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Preventing suicide: societal and mental health perspectives

Welsh Psychiatric Society &
Royal College of Psychiatrists in Wales
Llandudno May 2015

Nav Kapur
The Centre for Suicide Prevention
University of Manchester

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Some suicide statistics

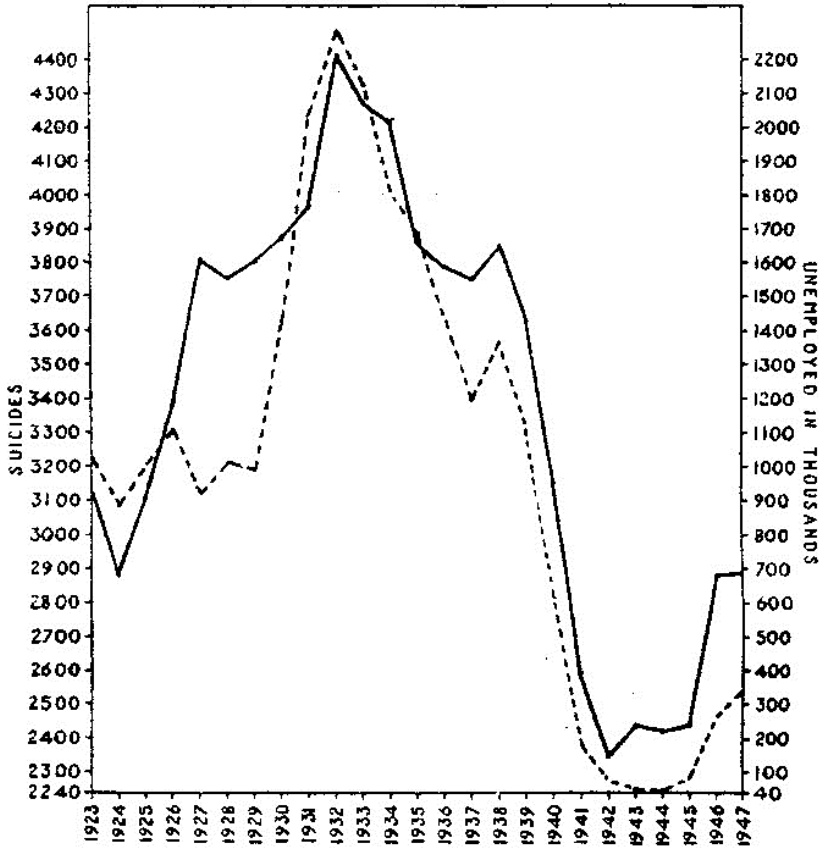

FIG. 5.—Comparison between numbers of male suicides, shown thus ————, and numbers of unemployed males, shown thus - - - - - - -, during 1923–47 (Great Britain).

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Some suicide statistics

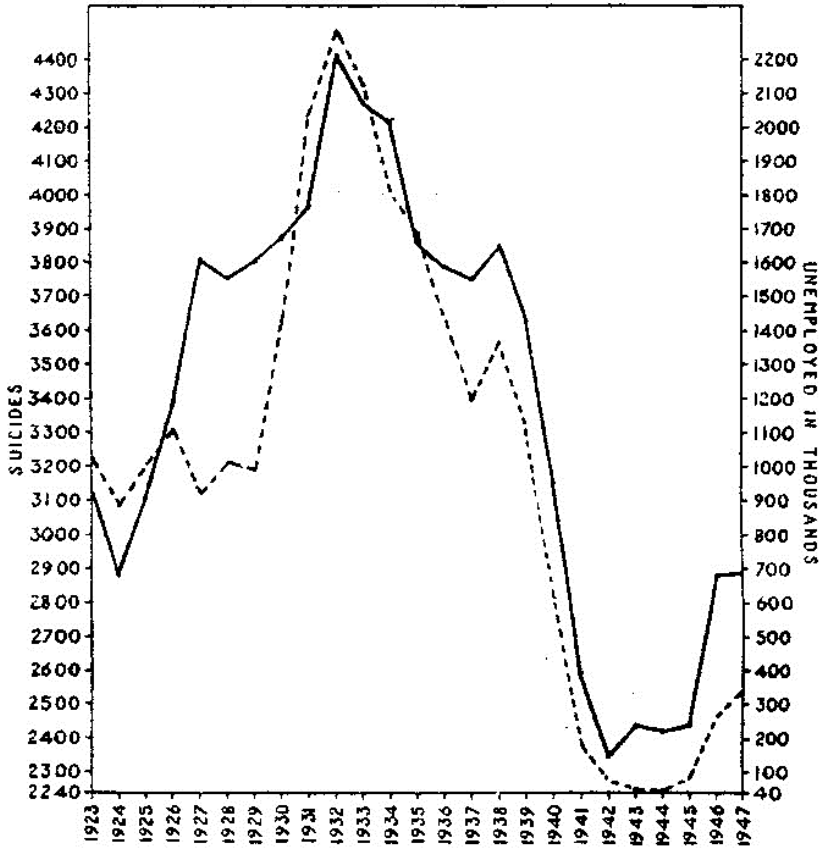

FIG. 5.—Comparison between numbers of male suicides, shown thus ————, and numbers of unemployed males, shown thus - - - - - - -, during 1923–47 (Great Britain).

BMJ 1951

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Do mental health services have a role?

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19 January 2015 Last updated at 07:36

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New strategy to cut suicides 'achievable', says Clegg

By Michael Buchanan
BBC News

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BBC News 19.1.2015

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What causes suicide?

Clinical factors
- Mental illness
- Physical illness
- Previous suicidal behaviour
- Drugs and alcohol
- Treatment

Psychological factors
- Problem solving
- Hopelessness
- Impulsivity
- Aggression

Suicidal Behaviour

Constitutional factors
- Genes
- Neurodevelopment

Environmental factors
- Early life experience
- Life events
- Socio-economic conditions
- Societal attitudes
- Availability of methods

(Adapted from Gunnell and Lewis 2005)

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Outline

1. Societal approaches to prevention
2. Mental health approaches to prevention

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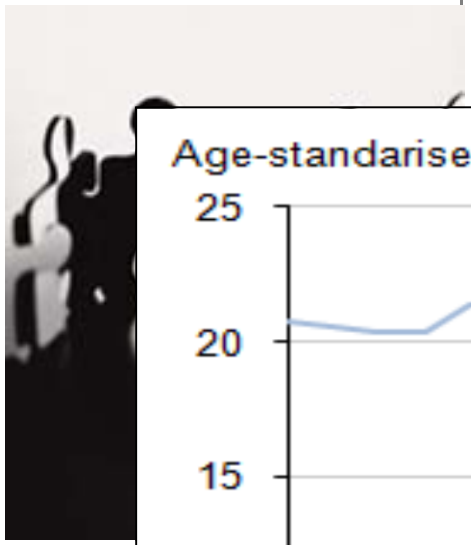
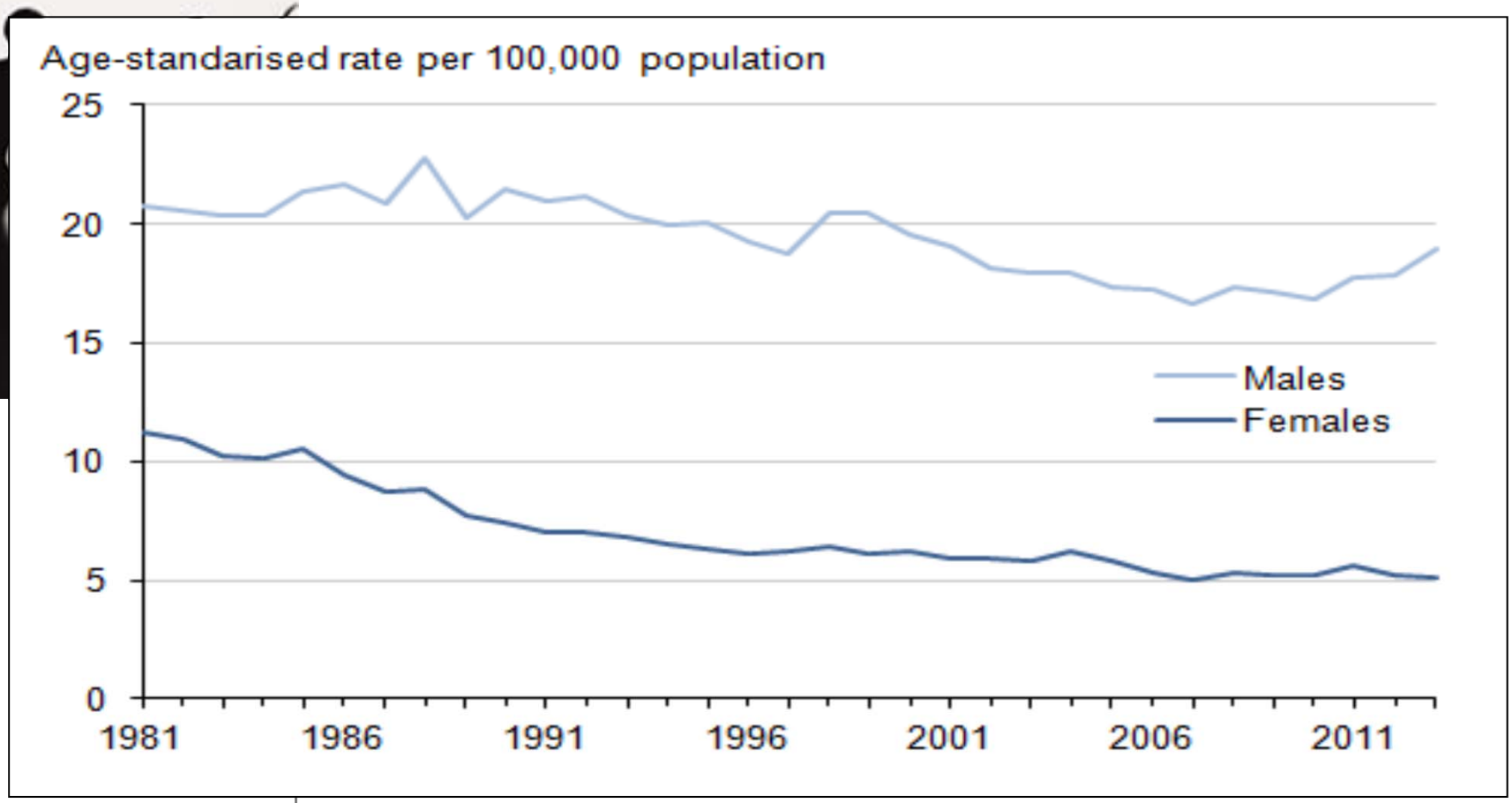
Suicide in the UK





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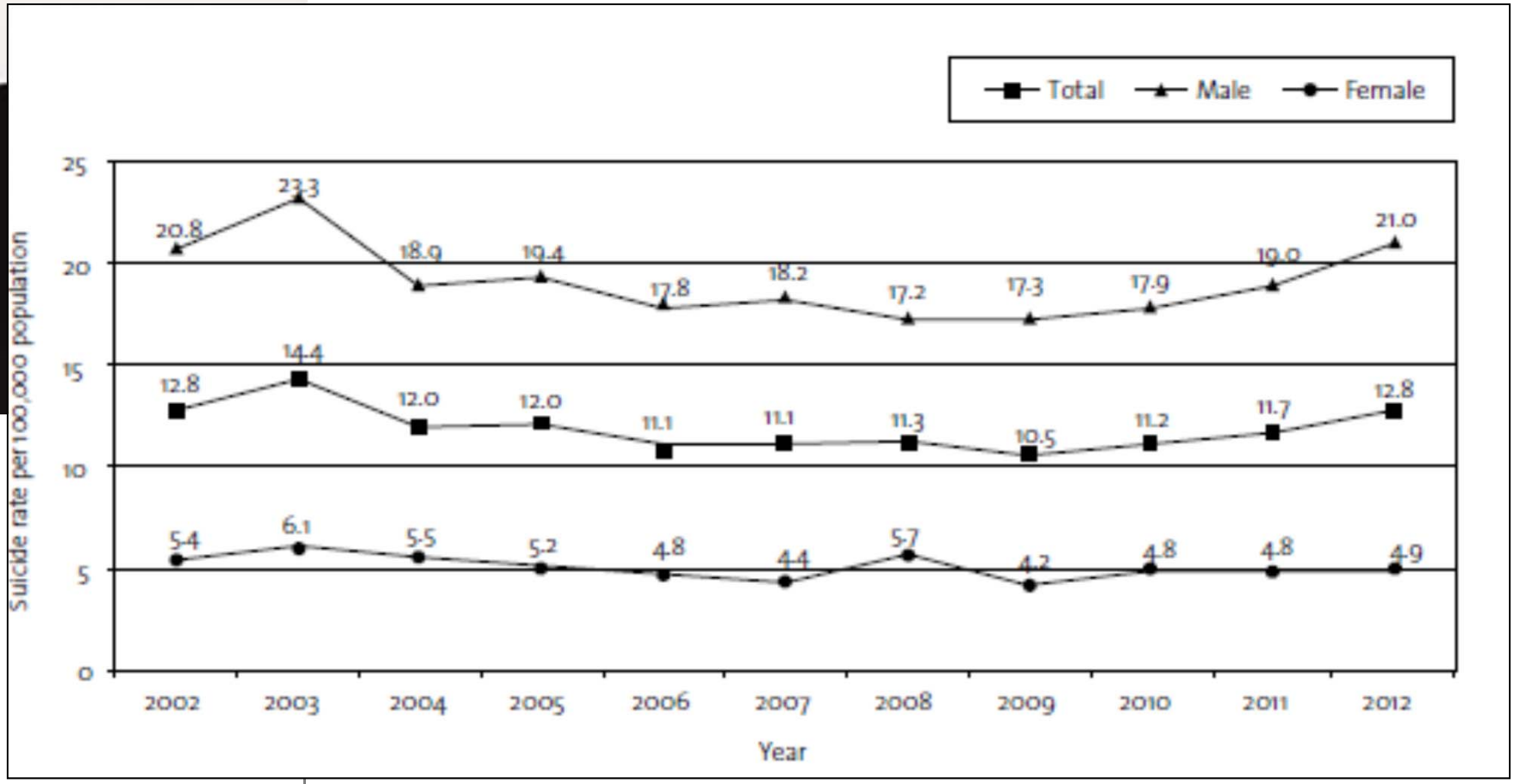
Suicide in Wales



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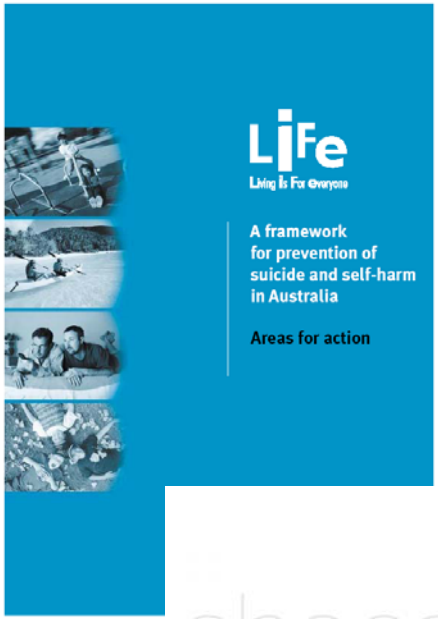
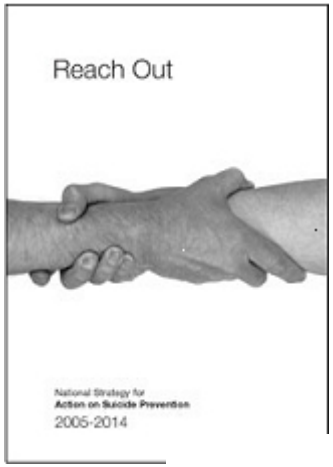
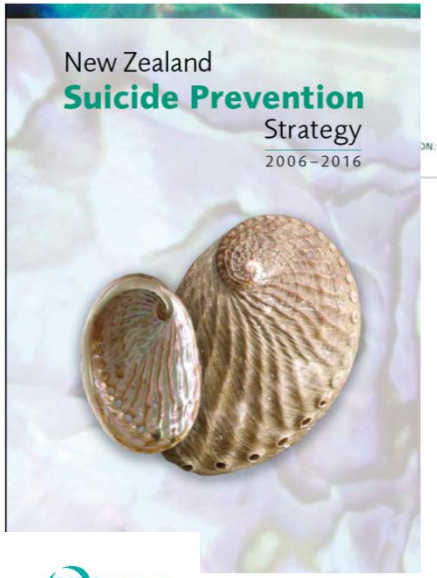
How might we best prevent suicide?







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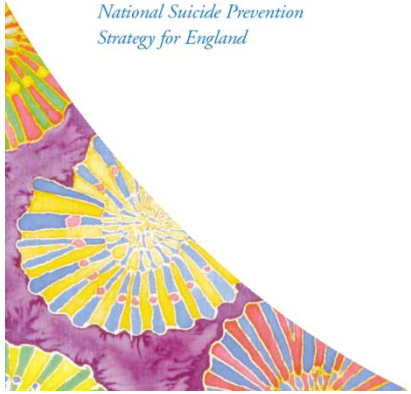

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How might we best prevent suicide?

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Key objectives

1: Further improve awareness, knowledge and understanding of suicide and self-harm amongst the public, gatekeepers and professionals in Wales
2: To deliver appropriate responses to personal crises, early intervention and management of suicide and self-harm
3: Information and support for those bereaved or affected by suicide and self-harm
4: Support the media in responsible reporting and portrayal of suicide and suicidal behaviour
5: Reduce access to the means of suicide
6: Continue to promote and support learning, information and monitoring systems and research to improve our understanding of suicide and self-harm in Wales and guide action

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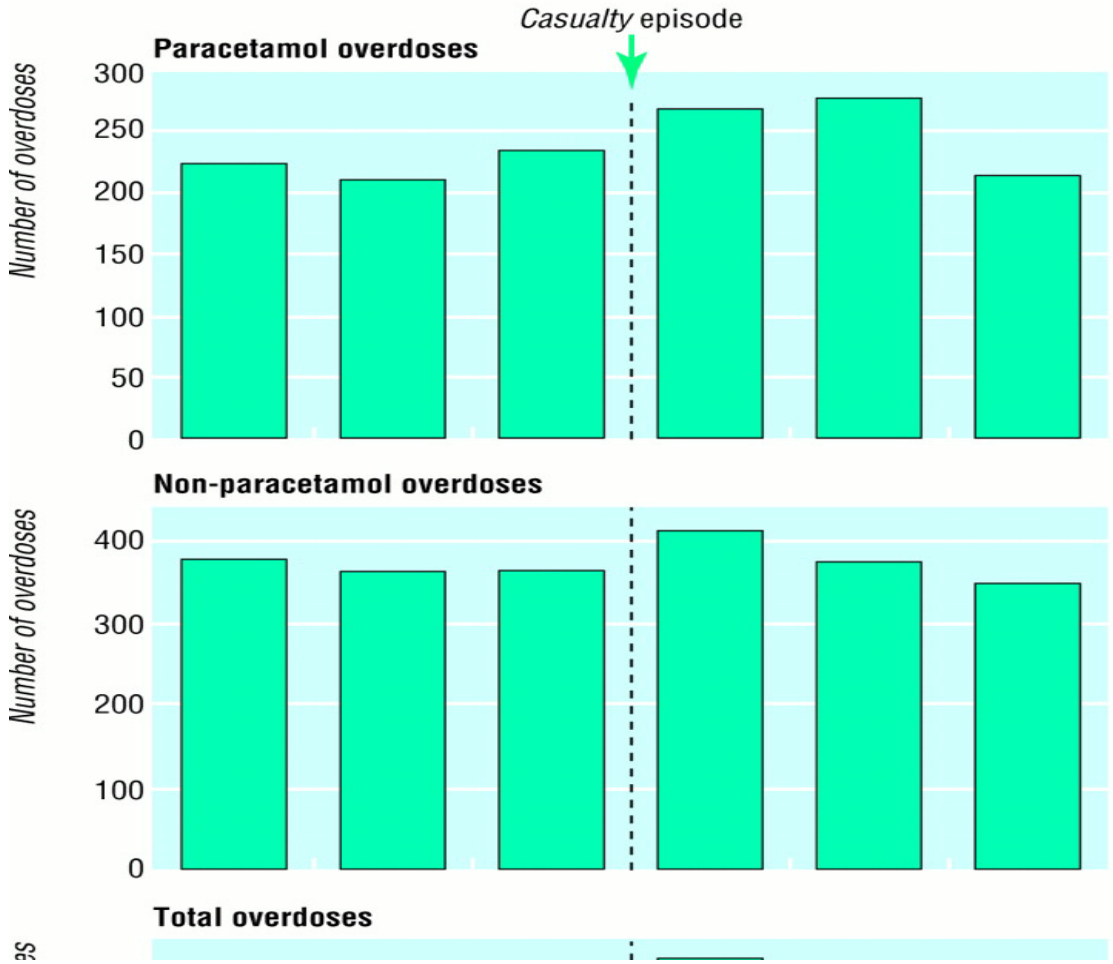
Improve media reporting



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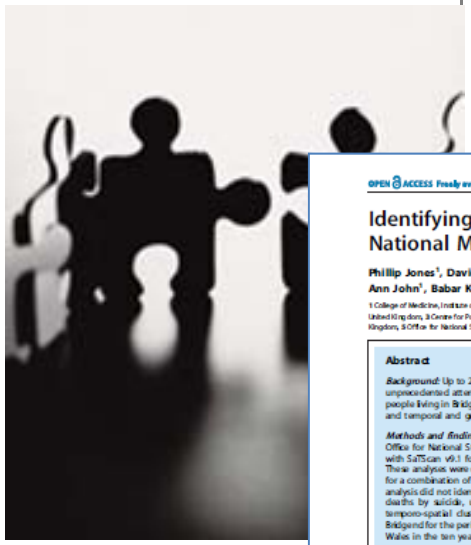
Improve media reporting



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Identifying Probable Suicide Clusters in Wales Using National Mortality Data

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Abstract

Background: Up to 2% of suicides in young people may occur in clusters i.e. close together in time and space. In early 2008 unprecedented attention was given by national and international news media to a suspected suicide cluster among young people living in Bridgend, Wales. This paper investigates the strength of statistical evidence for this apparent cluster, its size, and temporal and geographical limits.

Methods and findings: The analysis is based on official mortality statistics for Wales for 2000–2009 provided by the UK's Office for National Statistics (ONS). Temporo-spatial analysis was performed using Space Time Permutation Scan Statistics with SaTScan v9.1 for suicide deaths aged 15 and over, with a sub-group analysis focussing on cases aged 15–34 years. These analyses were conducted for deaths coded by ONS as: (i) suicide or of undetermined intent (probable suicides) and (ii) for a combination of suicide, undetermined, and accidental poisoning and hanging (possible suicides). The temporo-spatial analysis did not identify any clusters of suicide or undetermined intent deaths (probable suicides). However, analysis of all deaths by suicide, undetermined intent, accidental poisoning and accidental hanging (possible suicides) identified a temporo-spatial cluster ($p = 0.029$) involving 10 deaths amongst 15–34 year olds centred on the County Borough of Bridgend for the period 27th December 2007 to 19th February 2008. Less than 1% of possible suicides in younger people in Wales in the ten year period were identified as being cluster-related.

Conclusions: There was a possible suicide cluster in young people in Bridgend between December 2007 and February 2008. This cluster was smaller, shorter in duration, and predominantly later than the phenomenon that was reported in national and international print media. Further investigation of factors leading to the onset and termination of this series of deaths, in particular the role of the media, is required.

Citation: Jones P, Gunnell D, Platt S, Scourfield J, Lloyd K, et al. (2013) Identifying Probable Suicide Clusters in Wales Using National Mortality Data. PLoS ONE 8(8): e71713. doi:10.1371/journal.pone.0071713

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Competing Interests: The authors have declared that no competing interests exist.

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Introduction

Suicide is one of the leading causes of death in young people. In Wales, the country in the United Kingdom (UK) where this study is based, suicide accounts for almost one in five deaths among men aged 15–24 and almost one in 10 deaths among women of that age [1].

A suicide cluster can be defined as an excessive number of suicides occurring in close temporal and geographical proximity [2]. A recent analysis using space-time (temporo-spatial) models over an 18 year period in New Zealand found that 1.3% of probable suicides occurred in clusters [2]. In the United States (U.S.) it has been estimated that at least 2% of teenage suicides occur in temporo-spatial clusters; clustering is thought to be two to four times more common among young people (aged 15–24 years) than among other age groups [3,4]. Temporo-spatial analyses of specific groups of people at risk of suicide have identified 'point clusters': particularly in those who have contact with mental health services [5] or are in psychiatric hospitals [6]; prisons [7]; and schools [8].

Our understanding of what triggers a suicide cluster, what causes it to continue and eventually subside, is limited. Joiner [9] theorises that already vulnerable individuals, who are socially connected through shared characteristics, are those most affected by the suicide of a peer. Most researchers, however, have used the analogy of contagious illness, suggesting that there is imitation of suicidal behaviour, with social learning theory [10] being the dominant theoretical perspective. As well as local social networks, media reporting [11], and the internet [12] have been seen as important channels of transmission for suicide contagion.

In January 2008 the UK news media began reporting on a series of deaths amongst young people in South Wales, speculating that the town of Bridgend was experiencing a suicide epidemic (South Wales Echo January 17th 2008; The Mirror January 29th 2008; Daily Mail, January 23rd 2008). The intensity of the

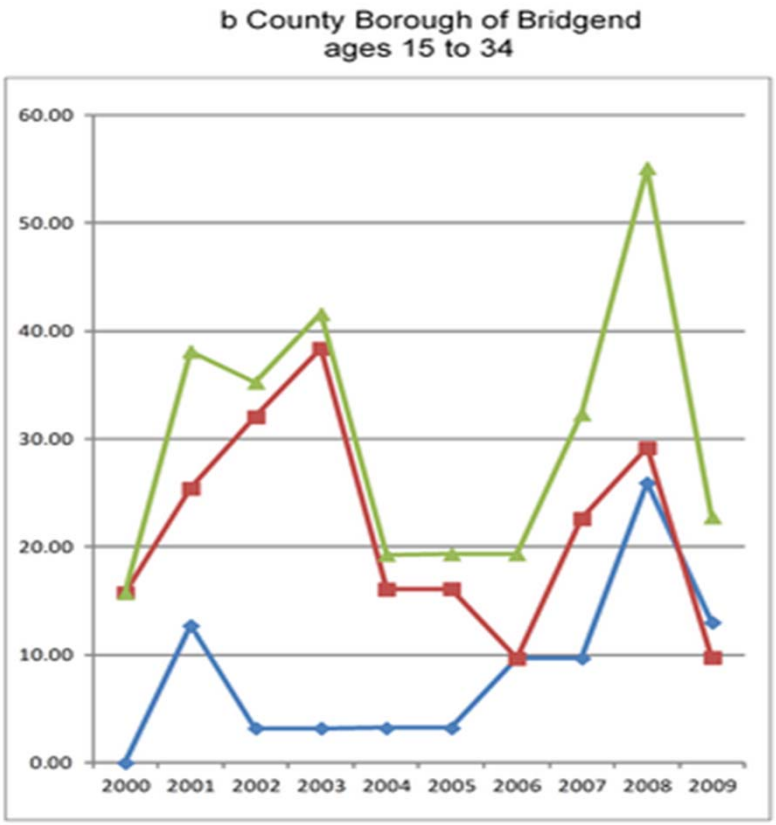

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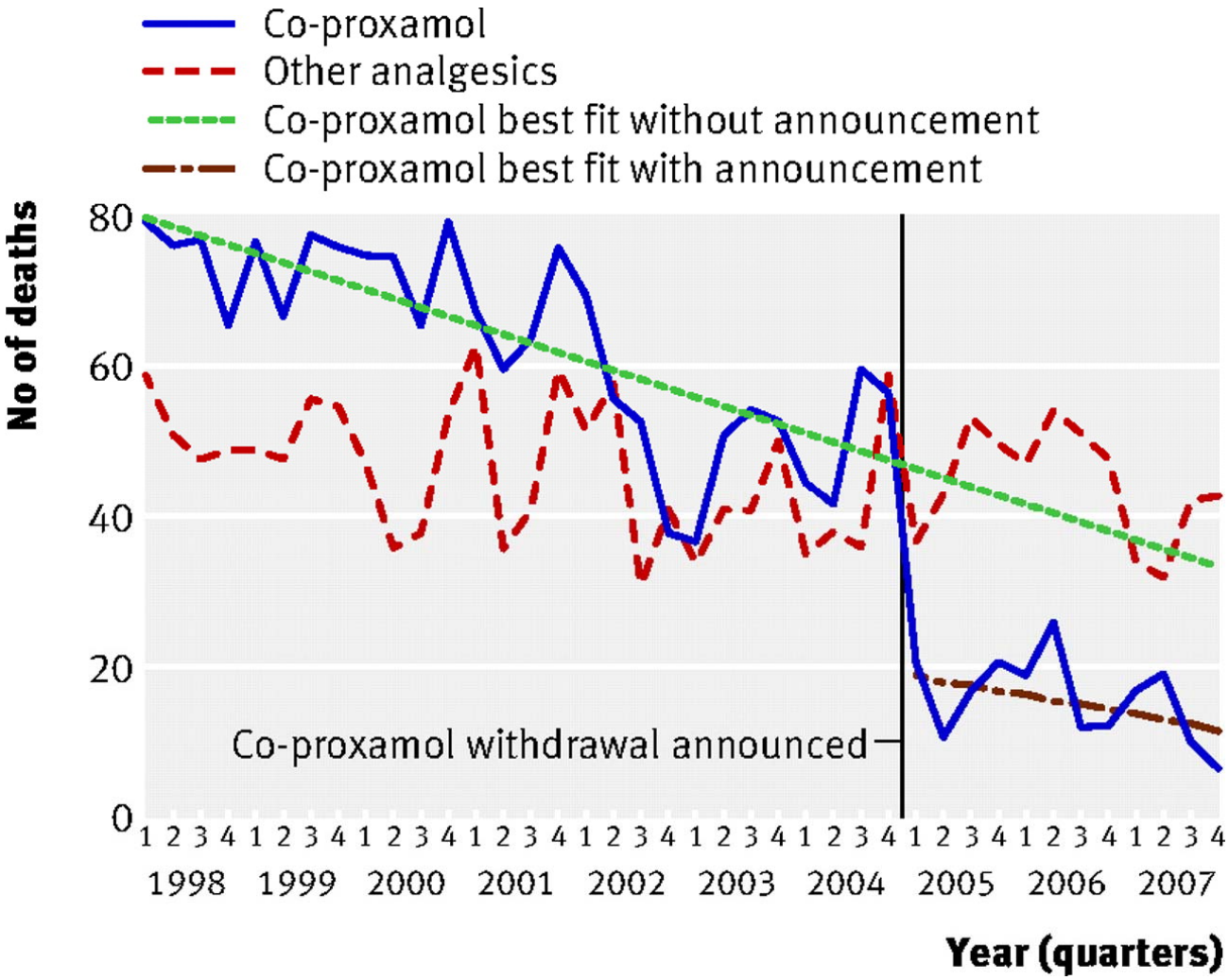
Fig 2 Mortality in England and Wales from analgesic poisoning (suicide and open verdicts), 1998-2007, for people aged 10 years and over (substances taken alone, with or without alcohol)



Hawton, K. et al. BMJ 2009;338:b2270

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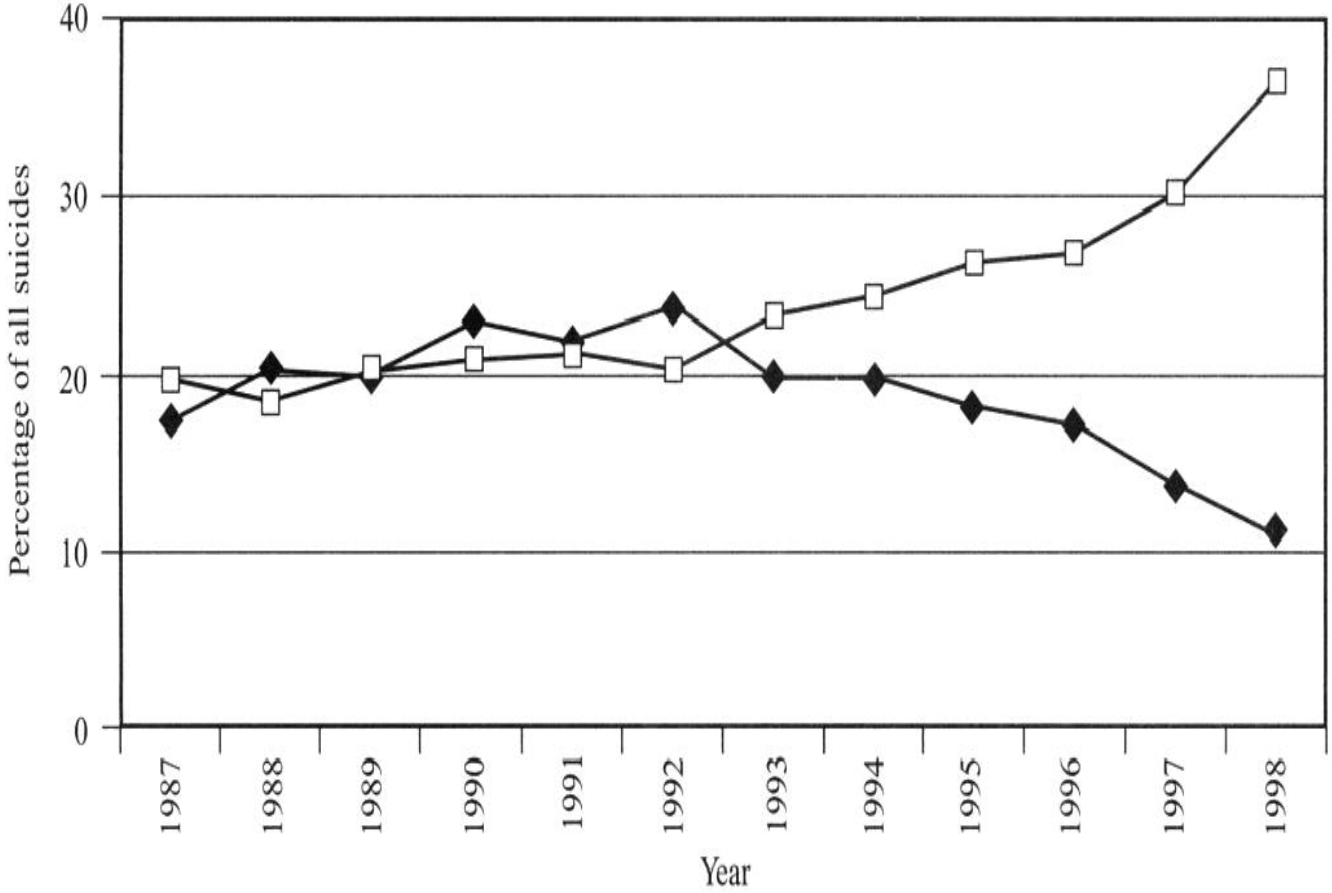
Car exhausts and method substitution



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Treating depression

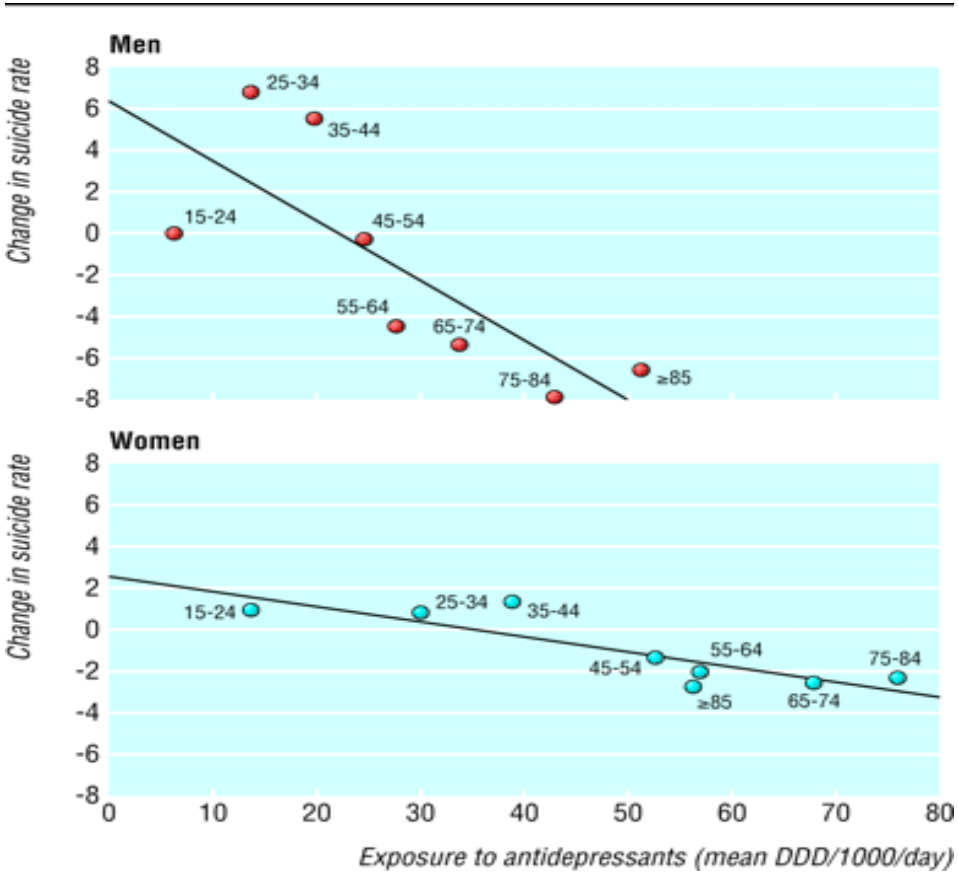

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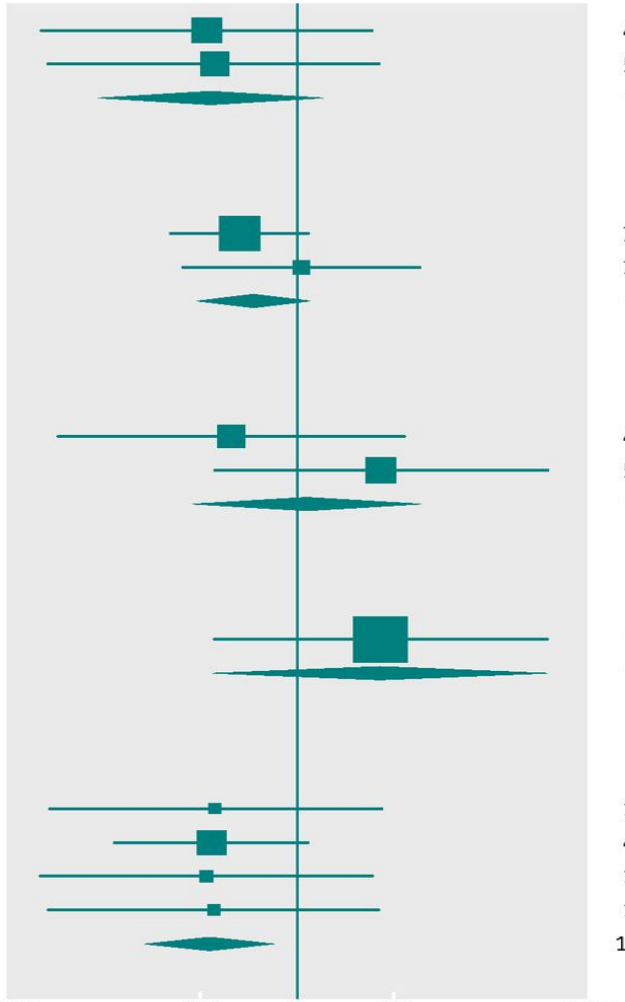
Fig 2 Forest plot showing meta-analysis of suicides in randomised trials comparing lithium with placebo or with active comparators.

Study	No of events/total: Lithium	No of events/total: Control	Weight (%)	Peto odds ratio Fixed (95% CI)
Versus amitriptyline				
Glen 1984	0/57	1/50	49.9	0.12 (0.00 to 5.98)
Greil 1996	0/40	1/41	50.1	0.14 (0.00 to 6.99)
Subtotal	0/97	2/91	100	0.13 (0.01 to 2.05)
Test for heterogeneity: χ^2=0.00, df=1, P=0.95, I^2=0%				
Test for overall effect: z=1.45, P=0.15				
Versus carbamazepine				
Greil 1997a	1/87	5/88	74.7	0.26 (0.05 to 1.30)
Greil 1997b	1/52	1/58	25.3	1.12 (0.07 to 18.16)
Subtotal	2/139	6/146	100	0.37 (0.09 to 1.51)
Test for heterogeneity: χ^2=0.80, df=1, P=0.37, I^2=0%				
Test for overall effect: z=1.38, P=0.17				
Versus lamotrigine				
Calabrese 2003	0/121	1/221	47.8	0.21 (0.00 to 12.83)
Licht 2010	1/78	0/77	52.2	7.29 (0.14 to 367.67)
Subtotal	1/199	1/298	100	1.35 (0.08 to 22.91)
Test for heterogeneity: χ^2=1.49, df=1, P=0.22, I^2=33%				
Test for overall effect: z=0.21, P=0.84				
Versus olanzapine				
Tohen 2005	1/214	0/217	100	7.49 (0.15 to 377.68)
Subtotal	1/214	0/217	100	7.49 (0.15 to 377.68)
Test for heterogeneity: Not applicable				
Test for overall effect: z=1.01, P=0.31				
Versus placebo				
Bauer 2000	0/14	1/15	16.8	0.14 (0.00 to 7.31)
Lauterbach 2008	0/84	3/83	49.8	0.13 (0.01 to 1.27)
Prien 1973a	0/45	1/39	16.7	0.12 (0.00 to 5.91)
Prien 1973b	0/101	1/104	16.8	0.14 (0.00 to 7.02)
Subtotal	0/244	6/241	100.0	0.13 (0.03 to 0.66)
Test for heterogeneity: χ^2=0.01, df=3, P=1.00, I^2=0%				
Test for overall effect: z=2.47, P=0.01				



Cipriani A et al. BMJ 2013;346:bmj.f3646

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Outline

1. Societal approaches to prevention
2. Mental health approaches to prevention

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Suicide in people with mental illness

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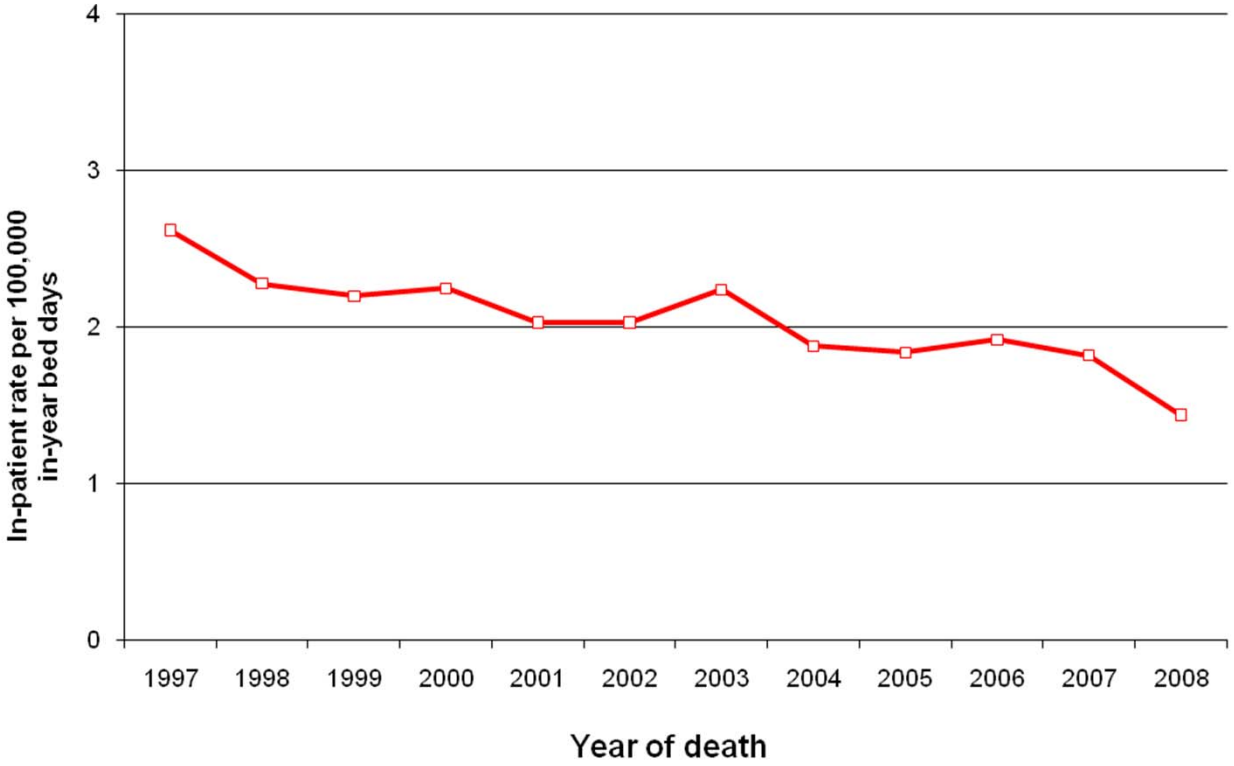
What works?

1) Focussing on safety in particular settings: psychiatric in-patients

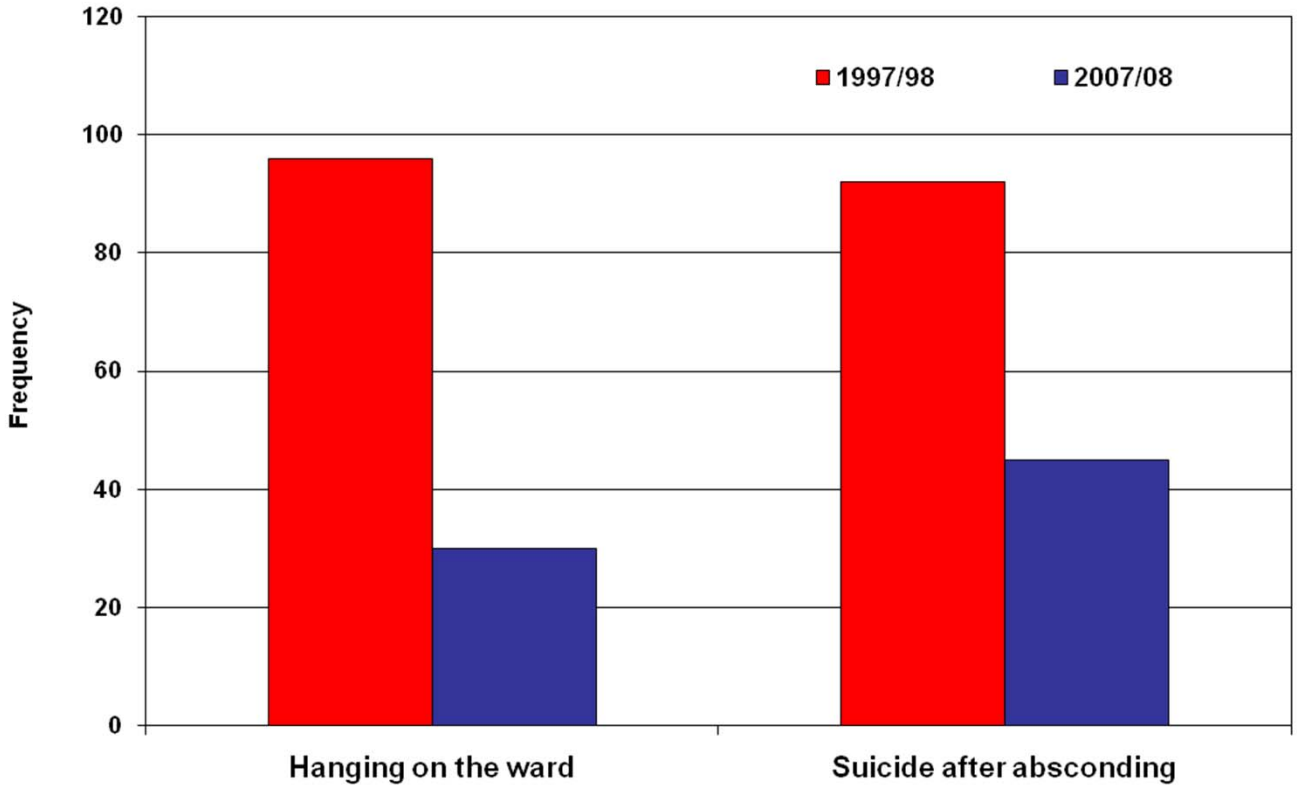
- Smaller in-patient bed base
- More morbid in-patient population
- Falling general population suicide rates
- Safety focus:
  - the environment
  - absconding

In-patient suicide

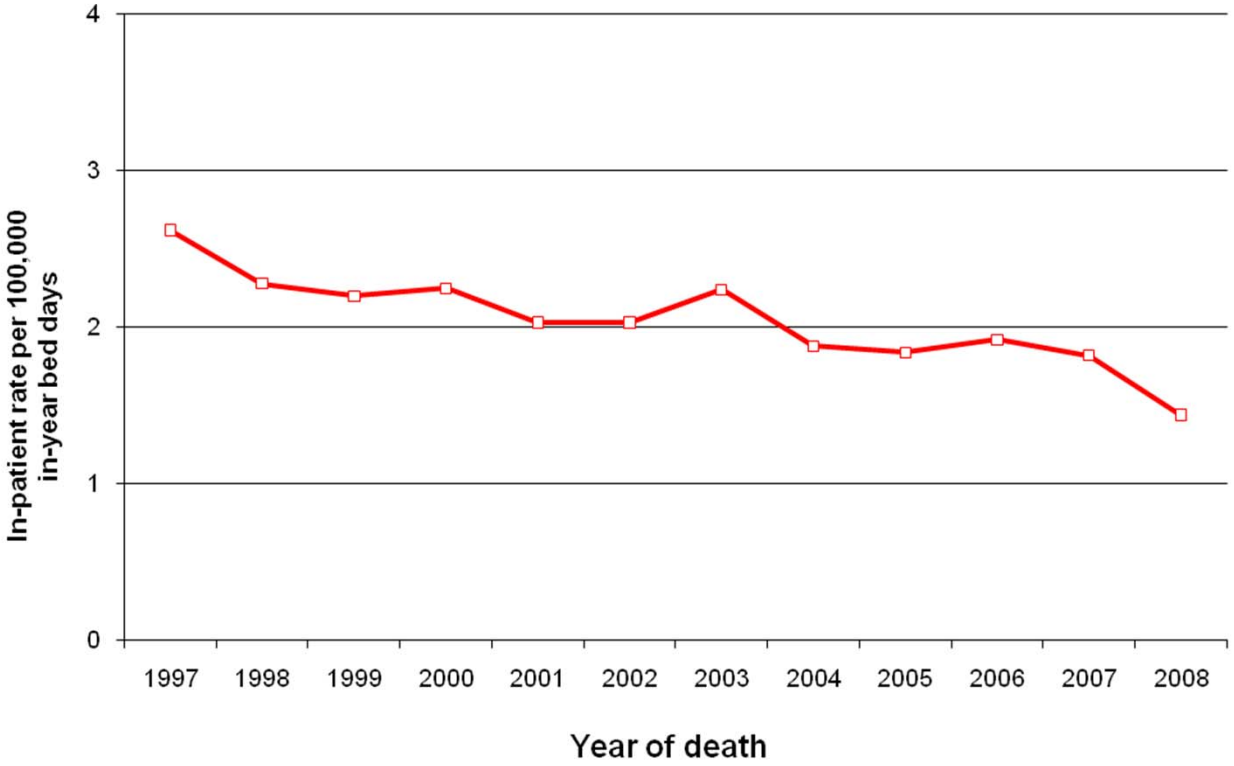


(Kapur et al Psychological Medicine 2012)

In-patient suicide, England 1997/98 - 2007/08

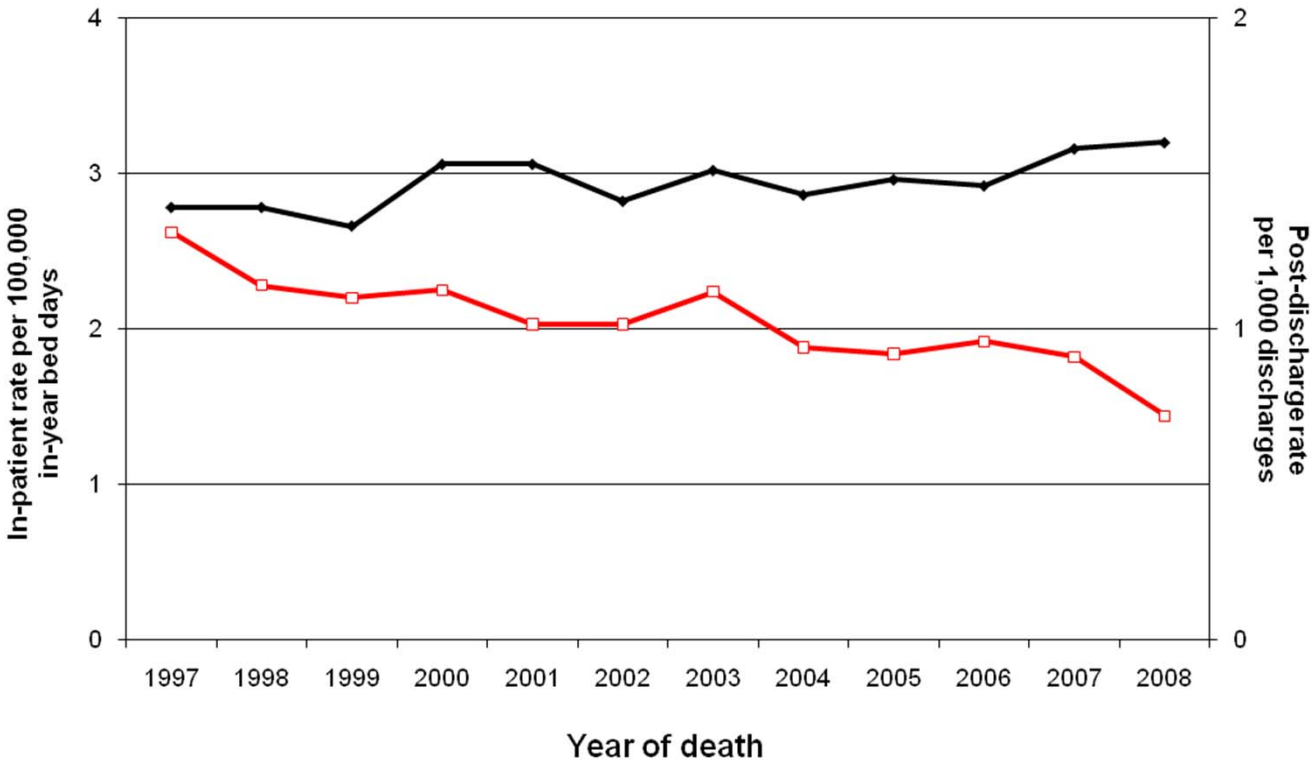


In-patient suicide



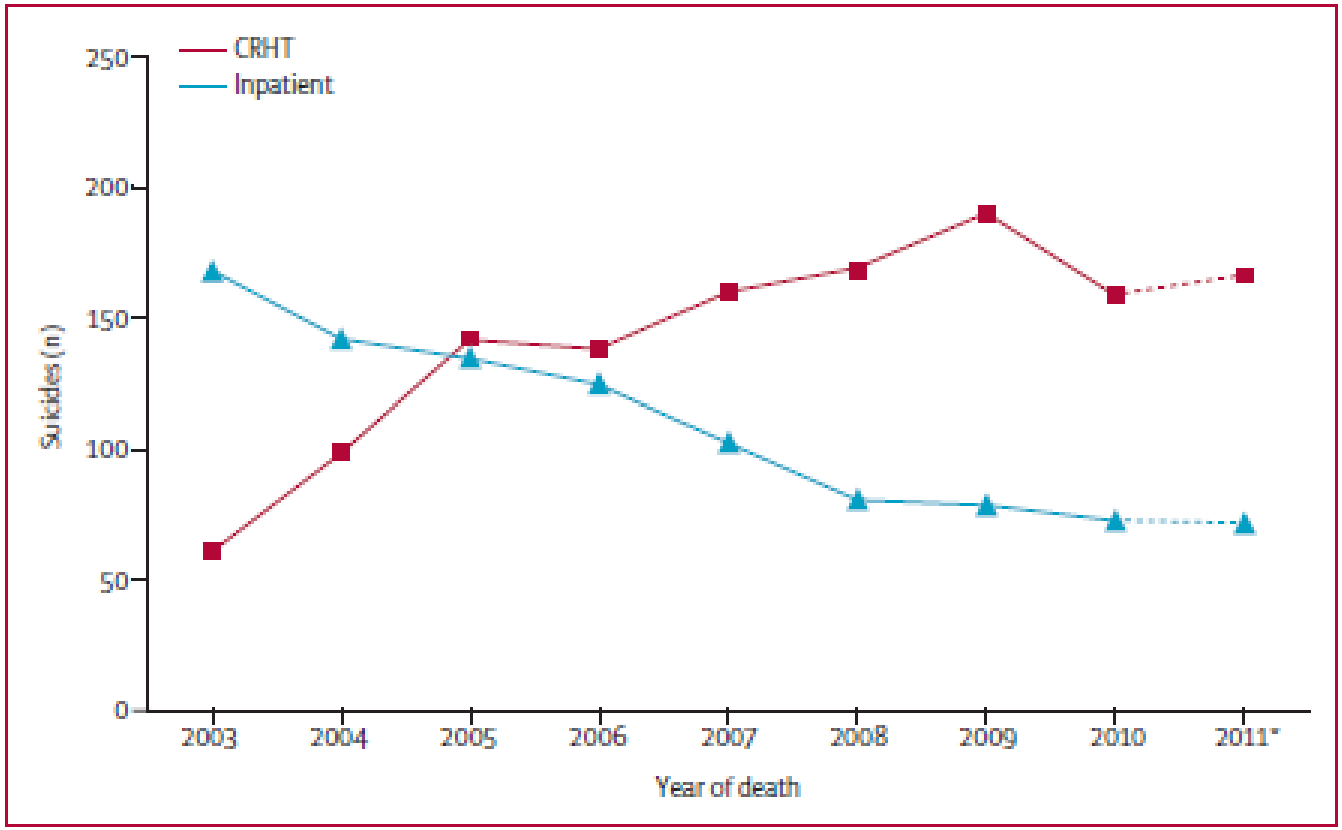
(Kapur et al Psychological Medicine 2012)

In-patient and post discharge suicide



(Kapur et al Psychological Medicine 2012)

In-patient suicide and suicide under crisis resolution/home treatment teams (CRHTs)



(Hunt et al Lancet Psychiatry 2014)

What works?

2) National policies and recommendations

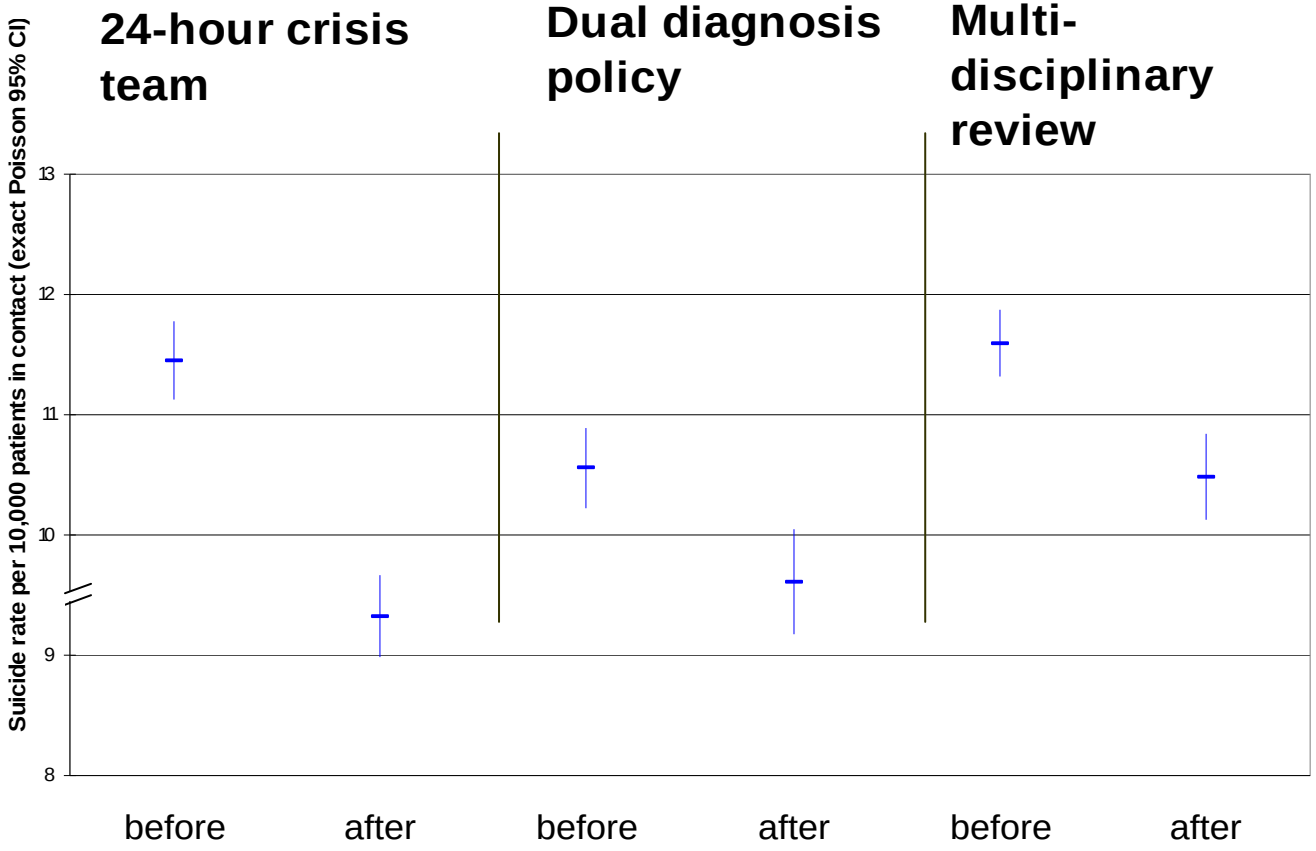
- Removal of ligature points
- Assertive outreach
- 24-hour crisis team
- 7-day follow-up
- Non-compliance
- Dual diagnosis
- Criminal justice information sharing
- Multi-disciplinary review
- Training in suicide risk management

Safety First, 2001
12 Steps to a Safer Service

Questions

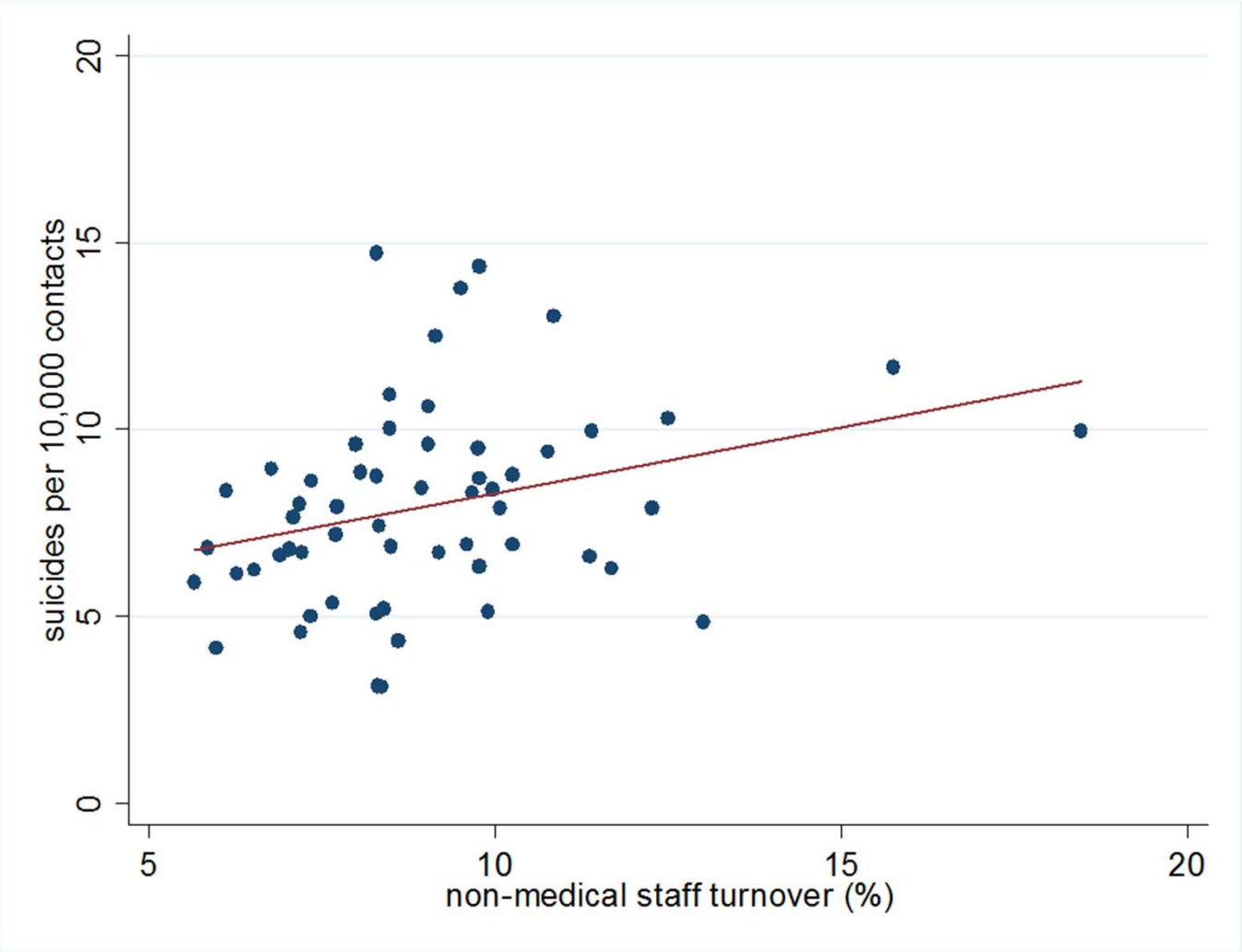
- Do mental health services implement policies?
- Do they make a difference?

Do policies make a difference?



(While et al Lancet, 2012)

Staff turnover and suicide



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Self-harm and suicide

- **50%+ of those who die by suicide have a history of self-harm**

- **Risk of suicide increased 30-50 fold in the year after self-harm**

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Self-harm and suicide

- 50%+ of those who die by suicide have a history of self-harm
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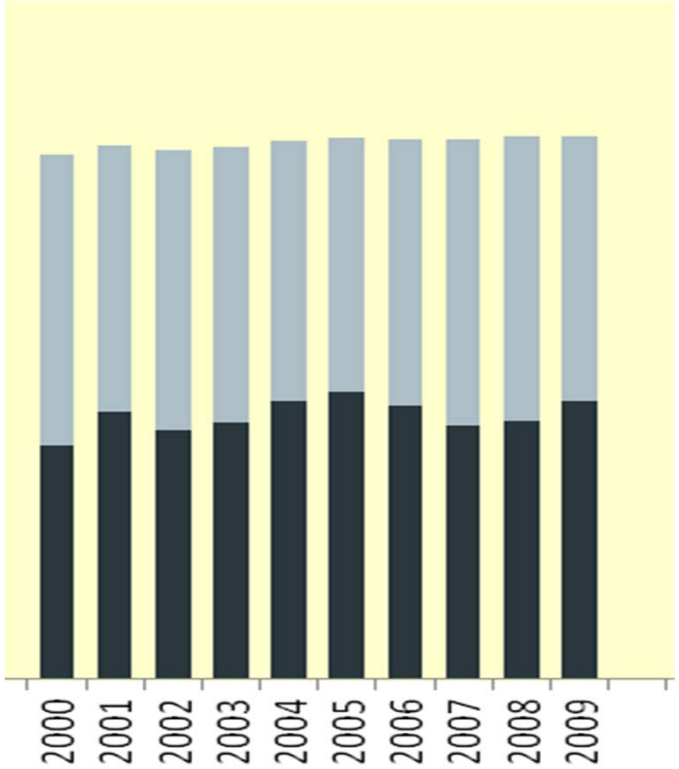
Life expectancy in men who self-harm vs the general population



Bergen et al 2012, Lancet

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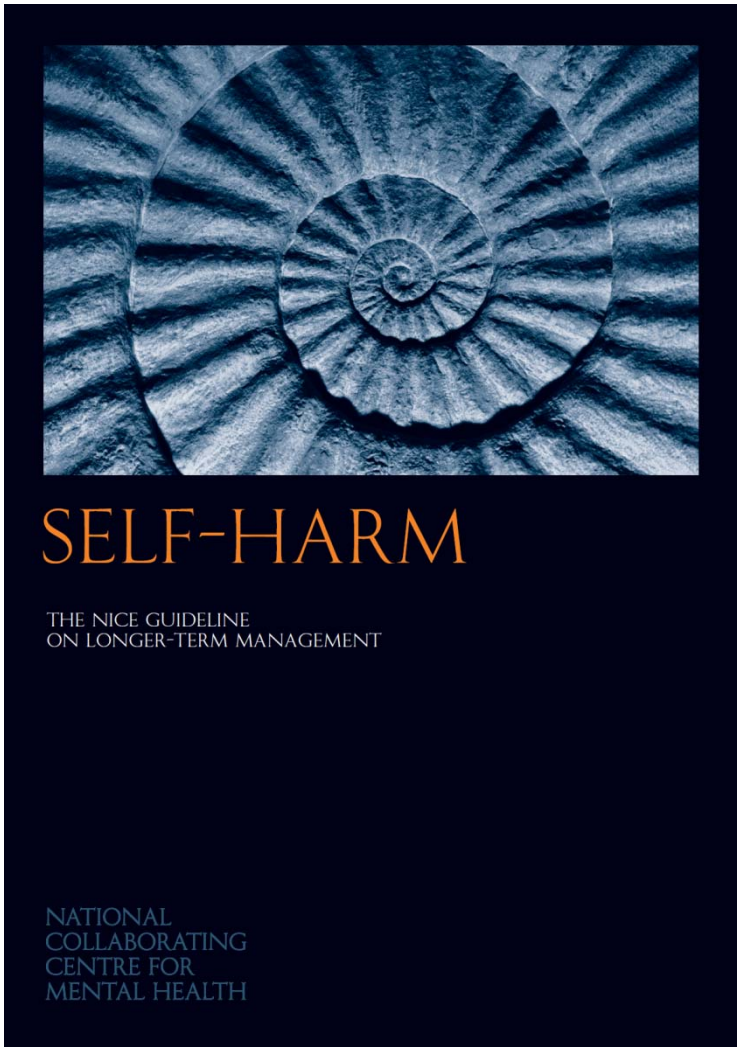
The NICE Guideline



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NICE self-harm Quality Standards – June 2013

1. People are treated with compassion, respect and dignity
2. They receive an initial assessment of physical health, mental state, social circumstances and risk of suicide.
3. They receive a comprehensive psychosocial assessment
4. They receive the monitoring they need to keep them safe
5. They are cared for in a safe physical environment
6. Collaborative risk management plan are in place.
7. They have access to psychological interventions.
8. There is a transition plan when moving between services.

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http://publications.nice.org.uk/quality-standard-for-selfharm-qs34

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