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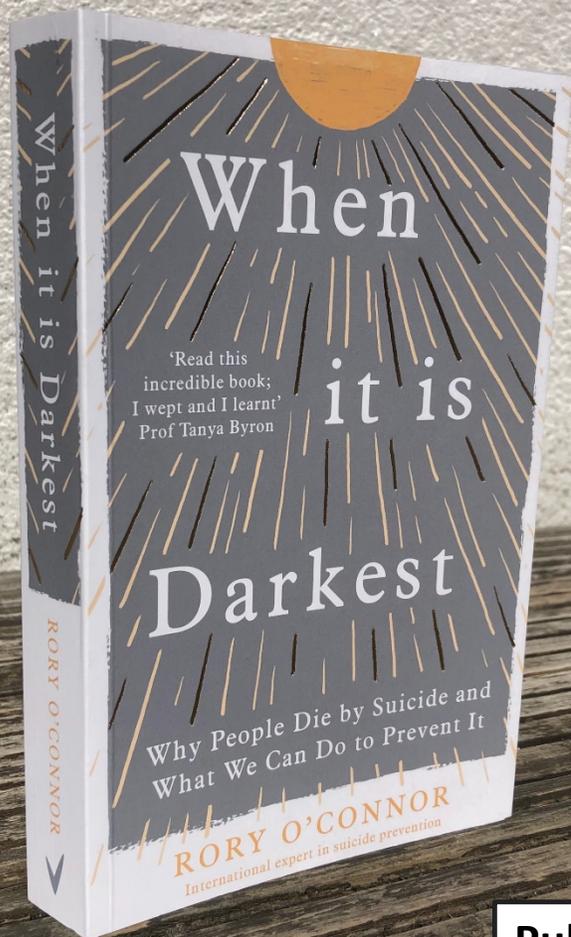
# When It Is Darkest Understanding Suicide Risk

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**Published  
May 2021**

**Vermilion**



Penguin  
Random  
UK

## Introduction

### Part 1 Suicide: An Overview

- 1 The How, Who and When of Suicide
- 2 What Suicidal Pain Feels Like
- 3 Myths and Misunderstandings

### Part 2 Suicide Is More About Ending the Pain Than Wanting To Die

- 4 Making Sense of a Suicide
- 5 What Suicide is Not
- 6 Towards An Integrated Understanding of Suicide
- 7 The Integrated Motivational–Volitional Model of Suicidal Behaviour
- 8 Crossing the Precipice: From Thoughts of Suicide to Suicidal Behaviour

### Part 3 What Works to Keep People Who Are Suicidal Safe

- 9 Brief Contact Interventions
- 10 Safety Planning
- 11 Longer-Term Interventions

### Part 4 Supporting People Who Are Vulnerable to Suicide or Bereaved by Suicide

- 12 Asking People About Suicide
- 13 Supporting Those Who Are Suicidal
- 14 Surviving the Aftermath of Suicide

Epilogue

[www.bookdepository.com](http://www.bookdepository.com)

2021

When

'Read this  
incredible book;  
I wept and I learnt'  
Prof Tanya Byron

it is

Darkest

Why People Die by Suicide and  
What We Can Do to Prevent It

RORY O'CONNOR

International expert in suicide prevention

*I have combined the personal with the professional – by telling something of people's stories, including my own, I have tried to convey a sense of what I have learned from my life and from my research into this most devastating of phenomena.*

*This is my journey through research into suicide, including how suicide has touched me personally. In this book, I try to make sense of suicide by drawing from the experiences of people I've met and in so doing I'll share the stories of those who have been suicidal and those who have lost loved ones to suicide.*



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- Scale of the challenge including COVID
- Myths around suicide
- Integrated Motivational-Volitional (IMV) model of suicidal behaviour
- Crossing the precipice: from suicidal thoughts to suicide attempts
- Safety Planning
- Conclusions

# Suicidal Behaviour Research Laboratory

We conduct interdisciplinary research including experimental research, clinical and non-clinical studies as well as psychosocial interventions as we strive to understand and prevent suicide

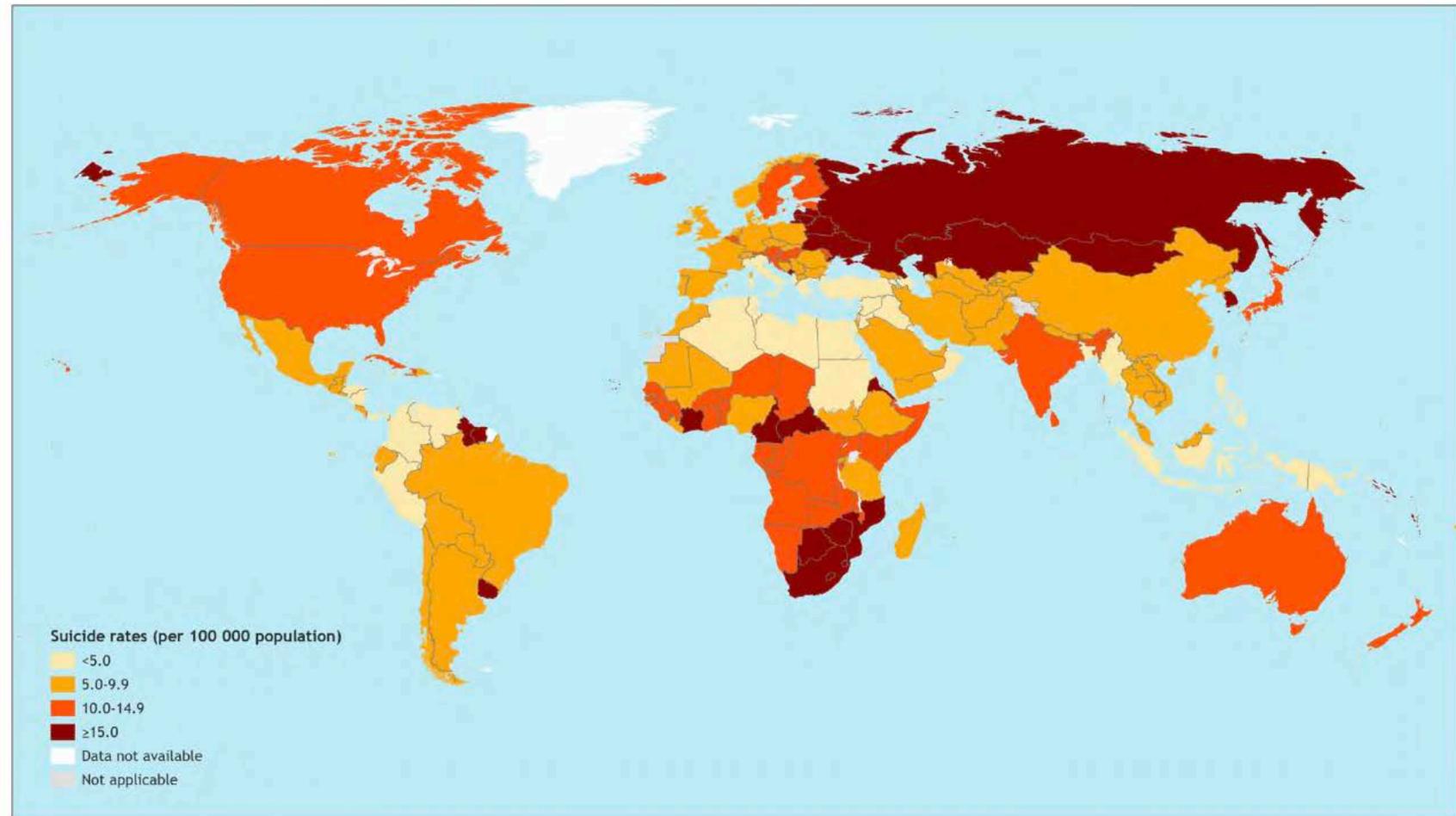
The Suicidal Behaviour Research Laboratory (SBRL) at the University of Glasgow



In 2019, an estimated 703 000 people died by suicide.

The global age-standardized suicide rate was 9.0 per 100 000 population for 2019. Rates varied between countries from fewer than two deaths by suicide per 100 000 to over 80 per 100 000 (Figure 1).

**Figure 1. Age-standardized suicide rates (per 100 000 population), both sexes, 2019**



WHO (2021)

Source: WHO Global Health Estimates 2000-2019



# The ripples of suicide

Globally, every **40 seconds**

**One** person dies by suicide

**20** people will attempt suicide

c95 million potentially  
affected / knew the person  
who died

703,000 deaths  
by suicide  
globally each  
year

# Suicide trends in the early months of the COVID-19 pandemic: an interrupted time-series analysis of preliminary data from 21 countries



Jane Pirkis, Ann John, Sangsoo Shin, Marcos DelPozo-Banos, Vikas Arya, Pablo Analuisa-Aguilar, Louis Appleby, Ella Arensman, Jason Bantjes, Anna Baran, Jose M Bertolote, Guilherme Borges, Petrana Brečić, Eric Caine, Giulio Castelpietra, Shu-Sen Chang, David Colchester, David Crompton, Marko Curkovic, Eberhard A Deisenhammer, Chengan Du, Jeremy Dwyer, Annette Erlangsen, Jeremy S Faust, Sarah Fortune, Andrew Garrett, Devin George, Rebekka Gerstner, Renske Gilissen, Madelyn Gould, Keith Hawton, Joseph Kanter, Navneet Kapur, Murad Khan, Olivia J Kirtley, Duleeka Knipe, Kairi Kolves, Stuart Leske, Kedar Marahatta, Ellenor Mittendorfer-Rutz, Nikolay Neznanov, Thomas Niederkrotenthaler, Emma Nielsen, Merete Nordentoft, Herwig Oberlerchner, Rory C O'Connor, Melissa Pearson, Michael R Phillips, Steve Platt, Paul L Plener, Georg Psota, Ping Qin, Daniel Radeloff, Christa Rados, Andreas Reif, Christine Reif-Leonhard, Vsevolod Rozanov, Christiane Schlang, Barbara Schneider, Natalia Semenova, Mark Sinyor, Ellen Townsend, Michiko Ueda, Lakshmi Vijayakumar, Roger T Webb, Manjula Weerasinghe, Gil Zalsman, David Gunnell\*, Matthew J Spittal\*

## Summary

**Interpretation** This is the first study to examine suicides occurring in the context of the COVID-19 pandemic in multiple countries. In high-income and upper-middle-income countries, suicide numbers have remained largely unchanged or declined in the early months of the pandemic compared with the expected levels based on the pre-pandemic period. We need to remain vigilant and be poised to respond if the situation changes as the longer-term mental health and economic effects of the pandemic unfold.

included with populations of less than 5 million. We used an interrupted time-series analysis to model the trend in monthly suicides before COVID-19 (from at least Jan 1, 2019, to March 31, 2020) in each country or area within a country, comparing the expected number of suicides derived from the model with the observed number of suicides in the early months of the pandemic (from April 1 to July 31, 2020, in the primary analysis).

**Findings** We sourced data from 21 countries (16 high-income and five upper-middle-income countries), including whole-country data in ten countries and data for various areas in 11 countries). Rate ratios (RRs) and 95% CIs based on the observed versus expected numbers of suicides showed no evidence of a significant increase in risk of suicide since the pandemic began in any country or area. There was statistical evidence of a decrease in suicide compared with the expected number in 12 countries or areas: New South Wales, Australia (RR 0.81 [95% CI 0.72–0.91]); Alberta, Canada (0.80 [0.68–0.93]); British Columbia, Canada (0.76 [0.66–0.87]); Chile (0.85 [0.78–0.94]); Leipzig, Germany (0.49 [0.32–0.74]); Japan (0.94 [0.91–0.96]); New Zealand (0.79 [0.68–0.91]); South Korea (0.94 [0.92–0.97]); California, USA (0.90 [0.85–0.95]); Illinois (Cook County), USA (0.79 [0.67–0.93]); Texas (four counties), USA (0.82 [0.68–0.98]); and Ecuador (0.74 [0.67–0.82]).

**Interpretation** This is the first study to examine suicides occurring in the context of the COVID-19 pandemic in multiple countries. In high-income and upper-middle-income countries, suicide numbers have remained largely unchanged or declined in the early months of the pandemic compared with the expected levels based on the pre-pandemic period. We need to remain vigilant and be poised to respond if the situation changes as the longer-term mental health and economic effects of the pandemic unfold.

(Prof J Pirkis PhD, S Shin MPH, V Arya MRes, J Dwyer PhD, M J Spittal PhD); Swansea University Medical School, Swansea, UK (Prof A John MD, M DelPozo-Banos PhD); Translational Health Research Institute, Western Sydney University, Campbelltown, NSW, Australia (V Arya); Ministry of Public Health, Department of Health Promotion, Quito, Ecuador (P Analuisa-Aguilar MPH); National Confidential Inquiry into Suicide and Safety in Mental Health (Prof L Appleby FRCPsych) and Centre for Mental Health and Safety and National Institute for Health Research Patient Safety Translational Research Centre (Prof N Kapur FRCPsych, Prof R T Webb PhD), University of Manchester, Manchester,

## But...

There is a need to ensure that efforts that might have kept suicide rates down until now are continued, and to remain vigilant as the longer-term mental health and economic consequences of the pandemic unfold. There are some concerning signals that the pandemic might be adversely affecting suicide rates in low-income and lower-middle-income countries, although data are only available in a small minority of these countries and tend to be of suboptimal quality. Even in high-income and upper-middle-income countries, the effect of the pandemic on suicide might vary over time and be different for different subgroups in the population.



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## UK COVID-19 Mental Health and Wellbeing study (UK COVID-MH)

To investigate the immediate and medium-term impact of the COVID-19 pandemic and the required social distancing and self-isolation measures on people's mental health and wellbeing in the UK.

Using a national, non-probability sample of adults from across the UK (n=3,077) with at least 7 follow-ups over 12-15 months, we asked people questions about their mental wellbeing in the weeks and months following the COVID-19 outbreak.

**Research Team:** Rory C O'Connor, Karen Wetherall, Seonaid Cleare, Heather McClelland, Ambrose J Melson, Claire L Niedzwiedz, Ronan E O'Carroll, Daryl B O'Connor, Steve Platt, Elizabeth Scowcroft, Billy Watson, Tiago Zortea, Eamonn Ferguson, & Kathryn A Robb



# Mental health and well-being during the COVID-19 pandemic: longitudinal analyses of adults in the UK

## COVID-19 Mental Health & Wellbeing study

Rory C. O'Connor, Karen Wetherall, Seonaid Cleare, Heather McClelland, Ambrose J. Melson, Claire L. Niedzwiedz, Ronan E. O'Carroll, Daryl B. O'Connor, Steve Platt, Elizabeth Scowcroft, Billy Watson, Tiago Zortea, Eamonn Ferguson and Kathryn A. Robb

### Background

The effects of coronavirus disease 2019 (COVID-19) on the population's mental health and well-being are likely to be profound and long lasting.

### Aims

To investigate the trajectory of mental health and well-being during the first 6 weeks of lockdown in adults in the UK.

### Method

A quota survey design and a sampling frame that permitted recruitment of a national sample was employed. Findings for waves 1 (31 March to 9 April 2020), 2 (10 April to 27 April 2020) and 3 (28 April to 11 May 2020) are reported here. A range of mental health factors was assessed: pre-existing mental health problems, suicide attempts and self-harm, suicidal ideation, depression, anxiety, defeat, entrapment, mental well-being and loneliness.

### Results

A total of 3077 adults in the UK completed the survey at wave 1. Suicidal ideation increased over time. Symptoms of anxiety, and levels of defeat and entrapment decreased across waves whereas levels of depressive symptoms did not change significantly. Positive well-being also increased. Levels of loneliness

did not change significantly over waves. Subgroup analyses showed that women, young people (18–29 years), those from more socially disadvantaged backgrounds and those with pre-existing mental health problems have worse mental health outcomes during the pandemic across most factors.

### Conclusions

The mental health and well-being of the UK adult population appears to have been affected in the initial phase of the COVID-19 pandemic. The increasing rates of suicidal thoughts across waves, especially among young adults, are concerning.

### Keywords

COVID-19; mental health; suicidal ideation; general population; depression.

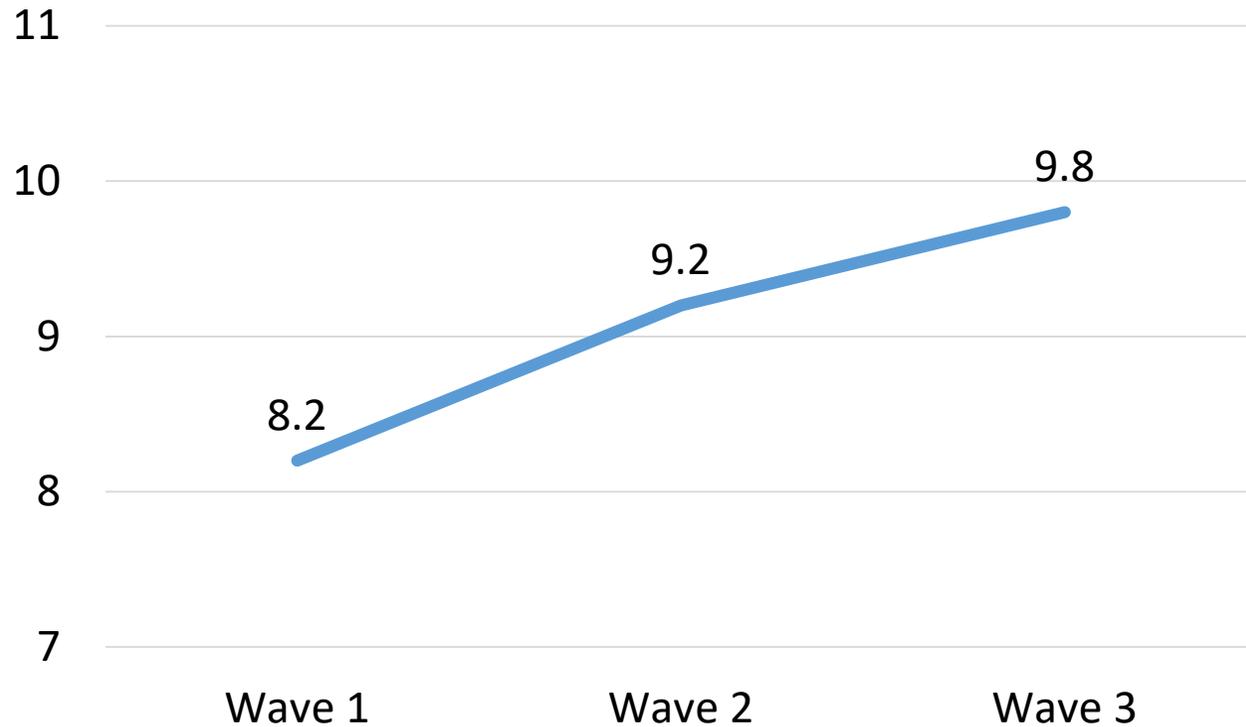
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# Trends in suicidal ideation in last week

Trends in suicidal ideation waves 1-3 (%)

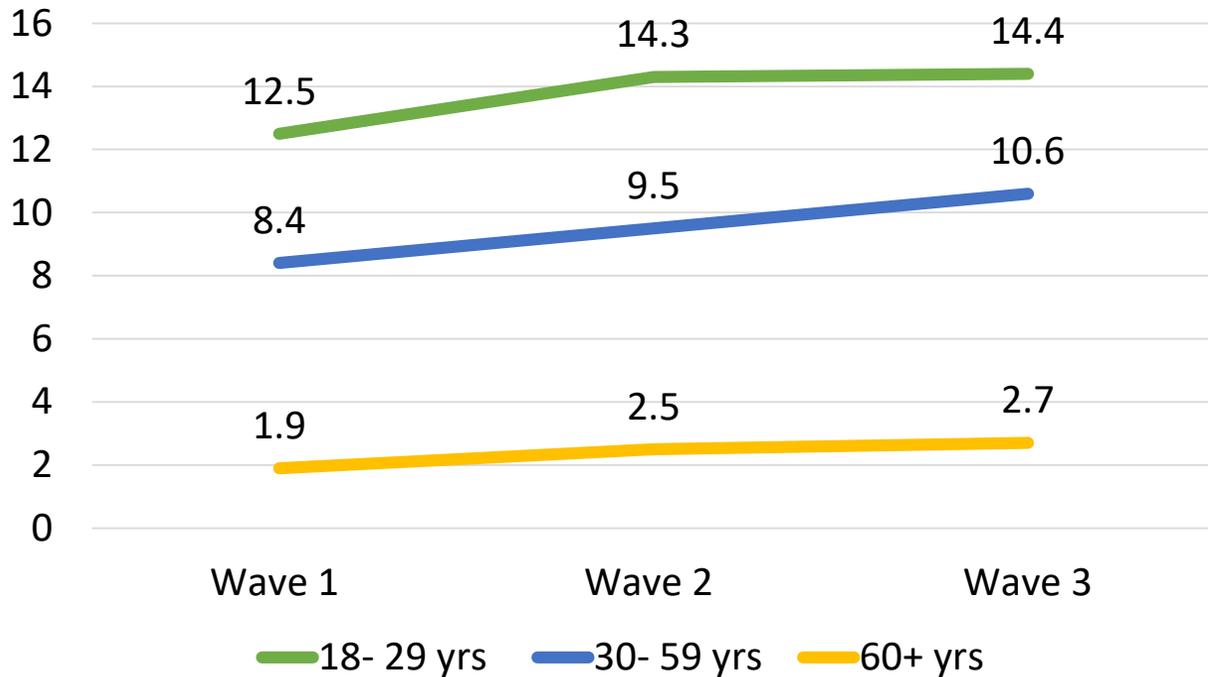


- Participants were asked: “How often have you thought about taking your life in the last week?” (‘never’, to ‘nearly everyday’)
- Suicidal ideation= at least one day/week
- Rates of suicidal ideation in the last week increased from wave 1 to wave 2 and from wave 1 to wave 3

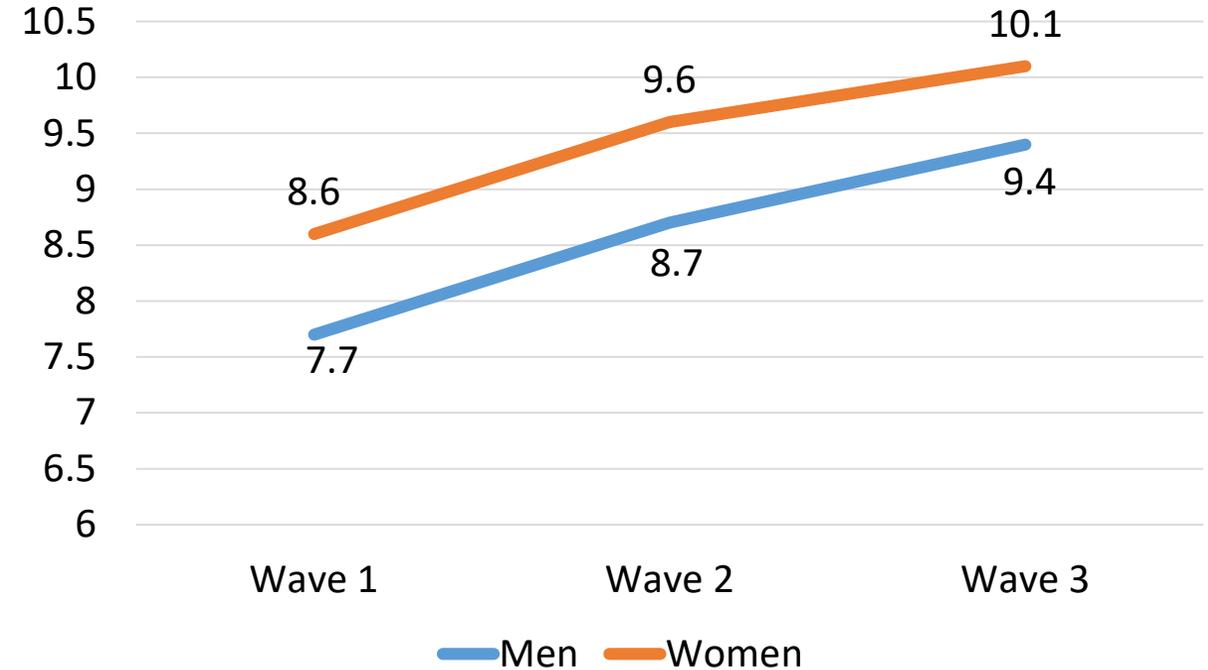


# Trends in suicidal ideation by age and gender

Trends in suicidal ideation waves 1-3 by age group (%)



Trends in suicidal ideation wave 1 - 3 by gender (%)

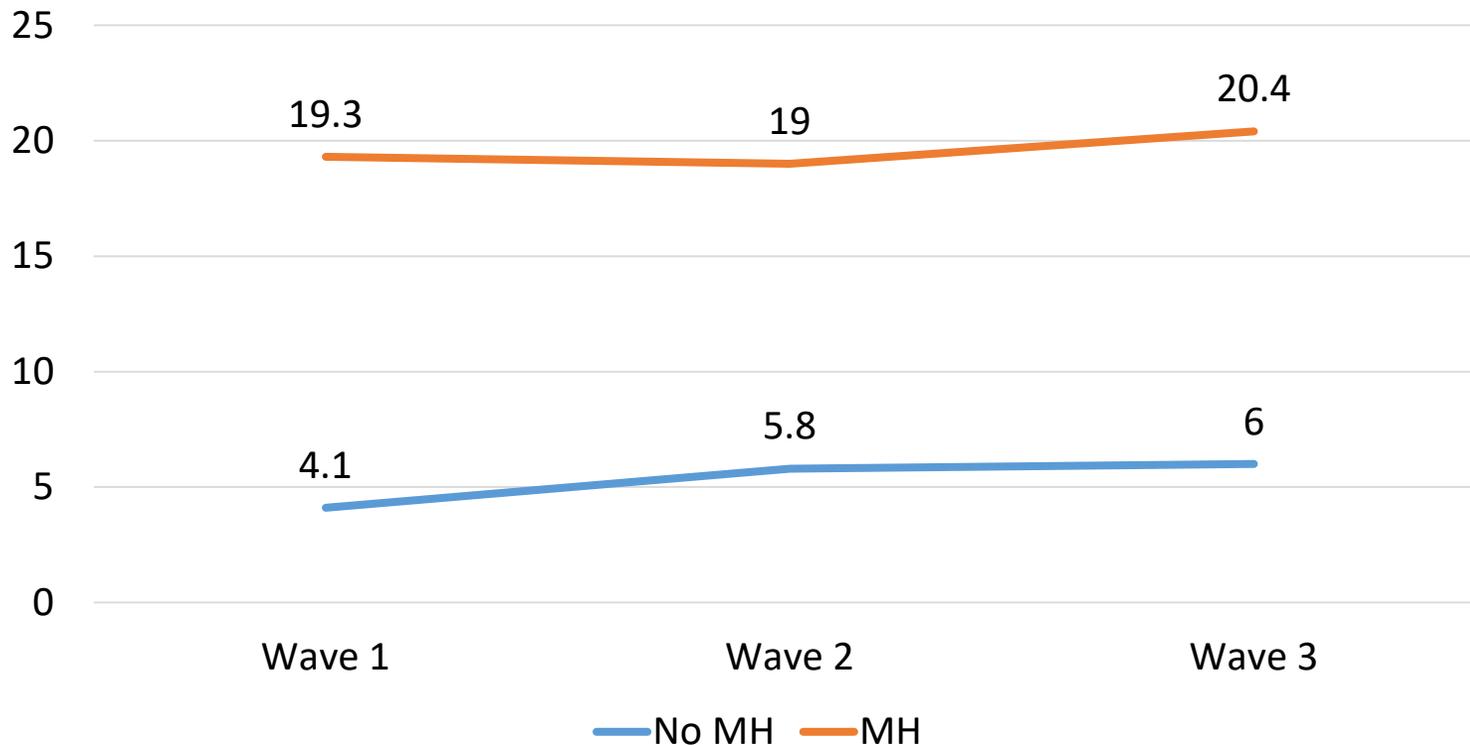


- Young people (18-29 year olds) reported the highest rates of suicidal ideation, and older adults reported the lowest levels
- Women reported slightly higher levels of suicidal ideation, but this was not significantly different



# Trends in suicidal ideation by pre-existing mental health condition (MH)

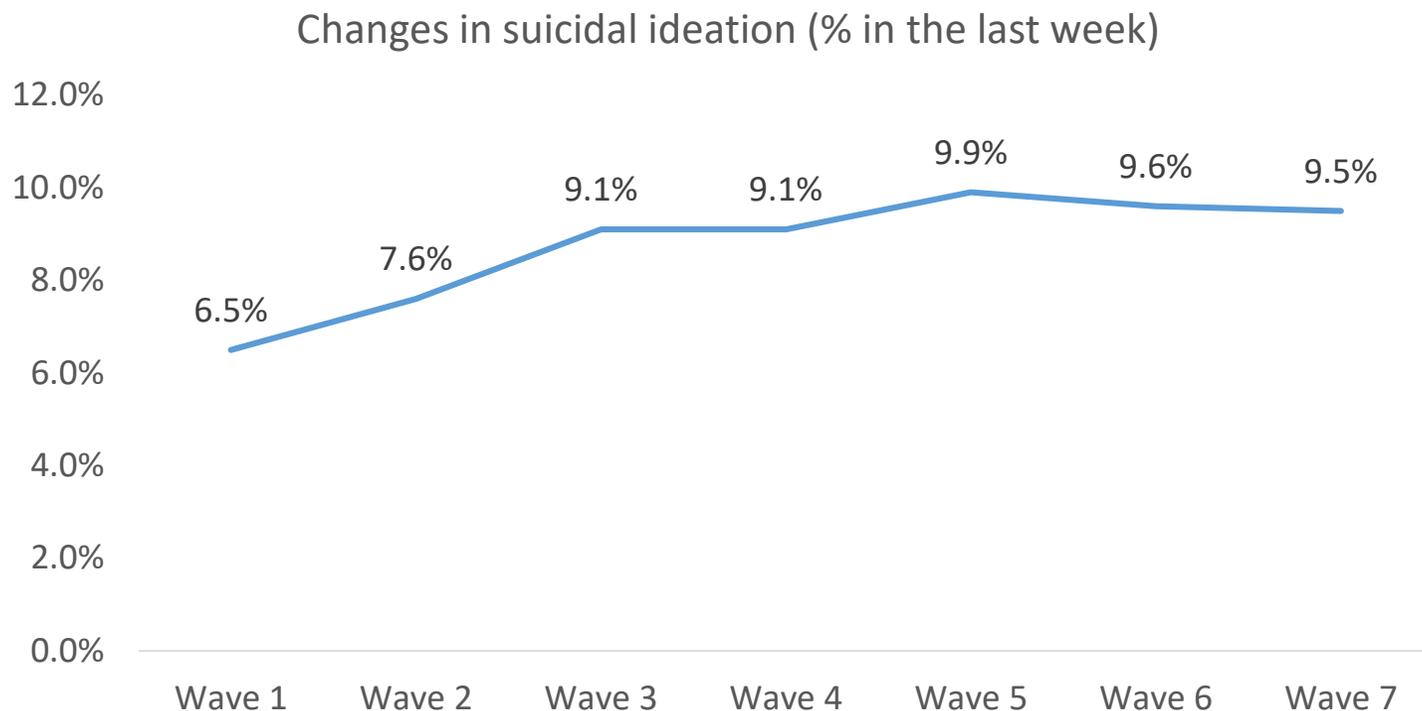
Trends in suicidal ideation waves 1 - 3 by pre-existing mental health condition (%)



- Participants were asked if they had a pre-existing mental health condition
- Of those who did (n=852) more people reported anxiety (21.5%) or depression (18%)
- Those with a MH condition reported higher suicidal ideation over each wave



# Suicidal ideation Waves 1 to 7



Depressive symptoms and loneliness increased from wave 6 to 7. Defeat and entrapment increased from wave 5 to 6 and remained elevated at wave 7. Anxiety symptoms, mental wellbeing and suicidal ideation did not change.

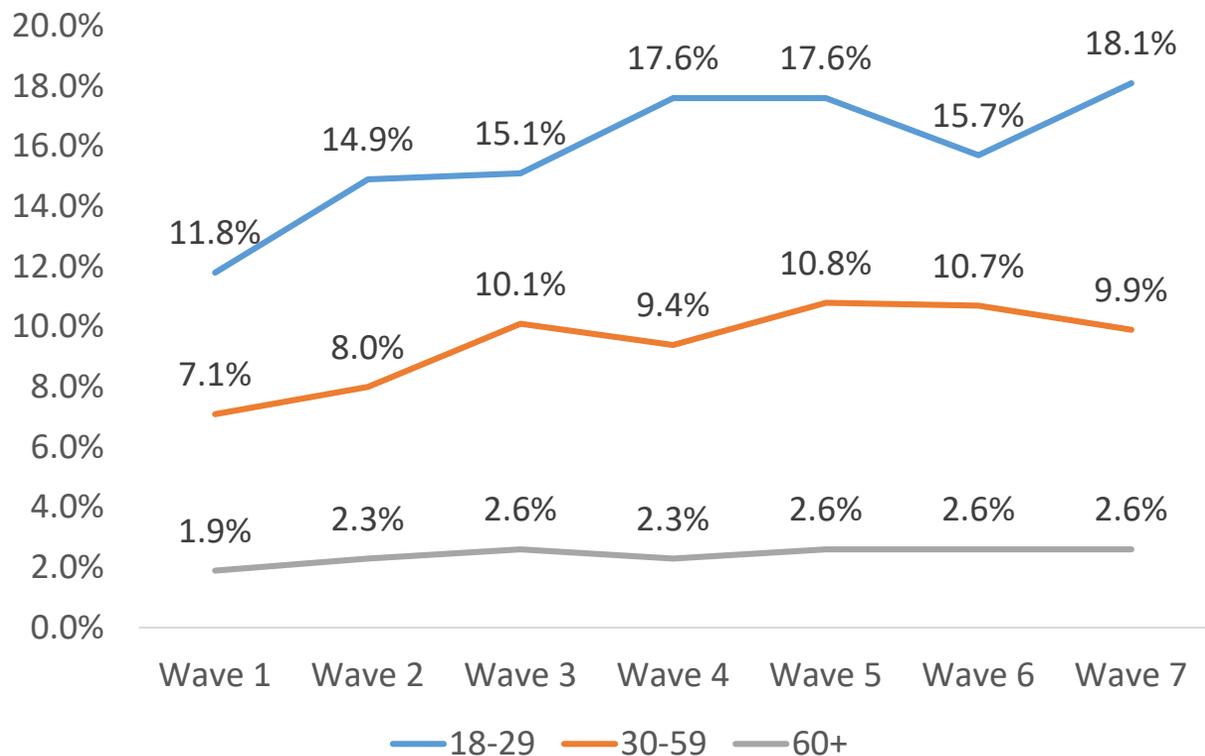
Preliminary analyses: please do not tweet/circulate - includes those who completed all waves

**Wave 7**  
**4 Feb to 2 March 2021**

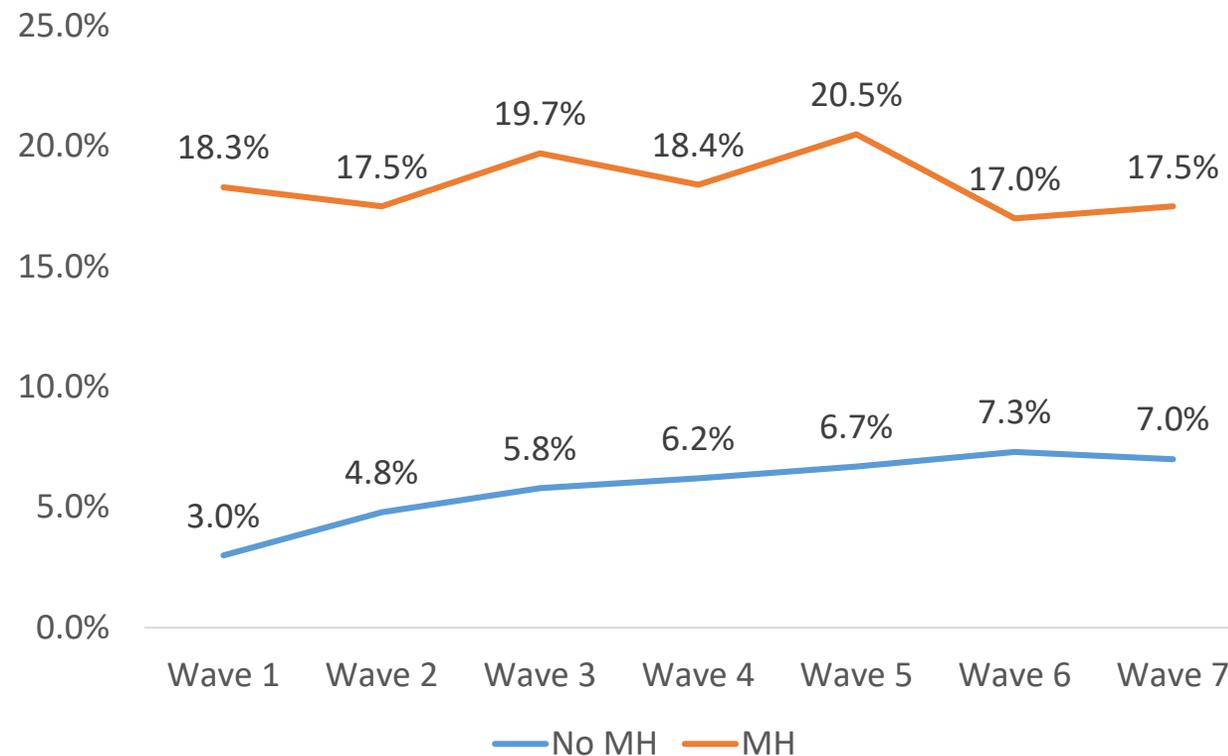


# Suicidal ideation: subgroup analysis

Changes in suicidal ideation by age group



Changes in suicidal ideation by mental health condition

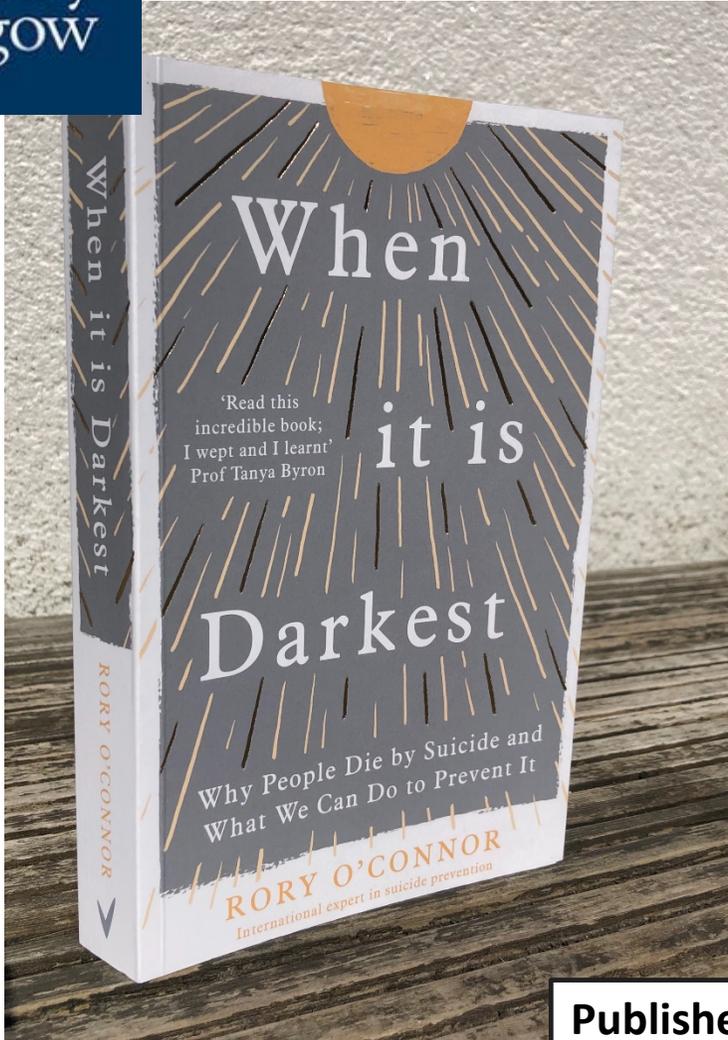


**Wave 7**  
**4 Feb to 2 March 2021**

Preliminary analyses: please do not tweet/circulate



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## MYTHS ABOUT SUICIDE

1. Those who talk about suicide are not at risk of suicide.
2. All suicidal people are depressed or mentally ill.
3. Suicide occurs without warning.
4. Asking about suicide 'plants' the idea in someone's head.
5. Suicidal people clearly want to die.
6. When someone becomes suicidal they will always remain suicidal.
7. Suicide is inherited.
8. Suicidal behaviour is motivated by attention-seeking.
9. Suicide is caused by a single factor.
10. Suicide cannot be prevented.
11. Only people of a particular social class die by suicide.
12. Improvement in emotional state means lessened suicide risk.
13. Thinking about suicide is rare.
14. People who attempt suicide by a low-lethality means are not serious about killing themselves.

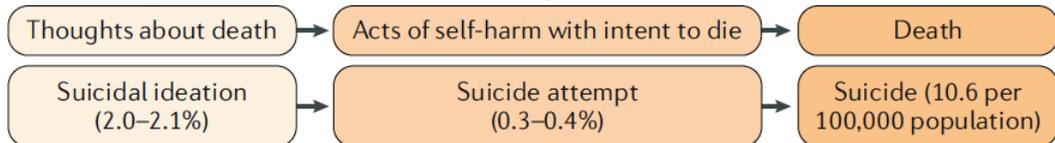
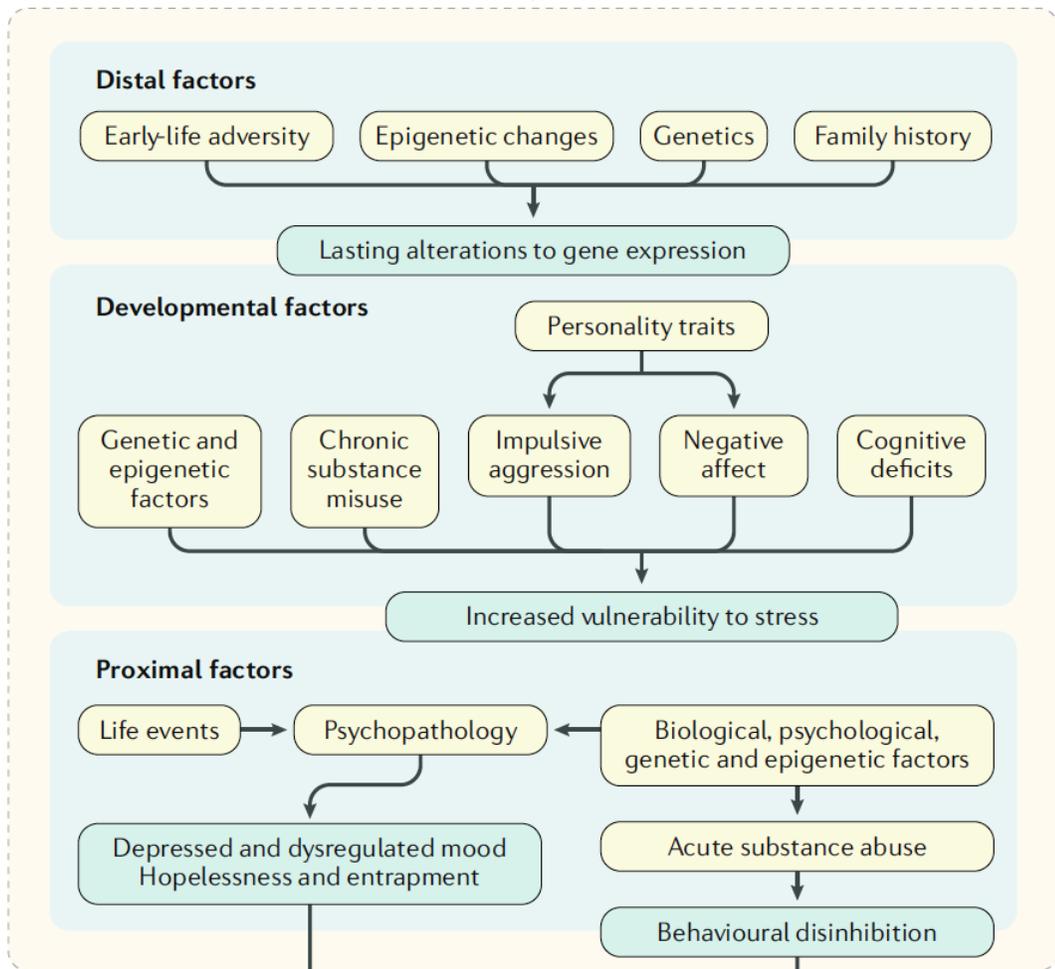
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UK

**Social context: lack of social cohesion and environmental factors**

- Geographical location
- Sociocultural norms
- Disruption to social structure or values
- Economic turmoil
- Social isolation
- Media reporting
- Access to lethal means
- Poor access to mental health services



# Biopsychosocial model of suicide risk

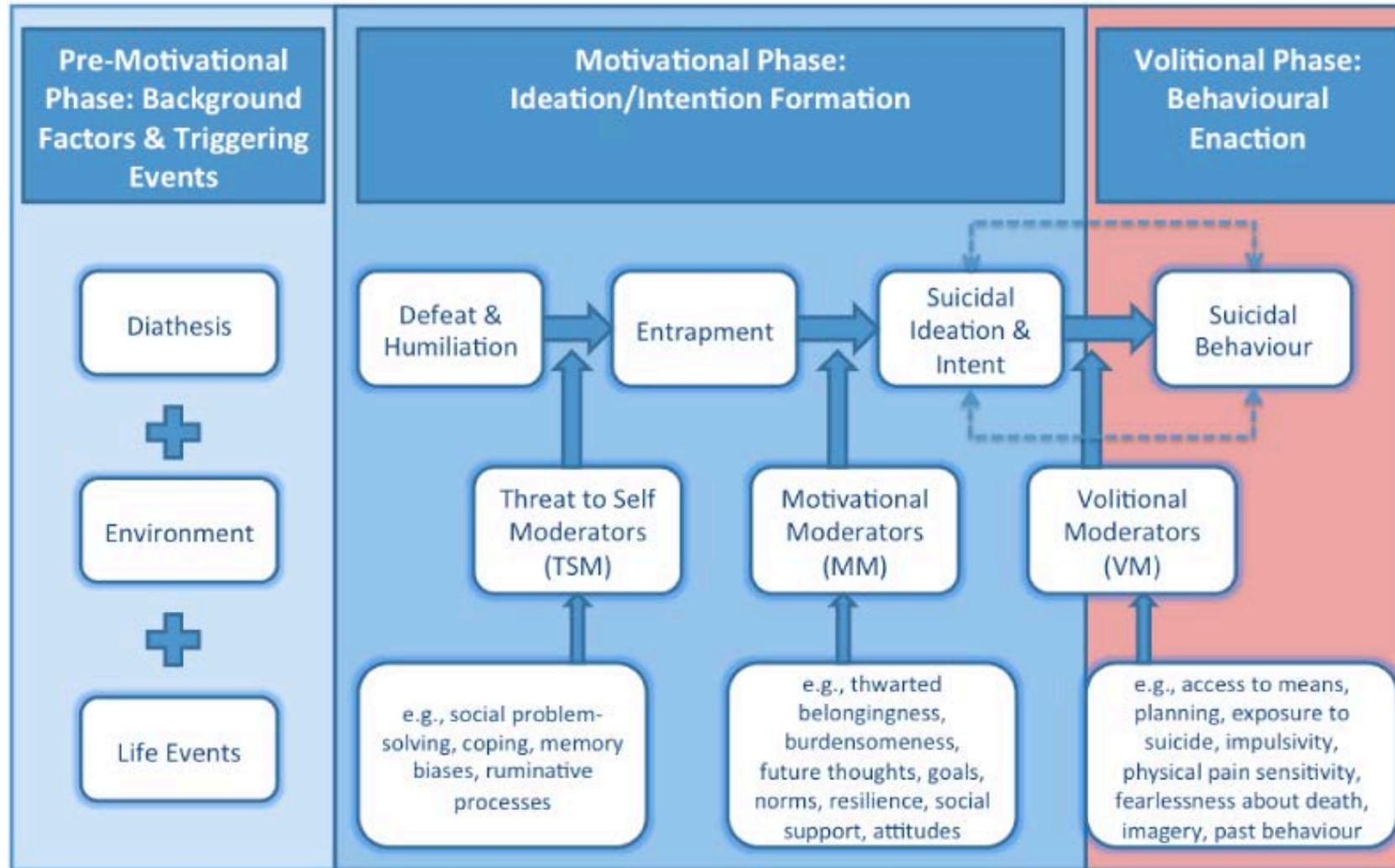
nature reviews  
disease primers

Gustavo Turecki<sup>1</sup>\*, David A. Brent<sup>2</sup>, David Gunnell<sup>3,4</sup>, Rory C. O'Connor<sup>5</sup>, Maria A. Oquendo<sup>6</sup>, Jane Pirkis<sup>7</sup> and Barbara H. Stanley<sup>8</sup>

2019



# Integrated motivational-volitional (IMV) model of suicidal behaviour



# Predicting suicidal ideation in a nationally representative sample of young adults: a 12-month prospective study

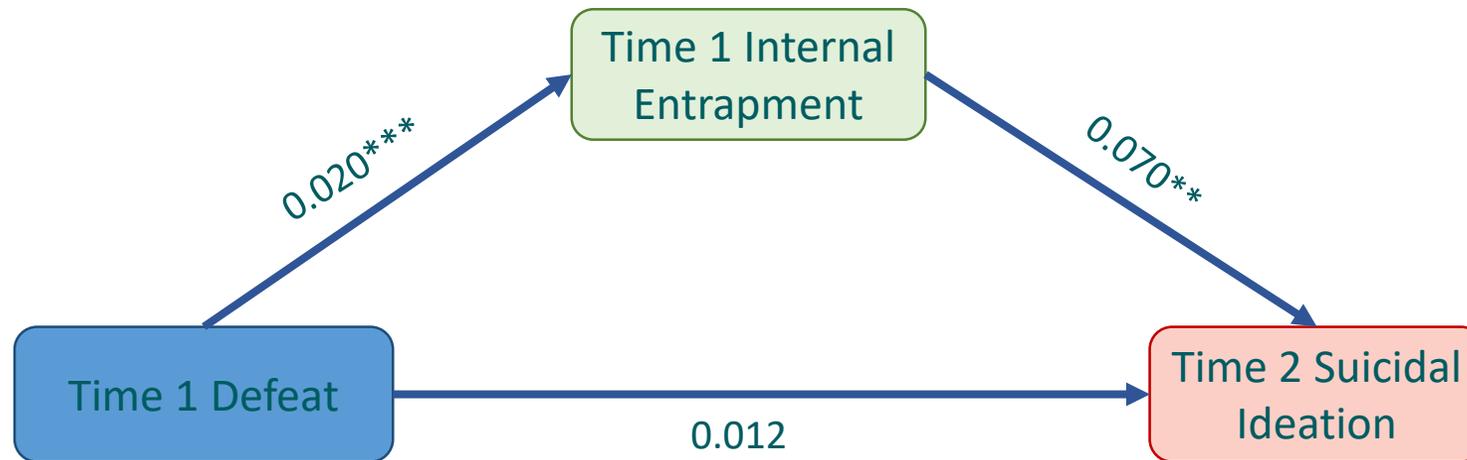
Karen Wetherall<sup>1</sup> , Seonaid Cleare<sup>1</sup>, Sarah Eschle<sup>1</sup>, Eamonn Ferguson<sup>2</sup>, Daryl B. O'Connor<sup>3</sup>, Ronan E. O'Carroll<sup>4</sup> and Rory C. O'Connor<sup>1</sup>

**Table 1.** Multiple linear regression models testing the extent to which baseline variables predict suicidal ideation at 12 months ( $n = 2382$ )

Variables	$\beta$	S.E.	95% CI
Baseline suicidal ideation	0.43***	0.03	0.38–0.48
Depressive symptoms	−0.02	0.01	−0.05–0.003
Thwarted belongingness	0.002	0.01	−0.03–0.03
Perceived burdensomeness	0.07***	0.02	0.04–0.10
Defeat	0.01	0.01	−0.01–0.04
External entrapment	−0.004	0.02	−0.03–0.03
Internal entrapment	0.07**	0.02	0.02–0.12

\*\*  $p < 0.01$  \*\*\*  $p < 0.001$ .

# Mediation analysis of the relationship of baseline defeat and entrapment with 12 month (Time 2) suicidal ideation



\*\*p < 0.01, \*\*\*p < 0.001

Indirect effect:  $b = 0.014$  (SE = 0.007), 95% CI = 0.001 – 0.027

Controlling for baseline (T1) depressive symptoms, suicidal ideation, perceived burdensomeness (PB), thwarted belongingness (TB), PB\*TB

NB. Same effect with total entrapment

## The 4-item Entrapment Scale Short-Form (E-SF)

1. I often have the feeling that I would just like to run away
2. I feel powerless to change things
3. I feel trapped inside myself
4. I feel I'm in a deep hole I can't get out of

# Loneliness and Suicide Risk

## Loneliness as a predictor of suicidal ideation and behaviour: a systematic review and meta-analysis of prospective studies

Heather McClelland<sup>a,\*</sup>, Jonathan J. Evans<sup>b</sup>, Rebecca Nowland<sup>c</sup>, Eamonn Ferguson<sup>d</sup>, Rory C. O'Connor<sup>a</sup>

**Loneliness was a significant predictor of both suicidal ideation and behaviour and there was evidence that depression acted as a mediator.**

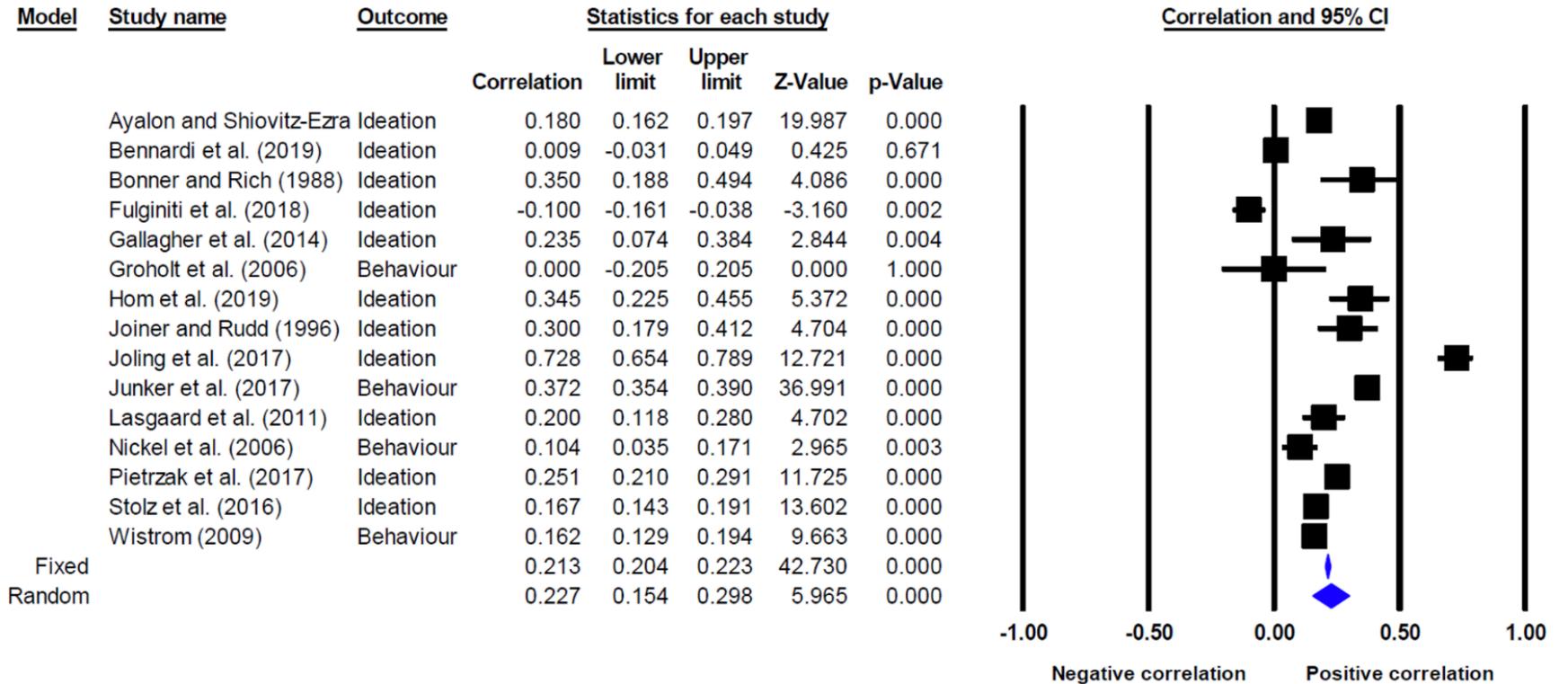


Fig. 2. Forest plot of overall effect sizes from whole participant group

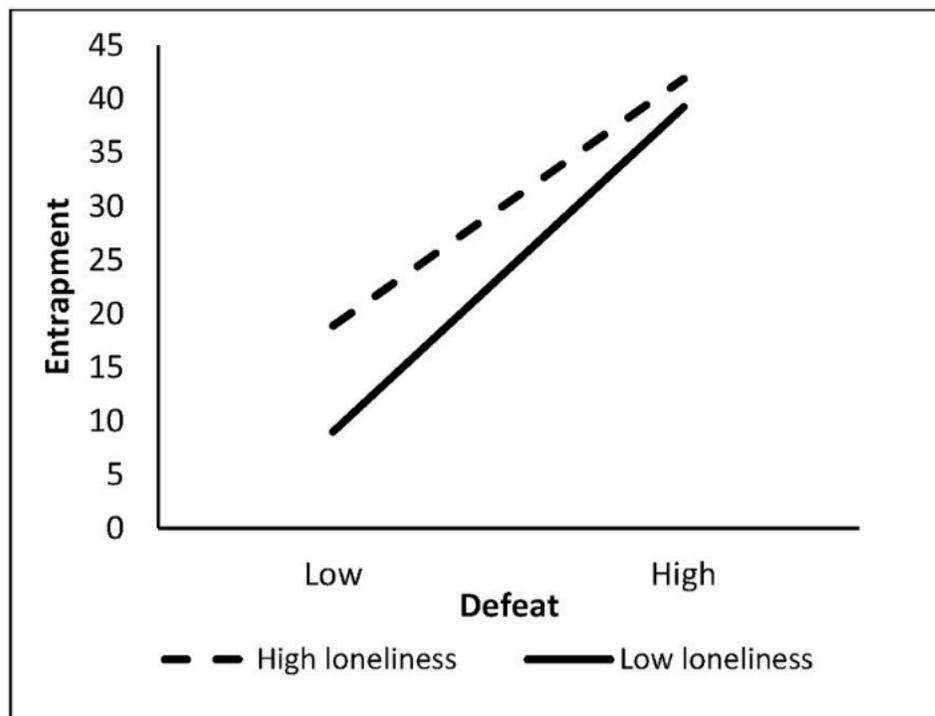


Fig. 2. Loneliness as a moderator between defeat and entrapment.

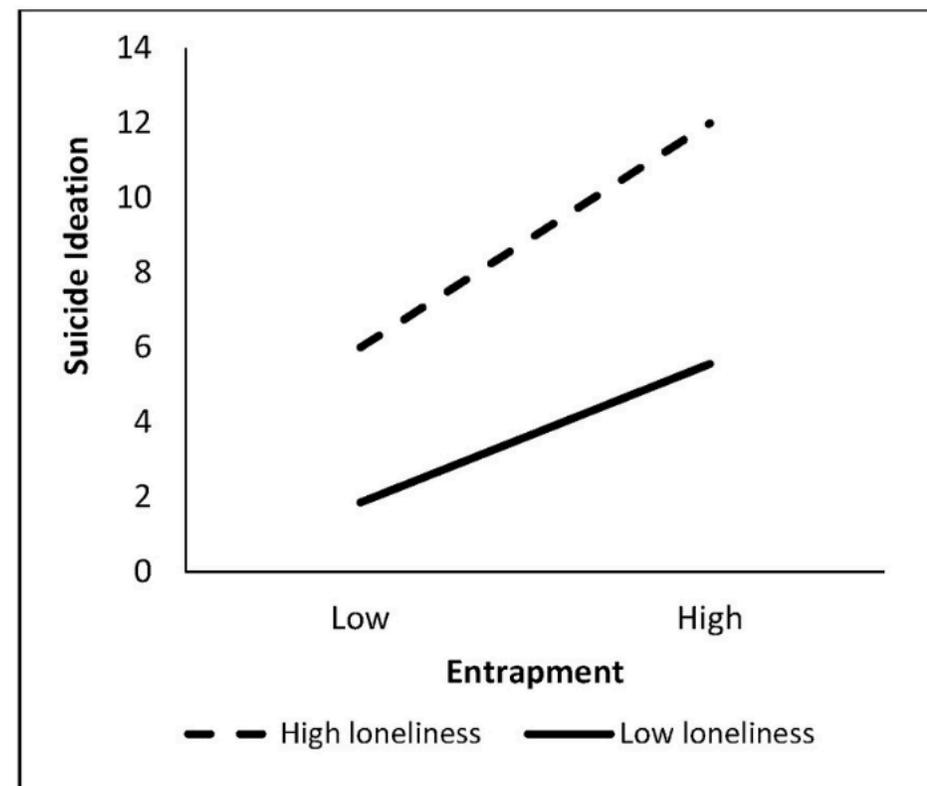


Fig. 3. Loneliness as a moderator between Entrapment and Suicidal Ideation.



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# Crossing the Precipice: From Thoughts of Suicide to Suicidal Behaviour

I never thought he'd do it. A few weeks before his death, he had told me that he had thoughts about being dead, but I was too scared to ask him directly whether he would kill himself. I haven't stopped asking myself why I didn't ask him. Not a day passes when I don't torment myself with this question. When I look back on it now, I just didn't think he was the type of person who would kill himself. I know how ridiculous that sounds, but he was just always so full of life.



**From Suicidal Thoughts to Suicidal Behaviour: Volitional Factors**





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# Cortisol: the Stress Hormone



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# Psychoneuroendocrinology

journal homepage: [www.elsevier.com/locate/psyneuen](http://www.elsevier.com/locate/psyneuen)



## Cortisol reactivity and suicidal behavior: Investigating the role of hypothalamic-pituitary-adrenal axis responses to stress in suicide



Daryl B. O'Connor (PhD)<sup>a,\*</sup>, Jessica A. Green (MSc)<sup>a</sup>, Eamonn Ferguson (PhD)<sup>b</sup>,  
Ronan E. O'Carroll (PhD)<sup>c</sup>, Rory C. O'Connor (PhD)<sup>d</sup>

<sup>a</sup> School of Psychology, University of Leeds, Leeds UK

<sup>b</sup> School of Psychology, University of Nottingham, Nottingham, UK

<sup>c</sup> Division of Psychology, University of Stirling, Stirling, UK

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HPA axis

Self-harm

Allostatic load

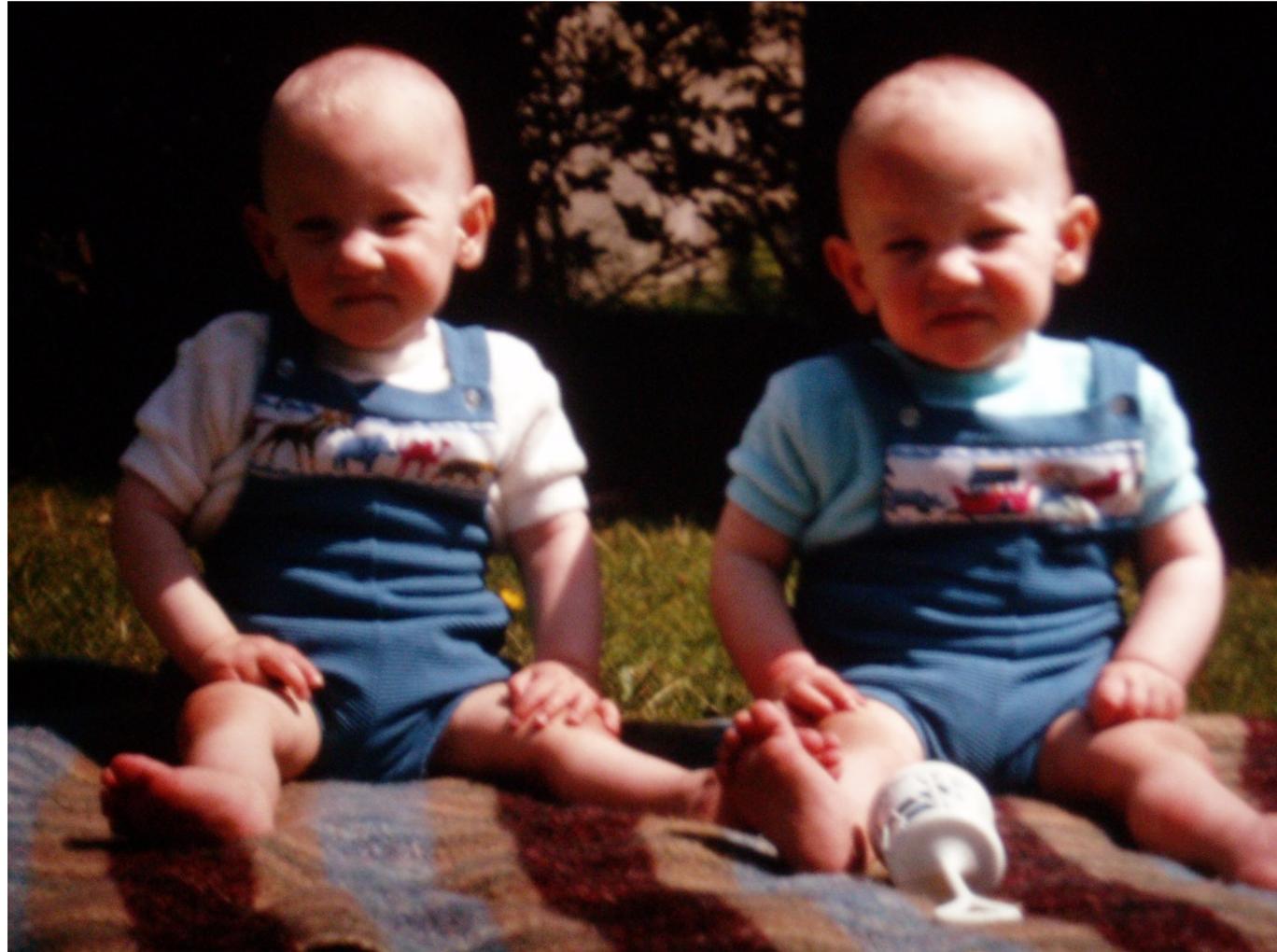
### ABSTRACT

Every 40 s a person dies by suicide somewhere in the world. The causes of suicidal behavior are not fully understood. Dysregulated hypothalamic-pituitary-adrenal (HPA) axis activity, as measured by cortisol levels, is one potential risk factor. The current study aimed to investigate whether cortisol reactivity to a laboratory stress task differentiated individuals who had previously made a suicide attempt from those who had thought about suicide (suicide ideators) and control participants. One hundred and sixty participants were recruited to a previous attempt, a suicidal ideation or a control group. Participants completed background questionnaires before completing the Maastricht Acute Stress Test (MAST). Cortisol levels were assessed throughout the stress task. Measures of suicide behavior were measured at baseline, 1 month and 6 month follow-up. Participants who had made a previous suicide attempt exhibited significantly lower aggregate cortisol levels during the MAST compared to participants in the control group; suicide ideators were intermediate to both groups. This effect, however, was driven by participants who made an attempt within the past year, and to some degree by those with a family history of attempt. Participants who made a suicide attempt and had a family history of suicide exhibited the lowest levels of cortisol in response to stress. Finally, lower levels of cortisol in response to the MAST were associated with higher levels of suicidal ideation at 1-month follow-up in the suicide attempter group. These results are consistent with other findings indicating that blunted HPA axis activity is associated with some forms of suicidal behavior. The challenge for researchers is to elucidate the precise causal mechanisms linking stress, cortisol and suicide risk.



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# My twin brother and I

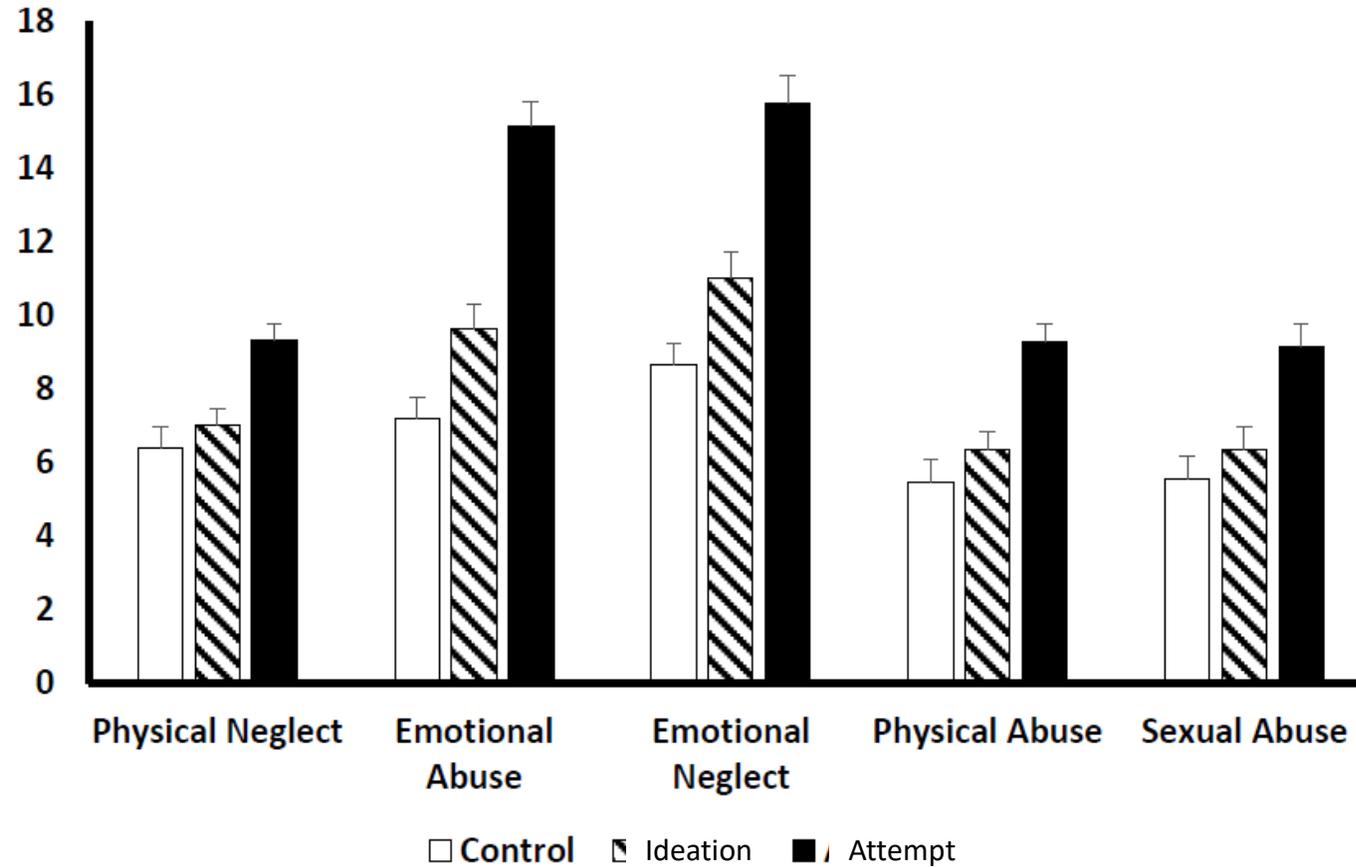


**Never too early to plan your research**



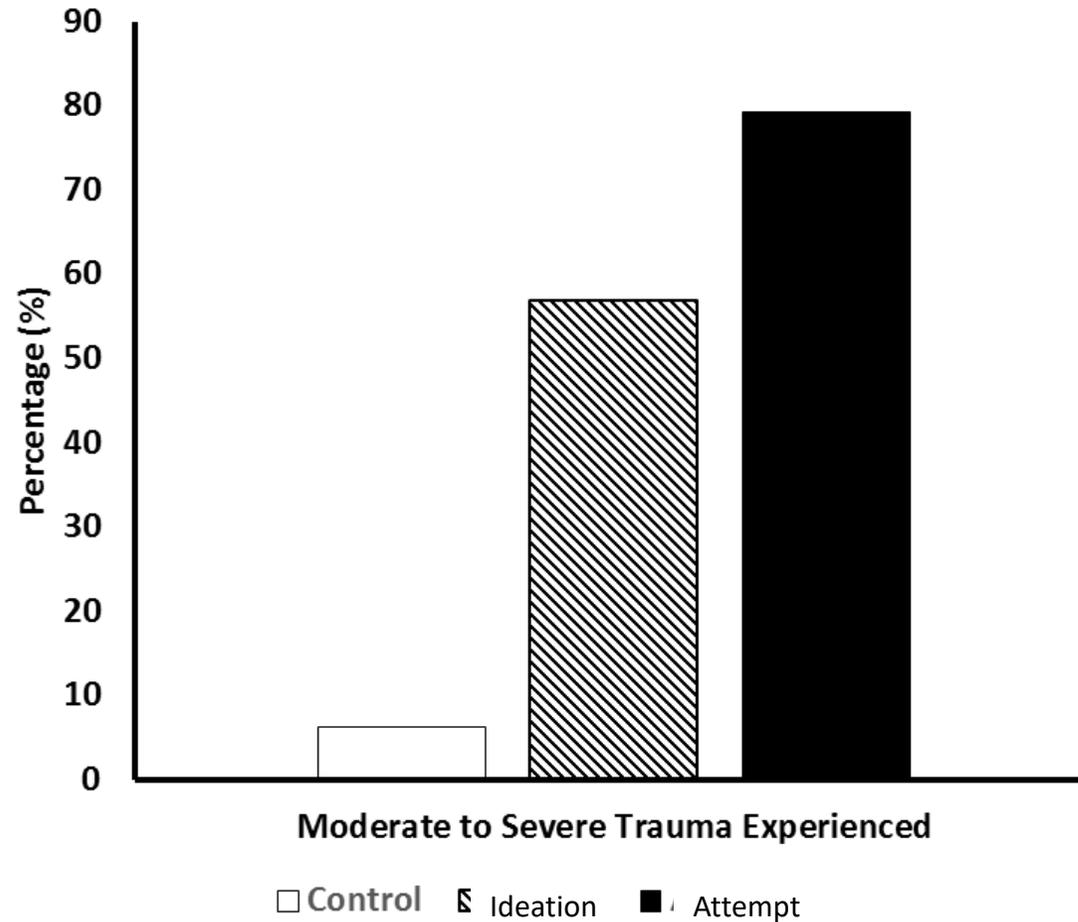
**Childhood trauma, stress and  
cortisol in individuals vulnerable to  
suicide?**

# Childhood trauma & suicidal history



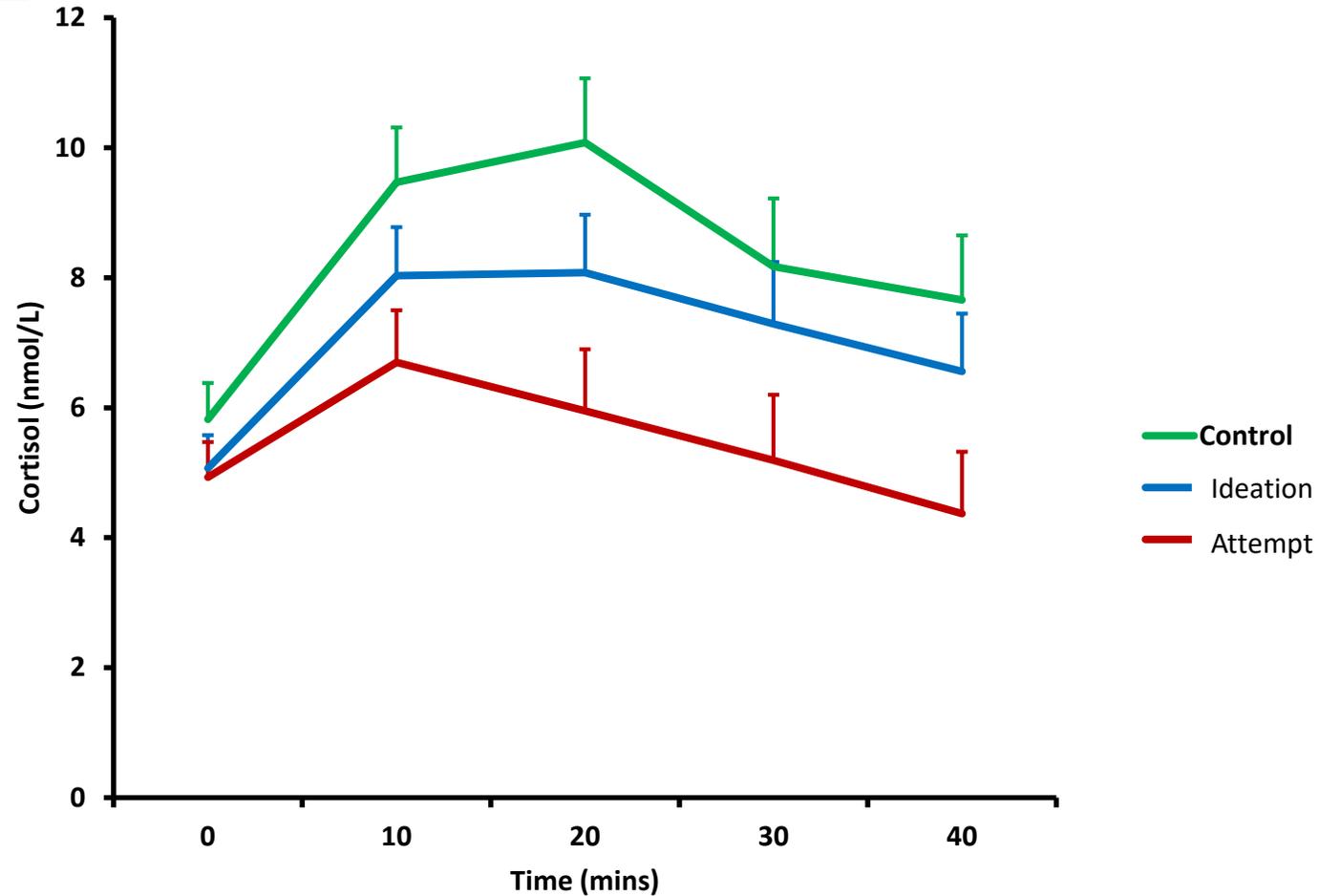
- ❖ Suicide attempt history scored sig. higher on all scales compared to both those in ideation and control groups
- ❖ Ideation group intermediate to the other two groups
- ❖ Ideation group different from controls on physical neglect ( $p < 0.001$ ), emotional abuse ( $p = 0.038$ ), and emotional neglect ( $p = 0.058$ ).

# Exposure to “moderate to severe” childhood trauma





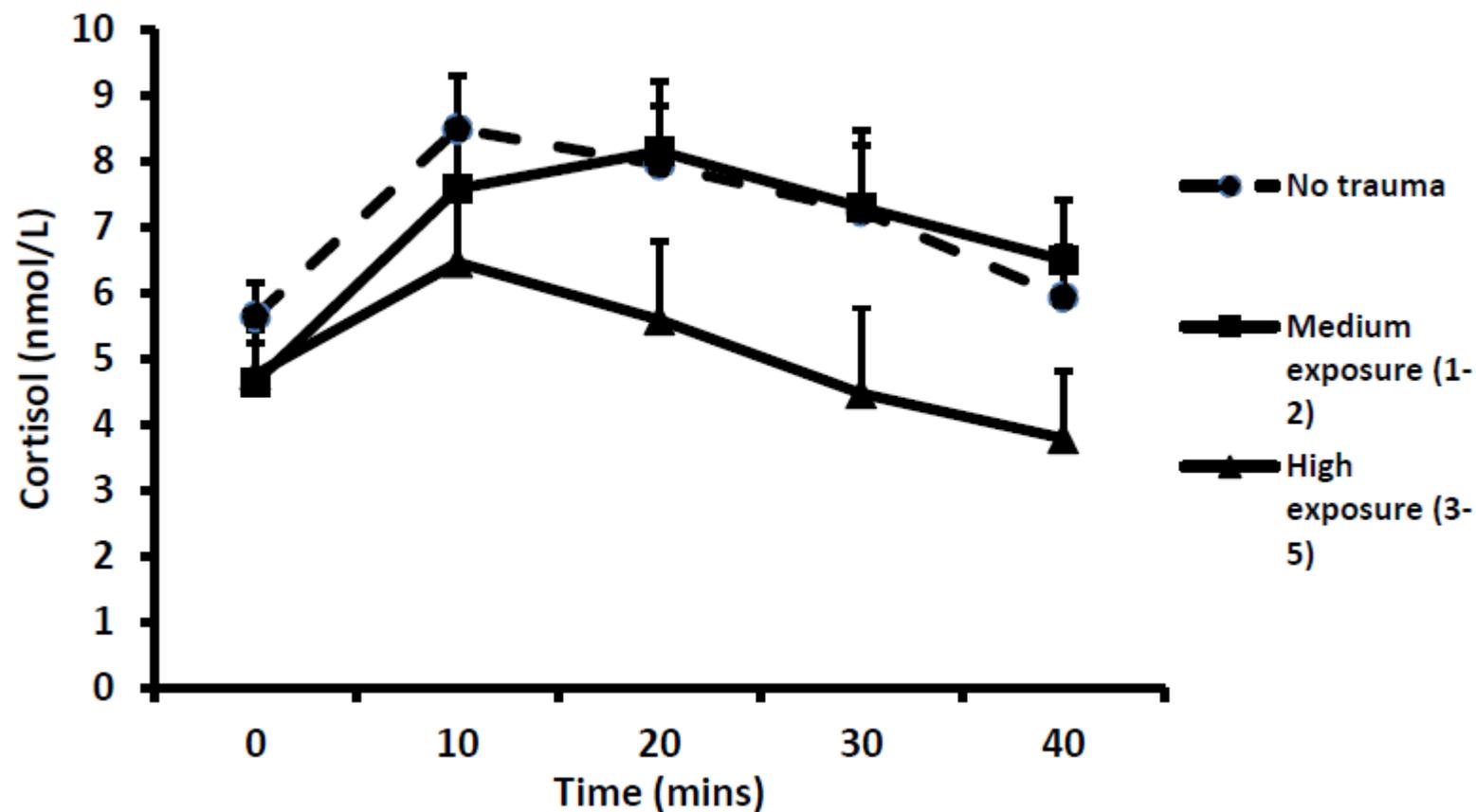
# Effects of group on cortisol during the MAST (stress task) (n=145)



Main effect of group for cortisol levels,  $p=0.02$ ; AUCg,  $p=0.02$ , AUCi,  $p=0.04$

Note: All analyses controlled for age, BMI, medication usage, time of day, smoking, & gender

# Effects of childhood trauma on cortisol reactivity to stress (AUCg)





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# From Thinking To Doing

Interventions to Interrupt the Transition  
from Suicidal Thoughts to Suicide  
Attempts

2019

nature reviews  
disease primers**Box 2 | Interventions for suicidal ideation and suicidal behaviour****Psychosocial***Longer-term psychosocial interventions*

- Cognitive behavioural therapy
- Dialectic behavioural therapy
- Collaborative assessment and management of suicidality
- Acceptance and commitment therapy
- Mentalization
- Interpersonal psychotherapy

*Brief interventions*

- Caring contacts
- No suicide contacts
- **Safety planning intervention**
- Crisis response planning

- Attempted suicide short intervention programme
- Volitional help sheet

**Pharmacological***Pharmacological agents with potential effect on suicidal behaviour*

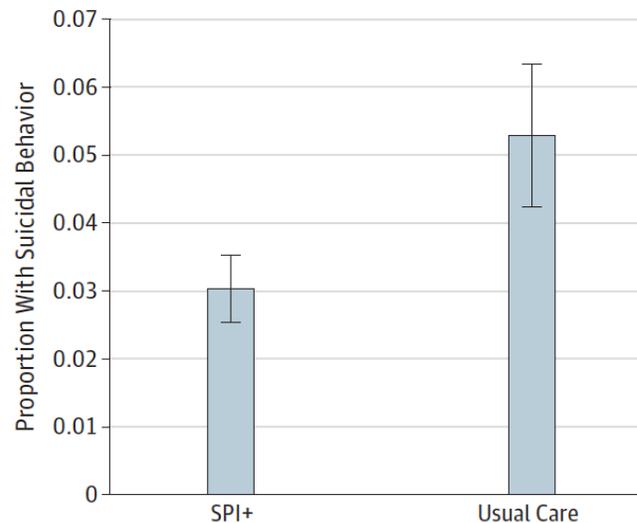
- Lithium
- Clozapine<sup>a</sup>
- Ketamine
- Selective serotonin reuptake inhibitors
- Buprenorphine

<sup>a</sup>Clozapine is indicated in treatment of patients with schizophrenia who present with suicidal ideation.

# Comparison of the Safety Planning Intervention With Follow-up vs Usual Care of Suicidal Patient in the Emergency Department

Barbara Stanley, PhD; Gregory K. Brown, PhD; Lisa A. Brenner, PhD; Hanga C. Galfalvy, PhD; Glenn W. Currier, MD; Kerry L. Knox, PhD; Sadia R. Chaudhury, PhD; Ashley L. Bush, MMA; Kelly L. Green, PhD

Figure 1. Suicidal Behavior in 6-Month Follow-up for Safety Planning Intervention With Structured Follow-up Telephone Contact (SPI+) and Usual Care



Proportion of patients with suicidal behavior in the 6 months following emergency department discharge in SPI+ compared with usual care patients. Error bars denote the standard error of the proportion.

- Patients in the SPI+ condition were less likely to engage in suicidal behavior (n = 36 of 1186; 3.03%) than those receiving usual care (n = 24 of 454; 5.29%) during the 6-month follow-up period.
- The SPI+ was associated with 45% fewer suicidal behaviors
- Those in SPI+ condition more likely to have treatment engagement



# Safety planning-type interventions for suicide prevention: meta-analysis

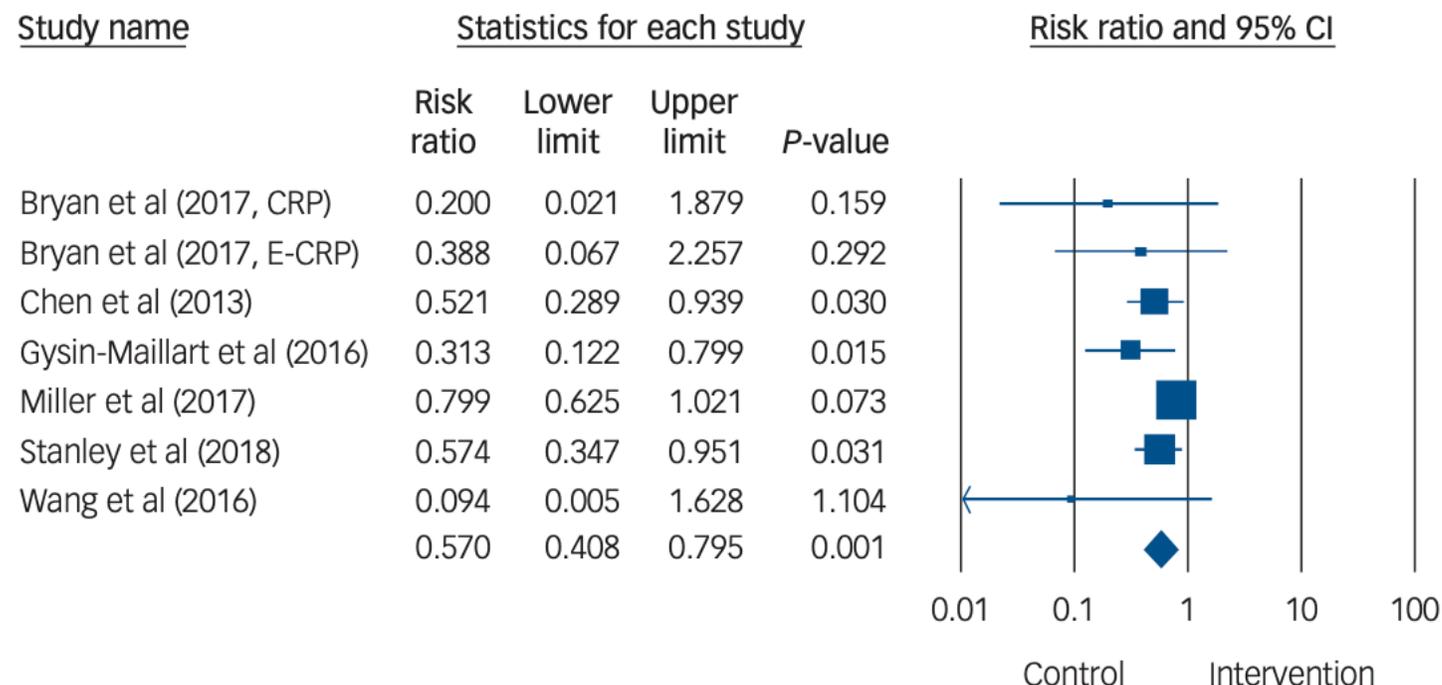
BJPsych

The British Journal of Psychiatry (2021)  
219, 419–426. doi: 10.1192/bjp.2021.50

Chani Nuij, Wouter van Ballegooijen, Derek de Beurs, Dilfa Juniar, Annette Erlangsen, Gwendolyn Portzky, Rory C. O'Connor, Johannes H. Smit, Ad Kerkhof and Heleen Riper

The relative risk of suicidal behaviour among patients who received an SPTI compared with control was 0.570 (95% CI 0.408–0.795,  $P = 0.001$ )

Results support the use of SPTIs to help preventing suicidal behaviour and the inclusion of SPTIs in clinical guidelines for suicide prevention.



**Fig. 2** Forest plot for suicidal behaviour. CRP, standard crisis response plan; E-CRP, enhanced crisis response plan.

Safety Plan

Participant ID: \_\_\_\_\_  
 Researcher ID: \_\_\_\_\_  
 Date of completion: \_\_\_\_\_

**Step 1:** Warning signed (thoughts, images, mood, situation, behaviour) that a crisis may be developing:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Step 2:** Internal coping strategies – Things I can do to take my mind off my problems without collecting another person (relaxation technique, physical activity):

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Step 3:** People and social settings that provide distraction:

- \_\_\_\_\_ Phone: \_\_\_\_\_
- \_\_\_\_\_ Phone: \_\_\_\_\_
- Place: \_\_\_\_\_
- Place: \_\_\_\_\_

**Step 4:** People where I can ask for help:

- \_\_\_\_\_ Phone: \_\_\_\_\_
- \_\_\_\_\_ Phone: \_\_\_\_\_
- \_\_\_\_\_

**Safety Planning is so much more than this form: importance of compassion & collaboration**

- Step 5: \_\_\_\_\_
- Clinic \_\_\_\_\_
- GP \_\_\_\_\_
- Local \_\_\_\_\_
- Same \_\_\_\_\_

Breathing Space: 0800 83 85 87

**Step 6:** Making the environment safe:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**BMJ Open SAFETEL randomised controlled feasibility trial of a safety planning intervention with follow-up telephone contact to reduce suicidal behaviour: study protocol**

Rory C O'Connor,<sup>1</sup> Jenna-Marie Lundy,<sup>1</sup> Corinna Stewart,<sup>1</sup> Susie Smillie,<sup>2</sup> Heather McClelland,<sup>1</sup> Suzy Syrett,<sup>1</sup> Marcela Gavigan,<sup>2</sup> Alex McConnachie,<sup>3</sup> Michael Smith,<sup>4</sup> Daniel J Smith,<sup>5</sup> Gregory K Brown,<sup>6</sup> Barbara Stanley,<sup>7</sup> Sharon Anne Simpson<sup>2</sup>

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► Prepublication history and additional material for this paper are available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2018-025591>).

**ABSTRACT**  
**Introduction** There are no evidence-based interventions that can be administered in hospital settings following a general hospital admission after a suicide attempt.  
**Aim** To determine whether a safety planning intervention (SPI) with follow-up telephone support (SAFETEL) is feasible and acceptable to patients admitted to UK hospitals following a suicide attempt.  
**Methods and analysis** Three-phase development and feasibility study with embedded process evaluation. Phase I comprises tailoring an SPI with telephone follow-up originally designed for veterans in the USA, for use in the UK. Phase II involves piloting the intervention with patients (n=30) who have been hospitalised following a suicide attempt. Phase III is a feasibility randomised controlled trial of 120 patients who have been hospitalised following

**Strengths and limitations of this study**

- SAFETEL will test the feasibility and acceptability of a safety planning intervention (SPI) with follow-up telephone support to patients admitted to UK hospitals following a suicide attempt.
- We have employed a collaborative person-centred approach to support the development of the SPI by involving those with lived experience as well as academics and clinicians.
- A process evaluation is embedded within the study.
- We have employed a mixed-methods approach (interviews, questionnaires, focus groups, medical records and hospital admission data).
- To enhance generalisability, this study is conducted in four hospitals.

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primary outcome event rates, and intervention effect size (Phase III). Thematic analyses will be conducted on interview and focus group data.  
**Ethics and dissemination** The East of Scotland Research Ethics Service (EoSRES) approved this study in March 2017 (GN17MH101 Ref: 17/ES/0036). The study results will be disseminated via peer-reviewed publication and conference presentations. A participant summary paper will also be disseminated to patients, service providers and policy makers alongside the main publication.  
**Trial registration number** ISRCTN62181241.

...a major public health problem. The WHO, 804 000 people die by suicide each year across the globe,<sup>1</sup> with an estimated 1 million people dying by suicide worldwide each year. Those with a history of suicide are at an increased risk of suicidal ideation and those who are treated in hospital are at risk of being harmed again within 5 years.<sup>2</sup> Despite the increased risk of suicide, there is a lack of evidence-based interventions within general hospital settings for those who have attempted suicide specifically. Although there are challenges in determining suicidal intent and debate about definitions of self-harm,<sup>3</sup> the majority of patients admitted to hospital following self-harm are cases of attempted suicide.<sup>3</sup> Therefore, delivering effective treatment in hospital and by other means in the weeks following a

BMJ Open: first published as 10.1136/bmjopen-2018-025591 on 5 February 2019. Downloaded from <http://bmjopen.bmj.com/> on 7 February 2019 by guest. Protected by copyright.

# Safety Plan...

## ...Is

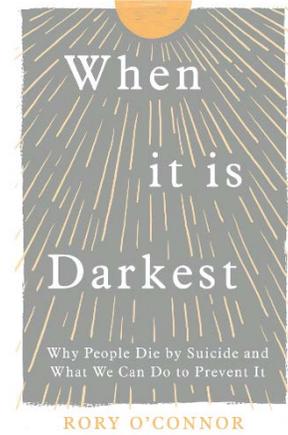
- A written, dynamic document
- A list of internal and social distractions & people to call for help
- Easy to read
- Collaborative
- To fill important gaps in care/ end of care

## ...Isn't

- A long-term tool for mood
- For someone at imminent risk of suicide
- For individuals with cognitive impairment (unless adapted)

# Use of Safety Plan in SAFETEL study

- During the telephone calls, at least 81% of participants discussed the content of their Safety Plan and reflected on the relevance of any people and activities they had listed on their Safety Plan.
- 79% of the intervention group participants who completed a Safety Plan said they had used it at least once since baseline
- Participants were most likely to report using their Safety Plan between their second and third follow-up calls, approximately 1-2 weeks after their recruitment to the study
- 47.4% of participants who made a Safety Plan, made changes during the follow-up call phase
- Across all calls, the most commonly changed step was Step 4 ('People in their personal lives to contact for support').

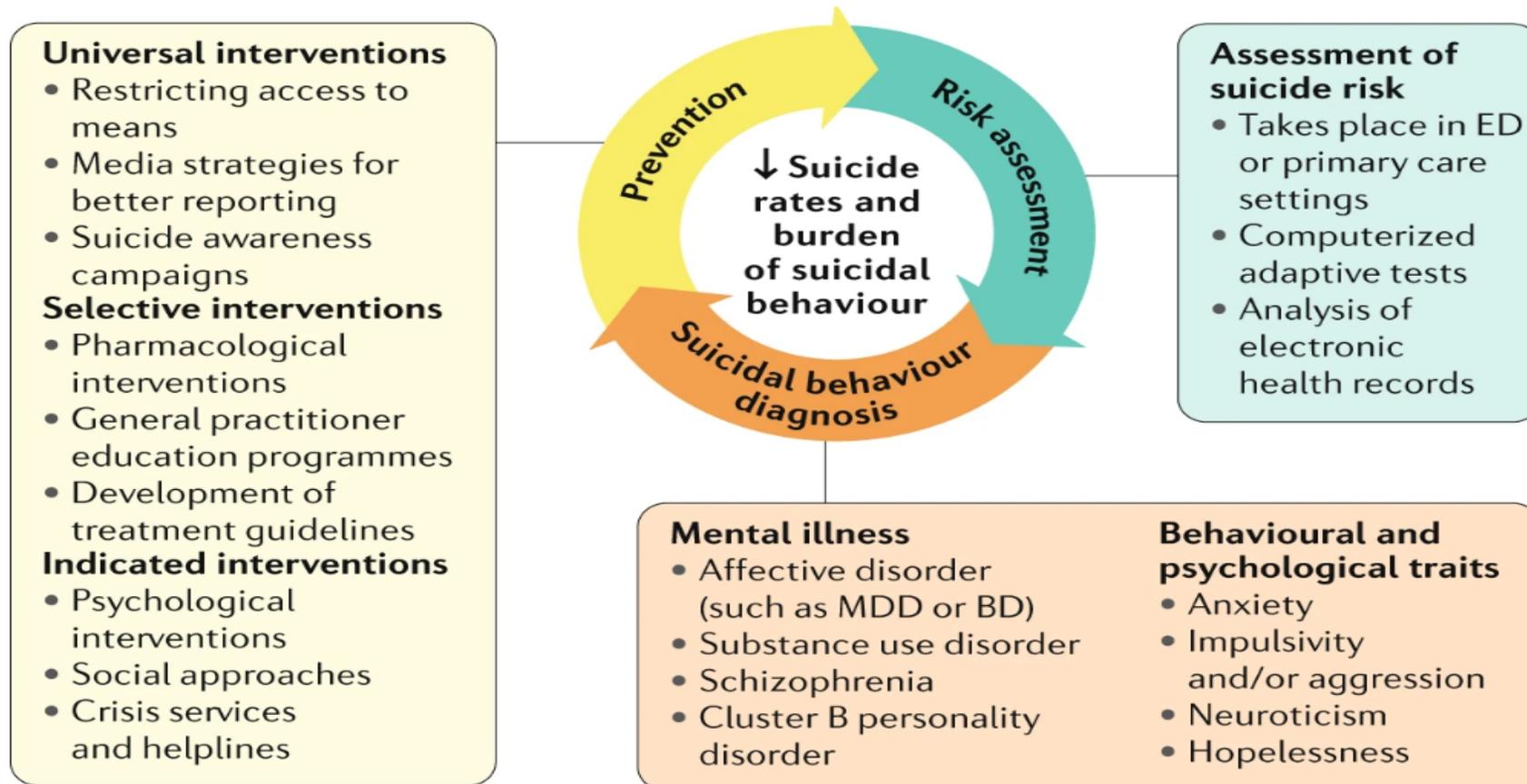


## Safety Planning

Safety planning is a structured intervention co-created usually between a patient and a mental health professional.<sup>3</sup> Its aim is to identify warning signs as well as techniques to help keep someone safe. Put simply, a safety plan is an ‘emergency plan’ designed to help prevent people from acting on their suicidal feelings. As illustrated in Figure 3 overleaf, a safety plan comprises six steps to be completed by someone, usually after a suicide crisis.<sup>4</sup>

# Approaches for preventing suicide

2019

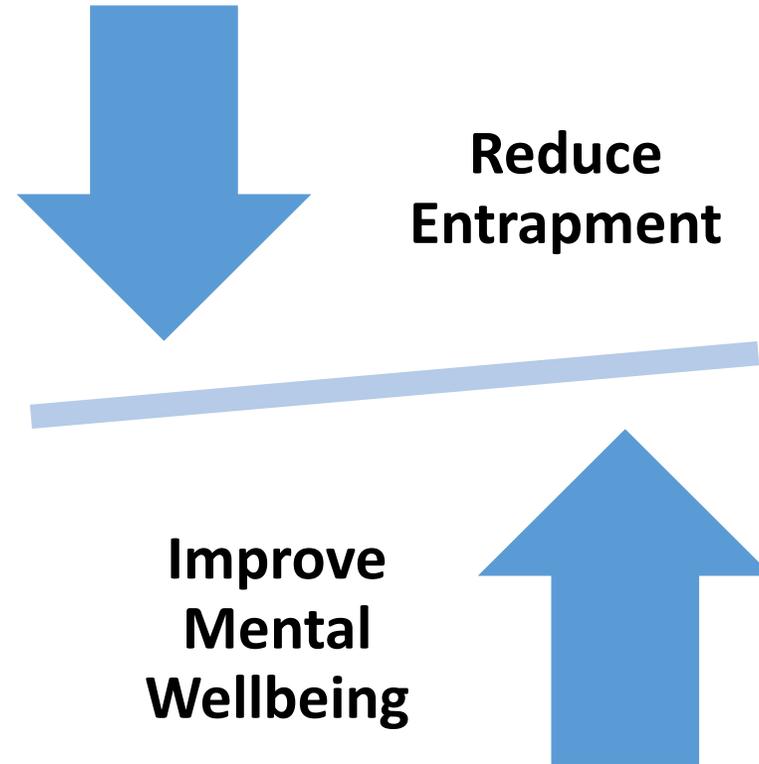


nature reviews  
disease primers

Gustavo Turecki<sup>1\*</sup>, David A. Brent<sup>2</sup>, David Gunnell<sup>3,4</sup>, Rory C. O'Connor<sup>5</sup>,  
Maria A. Oquendo<sup>6</sup>, Jane Pirkis<sup>7</sup> and Barbara H. Stanley<sup>8</sup>

# Call to Action

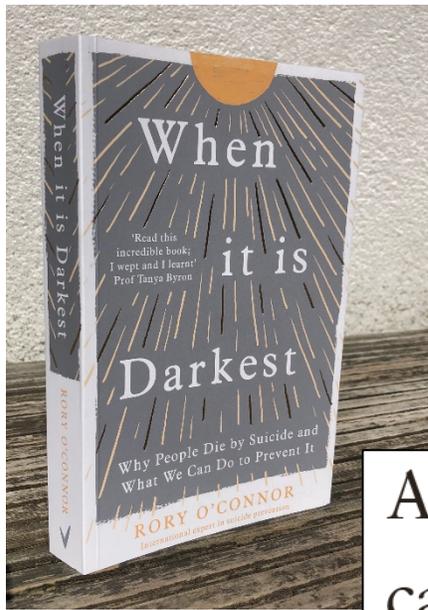
To promote mental health, to tackle stigma & to reduce suicide we all should target *entrapment*





- Suicide is more about ending pain than ending one's life
  - Trapped by mental pain
- To prevent suicide takes more than treating mental health problems
  - Tackling inequality, stigma, discrimination, COVID-19
  - We can support each other
  - Compassion and collaboration are key
- The factors that lead to suicidal thoughts are different from those associated with suicide attempts/death
- Brief interventions such as safety planning are important in preventing suicidal behaviour in individuals who are at high risk

*“I am terribly sorry for having chosen to take my own life, but I have just reached the point where I feel that I have no alternative...The feeling of being helpless and incapable is something that I am unable to cope with. I can't see any future other than a continual decline into a situation of helplessness and even worse unhappiness which is not something that I think I can bear...It is the unrelenting nature of the depression and the way that it robs me of everything..., and which despite my best efforts seems to be impossible for me to overcome that gives me no hope for the future...”*



Although we can never bring back those who we have lost, we can better support those left behind and, if we work together, we can save more lives. My ultimate hope is that, as a society, if we are kinder and more compassionate, both to ourselves and to those around us, then we will go some distance in protecting all of us from the devastation of suicide.