

# National Suicide Research Foundation

## Research Newsletter

### WELCOME

Welcome to the 16th edition of the National Suicide Research Foundation Newsletter. The main purpose of the Newsletter is to provide updates on our research and the recent activities of the research team. The NSRF's research provides an evidence base for the strategic goals and actions of *Connecting for Life*, Ireland's Strategy to reduce suicide 2015-2020.

### In this Issue

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### New Information Resources launched in Donegal

In September, the NSRF contributed extensively to three new information resources which promote awareness of suicide risk, launched by *Connecting for Life* Donegal.

The resources include a poster outlining the key services and phone numbers to contact in a mental health crisis, a GP Patient Pathway for those experiencing a suicidal crisis, and a Family Information Pack to be issued when a loved one is admitted to the acute psychiatric unit.

Speaking at the launch Dr Colette Corry, Senior Post-Doctoral Researcher at the NSRF stated "This pack addresses the important issues and questions which family members may have on admission of a family member to the acute inpatient unit, such as how to explain mental health problems to children and how to support a family member following discharge from the acute inpatient unit. We are hopeful that it will prove to be an invaluable resource to family members".

The family information pack can be accessed here: <http://tinyurl.com/yad5yghh>



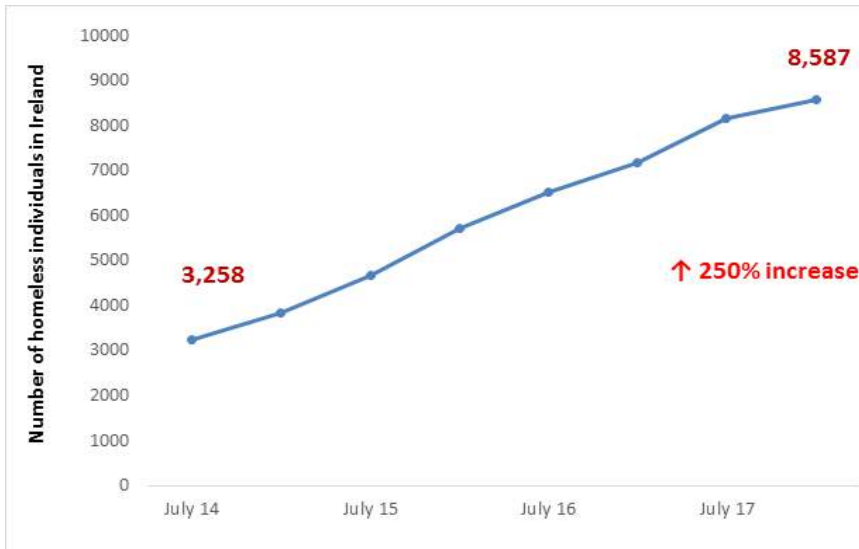
Left to right: Mr John Hayes, Dr Clifford Hayley, Dr Colette Corry, Dr Paul Stewart, Ms Anne Sheridan and Mr John Meehan

# Research Findings

## Self-harm among the homeless population in Ireland

Rates of premature mortality are typically higher among the homeless population than in the general population living at a fixed residence. Self-harm is a strong predictor of future suicide, but little is known about self-harm among the homeless population.

There have been increases in the prevalence of homelessness in Ireland in recent years, primarily due to supply shortages in housing (See figure 1).



Data source: Department of Housing, Planning, Community & Local Government

**Figure 1: Scale of homelessness in Ireland, 2014-2017**

The homeless population includes rough sleepers, those sleeping in emergency accommodation such as hostels, and the “hidden homeless” who stay with relatives or friends, or remain in institutional care due to a lack of alternative housing. In Ireland, 5% of all hospital presentations of self-harm in 2015 were by residents of homeless hostels or people of no fixed abode.

Although some of these are repeated presentations among the same individuals, this is disproportionately high; visibly homeless individuals comprised 0.1% of the Irish population in the 2016 census.

The characteristics of homeless individuals who self-harm may differ from domiciled individuals, as there are inherent demographic differences between these two groups.

A systematic review of 129 hospital-based studies identified homelessness as an under-researched risk factor for self-harm repetition (Larkin et al., 2014). In Ireland, approximately 15% of all self-harm patients make at least one repeat hospital presentation for self-harm in the same calendar year, but it is unknown whether this varies by housing status.

The study aim was to examine the incidence of self-harm among the homeless population and to assess factors associated with self-harm, using data from the National Self-Harm Registry Ireland for the period 2010-2014.

### Main findings

- The rate of self-harm presenting to hospital emergency departments between 2010 and 2014 was 30 times higher among the homeless population compared with those living at a fixed residence. Although the homeless population made up approximately 0.1% of the total population in Ireland, they accounted for 4% of all self-harm presentations
- Those who were homeless at presentation to hospital were more likely to be male, and to present with highly lethal methods of self-harm. Use of street drugs in intentional overdose was higher in this group. There was a greater risk of presenting with repeated acts of self-harm among the homeless.
- The impact of self-harm among the homeless was higher in urban centres than elsewhere in the country. Almost three quarters of self-harm presentations among the homeless were among people living in Dublin City or Cork City.
- The overall number of annual self-harm presentations in the homeless increased from 305 in 2010 to 513 in 2014. The visibly homeless population increased by 64% between 2011 and 2016; this is likely to account for some of the increase in overall number of self-harm presentations during the study period.

### Implications and recommendations

The findings indicate that the homeless are a particularly vulnerable population, and enhanced efforts to prevent self-harm among this group are required. In line with Ireland’s National Strategy to Reduce Suicide – Connecting for Life, 2015-2020 – targeted interventions such as improved provision of primary care and mental health services for the homeless, and increased availability of evidence-based psychosocial interventions for this group are required. Other recommended measures include:

- Cross-sectoral changes to health and housing policy to prevent homelessness and enhance access to appropriate care;
- Enhanced training for healthcare and community-based professionals to increase awareness of self-harm and related mental health and social issues;
- Population level interventions to reduce excessive use of alcohol and illicit drugs

Read the publication in full here: <https://tinyurl.com/yd5g79xl>

Reference: Barrett P, Griffin E, Corcoran P, O’Mahony MT, Arensman E. Self-harm among the homeless population in Ireland: A national registry based study of incidence and associated factors. *Journal of Affective Disorders* 2018. 229: 523-531

## A cost-effectiveness analysis of school-based suicide prevention programmes

Suicide is one of the leading causes of death among young people globally. In light of emerging evidence supporting the effectiveness of school-based suicide prevention programmes, we aimed to conduct a full cost-effectiveness analysis (CEA) of the large pan-European school-based RCT, Saving and Empowering Young Lives in Europe (SEYLE). The SEYLE study (in which the NSRF was a partner) reported a significant effect of a universal school-based mental health awareness programme—Youth Aware of Mental Health—in reducing incident suicide attempt and severe suicidal ideation.

The analysis shows that the Youth Aware of Mental Health programme was the most cost effective of the programmes that were compared in terms of preventing both attempted suicide and severe suicidal ideation among school-going adolescents.

The paper can be accessed here: <https://tinyurl.com/yb2uwgk8>

Reference: Ahern S, Burke LA, McElroy B, Corcoran P, McMahon EM, Keeley HS, et al. A cost-effectiveness analysis of school-based suicide prevention programmes. *European child & adolescent psychiatry*, 2018, 1-10.

## Intentional Drug Overdose involving Pregabalin and Gabapentin: Findings from the National Self-Harm Registry Ireland, 2007-2015

Using data from the National Self-Harm Registry Ireland this paper examines trends in the consumption of gabapentinoids in intentional drug overdose (IDO), the profile of individuals taking them and associated overdose characteristics.

The findings indicate that presentations involving a gabapentinoid increased from 0.5% in 2007 to 5.5% in 2015. The majority of IDOs involving a gabapentinoid were made by females (60%), with many involving alcohol (37%).

Compared with IDOs involving other drugs, presentations with a gabapentinoid were made by persons who were older (median 37 vs. 32 years) and involved a significantly greater quantity of tablets (median 30 vs. 21), with over one-quarter (27%) of these involving the ingestion of 50 tablets or more.

The study identifies the increasing use of gabapentinoids in IDO, and highlights the need for clinicians to exercise vigilance while prescribing gabapentinoids, including being aware of other medications that patients may have access to.

Read the paper here: <https://tinyurl.com/ybv6x8sj>

Reference: Daly C, Griffin E, Ashcroft DM, Webb RT, Perry JJ, Arensman E. Intentional Drug Overdose Involving Pregabalin and Gabapentin: Findings from the National Self-Harm Registry Ireland, 2007-2015. *Clinical Drug Investigation*. 2017

## Recent Publications



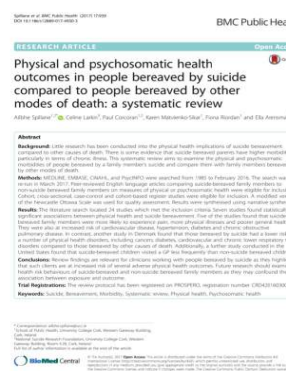
Mental health difficulties and suicidal behaviours among young migrants: multicentre study of European adolescents. *McMahon EM, Corcoran P, Keeley HS, Cannon M, Carli V, Wasserman C, et al. BJPsych open* 2018, 3 (6), 291-299.

Alcohol Involvement in Suicide and Self-Harm: Findings from two innovative Surveillance systems. *Larkin C, Griffin E, Corcoran P, McAuliffe, Perry JJ, Arensman E. 2017. Crisis*. Nov 29:1-10



Effectiveness of General Practitioner training to improve suicide awareness and knowledge and skills towards depression. *Coppens E, Van Audenhove C, Gusmao R, Purebl G, Székely A, Maxwell M, Koburger N, Arensman E, Hegerl U. 2017. Journal of Affective Disorders* 227:17-23

Standard 12 month dialectical behaviour therapy for adults with borderline personality disorder in a public community mental health setting. *Flynn D, Kells M, Joyce M, Corcoran P, Gillespie C, Suarez C, et al. Borderline personality disorder and emotion dysregulation* 2017, 4 (1), 19.



Physical and psychosomatic health outcomes in people bereaved by suicide compared to people bereaved by other modes of death: a systematic review. *Spillane A, Larkin C, Corcoran P, Matvienko-Sikar K, Riordan F, Arensman E. BMC Public Health*. 2017. 17:939



## Young Lives in Ireland: A school-based study of mental health and suicide prevention



Suicide is one of the leading causes of death among young people and in Ireland peak rates of hospital-treated self-harm are among 20-24 year old males and 15-19 year old females. This report presents the research findings of the Saving and Empowering Young Lives in Europe study, a mental health-promoting programme for adolescents in European schools.

In Ireland, 1,112 adolescents from 17 schools in the Cork and Kerry region participated in the SEYLE study. The lifestyles and mental health of the Irish SEYLE participants were examined using data gathered as part of the SEYLE trial. While the majority of the Irish sample reported high levels of wellbeing and low levels of risk behaviours, 23.7% had anxiety symptoms suggestive of a possible disorder and 13.8% had depressive symptoms suggestive of disorder, based on self-report screening measures. Serious suicidal thoughts were reported by 7.0% of the adolescents and 3.6% reported having attempted suicide at some time in their lives, with rates of suicidal thoughts and behaviour very similar for boys and girls.

Rates of smoking, alcohol and drug use were low, but strong associations were found between these risk behaviours and levels of anxiety, depressive symptoms and suicidal behaviour. We identified several groups at elevated risk of mental ill-health, including young people who had been victims of sexual or physical assault, migrants, and adolescents with concerns about their sexual orientation. Lifestyle factors associated with lower levels of difficulties included engaging in frequent physical activity and getting adequate sleep, indicating a possible protective role of these behaviours. Positive relationships with peers and parents were also associated with better mental health.

Regarding mental health, participants highlighted the need for school-based individual support, in particular the need for guidance counsellors to be available for young people in distress. A second major theme that emerged from the responses was the need for enhanced universal programmes of mental health education.

*Reference: McMahon E, O'Regan G, Corcoran P, Arensman E, Cannon M, Williamson E, Keeley H. Young Lives in Ireland: A school-based study of mental health and suicide prevention. National Suicide Research Foundation*

## National Self-Harm Registry Ireland Annual Report 2016

In 2016, the Registry recorded 11,485 presentations to hospital due to self-harm nationally, involving 8,909 individuals. Taking the population into account, the age-standardised rate of individuals presenting to hospital following self-harm in 2016 was 206 per 100,000. Between 2011 and 2013 there were successive decreases in the self-harm rate. An essentially unchanged rate in 2016 indicates a further stabilisation of the rate of self-harm in Ireland since 2013. However, the rate in 2016 was still 10% higher than in 2007, the year before the economic recession.

In 2016, the national male rate of self-harm was 184 per 100,000, 1% lower than in 2015. The female rate of self-harm in 2016 was 229 per 100,000, 3% higher than 2015. Since 2007, the male rate has increased significantly, by 14%, whereas the female rate is still 7% higher than in 2007.

In 2016, the only significant change in the rate of hospital-treated self-harm by age was among women aged 25-29 years, where the rate increased by 17% from 289 to 339 per 100,000.

Rates of self-harm for other age groups remained similar to 2015 figures. As in previous years, the female rate was higher than the male rate but the gender difference has narrowed from 37% in 2004-2005 to 24% in 2016. The peak rate for women was in the 15-19 years age group at 763 per 100,000, whereas the peak rate among men was in 20-24 year-olds at 516 per 100,000. These rates imply that one in every 131 girls in the age group 15-19 and one in every 194 men in the age group 20-24 presented to hospital in 2016 as a consequence of self-harm.

*Reference: Griffin E, Dillon C, Arensman E, Corcoran P, Williamson E, Perry I. National Self-Harm Registry Ireland Annual Report 2016. National Suicide Research Foundation*



Left to right: Ms Anne O'Connor, National Director for Mental Health HSE, Minister of State for Mental Health and Older People Jim Daly, Mr John Meehan, Assistant National Director, National Office for Suicide Prevention HSE and Dr Eve Griffin, Manager of the National Self-Harm Registry Ireland

## NSRF News

### HRB Research Leaders' Network Meeting

In October, the School of Public Health, University College Cork hosted the fourth annual meeting of the Health Research Board Research Leaders' Network in conjunction with the NSRF.

During the session, an update was provided on the 5 year HRB funded programme 'Individual and Area Level Determinants of Self-Harm and Suicide in Ireland: Enhancing Prediction, Risk Assessment and Management of Self-Harm by Health Services'.

Professor John Cryan from the Department of Anatomy and Neuroscience, University College Cork presented a lecture on 'Stress, Anxiety and Depression : Thinking outside of the (Brain) Box'.

An overview of the study (referred to as IMPRESS) can be found on pages 4&5 here: <http://www.nsrp.ie/projects/>



### New video interview on [suicidesupportandinformation.ie](http://suicidesupportandinformation.ie)



The NSRF added a new video interview to the Suicide Support and Information website!

In the video, Professor Eugene Cassidy, Consultant Psychiatrist, Cork University Hospital and Clinical Lead, University College Cork discusses common myths and important risk factors for suicide and self-harm, as well as effective treatments for depression and suicidal behaviour.

Prof Cassidy also outlines key messages for family members of individuals who are prone to depression and suicidal thoughts, how to respond to people bereaved by suicide, the impact of media reporting and the importance of self-care and peer support.

Watch the interview here! <http://suicidesupportandinformation.ie/video-gallery/>

### New Horizons in Medical Research Conference

Several NSRF researchers attended the New Horizons in Medical Research Conference in University College Cork in December. Grace O'Regan delivered an oral presentation entitled: 'Is there an association between methods of self-harm and risk of self-harm repetition? Findings from the National Self-Harm Registry Ireland'.

Dr Dorothy Leahy, Caroline Daly, Ailbhe Spillane, Ruth Benson and Niall McTernan presented their research on the following topics via poster presentations:

- Profile of patients presenting to emergency departments in the Southwest of Ireland following repeated episodes of self-harm
- The increasing use of gabapentinoids in intentional drug overdose: Findings from the National Self-Harm Registry Ireland, 2007- 2015
- What are the physical and psychological health effects of suicide bereavement on family members? A mixed-methods study
- The development of a Suicide and Self-Harm Observatory (SSHO) in Ireland
- Quality of media reporting of suicide in Ireland: Adherence to media guidelines





## Suicide & Self-Harm Early Career Researchers' Forum



Grace O'Regan presented at the 2nd Suicide & Self-Harm Early Career Researchers' Forum at the University of Glasgow in June.

The title of Grace's presentation was "Profile of people presenting to hospital with high risk suicidal behaviour".

The event and others like it provide an important opportunity for Early Career Researchers to learn, network and collaborate with other PhD and Post-Doctoral Researchers as well as more established researchers.

## WHO sub-regional workshop on suicide prevention

Professor Ella Arensman co-facilitated a World Health Organisation sub regional workshop on suicide prevention with Dr Alexandra Fleischmann (WHO) in Windhoek, Namibia also in June. The workshop was delivered as part of the NSRF's designation as a WHO Collaborating Centre for Surveillance and Research in Suicide Prevention. The topics covered included:

1. The process of developing suicide prevention strategies and programmes
2. The process of establishing a hospital-based suicide attempt /self-harm surveillance system
3. Evidence-based interventions in the African context

Participants from Ghana, Namibia, Mozambique, Uganda, Kenya, Zambia, Zimbabwe, South Africa and Tanzania were in attendance.



## Lord Mayor Forum on Mental Health



Professor Ella Arensman, Ruth Benson and Niall McTernan together with Dr Mary Joyce from the National DBT Project attended the Lord Mayor's Forum on Mental Health in Cork City Hall.

The session included workshops with Transition Year Students on how to promote positive mental health and how best to support young people in a school setting.

## Meet a member of our team..

### Dr Elaine McMahon, Post-doctoral Research Fellow in Youth Mental Health



Elaine recently completed work on a research programme funded by the Health Research Board as part of the Inter-Disciplinary Capacity Enhancement (ICE) programme. The project, Youth Mental Health: a population based research programme, involved inter-disciplinary and international research investigating the prevalence and correlates of adolescent mental ill-health.

Elaine is a graduate of University College Cork and previously worked as a research fellow at University College London. In 2012 she completed her PhD at the NSRF and the School of Public Health at University College Cork. Her doctoral work examined the psycho-social factors associated with self-harm in Irish adolescents. She has published papers on various topics including the relative incidence of adolescent suicide and self-harm; associations between bullying and mental health problems; and the mental health of young migrants in Europe.

Her work has involved international collaborations with the Child and Adolescent Self-Harm in Europe (CASE study) consortium and the multi-centre Saving and Empowering Young Lives in Europe (SEYLE) study and she has published her research in high-impact international journals.