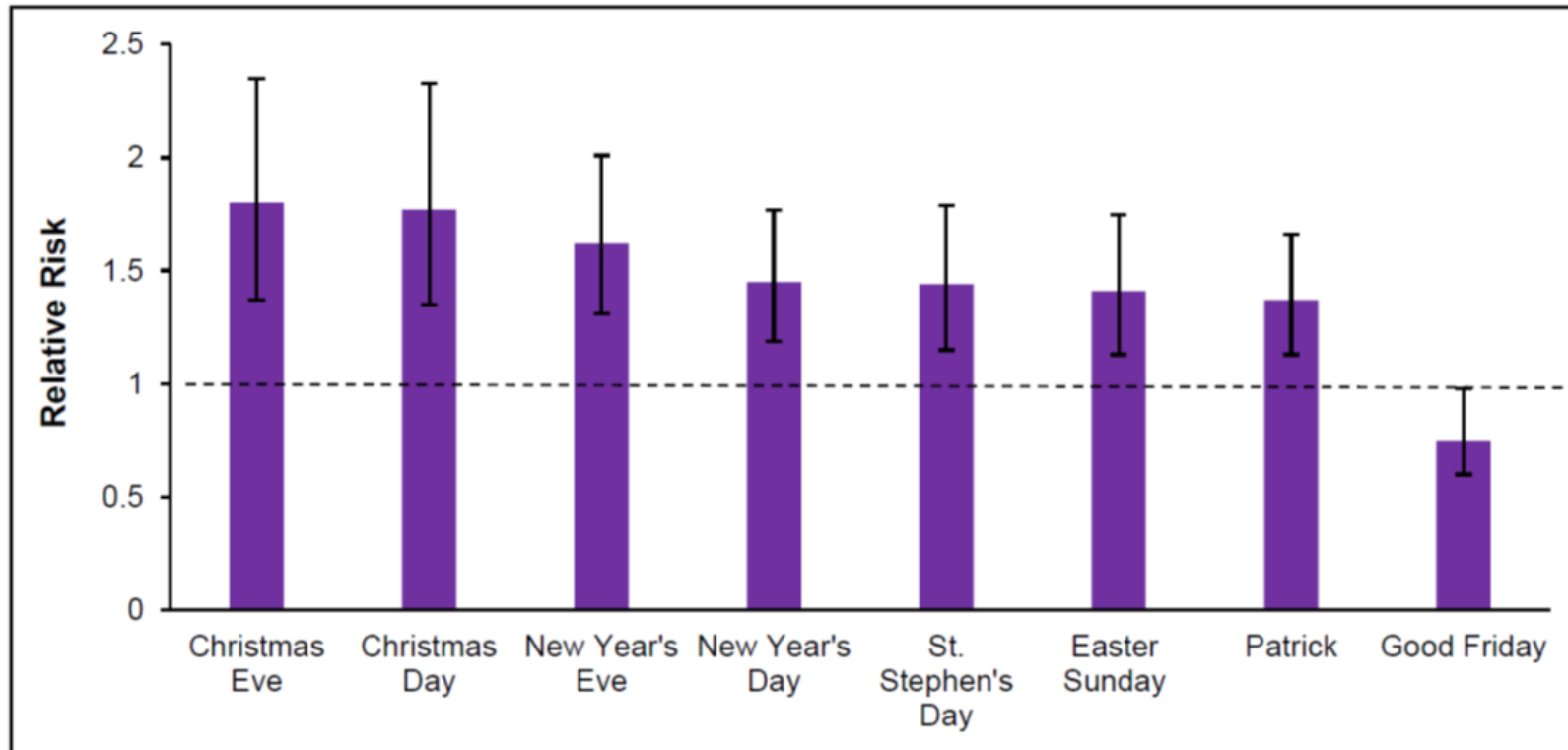
Research paper

The paradox of public holidays: Hospital-treated self-harm and associated factors



Eve Griffin^{a,*}, Christina B. Dillon^a, Grace O'Regan^a, Paul Corcoran^{b,c}, Ivan J. Perry^b, Ella Arensman^{a,b}

^a National Suicide Research Foundation, Cork, Ireland



International Journal of Environmental Research and Public Health



Article

Impact of Alcohol Policies on Suicidal Behavior: A Systematic Literature Review

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Abstract: Alcohol consumption has been found to be related to suicidal behavior at the individual and population level, but there is lack of literature reviews on the effect of alcohol policies on suicidal behavior. Therefore, the aim of the current study is to conduct a systematic literature review of the impact of alcohol policies at the population level on suicidal behavior and ideation. We searched the Cochrane CENTRAL, Cochrane DARE, EMBASE, Medline, ProQuest, PsycINFO, PubMed, SCOPUS, and Web of Science electronic databases in March 2019. Papers analyzing alcohol policies limiting alcohol use and studying suicidal behaviors as an outcome measure were included; we identified 19 papers. Although the methods and effect sizes varied substantially in the studies, reducing alcohol often led to reduction in suicidal behavior. Ecological-level studies predominantly investigated the effect of restrictions on alcohol availability and increased cost of alcohol, and the majority presented a reduction in suicides across Western and Eastern Europe, as well as the US. The majority of studies were rated as unclear risk of bias for a number of domains due to a lack of clear reporting. Policies targeting harmful alcohol consumption may contribute towards a reduction in suicidal behavior at the population level.

Keywords: alcohol policy; suicidal behavior; suicide prevention; systematic literature review

Opportunities for research and intervention

Research and data

- Understanding mechanisms by which population-level initiatives work
- Improving recording and reporting
 - Alcohol prevalence ranged from 20-51% across hospital
 - Classification of medications (e.g. ATC)
 - Source of access of medication

Interventions

- Targeted measures for substances with increased risk of fatality
- Improving services for self-harm patients with co-occurring substance use issues

Thank you!

Collaborators: Caroline Daly, Paul Corcoran, Ella Arensman, Mary Joyce, Emma Birchall, Bobby Smyth, Ivan J Perry, Roger Webb, Darren Ashcroft



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