Multidisciplinary perspective on the risk and protective factors associated with self-harm and suicide

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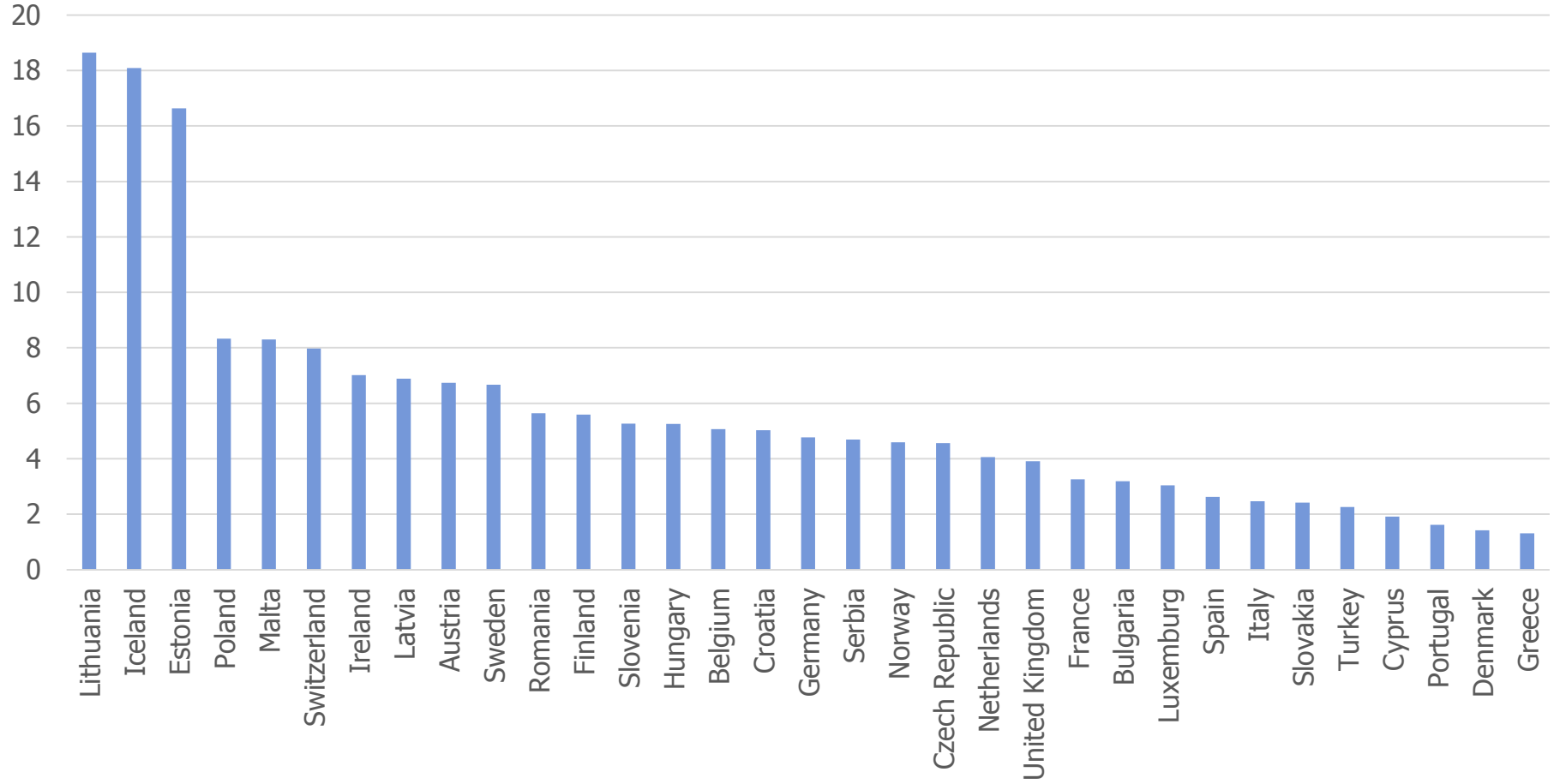
Rate of suicide among 15-19 year olds in Europe per 100,000 of population



*Data unavailable for the following countries: Montenegro, Former Yugoslav Republic of Macedonia and Albania

Source –Eurostat, 2018

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Social Psychiatry and Psychiatric Epidemiology (2018) 53:663–671
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ORIGINAL PAPER

Increasing rates of self-harm among children, adolescents and young adults: a 10-year national registry study 2007–2016

Eve Griffin[1] · Elaine McMahon[1] · Fiona McNicholas[2,3,4] · Paul Corcoran[1,5] · Ivan J. Perry[5] · Ella Arensman[1,5]

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Abstract

Purpose Rates of hospital-treated self-harm are highest among young people. The current study examined trends in rates of self-harm among young people in Ireland over a 10-year period, as well as trends in self-harm methods.

Methods Data from the National Self-Harm Registry Ireland on presentations to hospital emergency departments (EDs) following self-harm by those aged 10–24 years during the period 2007–2016 were included. We calculated annual self-harm rates per 100,000 by age, gender and method of self-harm. Poisson regression models were used to examine trends in rates of self-harm.

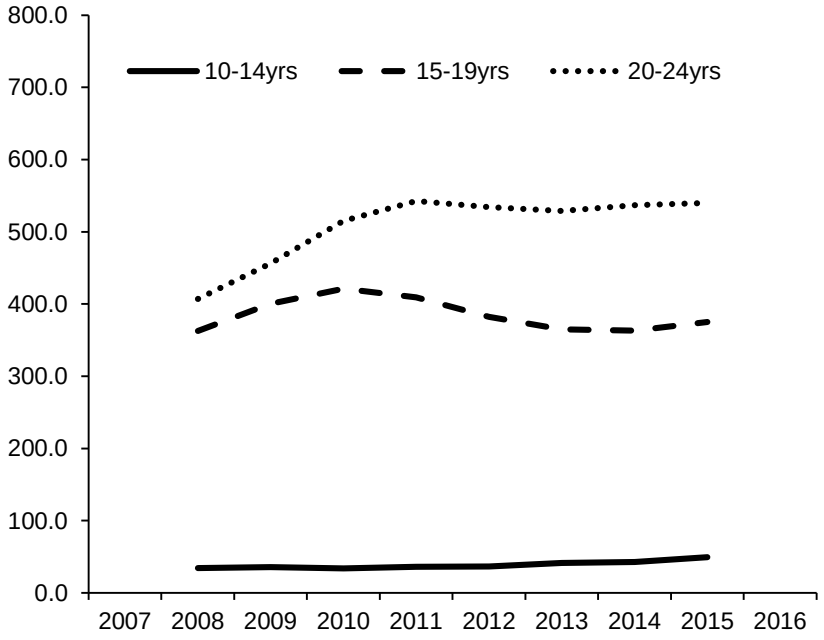
Results The average person-based rate of self-harm among 10–24-year-olds was 318 per 100,000. Peak rates were observed among 15–19-year-old females (564 per 100,000) and 20–24-year-old males (448 per 100,000). Between 2007 and 2016, rates of self-harm increased by 22%, with increases most pronounced for females and those aged 10–14 years. There were marked increases in specific methods of self-harm, including those associated with high lethality.

Conclusions The findings indicate that the age of onset of self-harm is decreasing. Increasing rates of self-harm, along with increases in highly lethal methods, indicate that targeted interventions in key transition stages for young people are warranted.

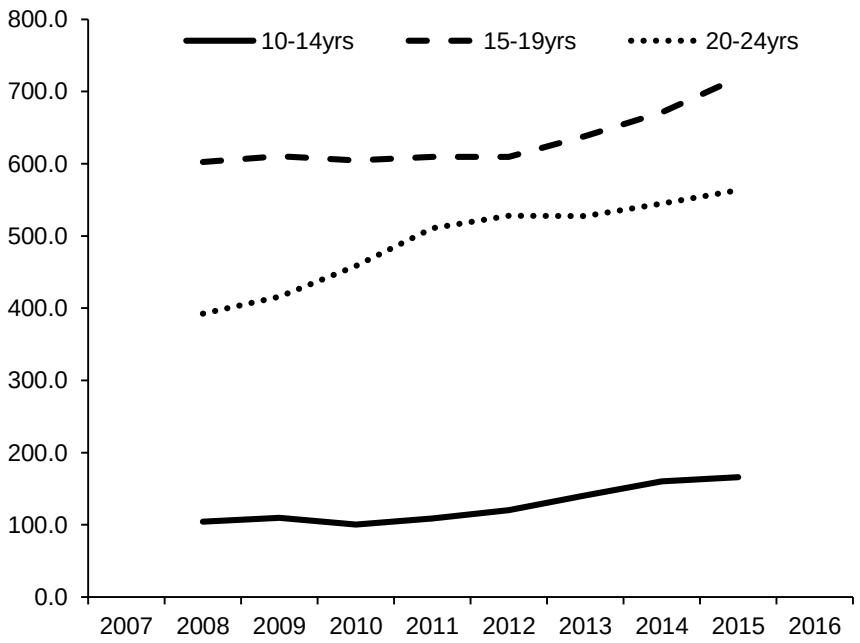
Keywords Self-harm · Young people · Epidemiology

Self-harm among young people in Ireland, 2007-2016

Male



Female



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Risk factors associated with self-harm in adolescents

Girls

- Substance abuse, including alcohol and drug abuse
- Self-harm by friends and family members
- Sexual abuse and physical maltreatment
- Problems related to sexuality
- Problems with parents
- Bullying and Cyberbullying
- Difficulties in making – keeping friends
- High levels of depressive symptoms
- Sleep problems

Boys

- Substance abuse, including alcohol and drug abuse
- Self-harm by friends and family members
- High levels of anxiety
- High levels of impulsivity
- Problems related to sexuality
- Bullying and Cyberbullying
- Problems with school work
- Sleep problems

McMahon et al, 2013; Hysing et al, 2015

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RESEARCH ARTICLE

Suicide among Young People and Adults in Ireland: Method Characteristics, Toxicological Analysis and Substance Abuse Histories Compared

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Abstract

Objective

Information on factors associated with suicide among young individuals in Ireland is limited. The aim of this study was to identify socio-demographic characteristics and circumstances of death associated with age among individuals who died by suicide.

Methods

The study examined 121 consecutive suicides (2007–2012) occurring in the southern eastern part of Ireland (Cork city and county). Data were obtained from coroners, family informants, and health care professionals. A comparison was made between 15-24-year-old and 25-34-year-old individuals. Socio-demographic characteristics of the deceased, methods of suicide, history of alcohol and drug abuse, and findings from toxicological analysis of blood and urine samples taken at post mortem were included. Pearson's χ^2 tests and binary logistic regression analysis were performed.

Results

Alcohol and/or drugs were detected through toxicological analysis for the majority of the total sample (79.5%), which did not differentiate between 15-24-year-old and 25-34-year-old individuals (74.1% and 86.2% respectively). Compared to 25-34-year-old individuals, 15-24-year-old individuals were more likely to engage in suicide by hanging (88.5%). Younger individuals were less likely to die by intentional drug overdose and carbon monoxide poisoning compared to older individuals. Younger individuals who died between Saturday and Monday were more likely to have had alcohol before dying. Substance abuse histories were similar in the two age groups.

PLOS ONE | DOI:10.1371/journal.pone.0166881 November 29, 2016 1 / 14

Factors associated with increased risk of suicide (n=307)

- Overrepresentation of men (80.1%); Men significantly younger than women
- Relatively high proportion were unemployed at time of death (33.1%)
- Among men, 48.6% had worked in the construction/production sector; among women, 26.5% had worked in a healthcare setting
- Nearly two thirds had a history of self-harm (65.2%); 69.1% were diagnosed with depression, and alcohol/and or drug abuse was present among 60.7%
- In the year prior to death, 81% had been in contact with their GP or a mental health service. Most people who contacted GP did so more than 4 times

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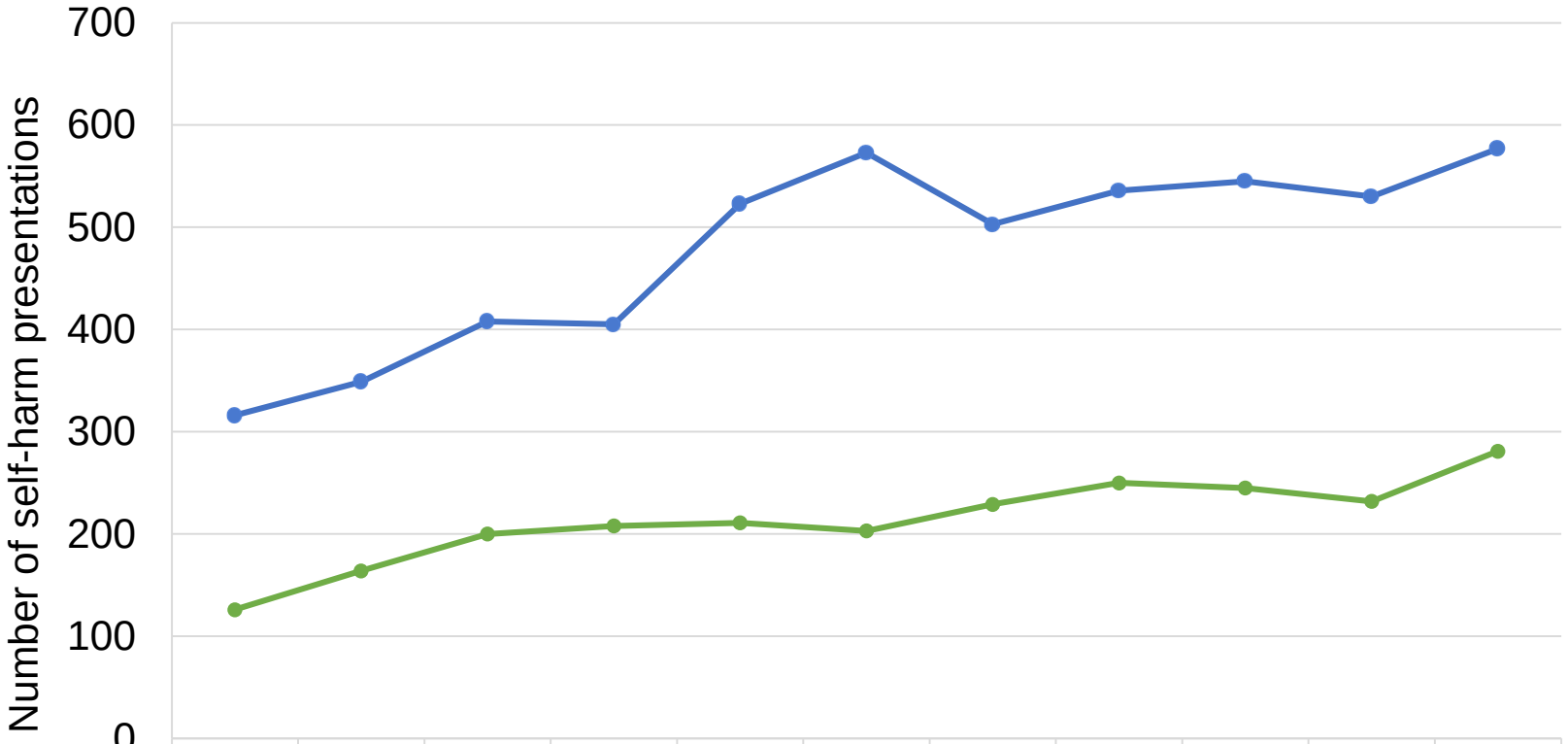
Mental Health Promotion and Intervention in Occupational Settings – **MINDUP**: An interdisciplinary approach

- The primary aim of MINDUP is to improve mental health in the workplace by developing, implementing and evaluating a multilevel intervention targeting mental health difficulties (non-clinical and clinical) in Small and Medium Enterprises (SMEs) across construction, health and ICT sectors.
- A secondary aim is to reduce depression and suicidal behaviour.

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



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Men	316	349	408	405	523	573	503	536	545	530	577
Women	126	164	200	208	211	203	229	250	245	232	281

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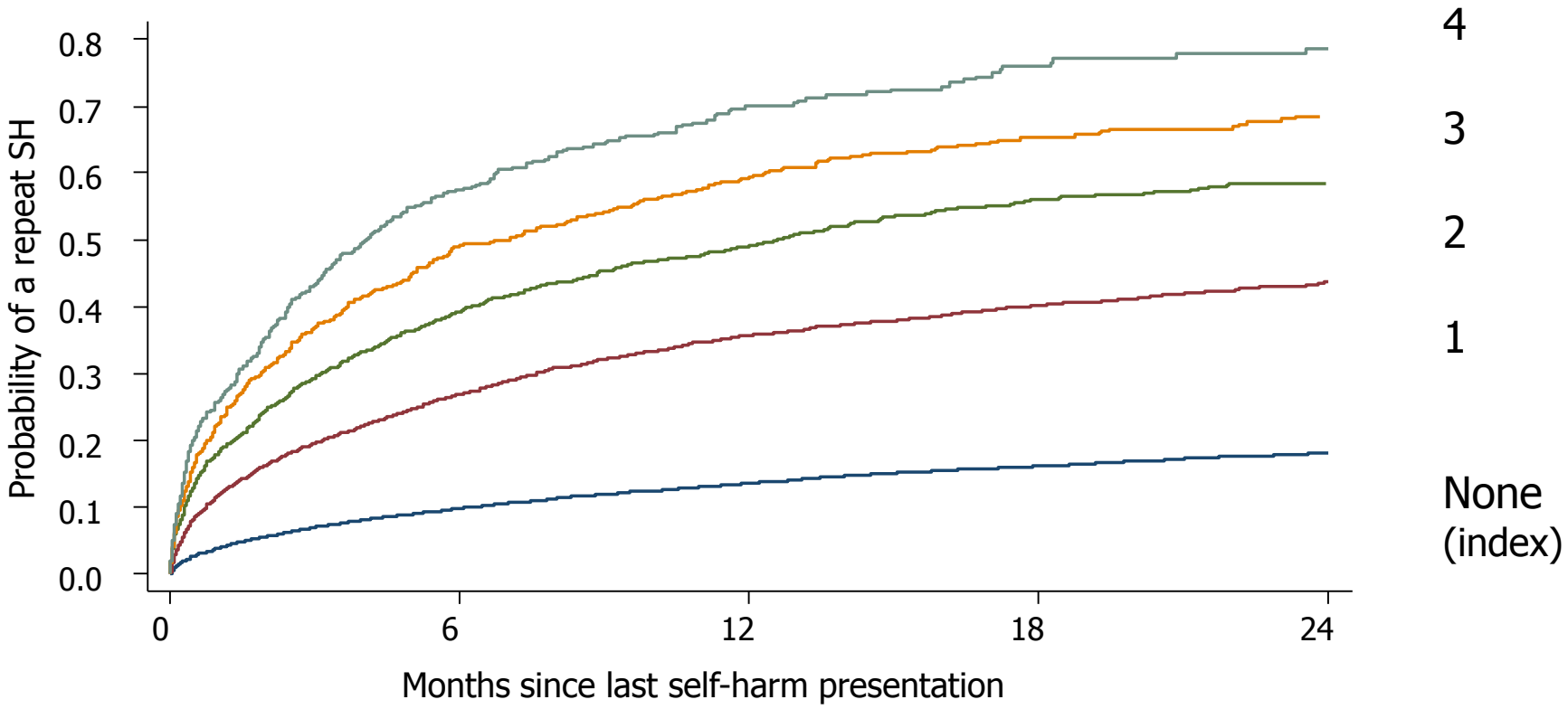
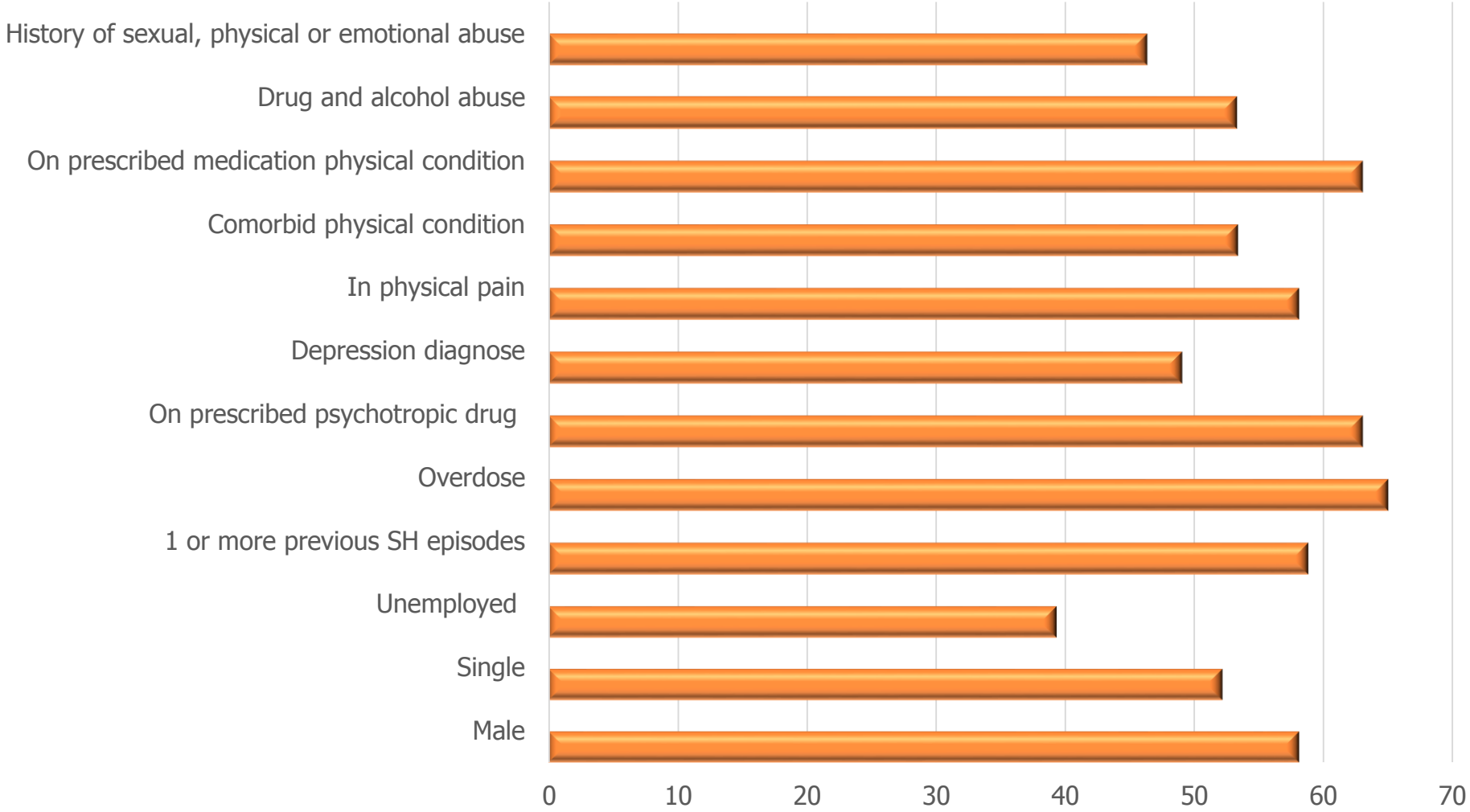
Repetition by number of previous self-harm presentations



High-Risk Self-Harm



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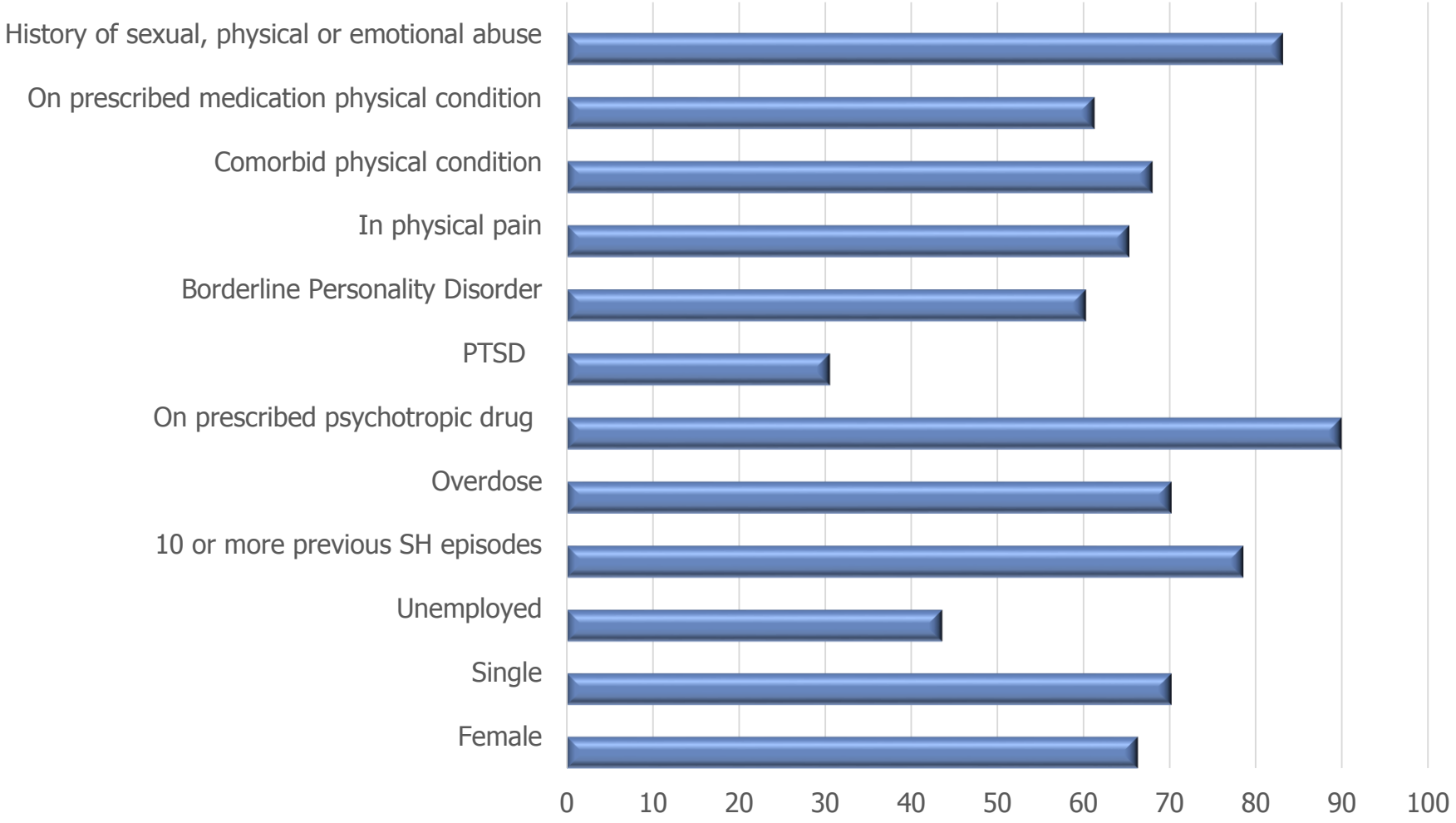
Major Self-Harm Repeaters



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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%
• Orthopaedic problems	16.6%	19%
• Chronic pain	46.6%	51%
Pharmacological treatment:		
• Antipsychotics	50%	20%
• Antidepressants	50%	61%
• Anxiolytics	26.6%	35%
• More than one psychotropic drug	73.3%	48%

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Evidence based interventions


Articles

Psychosocial interventions following self-harm in adults: a systematic review and meta-analysis

Summary

Introduction

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)

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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

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

Representative case

Anne, aged 35 years, diagnosed with Borderline Personality Disorder, Depression and PTSD symptoms. Long history of repeated self-harm that had started in early adolescence. She had engaged in many different pharmacological and psychological treatments, without significant improvements. In recent years, she had completed a 12 month DBT treatment, however with minimal improvements.

In recent months, she had revealed some details about longstanding experience of sexual abuse, starting in early childhood until early adolescence. However, she was still afraid of the perpetrator and she was anxious that nobody would believe her.

The pattern of relatively low lethal self-harm acts changed to increasingly highly lethal self-harm acts and she died by suicide in 2016.

Representative case

Kate, aged 42 years, diagnosed with Borderline Personality Disorder, Depression, PTSD and Dissociative Identity Disorder. She has a long history of self-harm that had started in early adolescence. She has engaged in many different pharmacological and psychological treatments, without significant improvements. During the last 2 years, she has opened up about her longstanding experience of sexual abuse, starting in childhood and followed by 3 other perpetrators, including the time while she was in a Children's Home.

Supported by her GP and 2 mental health professionals, she is currently exploring the most appropriate treatment approach for her.

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

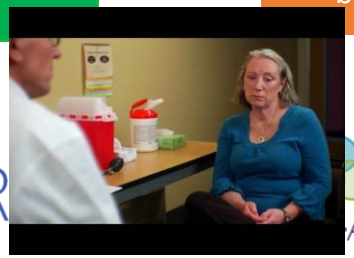
Module 1- Extent of self-harm and suicide, risk and protective factors
Module 2- Evidence informed assessment and management procedures
Module 3- Working with self-harm patients
Module 4- Subgroups of people who self-harm & evidence based treatments
Module 5- Self-care

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

Module (1/2day)
Simulation training
Skills training module
Self-harm repeaters

Module (1/2 day)
Simulation training
High risk self-harm behaviour

Module (1/2 day)
Simulation training
Challenging presentations and behaviour



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