



National Suicide Research Foundation

Research Bulletin

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This is Issue 11 of the Research Bulletin produced by the National Suicide Research Foundation (NSRF). The main objective is to provide regular updates of our research findings to a wide range of relevant agencies and professionals in the health and community care services, thereby helping to provide an evidence base for suicide and self harm prevention programmes.

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Use of minor tranquillisers in intentional overdose

Drug overdose is the most common method of self harm in Ireland, which is involved in 77% of all self-harm acts registered by the National Registry of Deliberate Self Harm (NRDSH) in 2010 and more so in women (77%) than in men (65%). Since the start of the Registry, minor tranquillisers (benzodiazepines) are the most common drug involved in intentional overdose representing 29% (ca. 3,500) of self harm episodes presenting to hospital Emergency Departments each year.

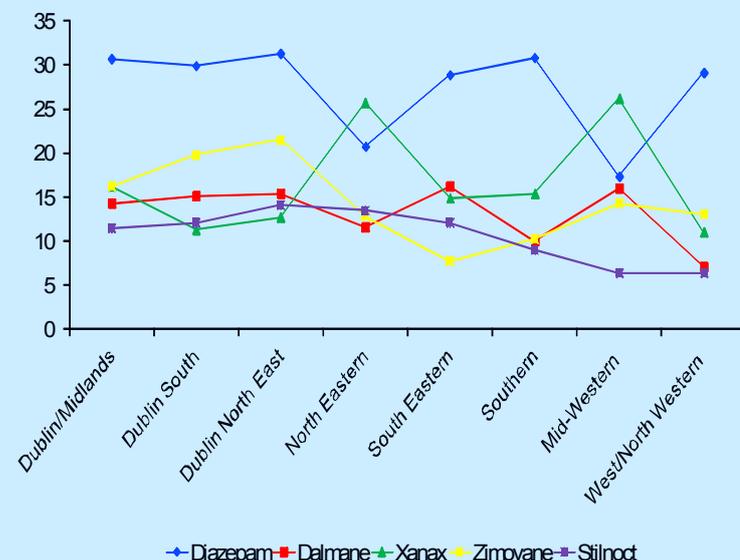
Investigating trends in the use of minor tranquillisers in intentional overdose over time, the 5 most frequently used minor tranquillisers are Diazepam, Dalmane, Xanax, Stilnoct and Zimovane, with Diazepam being most common.

Between 2003 and 2006 an increasing trend was observed for the use of diazepam which has stabilised in recent years. Since 2006, there has been a decreasing trend in the use of Dalmane and a slightly increasing trend in the use of Xanax and Stilnoct. A stable pattern over time was observed for the use of Zimovane in intentional overdose.

Prevalence of minor tranquillisers by geographical region

There is considerable variation in the use of minor tranquillisers involved in intentional overdose by Hospital group area (Figure 1).

Figure 1 Intentional overdose involving minor tranquillisers by hospital group (average percentage 2003-2010)



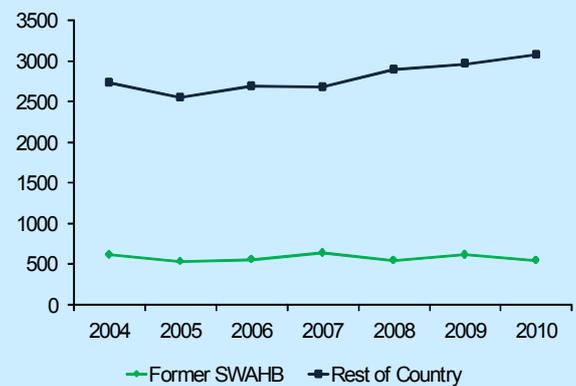
In all areas other than the North Eastern area and Mid-Western area, Diazepam is the most frequently used drugs in intentional overdose. Use of Xanax is particularly high (26%) in both the North Eastern and Mid-Western areas. The use of Zimovane is relatively high in the Dublin areas (18%), Mid-Western (14%) and West/North Western area (13%).

Effectiveness of the DUMP project in reducing use of minor tranquillisers in intentional overdose

The campaign to Dispose of Unused Medications Properly (DUMP) was launched in 2002 (O'Driscoll et al, 2009). It aims to encourage people to return their unused medicines to their local community pharmacies. One hundred and fifty seven pharmacies have been involved in the full roll out of the DUMP project in the former South Western Area Health Board (SWAHB), since 2002.

During the period 2004-2010, use of minor tranquillisers involved in intentional overdose in the former SWHAB area remained stable, with a slight decrease in 2010 (Figure 2). However, in the rest of the country an increasing trend has been observed since 2007. These findings support the effectiveness of the DUMP project on reducing intentional overdose involving minor tranquillisers.

Figure 2 Effects of the DUMP project on the use of minor tranquillisers in intentional overdose (Former South Western Area Health Board Region, 2004-2010)



These findings are consistent with various other national and international initiatives aimed at restricting access to frequently used means in self-harm and suicide (Sarchiapone et al, 2011; Corcoran et al, 2010; Mann et al, 2005).

In January 2012, the National Office for Suicide Prevention established a National Working Group to Restrict Access to Means, with a central focus on reducing access to minor tranquillisers. Objectives of the Working Group are to promote the safe storage and disposal of medications and increase awareness among prescribers and the general public. Taking into account the evidence supporting the effectiveness of the DUMP project in the former SWAB area, the Working Group would strongly recommend implementation of the DUMP campaign at national level.

The Incidence and Repetition of Hospital-Treated Deliberate Self Harm: Findings from the World's First National Registry

Few countries worldwide have reliable data on deliberate self-harm (DSH). There is a broad spectrum of self-harming behaviours ranging from deliberate recklessness to highly lethal attempts at suicide and only a minority of adolescents and adults who self-harm present to hospital.

We have established a national DSH registry in the Republic of Ireland. The purpose of this national registry is to determine and monitor the incidence and repetition of DSH, to identify high-incidence groups and areas and to inform services and practitioners concerned with the prevention of suicidal behaviour.

Between 2003 and 2009, the Irish National Registry of Deliberate Self Harm (NRDSH) collected data on DSH presentations to all 40 hospital emergency departments in Ireland. Data was collected by trained data registration officers using standard methods of case ascertainment and definition. The Registry recorded 75,119 DSH presentations involving 48,206 individuals. The total incidence rate fell from 209 per 100,000 in 2003 to 184 per 100,000 in 2006 and increased again to 209 per 100,000 in 2009. The most notable annual changes were successive 10% increases in the male rate in 2008 and 2009. There was significant variation by age with peak rates in women in the 15–19 year age group (620 per 100,000), and in men in the 20–24 age group (427 per 100,000). Repetition rates varied significantly by age, method of self-harm and number of previous episodes.

Of the 48,206 people who made the 75,119 DSH presentations to hospital in 2003–2009, 10,516 (22%) repeated at least once, 4,642 (10%) repeated at least twice and 453 (1%) repeated at least nine times. This group of 453 frequent repeaters accounted for 8,080 (11%) of the 75,119 self-harm presentations over the seven years of observation.

Acts involving self-cutting were associated with an elevated risk of repetition for both genders but where cutting was the sole method of DSH the increased risk of repetition among women was higher than that among men.

Population-based data on hospital-treated DSH represent an important index of the burden of mental illness and suicide risk in the community. The increased DSH rate in Irish men in 2008 and 2009 coincided with the advent of the economic recession in Ireland. The findings underline the need for developing effective interventions to reduce DSH repetition rates as a key priority for health systems.

Reference: Perry IJ, Corcoran P, Fitzgerald AP, Keeley HS, Reulbach U, Arensman E (2012) The Incidence and Repetition of Hospital-Treated Deliberate Self Harm: Findings from the World's First National Registry. *PLoS ONE* 7 (2): e31663. doi:10.1371.

Clinicopathological significance of psychotic experiences in non-psychotic young people: evidence from four population-based studies

Research has shown that hallucinations and delusions, the classic symptoms of psychosis, are far more prevalent in the population than actual psychotic disorder. These symptoms are especially prevalent in childhood and adolescence. Longitudinal research has demonstrated that psychotic symptoms in adolescence increase the risk of psychotic disorder in adulthood. There has been a lack of research on the immediate clinicopathological significance of psychotic symptoms in adolescence.

This study aimed to investigate the relationship between psychotic symptoms and non-psychotic psychopathology in community samples of adolescents in terms of prevalence, co-occurring disorders, multiple psychopathology and variation across early versus middle adolescence.

Data from four population studies were used: two early adolescence studies (ages 11–13 years) and two mid-adolescence studies (ages 13–16 years). Studies 1 and 2 involved school-based surveys of 2,243 children aged 11–16 years and looked at psychotic symptoms and emotional and behavioural symptoms of psychopathology.

The mid-adolescent studies involved in-depth diagnostic interview assessments of psychotic symptoms and lifetime psychiatric disorders in community samples of 423 children aged 11–15 years.

This study found that younger adolescents had a higher prevalence (21–23%) of psychotic symptoms than older adolescents (7%). In both age groups the majority of adolescents who reported psychotic symptoms had at least one diagnosable non-psychotic psychiatric disorder, although associations with psychopathology increased with age. Nearly 80% of the mid-adolescence sample who reported psychotic symptoms had at least one diagnosis, compared with 57% of the early adolescence sample. Adolescents who reported psychotic symptoms were at particularly high risk of having multiple co-occurring diagnoses.

Psychotic symptoms are important risk markers for a wide range of non-psychotic psychopathological disorders, in particular for severe psychopathology characterised by multiple co-occurring diagnoses. These symptoms should be carefully assessed in all patients.

Reference: Kelleher I, Keeley H, Corcoran P, Lynch F, Fitzpatrick C, Devlin N, Molloy C, Roddy S, Clarke MC, Harley M, Arseneault L, Wasserman C, Carli V, Sarchiapone M, Hoven C, Wasserman D, Cannon M (2012). Clinicopathological significance of psychotic experiences in non-psychotic young people: evidence from four population-based studies. *British Journal of Psychiatry*, Apr 12. [Epub ahead of print] DOI: 10.1192.

Non-Suicidal Self-Injury – Is there a case for a new diagnostic category?

In the US, preparations are underway for the next edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) which will be published in 2013. One of the newly proposed diagnostic categories for inclusion is Non-Suicidal Self Injury (NSSI). Non-Suicidal Self Injury refers to intentional destruction of one's own body tissue (e.g. cutting, burning, hitting) without suicidal intent and for purposes not socially sanctioned.

Concerns have been reported in relation to the proposal to include a diagnostic category for NSSI due to lack of sufficient evidence and potential negative implications for assessment, treatment and prevention.

The need to improve assessment procedures to determine the *degree of suicidal intent* among people engaging in self-harm has been highlighted as a key priority rather than the need to distinguish between those *with and without suicidal intent*. This view is further supported by evidence that suicidal intent is a fluid rather than a dichotomous concept. This raises the question about the validity and clinical relevance of classifying self-harm patients into 'yes/no suicidal categories'.

Evidence has been reported for subgroups of self-harm patients characterised by mild versus those with severe self-harm representing the opposite poles of a dimensional concept of severity. Low severity was associated with low (not "zero") suicidal intent, low degree (not "absence") of suicidal preoccupation, low lethal self-harm methods, trying to influence someone and wish to seek help.

Considering that NSSI was found to be significantly associated with attempted suicide and suicide, a diagnosis of NSSI could prevent the identification of a significant group of people who are at risk for further suicide attempts and who could benefit from targeted interventions.

While at present the evidence would not support NSSI as a separate diagnostic category, it may have a useful place as a subtype of self-harm at an individual clinical level.

Reference: Arensman E, Keeley HS (2012). Non-Suicidal Self-Injury – Is there a case for a new diagnostic category? *Psychiatry Professional*, Spring.

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