

Self-harm and opportunities for prevention: Population-based approaches

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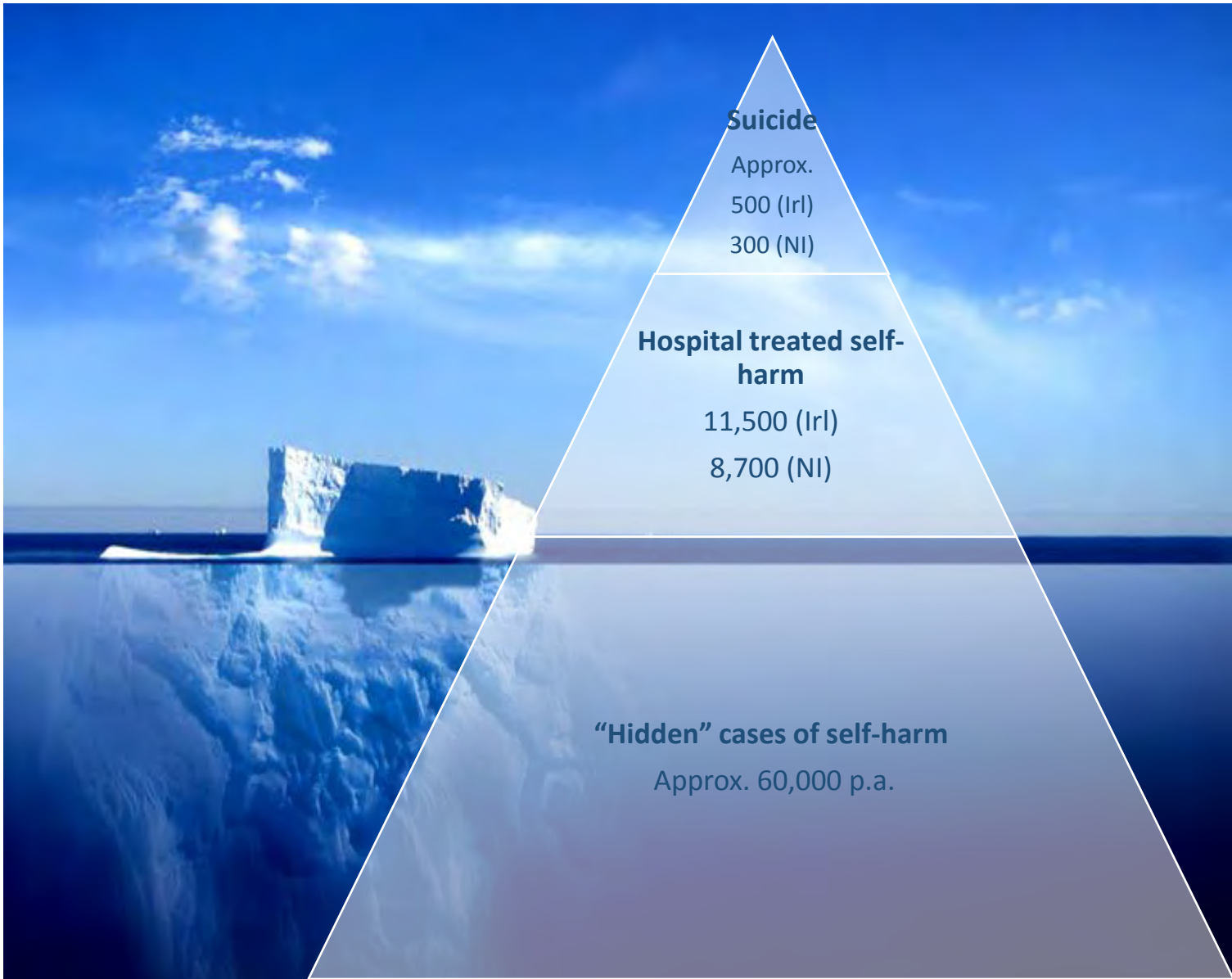
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Suicidal behaviour in Ireland



Monitoring of hospital-treated self-harm on Island of Ireland

The National Self-Harm Registry Ireland



The Northern Ireland Registry of Self-Harm



Monitoring of hospital-treated self-harm on Island of Ireland

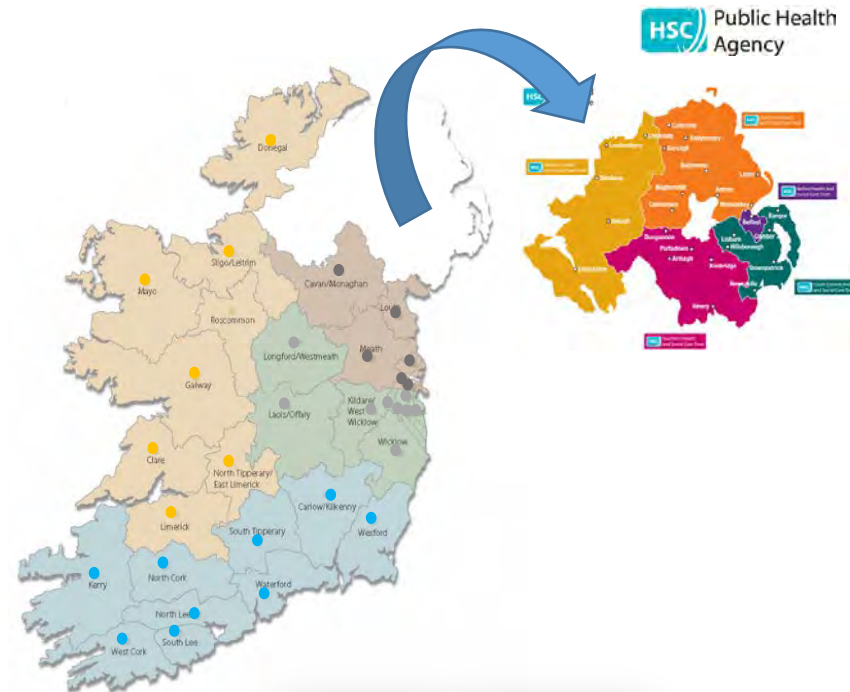
Aims:

- To establish the extent and nature of hospital-treated self-harm;
- To monitor trends over time and also by area;
- To contribute to policy and development in the area of suicidal behaviour;
- To help the progress of research and prevention.

Definition

‘an act with **non-fatal outcome** in which an individual **deliberately initiates a non-habitual behaviour**, that without intervention from others will cause self harm, or deliberately ingests a substance in excess of the prescribed or generally recognised therapeutic dosage, and which is aimed at **realising changes** that the person desires via the actual or expected physical consequences’.

(Schmidtke et al, 2006)



2017 statistics at a glance

Presentations
11,600

Persons
9,103




Rates in young people 10-24 years increased by 21% between 2007-2017

RATES:

199
per 100,000

1 in every 503
had a self-harm act

 **Male:** 20-24 year-olds
(505 per 100,000)
1 in every 198

 **Female:** 15-19 year-olds
(758 per 100,000)
1 in every 132

PEAK
RATES
WERE
AMONG
YOUNG
PEOPLE

TIME:

Peak time



10pm



7pm

3am

Almost **half** of presentations were made between 7pm-3am



Monday, Tuesday and Sunday had the highest number of self-harm presentations

METHOD:

2 in every 3
involved **overdose**



65%

3 in every 10
involved **alcohol**



33%

Men



29%

Women

1 in every 4
involved **self-cutting**



27%

TREATMENT:



72%
received an assessment in the ED



80% received a follow-up recommendation after discharge



12% left ED before a recommendation was made

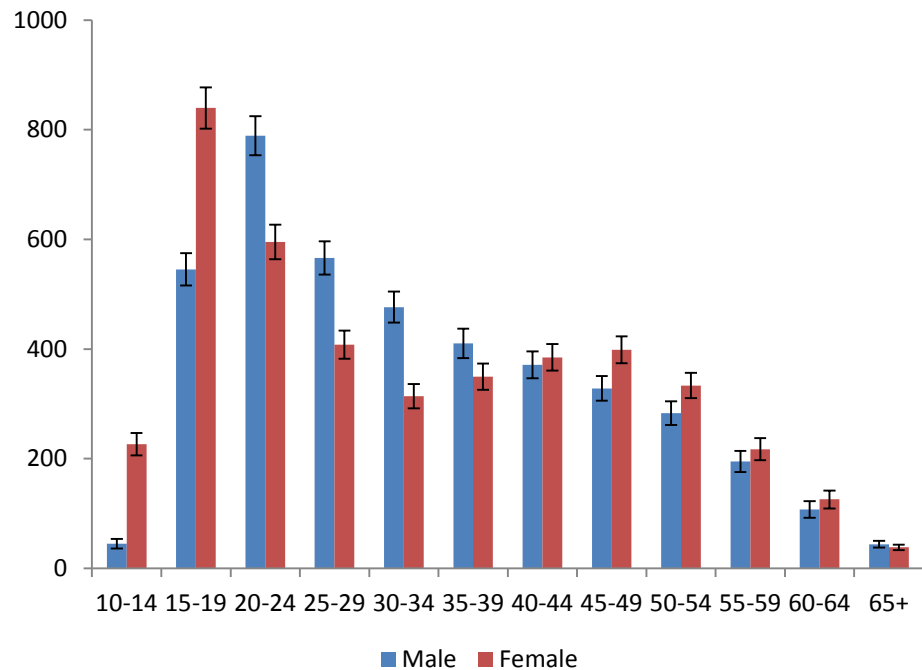
1 in 7

persons had a repeat attendance in 2017

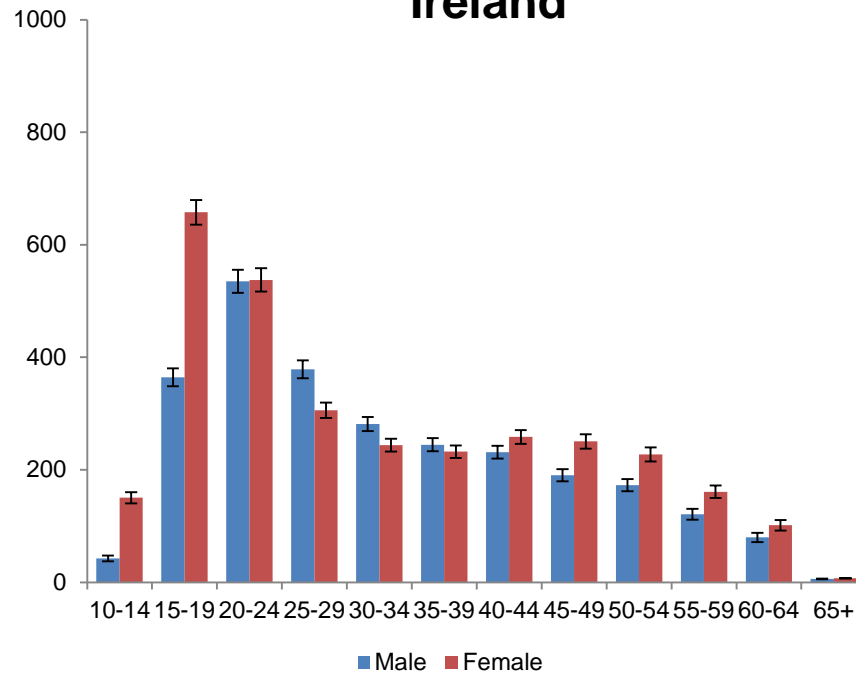


Rates of self-harm in Northern Ireland and Ireland

Northern Ireland



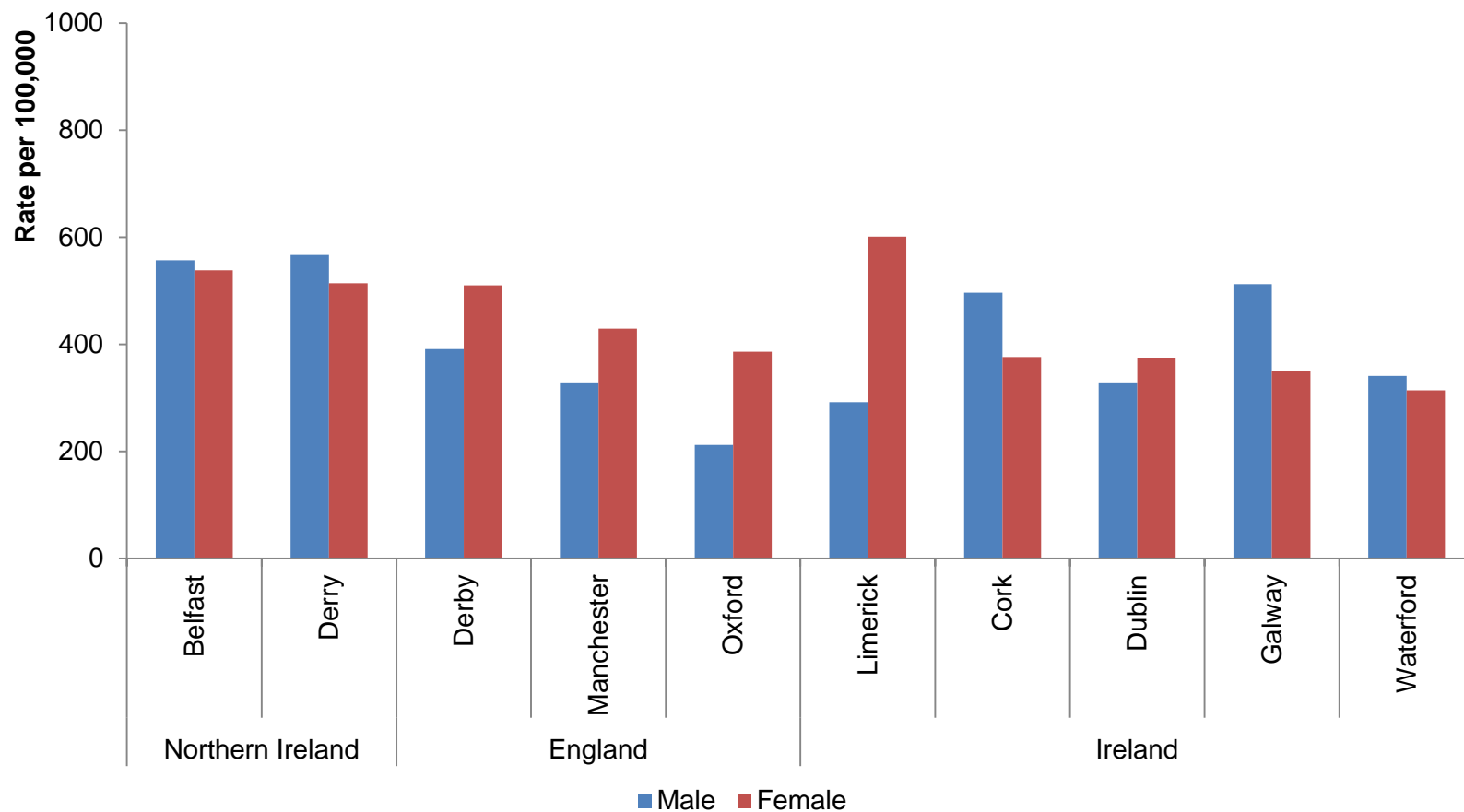
Ireland



EASR per 100,000	All	Male	Female	Gender diff
Northern Ireland (2012-2015)	291	289	294	+1.5%
Ireland (2012-2015)	203	187	221	+8.6%
% diff	+44%	+55%	+33%	

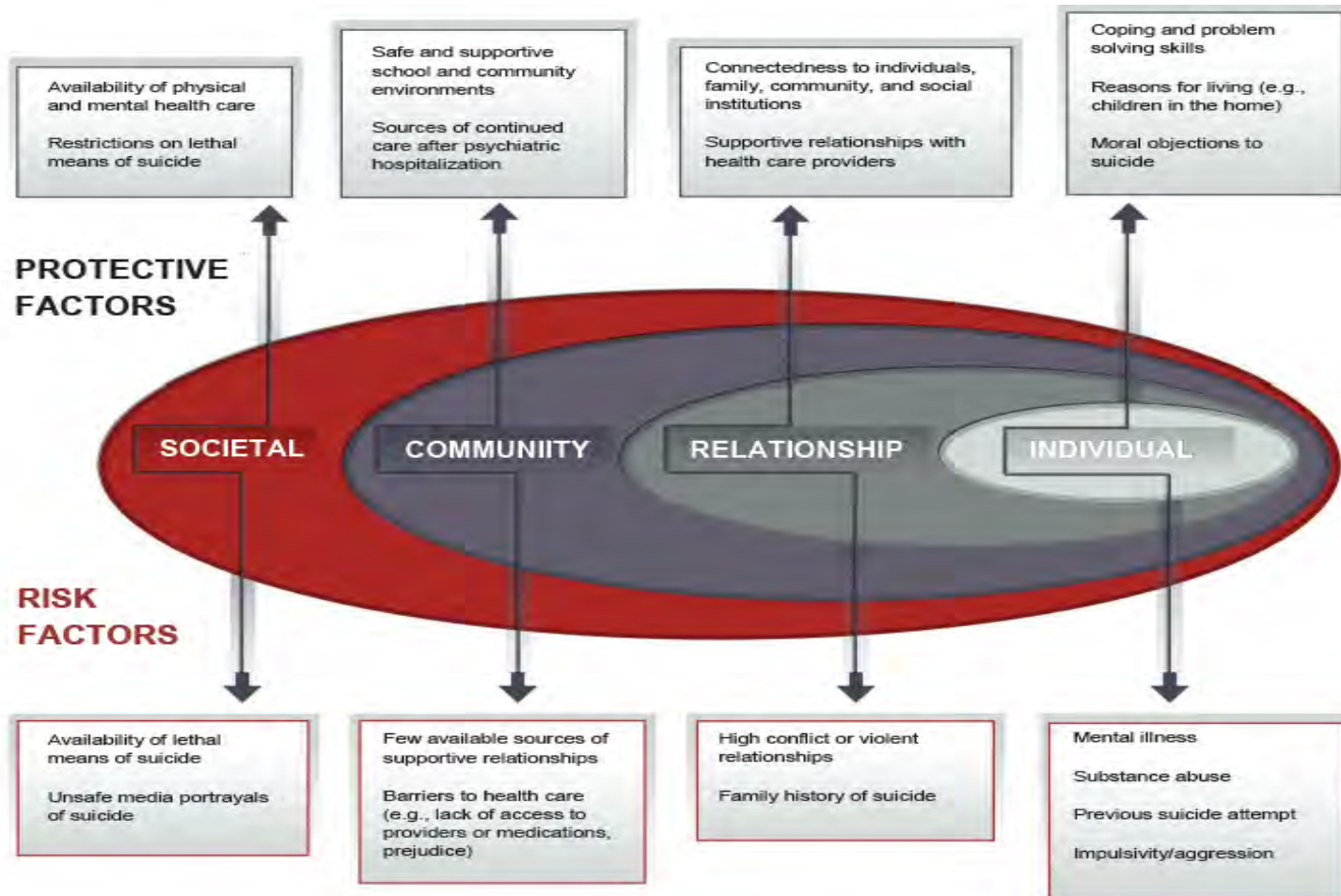


Comparison of cities in Northern Ireland, Ireland and England - 15+ EASR



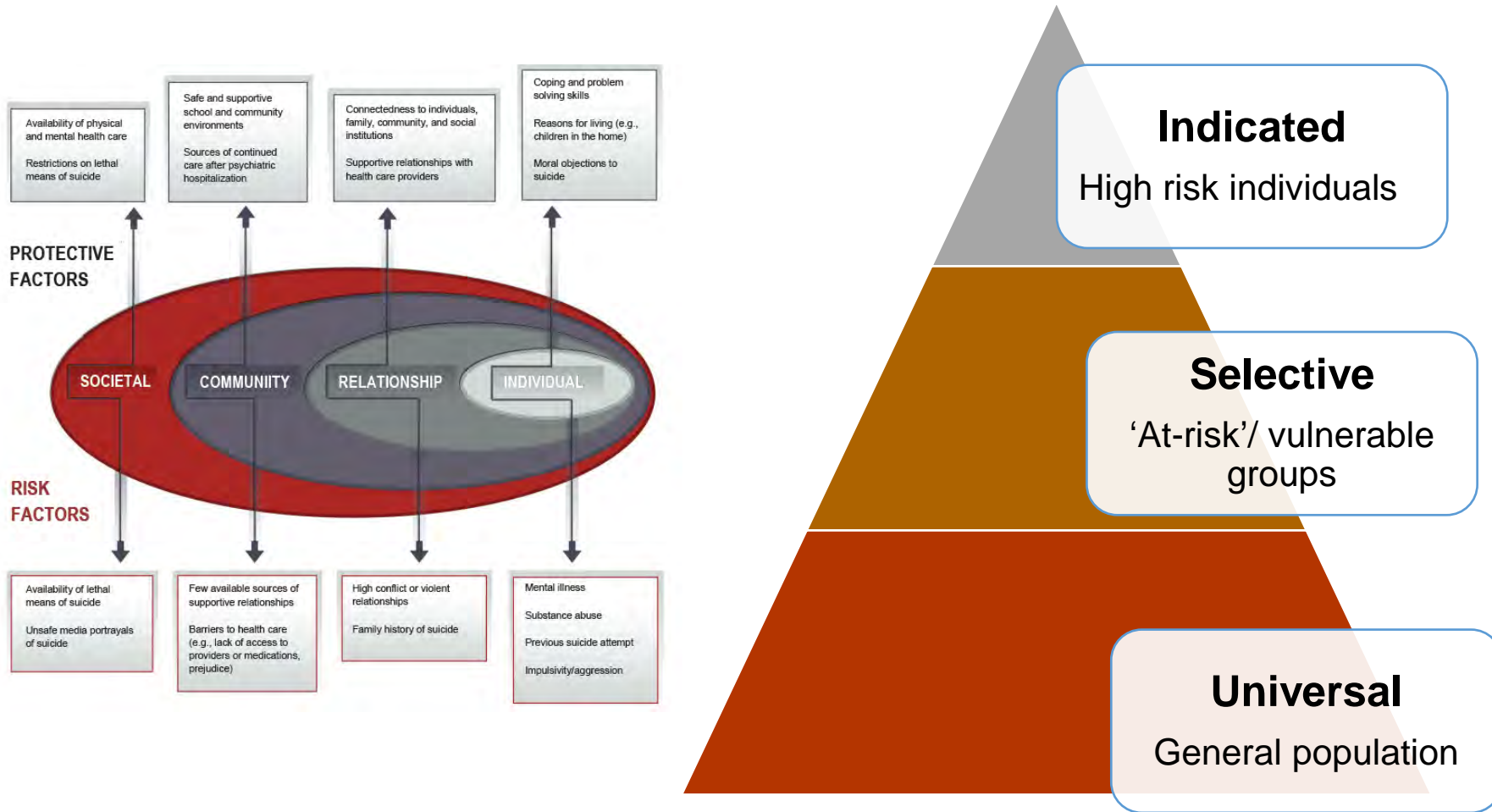
Data based on years 2012-15 (NI & Irl); 2014 (Eng)

Risk factors for suicidal behaviour



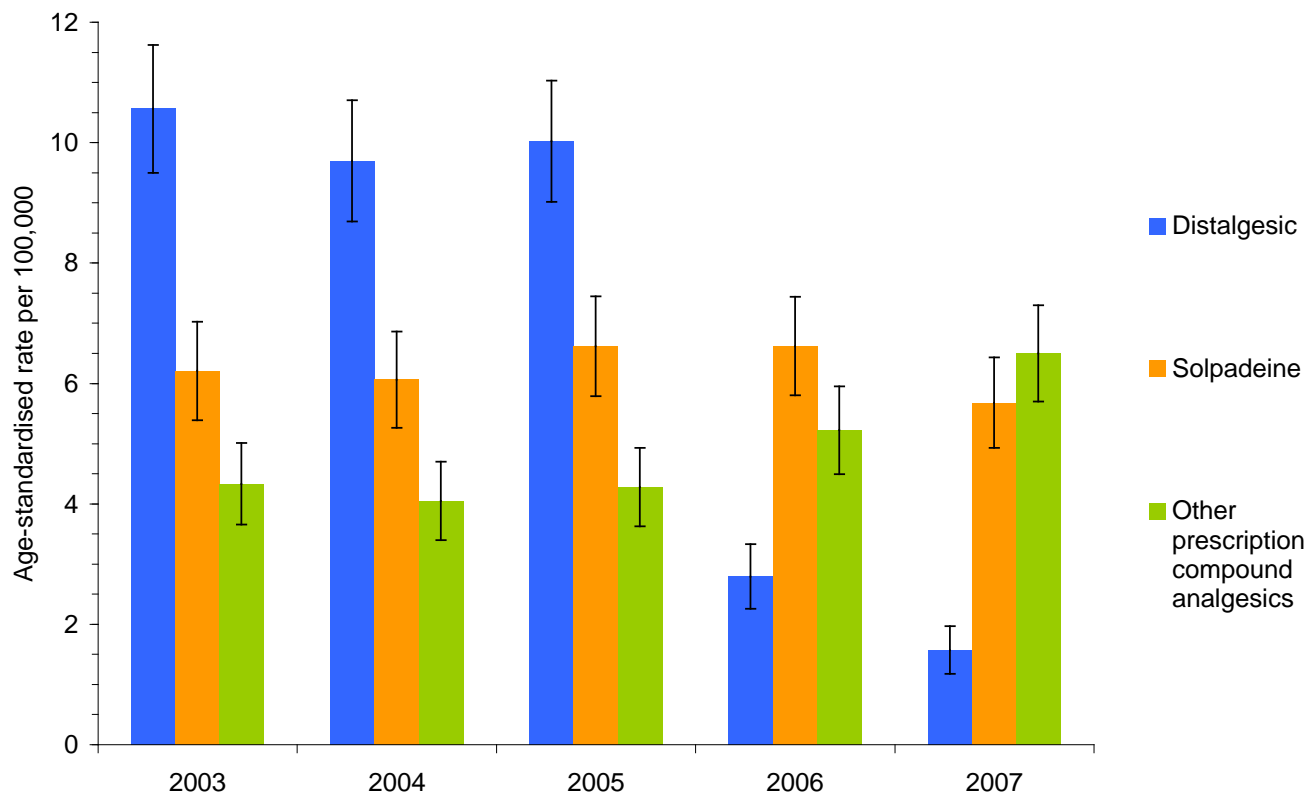
U.S. Surgeon General and NAASP (2012)

Prevention of suicidal behaviour



Method restriction and reducing self-harm and suicide

Case of distalgesic withdrawal in Ireland



Method restriction and reducing self-harm and suicide

The other side of the coin

Inadvertently promoting a particular method of suicide

Germany goalkeeper Robert Enke in train suicide

Robert Enke, a goalkeeper for the German national football team and club Hanover 96, has been found dead after jumping in front of a train.



Germany stunned as national goalkeeper Robert Enke commits suicide

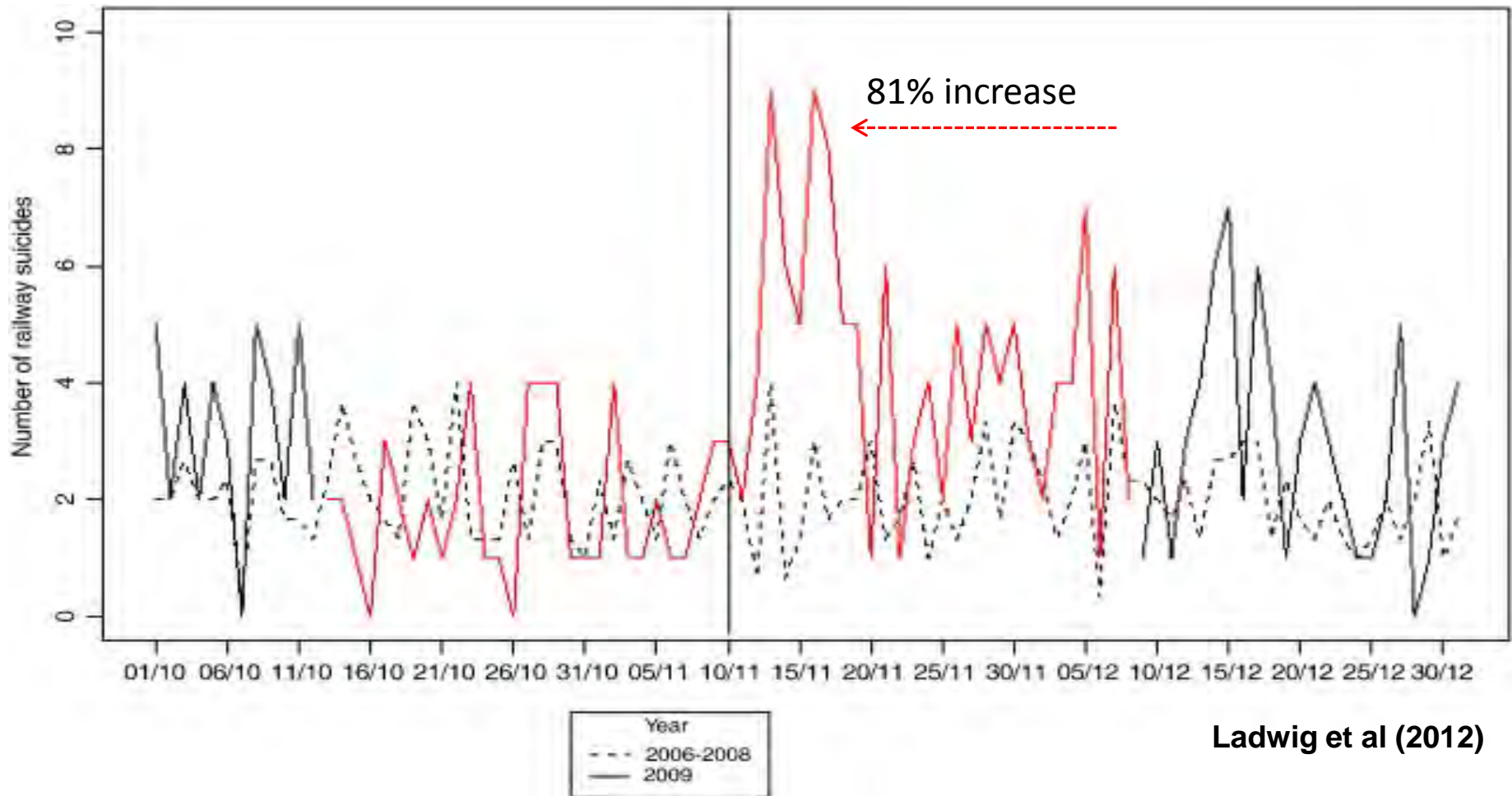
By SPORTSMAIL REPORTER
UPDATED: 12:15 GMT, 11 November 2009

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Germany international Robert Enke has committed suicide at the age of 32. The goalkeeper was struck by a train travelling at 100mph between Norddeich and Hanover at a railway crossing in Neustadt am Rubenberge and died at the scene. He left behind a note but police have not revealed its contents.

Germany goalkeeper Robert Enke suicide: Soccer star jumped in front of train near daughter's grave

Significant increase of railway suicides after the suicide of German goal keeper, Robert Enke (10th November 2009)



In addition to the short term increase in railway suicides, Hegerl et al (2013) identified a long-term effect: 19% increase in railway suicides in the two years after the suicide by Robert Enke

The association between self-harm and area-level characteristics in Northern Ireland

Research design



Study period Jan 2013 to Dec 2015

Population 1.81m (2011), of which 78% are working age

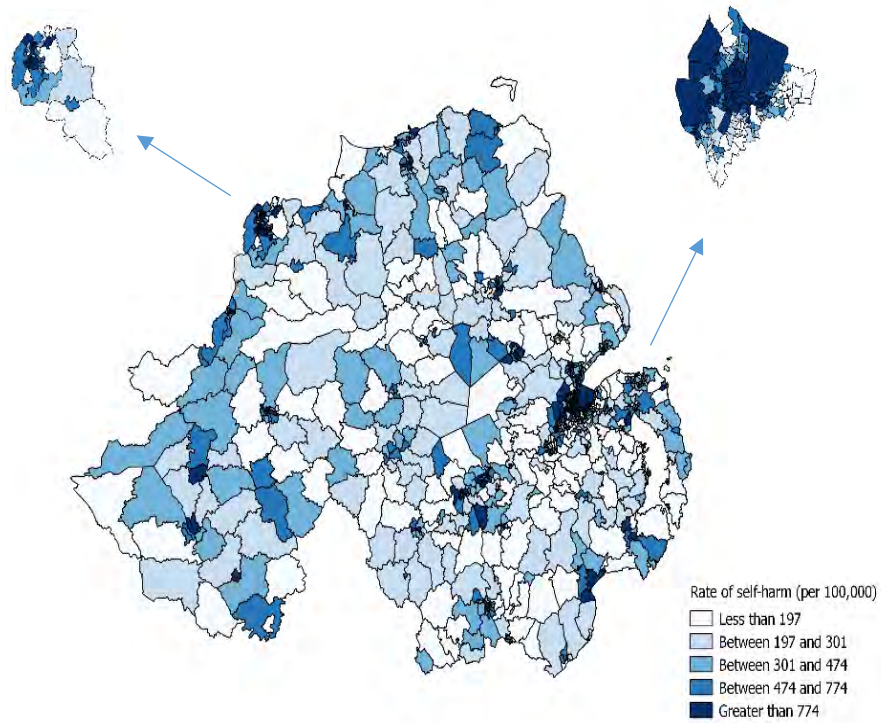
Data Source

- Self-harm presentations to acute hospital EDs from the Northern Ireland Registry of Self-Harm (PHA)
- All permanent residents aged 16-64 years
- Patient address geocoded to small area level (n=890)

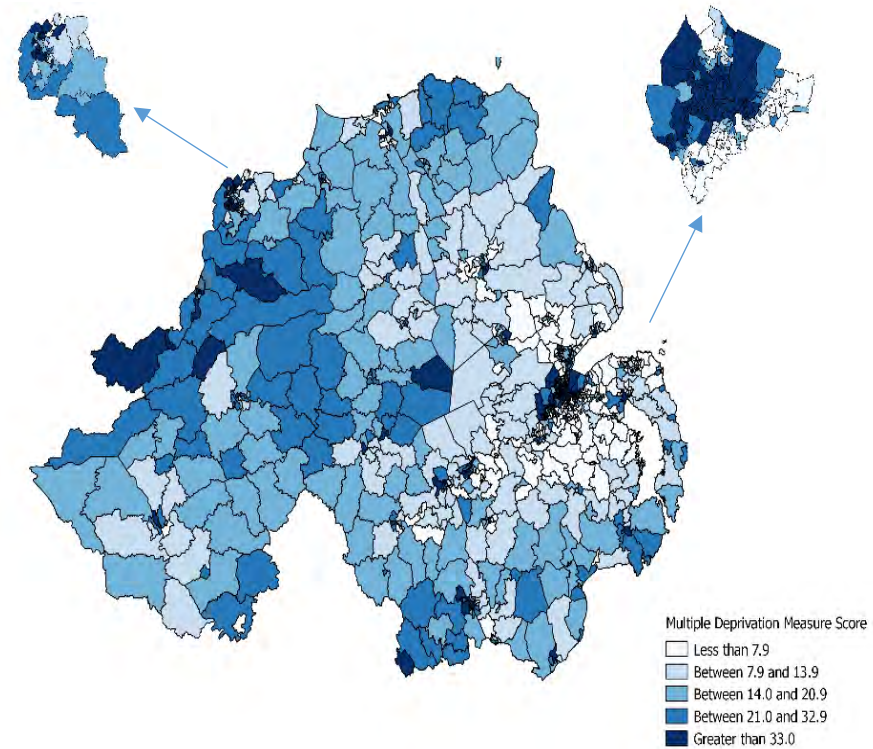
Statistical analyses

- Pooled self-harm rates per 100,000 were calculated using annual population estimates
- Multivariate analyses were conducted using stepwise negative binomial regression models
- Tested for interactions by sex and age using likelihood ratio tests ($p < 0.05$)

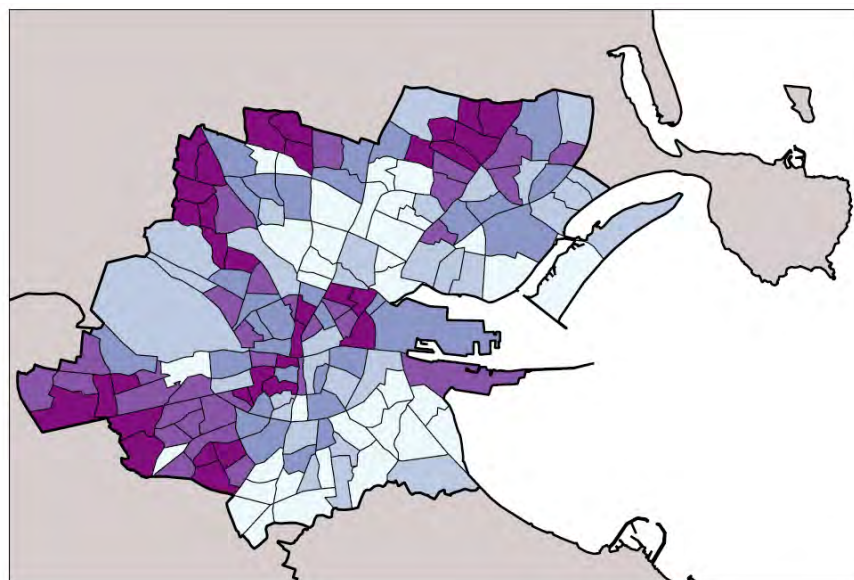
(a) Rate of self-harm



(b) Deprivation

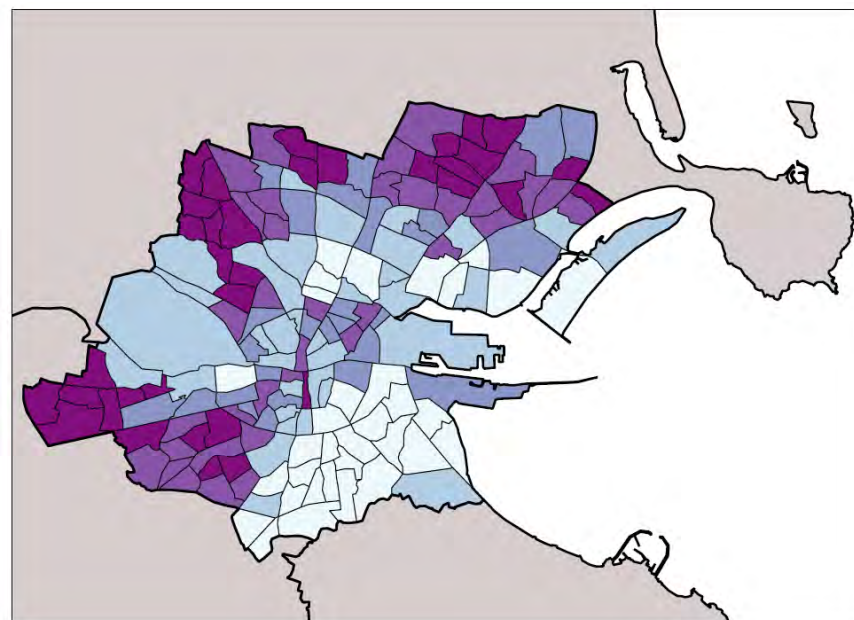


Area-level self-harm and deprivation, Dublin 2015-2017



Rate of self-harm (per 100,000)

- Self-harm rate greater than 250
- Self-harm rate between 247 and 350
- Self-harm rate between 169 and 246
- Self-harm rate between 118 and 168
- Self-harm rate less than 118

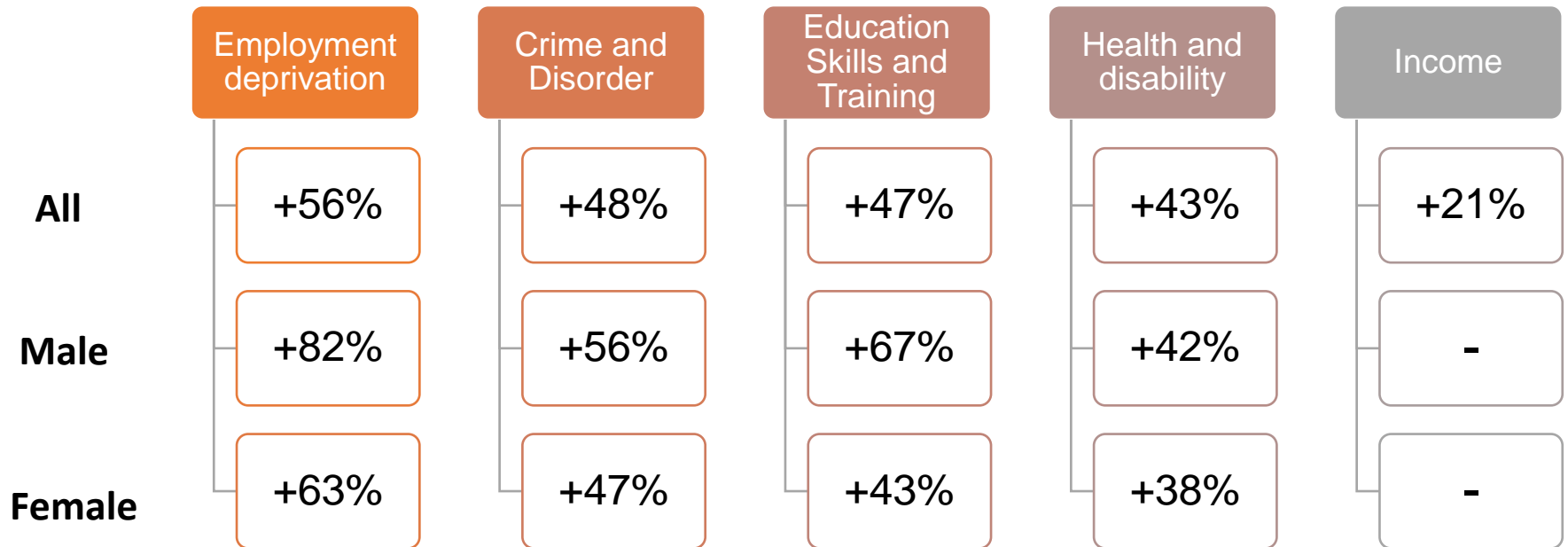


Extent of deprivation

- Most deprived
- Least deprived

In the most deprived areas (20%), rates of self-harm were

4x times higher



Conclusions

- 1 in every 212 persons aged 16-64 years in Northern Ireland have presented to hospital as a result of self-harm
- High rates of self-harm among men and city residents
- Self-harm is influenced by social inequalities and those vulnerable reside in highly deprived areas



- Interplay between economic, social and health-related factors
- Multi-level approaches tailored to both men and women
- Factors contributing to suicidal behaviour may be country- and area- specific

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