



# Identifying subgroups of self-harm: Implications for assessment and treatment

Prof Ella Arensman, Grace Cully, Dr Ana Paula Ramos Costa,

Dr Dorothy Leahy, Sarah O'Meara, Ruth Benson, Isabela Troya, Karen Mulcahy

School of Public Health and National Suicide Research Foundation,

University College Cork

Australian Institute for Suicide Research and Prevention

International Association for Suicide Prevention



Australian Institute for Suicide Research and Prevention



World Suicide Prevention Day Forum AISRAP, Griffith University, Brisbane, 10th September 2019











Dedicated to Allison Milner, 1<sup>st</sup> May 1983 - 12<sup>th</sup> August 2019





## **#ValeAllison**











# Background

Limited research into subgroups of people who self-harm; • different methodological approaches within existing research

#### RESEARCH ARTICLE

Recommended next care following hospitaltreated self-harm: Patterns and trends over time

Ella Arensman<sup>1,2</sup>\*, Eve Griffin<sup>1</sup>, Caroline Daly<sup>1</sup>, Paul Corcoran<sup>1,2</sup>, Eugene Cassidy<sup>3</sup> J. Perry<sup>2</sup>

1 National Suicide Research Foundation, Cork, Ireland, 2 School of Public Health, University College Corl Cork, Ireland, 3 Department of Psychiatry, University College Cork, Cork, Ireland, 4 Liaison Psychiatry Service, Cork University Hospital, Cork, Ireland

earensman@ucc.ie

Abstract

#### Objective

received

OPEN ACCESS The specific objectives of this study were to examine variation in the care of self-harm patients in hospital settings and to identify the factors that predict recommended next care Citation: Arensman F. Griffin F. Daly C. Corcoran P. following self-harm Cassidy E, Perry IJ (2018) Recommended next care following hospital-treated self-harm: Pattern and trends over time, PLoS ONE 13(3); e019358 Methods Editor: Keith M. Harris, University of Queensland Data on consecutive presentations to Irish emergency departments (EDs) involving self-AUSTRALIA harm from the National Self-Harm Registry Ireland from 2004 to 2012 were utilised. Univari-

Received: October 3, 201 Accepted: February 14, 2018

Published: March 1, 2018 Copyright: © 2018 Arensman et al. This is an oper

mons Attribution License, which permits unrestricted use, distribution, and roduction in any medium, provided the original author and source are credited.

Data Availability Statement: The data used in this mes from the National Self-Harm Registry Ireland and contains sensitive patient ion. As a result, access to this data set is estricted and facilitated by the National Suicide earch Foundation. All data requests may b made to the National Suicide Research Foundation

Funding: The National Self-Harm Registry Ireland is funded by the Irish Health Service Executive's onal Office for Suicide Prevention

ate and multivariate regression analyses were performed to assess the associations between patients' clinical and demographic characteristics, and recommended next ca

#### access article distributed under the terms of the Results Across the study period a total 101,904 self-harm presentations were made to hospital EDs

involving 63,457 individuals. Over the course of the study there was a declining number of presentations resulting in patient admission following attendance with self-harm. Recommended next care varied according to hospital location, with general admission rates ranging from 11% to 61% across administrative health regions. Multinomial logistic regression identified that the factor which most strongly affected next care was the presenting hospital Being male, older age, method, repeat self-harm, time of attendance and residence of the patient were all identified as influencing care received. Psychiatric admission was most

common when highly lethal methods of self-harm were used (OR = 4.00, 95% CI, 3.63-4.41). A relatively large proportion of patients left the ED without being seen (15%) and the risk of doing so was highest for self-harm repeaters (1.64, 1.55-1.74 for those with 5+ presentations)

National Suicide **Research Foundation** 

#### Existing clinical guidelines and guidance documents for the assessment and management of self-harm (NICE, 2013; BPS, 2012) have limited focus on clinical subgroups of selfharm and tailored treatment approaches

- Emerging evidence about people who self-harm and who do not benefit from evidence based interventions – hidden subgroups?
  - Based on the National Self-Harm Registry Ireland, 39% of patients presenting to emergency departments due to selfharm do not receive a psychiatric or psychosocial assessment and 15% leave the hospital without a next care recommendation (Arensman et al, 2018)

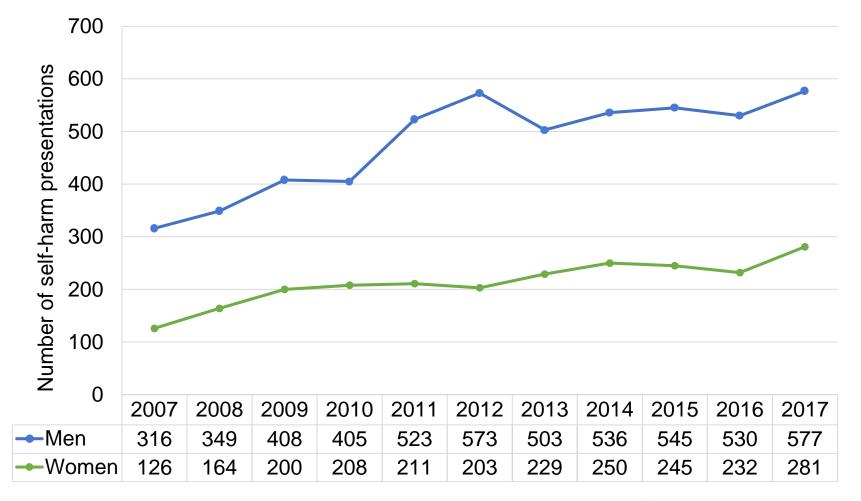








# Increasing trend of self-harm acts involving highly lethal methods among males and females (rates/100,000)





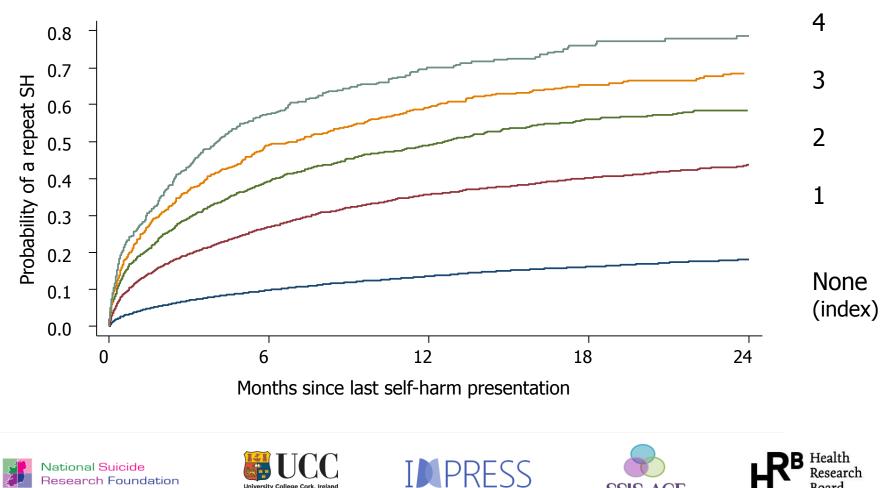








# Repetition by number of previous self-harm presentations



esearch

Board

**SSIS-ACE** 



University College Cork, Ireland

Coláiste na hOllscoile Corcaigh

# Improving Prediction and Risk Assessment of Self-Harm and Suicide (IMPRESS)

#### **Objectives:**

- Further investigate predictive risk factors associated with repeated self-harm among high risk groups of self-harm patients
- To develop a programme for the assessment and management of self-harm procedure for repeated self-harm and suicide for use in a general hospital setting
- Prospective design involving in-depth semi-structured interviews following an index self-harm presentation to general hospital (baseline) and 6 months follow-up

### Population: 2 high risk groups

- **High risk self-harm (HR):** self-harm presentations of high lethality and/or high level of suicidal intent)
- **Major repeaters (MR):** self-harm presentations by patients who have a history of 5 or more previous self-harm presentations)



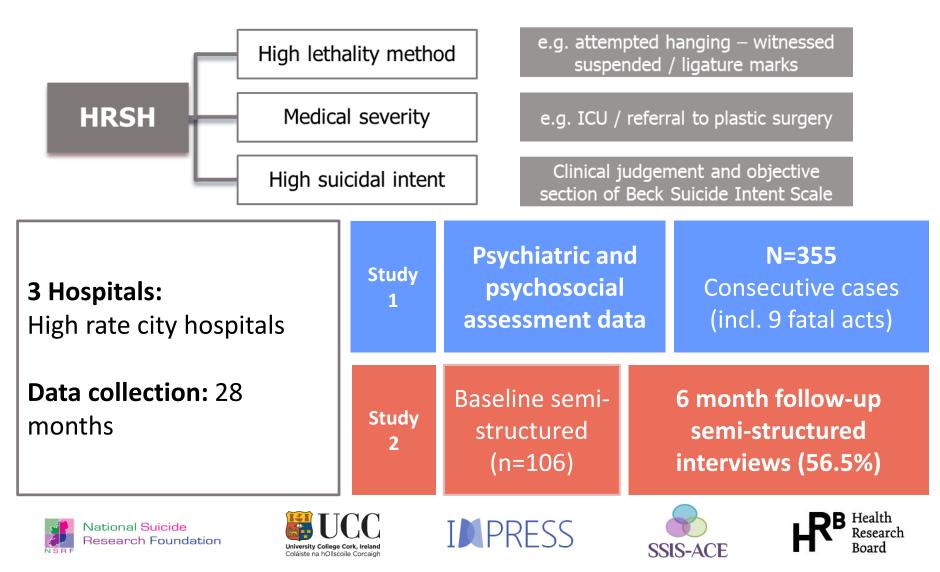








# Methods: Recruitment and response of patients with high risk self-harm



# Methods: Recruitment and response of patients with major self-harm repetition



5 or more previous episodes of self-harm

<b>3 Hospitals</b> High rate city hospitals	Study 1	Psychiatric and psychosocial assessment data	<b>N=135</b> Consecutive cases (incl. 2 fatal acts)
<b>Data collection:</b> 22 months	Study 2	Baseline semi- structured (n=32)	6 month follow-up semi-structured interviews (72%)











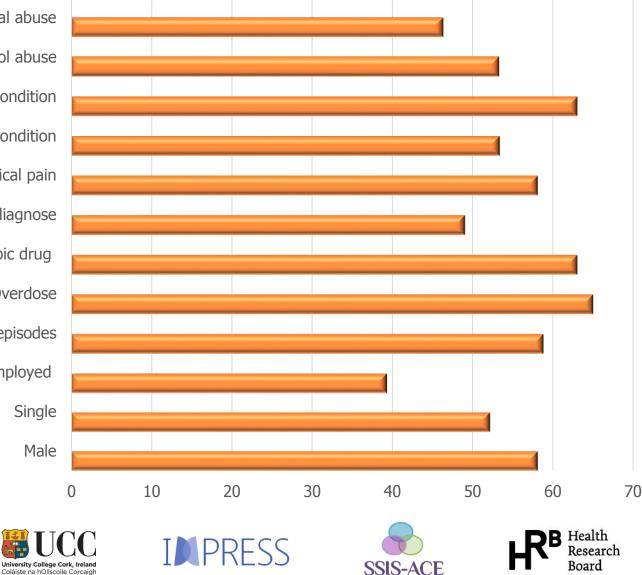
# **High-Risk Self-Harm**

History of sexual, physical or emotional abuse Drug and alcohol abuse On prescribed medication physical condition Comorbid physical condition In physical pain Depression diagnose On prescribed psychotropic drug Overdose 1 or more previous SH episodes Unemployed Single Male 0

National Suicide

**Research Foundation** 

Coláiste na hOllscoile Corcaigh

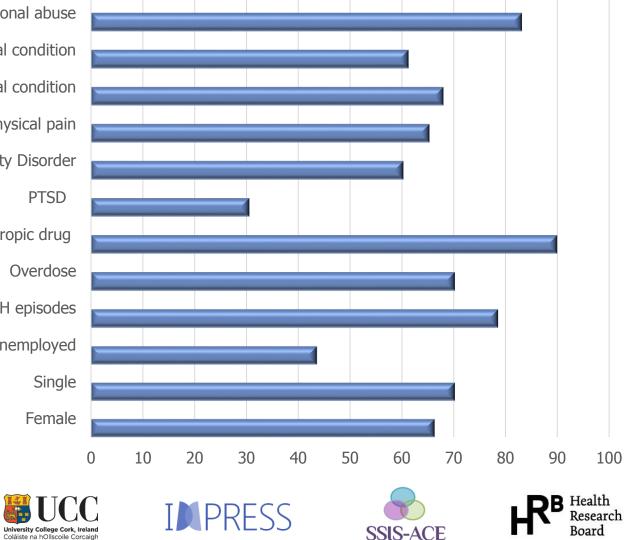


# Major Self-Harm Repeaters

History of sexual, physical or emotional abuse On prescribed medication physical condition Comorbid physical condition In physical pain Borderline Personality Disorder PTSD On prescribed psychotropic drug Overdose 10 or more previous SH episodes Unemployed Single Female 10 0 National Suicide

Coláiste na hOllscoile Corcaigh

**Research Foundation** 



# Experience of physical and sexual abuse

## **High Risk Self-Harm**

 Among the participants, 46.2% had a history of physical, sexual or emotional abuse. Among this subgroup, 22.9% reported one or more experiences with childhood sexual abuse or sexual assault at adolescent age.

### **Major Self-Harm repeaters**

 Over 80% of participants had a history of physical, sexual or emotional abuse. Among the participants who reported an abuse experience, the majority (71%) had experienced childhood sexual abuse and 80.6% had experienced sexual assault at adolescent age.











Comparing major repeaters versus those with high risk self-harm on physical comorbidities and pharmacological treatment

Common physical comorbidities:	MR	HRSH
Asthma	20%	8%
Metabolic diseases	20%	19%
<ul> <li>Orthopaedic problems</li> </ul>	16.6%	19%
Chronic pain	46.6%	51%
Pharmacological treatment:		
<ul> <li>Antipsychotics</li> </ul>	50%	20%
<ul> <li>Antidepressants</li> </ul>	50%	61%
Anxiolytics	26.6%	35%
<ul> <li>More than one psychotropic drug</li> </ul>	73.3%	48%









Health

# Evidence based interventions

Internationally consistent evidence:

- Dialectical Behaviour Therapy, in particular among women
- Cognitive Behaviour Therapy

Growing evidence:

- Problem-Solving Therapy
- Internet-based psychotherapeutic interventions for mild to moderate mental health problems
  - DBT among men who engaged in high-risk self-harm has not yet shown consistently positive effects in reducing repeated self-harm and suicide (Goodman et al, 2016)











Psychosocial interventions fol	@ 🐂 🖲	
a systematic review and meta-	analysis	Recorded a
Kath Haatan, Katrino G Witt, Tatiano L Taylar Solisbury, I Ba Annormas	Devid Gunnall. Philip Haratl, Ellen Townsend, Kees van Heeringen	
Summary Eastgrowed Selfharm (intentional acts of non-fatal self-poisoning or self-injuny) is common, particularly in young adults aged 15-35 years, often repeated, and strongly associated with socied. Effective aftercare of individuals who self-larm is therefore important. We have undertaken a Codctare spatematic review and meta-analysis of the effectiveness of produced intervenismon for self-larm in adults.		
and PsycINFO) between Jan 1, 1998, and April 29, 2015. for for adults after a recent (within 6 months) episode of self- report results for interventions for which at least three r treatment as usual have been published and hence might	R-Studies and References. CENTRAL MEDUINE. Embase, randomised controlled trials of psychosocial interventions arm. Most interventions were assessed in single trials, We andomised coartefield trials comparing interventions with controllet to clinical guidance. The primary noticome was 0.5 (12 and 24 months follow-up analysed when available, we analysed with all available cost data.	Las Colling Constant Holy, Ho. Ker. org 10, 32 Ker L2025, 0364 (164) (2014) - Conten for Volcinia Research, University Separatowerk of Phychildry, Wannelvert Heapits, Oxfords, 54 (Prof. Crouwton Releases), Dispatchert, 14 (Prof. Crouwton Releases), Dispatchert, 14 (Prof. Crouwton Releases), Dispatchert, 14 (Prof. Crouwton Releases), Dispatchert, 14 (Prof. Crouwton Rel. 2014), Octoor
Findings We identified 2D non-certapping randomized functions ( $p_{1}^{-1}$ (colores) products product the product structure ( $p_{1}^{-1}$ (colores) products product structure ( $p_{1}^{-1}$ ) (colores) products product structure ( $p_{1}^{-1}$ ) (colores) (colores) product structure ( $p_{1}^{-1}$ ) (colores) (colo	UK (CAN) Design Jowen Bei Constant event auch, Department of Propulsion Health, London Konsol of Hygines & Tropical Mentione, London X (Canad Montal Hyginetics Research Propulsion Resear	
	el6harm. Dialectical behaviour therapy did not reduce the the frequency of self-harm. However, aside from CBT, there ag firm conclusions as to their effectiveness.	South Research Foundation and Department of Epidemiology and Public Health, University College Co. Cork, Indend (LArenman Phil School of Social and
Introduction biffactor (composition of a set of softpose section of biffactor (composition of the scalar data secure) has been a growing problem in most constitution with the part of the scalar data security and the scalar data security and the UK, there are now estimated as the means of parts. In the biffactor and the scalar data security in the scalar data security and the scalar data security in the scalar data security and the scalar data security have a scalar data security and the scalar data security have a scalar data security and the scalar data security biffactor in other scalar data security and the scalar data security biffactor in other scalar data security and the scalar data security biffactor in other scalar data security and the scalar data security biffactor in other scalar data security and the scalar data security biffactor in other scalar data security and the scalar data security biffactor in other scalar data security and the scalar data security biffactor in other scalar data security and the scalar data security biffactor in other scalar data security and the scalar data security biffactor in other scalar data security and the scalar data security and the prosterior is borgital with a fiffactor is presenting the scalar data security and the scalar data sec	factor for suitcle across a range of psychiatric disorders' forpertion: a subharm further increases the rok of Genes the size of the problem of solitams, the forgency with which is a regulard, and the rok of momentum therements are designed for the patient population. We previously published a systematic rows and most analysis of toolk problemost and pharma- and most analysis. We have also design that the other sector and the rows of the problem of all most analysis. We have also design that the other sector and the sector of the problem of d disa reverse in comparison with the Carlange of the reverse in comparison with the Carlange rows of psychosodic dimensional on without the the sector adabtes reversing the an animation of discs independent datas reversing the an animation of discs independent disa permitted reversions for the rows of which we	Commergia di Mattiko, Mannesta di Rassa Kanton, Kanton, Kali Jindi Sconsenti Andreis Martino di Mattiko di Mattiko Mattiko di Mattiko Mattiko Mattiko di Mattiko Matt

But..... not everybody is able to benefit from the evidence based interventions:

### **Reduced impact of DBT when:**

- People suffer from severe PTSD. Increased repetition of self-harm during treatment
- Higher levels of dissociation throughout DBT treatment

Borderline Personality Disorder Complex Trauma

• Greater severity of PTSD is associated with lower likelihood of self-harm cessation during DBT (Harned al, 2010; Barnicot and Priebe, 2013)











### Advanced training: Self-Harm Assessment and Management for Self-Harm in General Hospitals(SAMAGH)

Core Components Knowledge based training via E-learning (to be completed in the week prior to skills training)

#### **E-learning modules**

Module 1- Extent of self-harm and suicide, risk and protective factors

Module 2- Evidence informed assessment and management procedures

Module 3- Working with self-harm patients

Module 4- Subgroups of people who self-harm & evidence based treatments

Module 5- Self-care

#### Biopsychosocial assessments, referral pathways, safety planning (1/2 day)





# World Suicide Prevention Day Working Together to Prevent Suicide September 10, 2019

I A S P International Association for Suicide Prevention









# **#ValeAllison**









