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

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Dedicated to Allison Milner, 1st May 1983 - 12th August 2019

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Background

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

- 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 self-harm 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 self-harm 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)

<table>
<thead>
<tr>
<th>Year</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>316</td>
<td>126</td>
</tr>
<tr>
<td>2008</td>
<td>349</td>
<td>164</td>
</tr>
<tr>
<td>2009</td>
<td>408</td>
<td>200</td>
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<tr>
<td>2010</td>
<td>405</td>
<td>208</td>
</tr>
<tr>
<td>2011</td>
<td>523</td>
<td>211</td>
</tr>
<tr>
<td>2012</td>
<td>573</td>
<td>203</td>
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<td>2013</td>
<td>503</td>
<td>229</td>
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<td>2014</td>
<td>536</td>
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<td>2015</td>
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<td>245</td>
</tr>
<tr>
<td>2016</td>
<td>530</td>
<td>232</td>
</tr>
<tr>
<td>2017</td>
<td>577</td>
<td>281</td>
</tr>
</tbody>
</table>
Repetition by number of previous self-harm presentations

Probability of a repeat SH

Kaplan-Meier failure estimates

Repetition by number of previous self-harm presentations

Months since last self-harm presentation

Probability of a repeat SH

None (index)
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

3 Hospitals: High rate city hospitals

Data collection: 28 months

Study 1
Psychiatric and psychosocial assessment data
N=355 Consecutive cases (incl. 9 fatal acts)

Study 2
Baseline semi-structured (n=106)
6 month follow-up semi-structured interviews (56.5%)

Methods:

HRSH

High lethality method
No specific examples provided

Medical severity
- e.g. ICU / referral to plastic surgery

High suicidal intent
- Clinical judgement and objective section of Beck Suicide Intent Scale

Study 1
Psychiatric and psychosocial assessment data
N=355 Consecutive cases (incl. 9 fatal acts)

Study 2
Baseline semi-structured (n=106)
6 month follow-up semi-structured interviews (56.5%)
Methods: Recruitment and response of patients with major self-harm repetition

3 Hospitals
High rate city hospitals

Data collection:
22 months

MR
Pattern of self-harm repetition
5 or more previous episodes of self-harm

Study 1
Psychiatric and psychosocial assessment data
N=135 Consecutive cases (incl. 2 fatal acts)

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
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
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

<table>
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<tr>
<th>Common physical comorbidities:</th>
<th>MR</th>
<th>HRSH</th>
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<tbody>
<tr>
<td>Asthma</td>
<td>20%</td>
<td>8%</td>
</tr>
<tr>
<td>Metabolic diseases</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>Orthopaedic problems</td>
<td>16.6%</td>
<td>19%</td>
</tr>
<tr>
<td>Chronic pain</td>
<td>46.6%</td>
<td>51%</td>
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**Pharmacological treatment:**

<table>
<thead>
<tr>
<th></th>
<th>MR</th>
<th>HRSH</th>
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<tbody>
<tr>
<td>Antipsychotics</td>
<td>50%</td>
<td>20%</td>
</tr>
<tr>
<td>Antidepressants</td>
<td>50%</td>
<td>61%</td>
</tr>
<tr>
<td>Anxiolytics</td>
<td>26.6%</td>
<td>35%</td>
</tr>
<tr>
<td>More than one psychotropic drug</td>
<td>73.3%</td>
<td>48%</td>
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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)
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)*
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 (1/2 day)
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

National Suicide Research Foundation
Health Research Board
World Suicide Prevention Day
Working Together to Prevent Suicide
September 10, 2019

BREAKING DOWN WALLS
BUILDING BRIDGES
17–21 September 2019

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