

Suicide and the COVID-19 pandemic: Trends in Japan and around the world: Part 1

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800,000 suicides per year; one death every 40 seconds

Suicide is the tip of the iceberg of emotional distress

800,000 suicide deaths

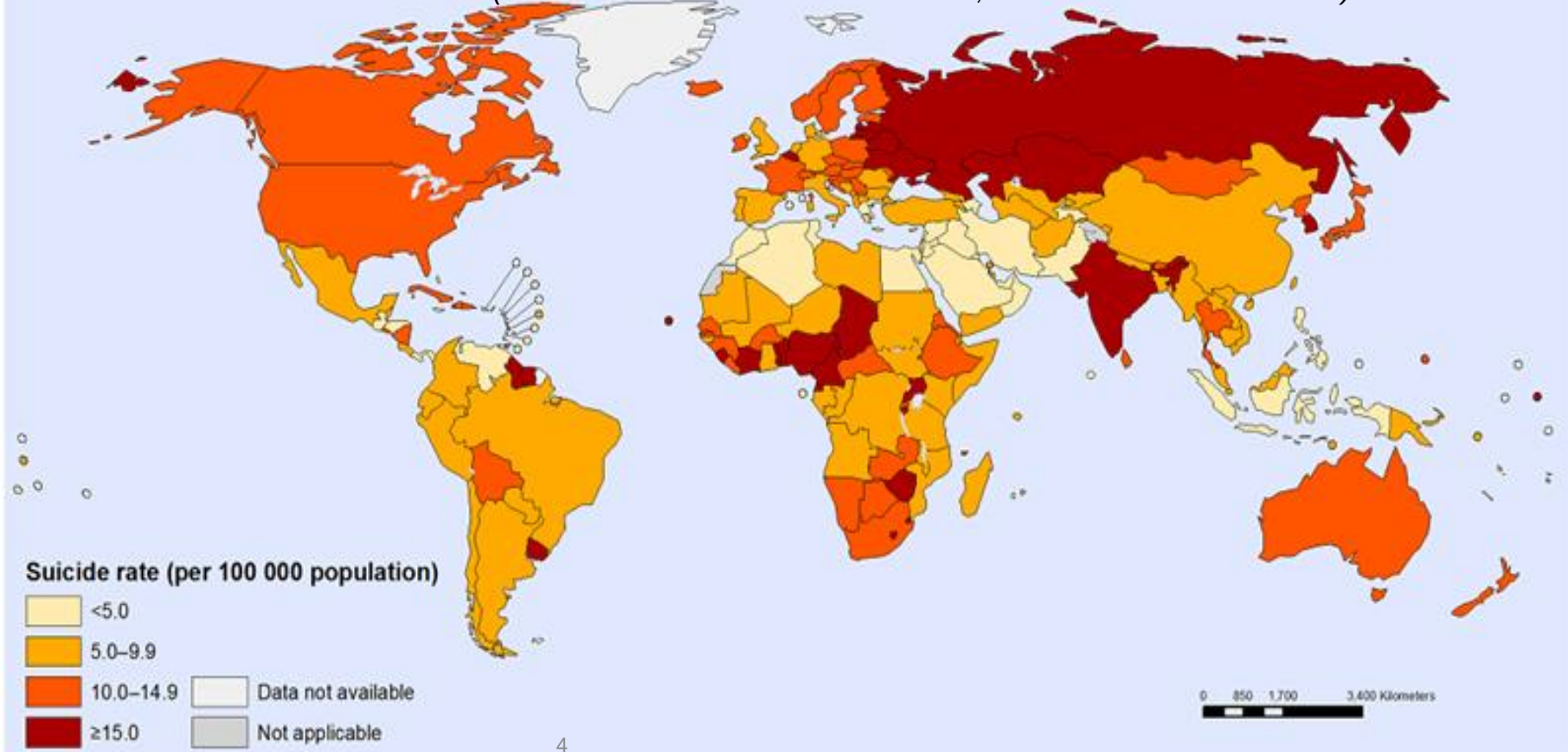
**Estimated 16,000,000 hospital attendances
for suicide attempts**

**160,000,000 people experience suicidal
thoughts**

Age-standardized suicide rates (per 100 000 population), both sexes, 2016

International variations in incidence

(Source: WHO Global Health Estimates, 2018. Alexandra Fleischman)



4

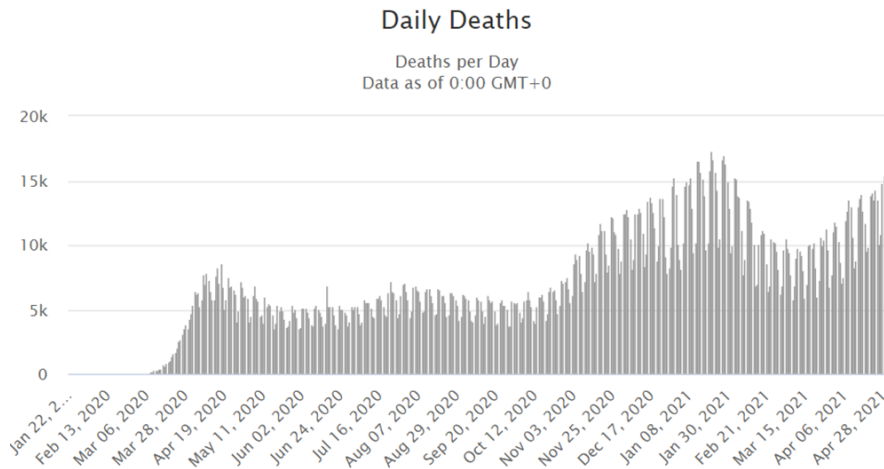
The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Information Evidence and Research (IER)
World Health Organization



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Impact of COVID-19 on suicide



Coronavirus Cases:

153,507,160

[view by country](#)

Deaths:

3,216,711

What will be the impact of COVID-19 on population mental health and suicide rates?

What can the suicide prevention research community do to reduce the impact on suicide?



VIDEO

Top Manhattan ER doc commits suicide, shaken by coronavirus onslaught

By Elizabeth Kolbert and Kate Sheehy

April 27, 2020 | 5:23pm | Updated



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Suicide attempts soar among lonely elderly during lockdown

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'Mental health tidal wave' coming after Covid-19

Ministers are being urged to set out the full picture on suicide rates in Scotland to help tackle the looming "mental health tidal wave" as a result of Covid-19.

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Charity warns of 'mental illness timebomb' as calls increase by 200%

NATIONAL | HEALTH | MENTAL HEALTH | CORONAVIRUS | Wednesday 6 May 2020, 5:07pm

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Suicide cases on the rise in Nepal during COVID-19 lockdown

led as of June 27 in police stations all over people killing themselves every day since the

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Coronavirus lockdown was 'like three hundred years' for Manchester teenager who took her own life, say family

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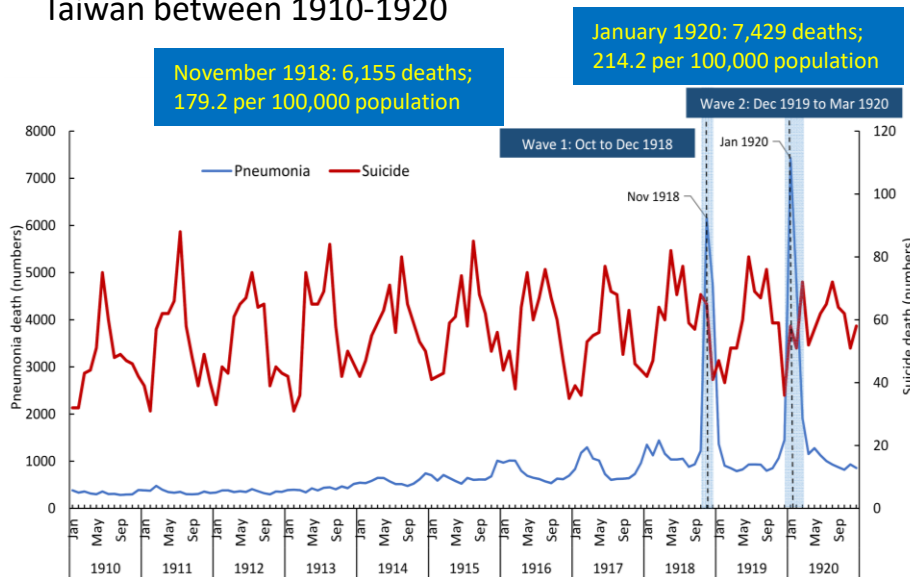
This Doctor Said His Hospital Had Seen "A Year's Worth Of Suicide Attempts" In Four Weeks Because Of The Coronavirus Lockdowns. That Wasn't True.

"If you contextualize in concrete numbers fashion, it's not accurate."

Salvador Hernandez BuzzFeed News Reporter

Impact of the 1918-20 Influenza pandemic on suicide in Taiwan 1918-20

Monthly number of **suicide** and **pneumonia** mortality in Taiwan between 1910-1920



Poisson regression, controlling for season and linear trend):

- Evidence of increased suicide deaths in January & March 1920 (risk ratio 1.3)
- Estimated total excess suicide deaths ~30

Chang YH, Chang SS, Hsu CY, Gunnell D. Impact of pandemic on suicide: excess suicides in Taiwan during the 1918-1920 influenza pandemic. *J Clin Psychiatry* 2020.



41 countries

Mental health and suicide risk during COVID-19 pandemic: general population considerations

- Social isolation from physical distancing
- Stress on health and social care staff; frontline workers
- Rise in domestic violence and alcohol misuse
- Economic impact / recession
- Interrupted education
- Bereavement / complicated grief
- Media reporting leading to heightened anxiety

What do we know (so far) about the impact of the pandemic on suicidal behaviour?

Suicide trends: England 2020 (areas with real time surveillance: population 13 million)

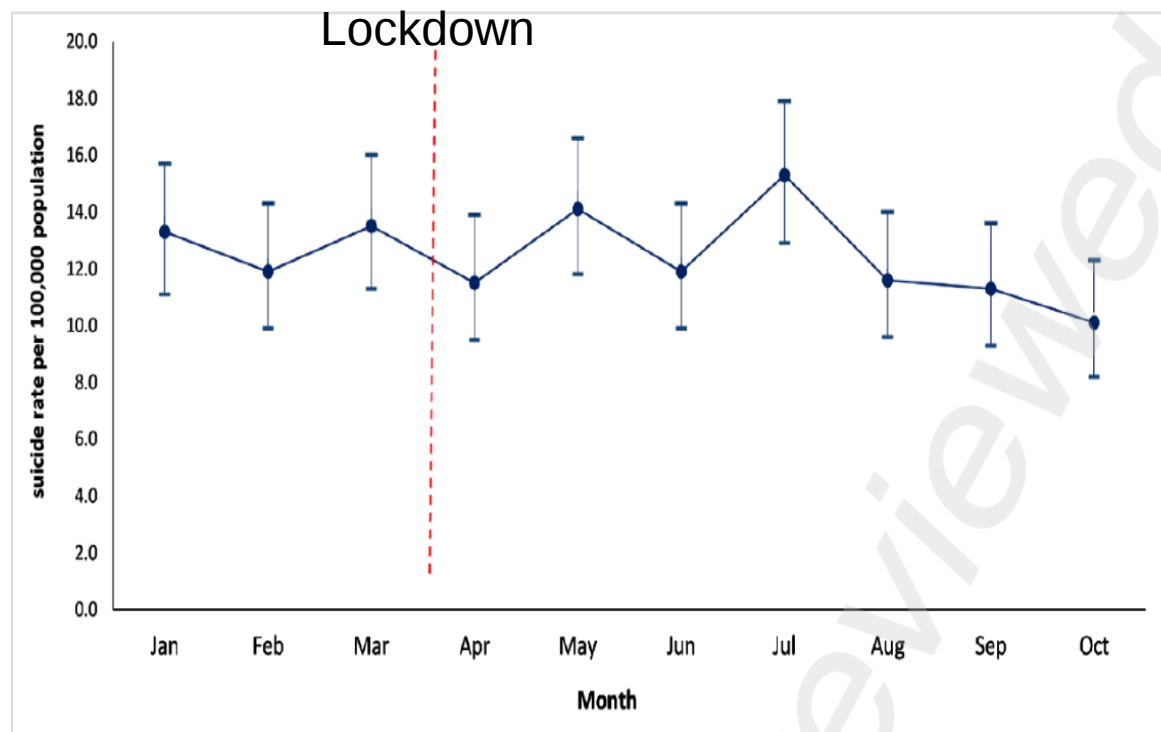
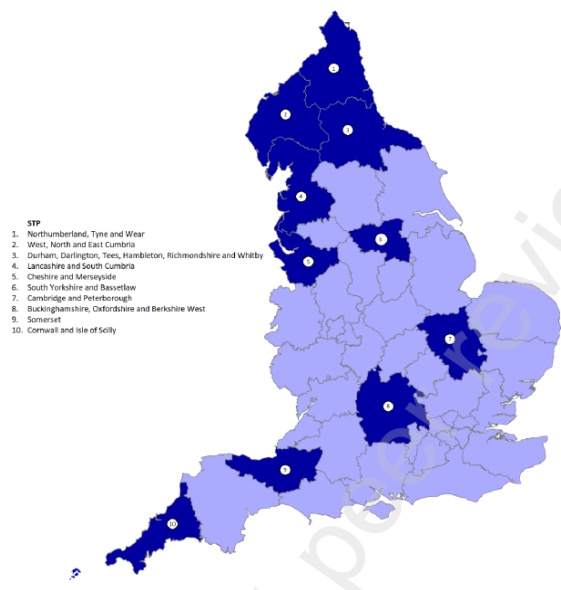


Figure 2: Suicide rates (with 95% confidence intervals) using “real-time surveillance” data in 10 participating STPs in 2020. Dotted line indicates the beginning of the lockdown

Comparison with rates in 2019 also showed no difference



Appleby et al. 2021 Lancet Health Regional – Europe

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

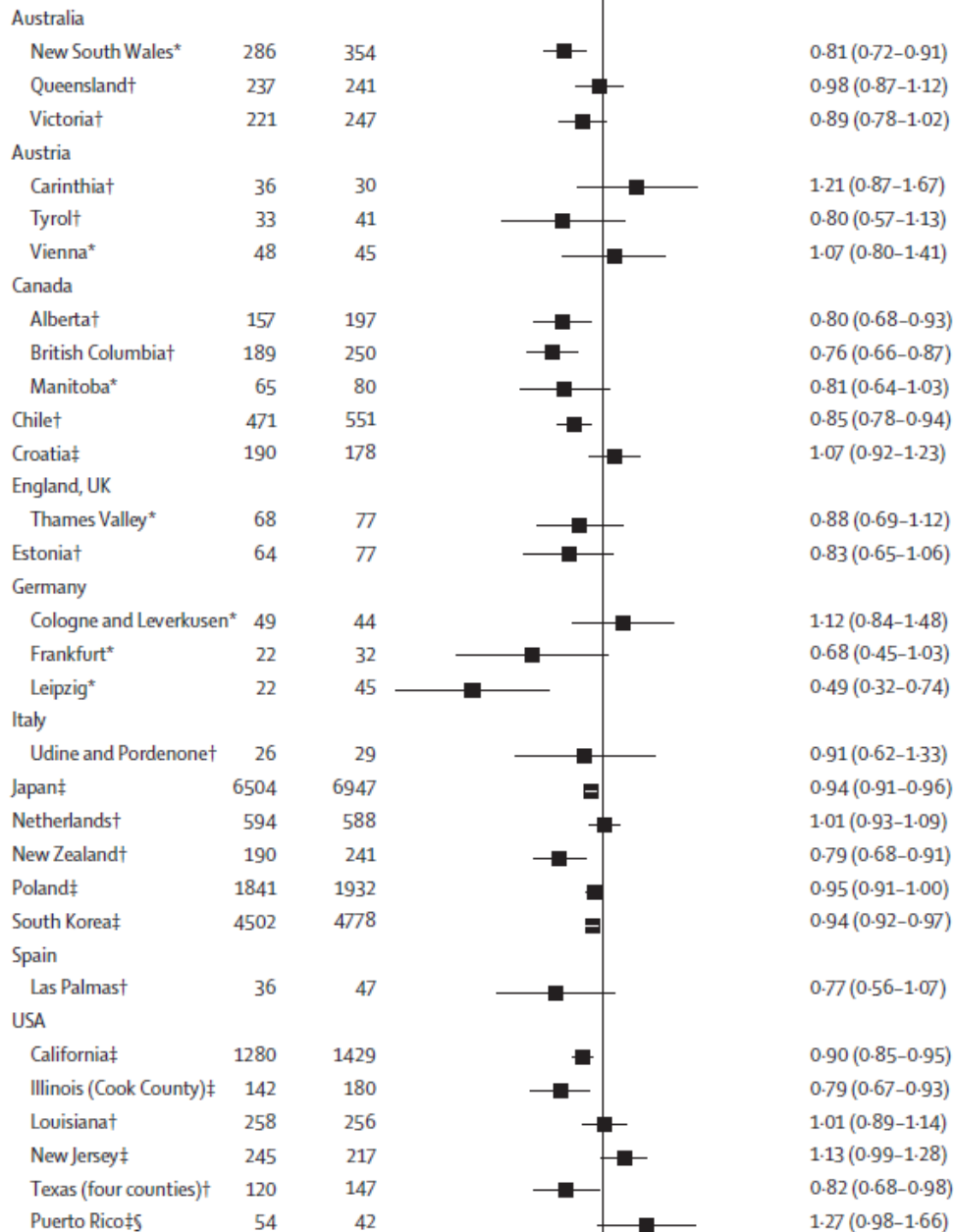
Background The COVID-19 pandemic is having profound mental health consequences for many people. Concerns *Lancet Psychiatry* 2021



Number of suicides
Observed Expected

Rate ratio (95% CI)

High-income countries



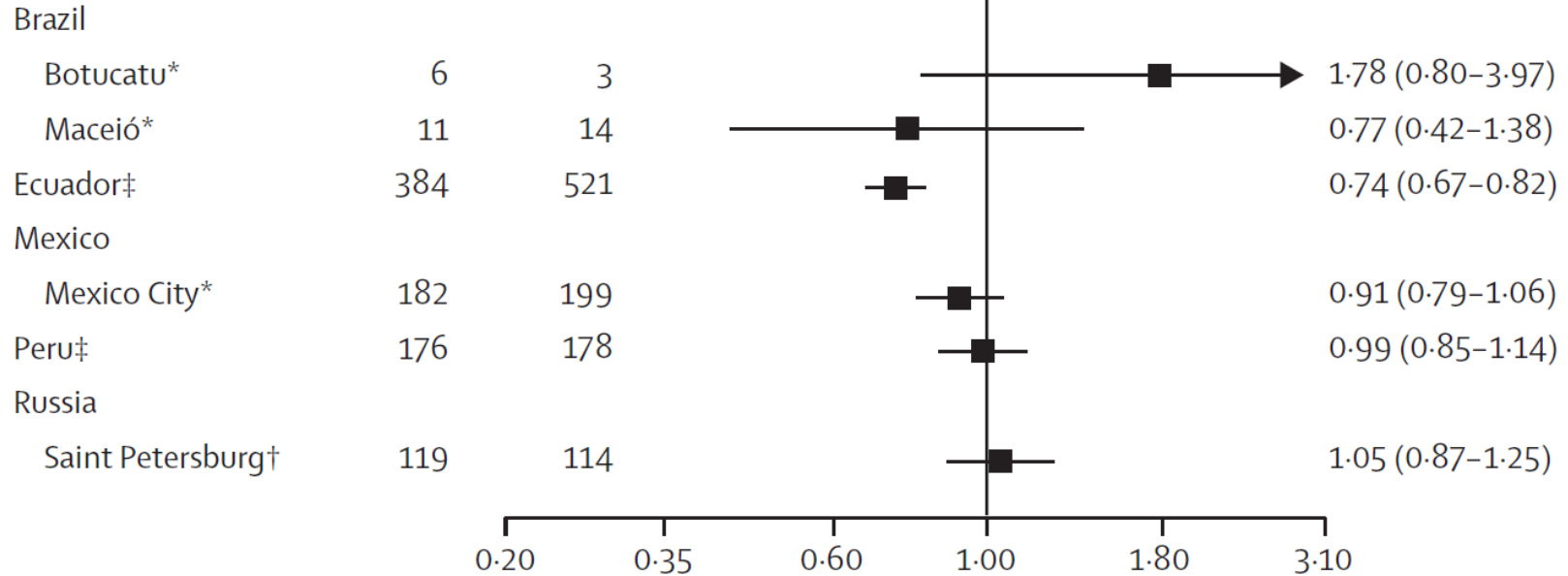
Suicide trends in the first 4 months of the pandemic: High Income countries (n=16)

Suicide rates largely unchanged or lower

Pirkis et al Lancet Psych 2021

Upper Middle-Income Countries (n=5)

Upper-middle-income countries



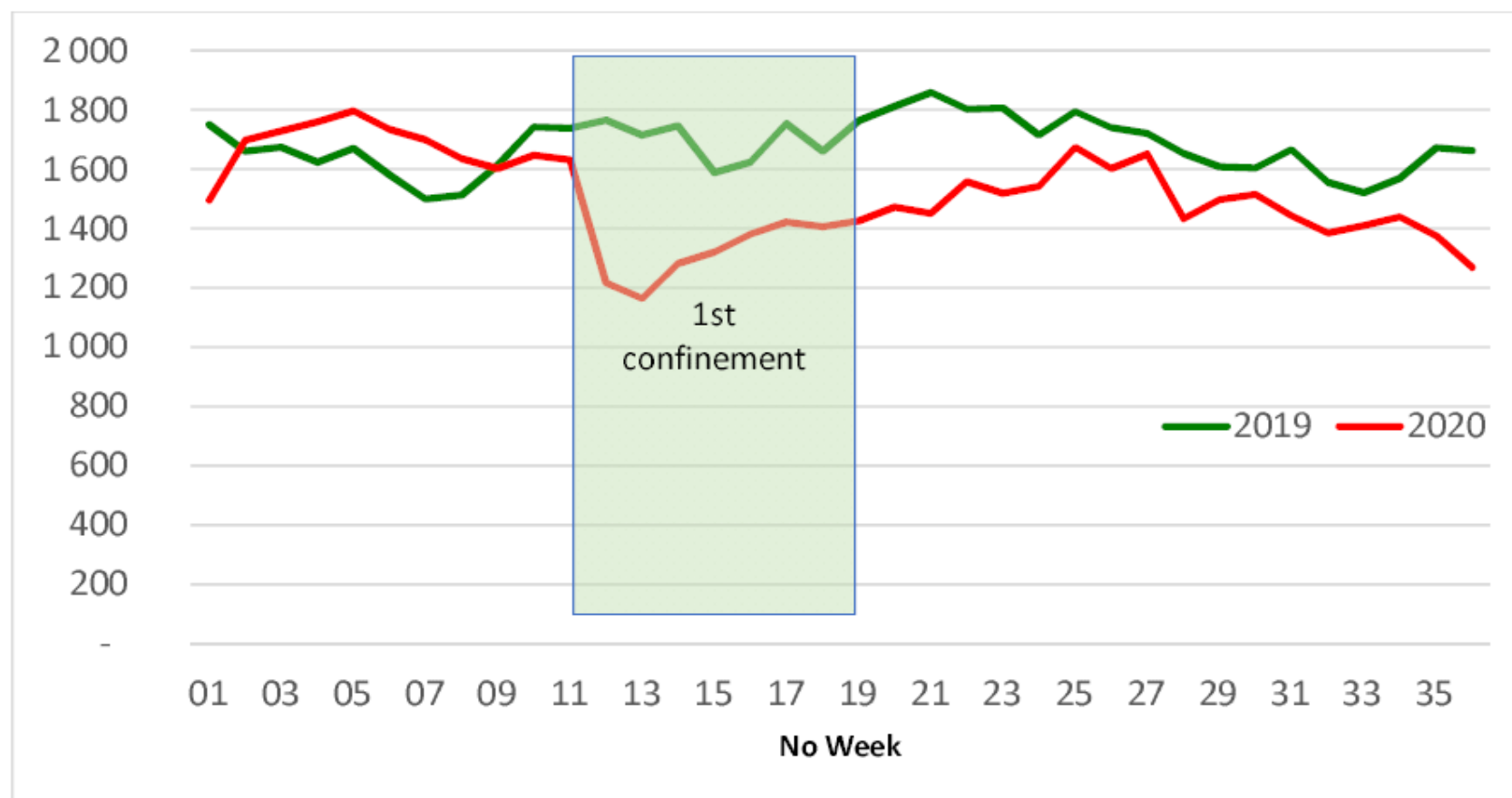
Findings similar when period extended to October 2020:

Exceptions: Japan, Vienna and Puerto Rico (increases)

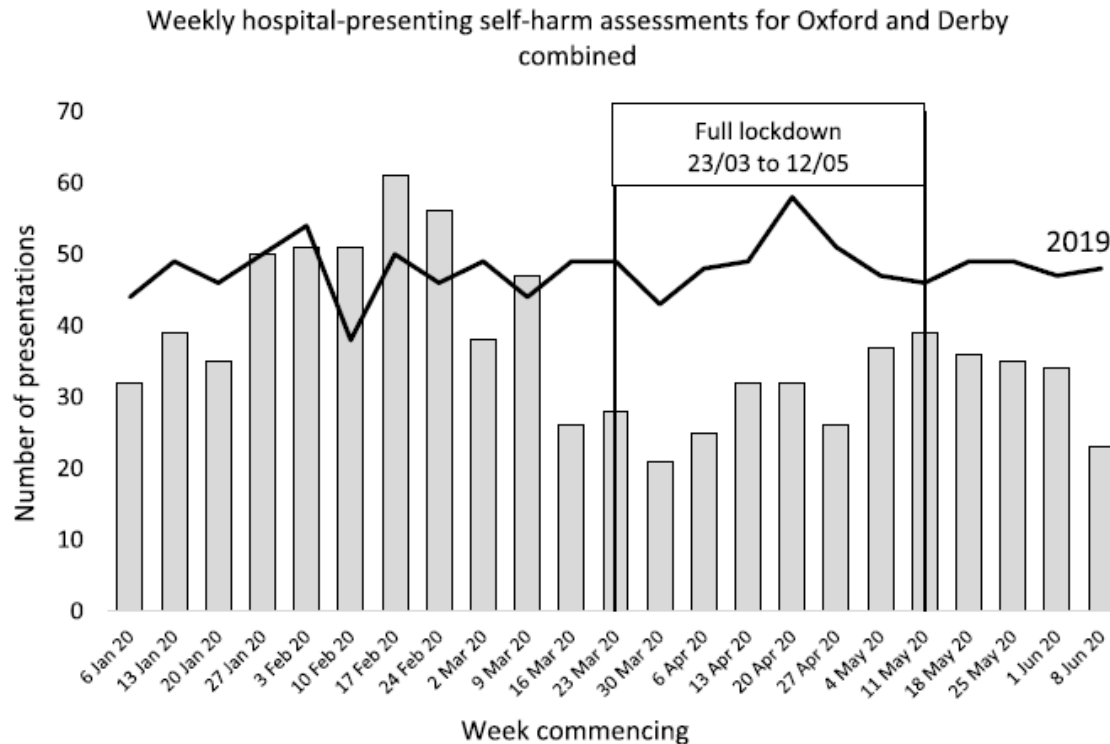
Thames Valley (UK); Victoria (Australia); Mexico City (falls)

Suicide Attempts / self-harm

Figure 1. Number of weekly hospitalizations for self-harm in France in 2020 and 2019 (January to August only)



Similar findings in England...



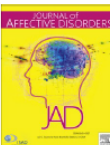
Journal of Affective Disorders 282 (2021) 991–995



Contents lists available at ScienceDirect

Journal of Affective Disorders

journal homepage: www.elsevier.com/locate/jad



Research paper

Self-harm during the early period of the COVID-19 pandemic in England: Comparative trend analysis of hospital presentations

Keith Hawton^{a,b,*}, Deborah Casey^a, Elizabeth Bale^a, Fiona Brand^a, Jennifer Ness^c,



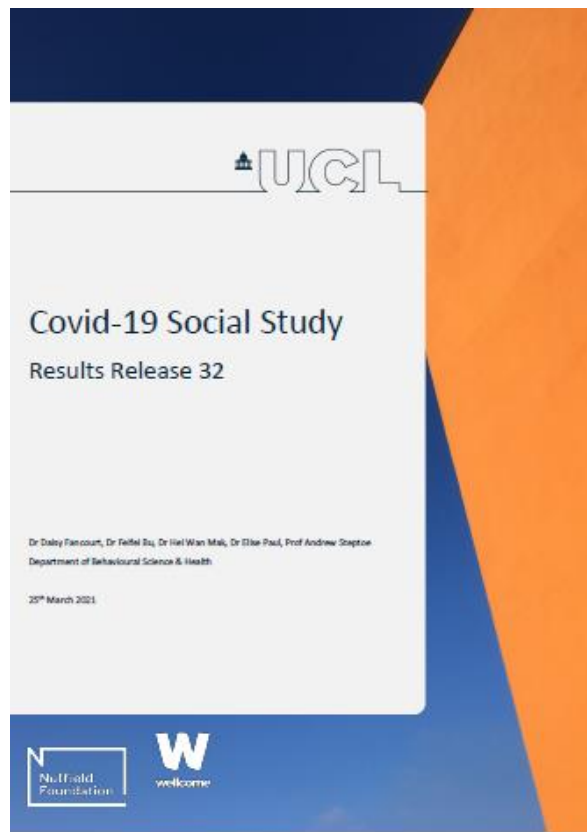
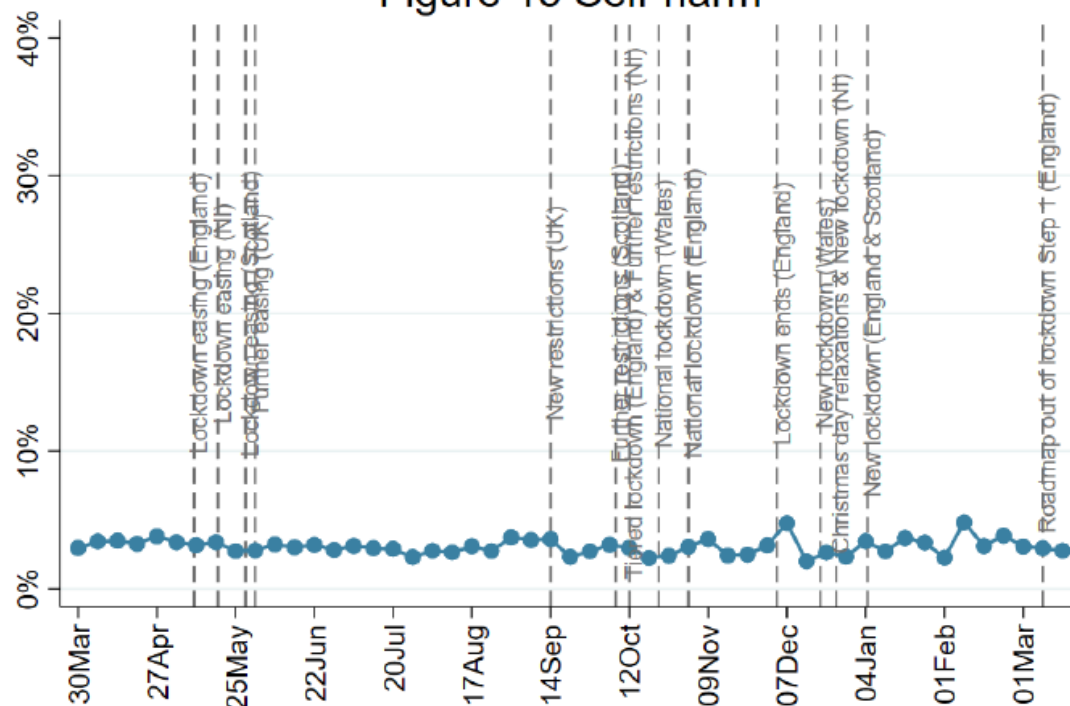


Figure 15 Self-harm



FINDINGS

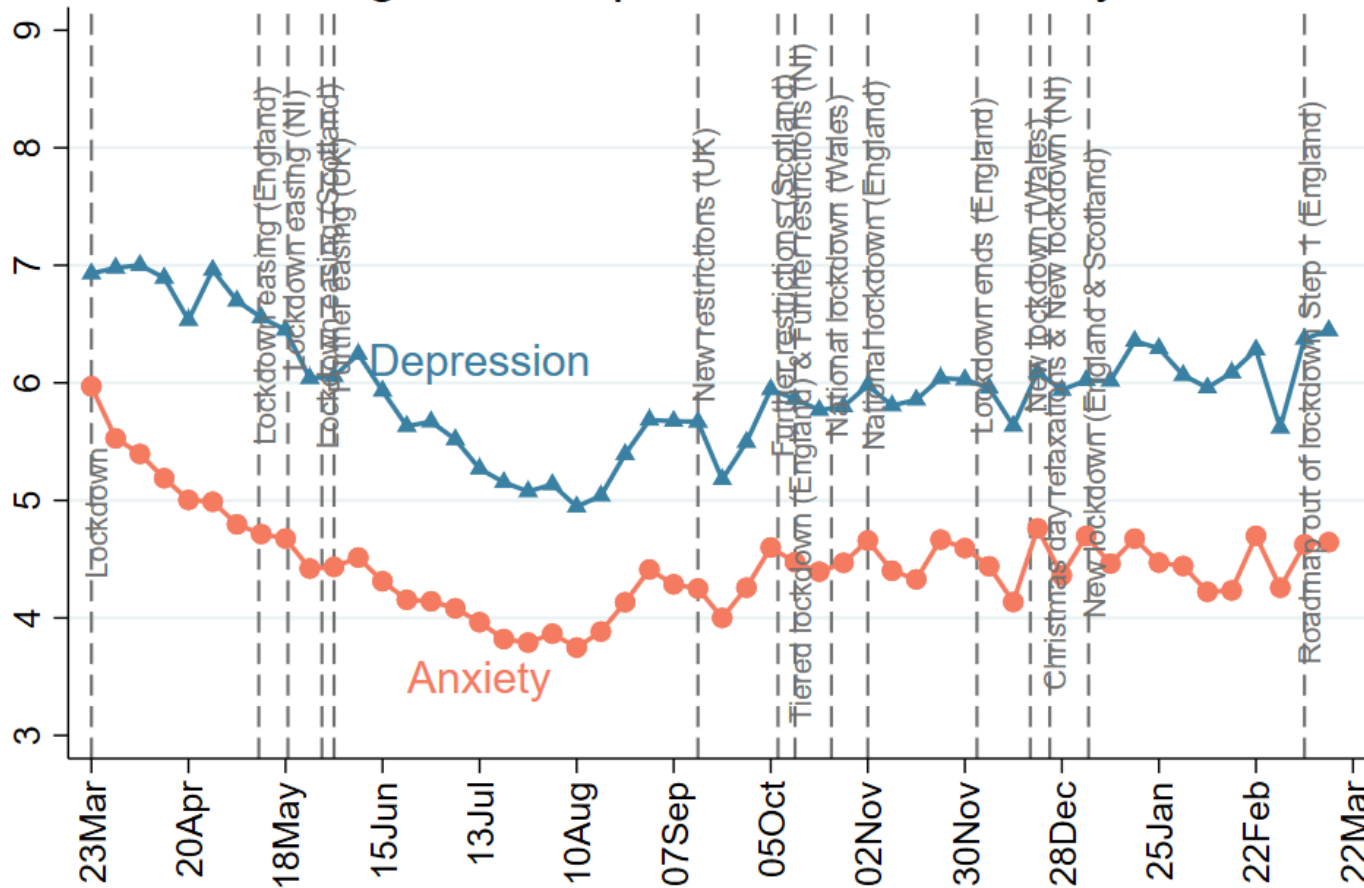
“Self-harming or deliberately hurting oneself in last week”

Note: data series begin at time of UK lockdown



- Early data – may change e.g. post-pandemic recession
- Some groups may be more affected than others (e.g. women, ethnic minorities, low-income countries)
- We know little about impact in low-income countries
- Whilst suicide rates may not have increased, levels of mental distress have

Figure 5 Depression and anxiety



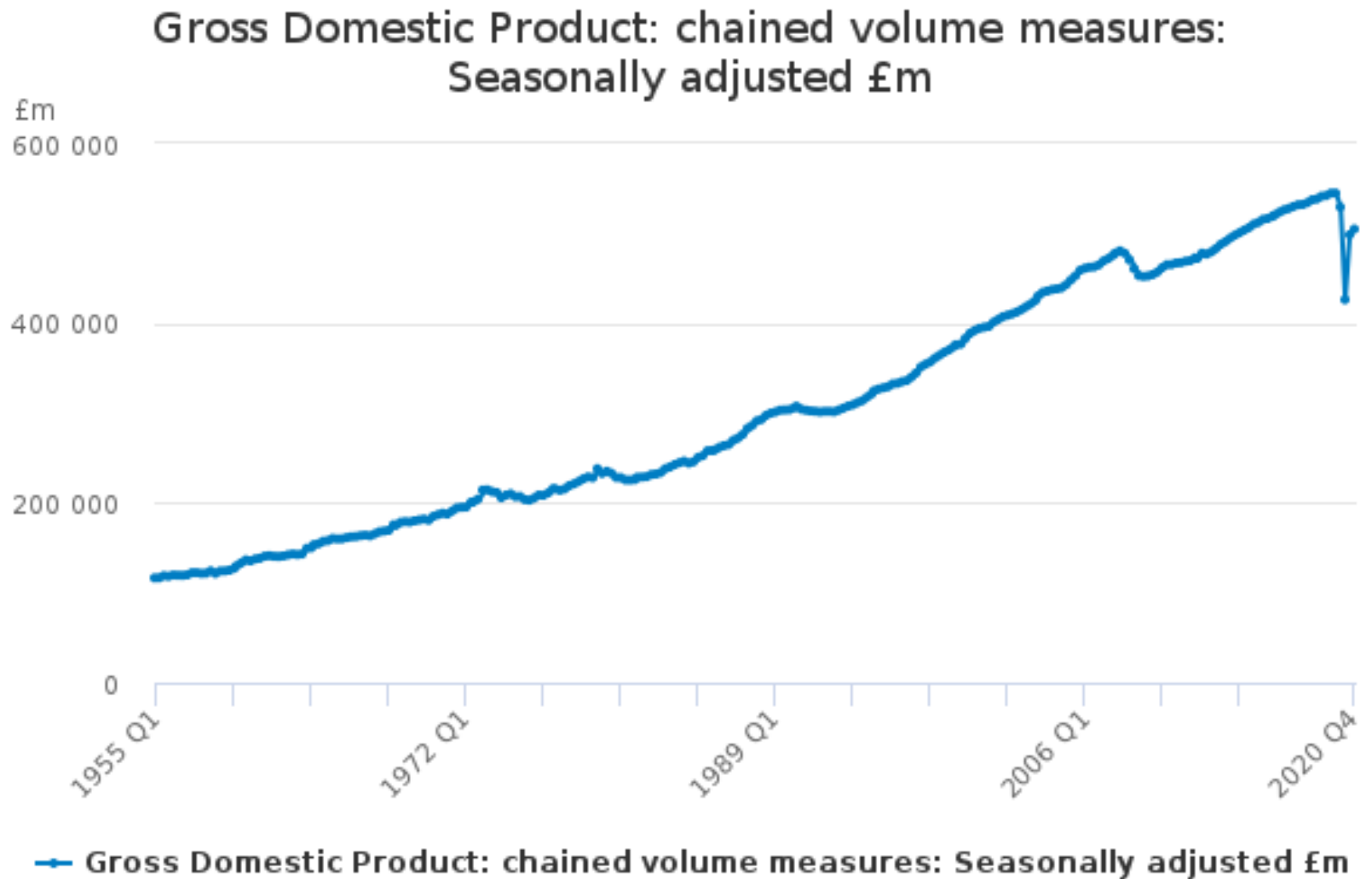
Why have suicide rates not risen?

- Increased social cohesion
e.g. support from family,
friends and neighbours /
communities
- Economic protection
measures
- Support from services and
charities



Whilst early indications appear reassuring – in high income countries at least - we will get a clearer picture over next few months as research findings are published. **The long term impact of the pandemic on the economy, and the well-recognised heightened risk of suicide during economic recession as well as potential risk associated with long-COVID are a cause for continuing concern.....**

UK GDP trends: Office for National Statistics



Source:

(Source: <https://www.ons.gov.uk/economy/grossdomesticproductgdp/timeseries/abmi/qna>
Accessed 14 April 2020)

Unemployment and suicide in the Great Depression: Great Britain 1920s & 1930s

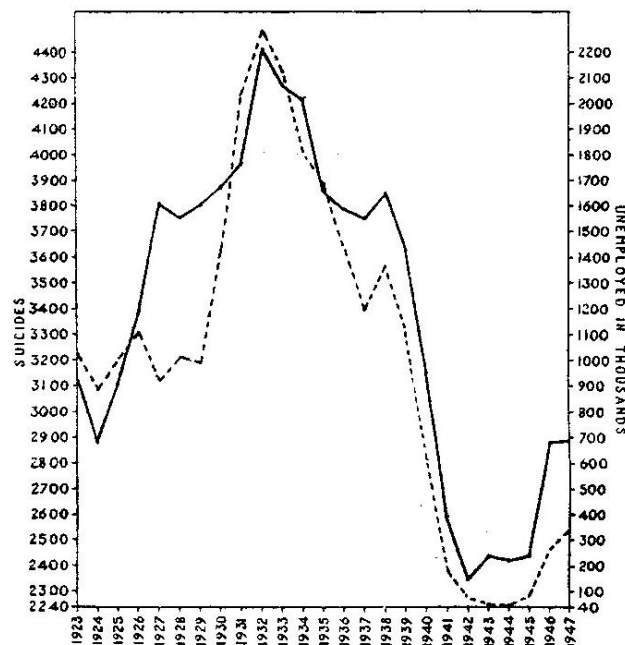


FIG. 5.—Comparison between numbers of male suicides, shown thus ———, and numbers of unemployed males, shown thus - - - - -, during 1923-47 (Great Britain).

Source: Douglas Swinscow, BMJ June 23 1951; 1417-1423

Summary

- Whilst levels of distress, depression and anxiety have risen during the pandemic, suicide rates and hospitalisations for suicide attempts largely remained stable or fell in the early phase
- We need better data from low income settings
- We need to continue to monitor the situation – concern about long term effect: recession / long COVID
- Continued surveillance and good quality, ethically conducted research is crucial to inform what we do
- Economic measures are needed to mitigate recession effects

Thankyou

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