

# National Suicide Research Foundation



# **Research Bulletin**

# January 2015

Welcome to the 14<sup>th</sup> issue of the National Suicide Research Foundation's (NSRF) Research Bulletin. The main objective of the Research Bulletin is to provide updates of research findings to a wide range of relevant agencies and professionals in policy, health and community settings, thereby helping to provide an evidence base for suicide prevention programmes and related work.

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## Increase in the use of highly lethal methods of selfharm: Findings from the National Registry of Deliberate Self-Harm

In 2013, the age-standardised rate of individuals presenting to hospital following self-harm was 199 per 100,000, a 6% decrease on the rate in 2012. This decrease is the third successive decrease in the rate of self-harm in Ireland (-4% and -2% in 2011 and 2012, respectively). However, the rate of self-harm in 2013 was still 6% higher than that in 2007, before the economic recession.

During the period 2007 to 2013, there was variation in the methods of self-harm recorded by the Registry. While methods of low lethality remained relatively stable during this time (Figure 1), highly lethal methods have steadily increased since 2007 for both men and women and across all age groups, and in particular among 25-44 year-olds. (Figure 2). While relatively rare (approx. 12% of all self-harm acts), the number of presentations involving highly lethal methods has increased by 32% for men and 53% for women since 2007.

This is particularly worrying as there is a significant association between the use of highly lethal methods of self-harm and subsequent suicide, especially among men (Bergen et al, 2012).

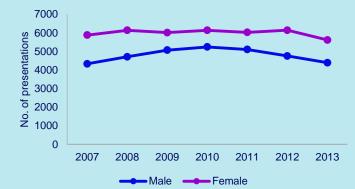


Figure 1: Trends in methods of low lethality by gender, 2007-2013

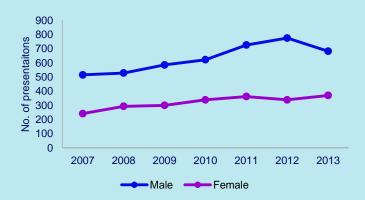


Figure 2: Trends in methods of high lethality by gender, 2007-2013

### Decreasing versus increasing trends of self-harm

The increase in rates of self-harm associated with the economic recession varied according to age. During the period 2010-2013, the increase in male self-harm was highest among those aged 25-44 years. For women, the most significant increase was observed for those aged 15-24 years.

Since 2010, the male rate of self-harm has decreased by 16% and the female rate by 13%. However, these decreases varied by city and county. The decreases at county level ranged from 6% to 56% for men, and for women from 3% to 40%. However, not all regions saw a reduction in self-harm rates during the period 2010-2013 (Figures 3a, 3b). Leitrim and Carlow saw significant increases in self-harm among both men and women, with the highest increase for both men and women in Leitrim (+42.69% and +104.4% respectively). These regions saw increases in all methods of self-harm during this period, and in particular highly lethal methods among women.

In two regions a corresponding increase in suicide rates was observed during this period. Kildare saw increases in the rate of suicide for men and women (+12.7% and +94.3% respectively). Increases were also observed among men in Dublin City (+15.64%).

In the context of the new Strategic Framework for Suicide Prevention (2015-2019) it would be important to prioritise research and prevention initiatives in areas where increasing trends of self-harm are being observed.

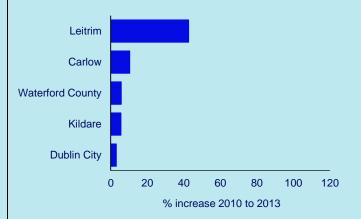


Figure 3a: Cities and counties with increases in self-harm rates for men, 2010 to 2013

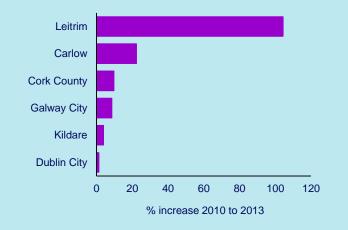


Figure 3b: Cities and counties with increases in self-harm rates for women, 2010 to 2013

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## The Iceberg of suicide and self-harm in Irish adolescents: A population based study

Suicide is a leading cause of death among adolescents. Self-harm is the most important risk factor for suicide, yet the majority of selfharm does not come to the attention of health services. Suicide is seen to increase in prevalence with age through adolescence and into adulthood.

Adolescent self-harm is a major public health problem, with a prevalence of approximately 10%, and of this percentage a small minority report seeking help from health services. Many adolescents report having harmed themselves, with a rate of 5,551 per 100,000 per year, while hospital data shows that only 6% of these result in hospital presentation.

An iceberg has been used as a representation to portray suicidal behaviour, with the tip of the iceberg being the highly visible but rare event of suicide, beneath this are the higher rates of hospital-treated self-harm, and under the surface is the more common but often hidden phenomenon of self-harm which does not come to the attention of health services.

For every boy who died by suicide, 16 presented to hospital with self-harm and 146 reported self-harm in the community. For every female suicide, 162 girls presented to hospital with self-harm and 3,296 reported self-harm. Gender differences in relative rates of selfharm and suicide are very large, with boys who have harmed themselves at particularly high risk of suicide. Knowledge of the relative incidence of self-harm and suicide in adolescents can inform prevention programmes and services.

Reference: McMahon E, Keeley H, Cannon M, Arensman E, Perry I, Clarke M, Chambers D, Corcoran C. (2014). The iceberg of suicide and self-harm in Irish adolescents: A population-based study. Soc Psychiatry Psychiatr Epidemiol. 49(12):1929-35.

DOI 10.1007/s00127-014-0907-z.

# **Characteristics of hospital-treated intentional** drug overdose in Ireland and Northern Ireland

Intentional drug overdose (IDO) is the most common form of hospital-treated suicidal behaviour, accounting for 65-85% of selfharm presentations to emergency departments and 1-2% of all hospital admissions.

Studies of the drugs taken in IDOs have led to effective changes in policy and legislation. In Ireland and the UK, paracetamol pack sizes have been reduced and some drugs are being removed from the market. Between 2007 and 2012 there were 56,494 IDO presentations to emergency departments, 50,394 in Ireland and 6,100 in the Western Area of Northern Ireland.

This study compared the profile of IDOs presenting to emergency departments in Ireland and in Northern Ireland over a five year period. The rate of IDO presentations to emergency departments and the availability of anti-depressants and tranquilisers were twice as high in Northern Ireland. The profile of IDO presentations in term of gender, age, the type of drug and the number of tablets taken were similar in both countries. The rate of alcohol involvement in IDO presentations was higher in Northern Ireland than in Rol. Alcohol involvement in Northern Ireland was very similar to that reported in the UK, suggesting a cultural pattern of alcohol misuse.

Reference: Griffin E, Corcoran P, Cassidy L, O'Carroll A, Perry I, Bonner B. (2014). Characteristics of hospital-treated intentional drug overdose in Ireland and Northern Ireland. BMJ Open 2014;4 (7):e005557.DOI:10.1136/bmjopen-2014-005557

# Effectiveness of community facilitator training in improving knowledge, attitudes, and confidence in relation to depression and suicidal behaviour: Results of the OSPI-Europe intervention in four **European countries**

About 90% of all suicides occur in context of psychiatric disorders, with depression being the most prominent risk factor. Community facilitators (CFs), such as teachers, nurses and social workers, are well placed as gatekeepers for depression and suicidal behaviour, but are not properly prepared to provide preventive and supportive services.

The OSPI-Europe training programme was implemented in eight different CF groups in Ireland, Germany, Hungary and Portugal. To evaluate the effectiveness of the training programme, attitudes toward depression, knowledge about suicide, and confidence in identifying suicidal persons were assessed before training, after training, and at three to six months follow-up.

The study outcomes provide evidence indicating that gatekeeper trainings in community settings are successful in improving knowledge, reshaping attitudes, and boosting the confidence of gatekeepers. The most effective strategy to achieve the preferred objectives is to target those CF groups that are most in need of training and to tailor the content of the training programme to the individual needs of the target group.

Reference: Coppens E, Van Audenhove C, Iddi S, Arensman E, Gottlebe K, Koburger N, Coffey C, et al. (2014). Effectiveness of community facilitator training in improving knowledge, attitudes, and confidence in relation to depression and suicidal behaviour: Results of the OSPI-Europe intervention in four European countries. Journal of Affective Disorders, 165, 142-150. DOI 10.1016/j.jad.2014.04.052

#### **Conferences in 2015**

#### **Self-Harm Symposium**

February 27<sup>th</sup>

Belfast, Northern Ireland

Health and Social Care Public Health Agency

For further information go to: <a href="http://www.publichealth.hscni.net">http://www.publichealth.hscni.net</a>

To register your interest in attending email: hilary.coleman@leadership.hscni.net

#### **IASP Montreal 2015**

June 16<sup>th</sup> – 20<sup>th</sup>

Montreal, Canada

28<sup>th</sup> World Congress of the International Association for Suicide Prevention

New Discoveries and Technologies in Suicide Prevention

For further information go to: http://iasp2015.com/

#### **IASR/AFSP International Summit on** Suicide Research

October 11th - 14th

New York City, US

Preventing Suicide: Progress through Research For further information and to submit your proposal go to: http://suicideresearchsummit.org/



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