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Suicide prevention: what works? Evidence from around the world

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Overview

- What we know about suicide
- Challenges in suicide prevention
- Models of suicide prevention
- Evidence from around the world
- Other promising areas
- Evaluation
- Conclusions

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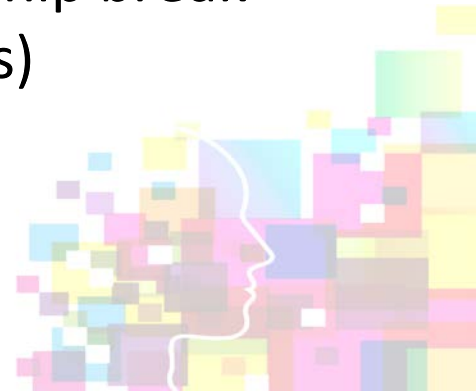
What do we know about suicide?

- Profiles of people who die by suicide are varied
- Situational factors surrounding suicidal behaviour vary
- Not all people who die by suicide have a mental illness
- Not all people with a mental illness die by suicide
- Negative life events are important (e.g. relationship break-ups, bereavement, job insecurity, financial issues)



Challenges in suicide prevention

- Lack of coordination of programs and services (SPA, 2014)
- Lack of evidence for suicide prevention programs (NMHC, 2013)
- Medical focus - psychiatrists not trained to detect major life events (De Leo, 2017)
- Gaps in knowledge of how different combinations of programs work in different settings

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Models of suicide prevention

- Universal
- Selective
- Indicated

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Universal approaches

Targets entire population

e.g. restriction of access to means, public education programs, media education, school-based programs, improved welfare and public health

- **Advantages**
- Reach very large numbers of people/prevent greater number of deaths
- Prevent suicidal behaviours before they take hold
- **Disadvantages**
- Difficult to evaluate due to other overlapping factors (political, social etc.)
- May not meet the needs of high-risk groups
- Effects may take a long time to observe

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Selective approaches

Aim to prevent the onset of suicidal behaviours in high-risk groups
e.g. screening programs, gatekeeper training, crisis and referral services

- **Advantages**
- Targets limited resources by developing strategies to meet the needs of specific groups
- Strategies are relatively easy to implement (Pitman & Caine, 2012)
- **Disadvantages**
- Difficult to demonstrate their effectiveness (little or conflicting evidence) (Pitman & Caine, 2012; Stone & Crosby, 2014)

Indicated approaches

Target high-risk individuals who already show signs of suicidal behaviour
e.g. crisis management, psychiatric treatment, follow-up programs for suicidal patients

- **Advantages**

- Can be tailored to the specific needs of high-risk individuals

- **Disadvantages**

- Does not address the source of the problem of suicide in the population (Stone & Crosby, 2014)

Evidence for ‘what works’

18 suicide prevention experts from 13 European countries systematically reviewed all available evidence for suicide prevention interventions (Zalsman et al., 2016; 2017)

- 1797 studies from over the last 10 years
- (includes 40 randomised controlled trials; 67 cohort trials; 22 population-based studies; 23 systematic reviews)

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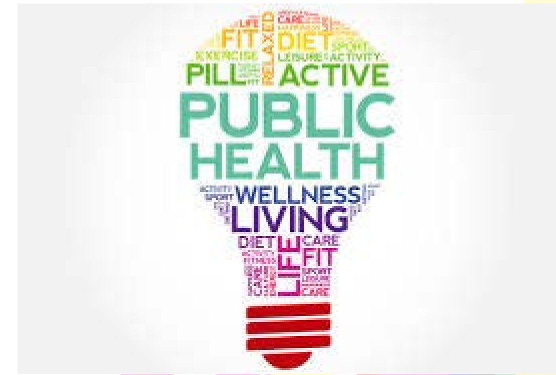
High-level evidence

Suicide prevention strategies with the highest levels of evidence:

- Public health strategies
- Health care strategies
  - Complementary approaches…



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Evidence-based strategies - 1

- **Restriction of access to lethal means (public health)**

- barriers at jumping sites (86% reduction in deaths)
- firearm control legislation
- restrictions on analgesics and pesticides

(Zalsman et al., 2016;2017)

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Evidence-based strategies - 2

- **Treatment of depression (health care)**

- psychiatric disorders a major risk factor for suicidal behaviours
- good evidence for pharmacological treatment (lithium, ketamine showing promising results) and psychotherapy (CBT, DBT)

(Zalsman et al., 2016;2017)

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Evidence-based strategies - 3

- **Ensuring a chain of care (health care)**

- follow-up support after a suicide attempt
- contact interventions (postcards, telephone and face-to-face contacts)
- collaborative care with primary health care services

(Zalsman et al., 2016;2017)

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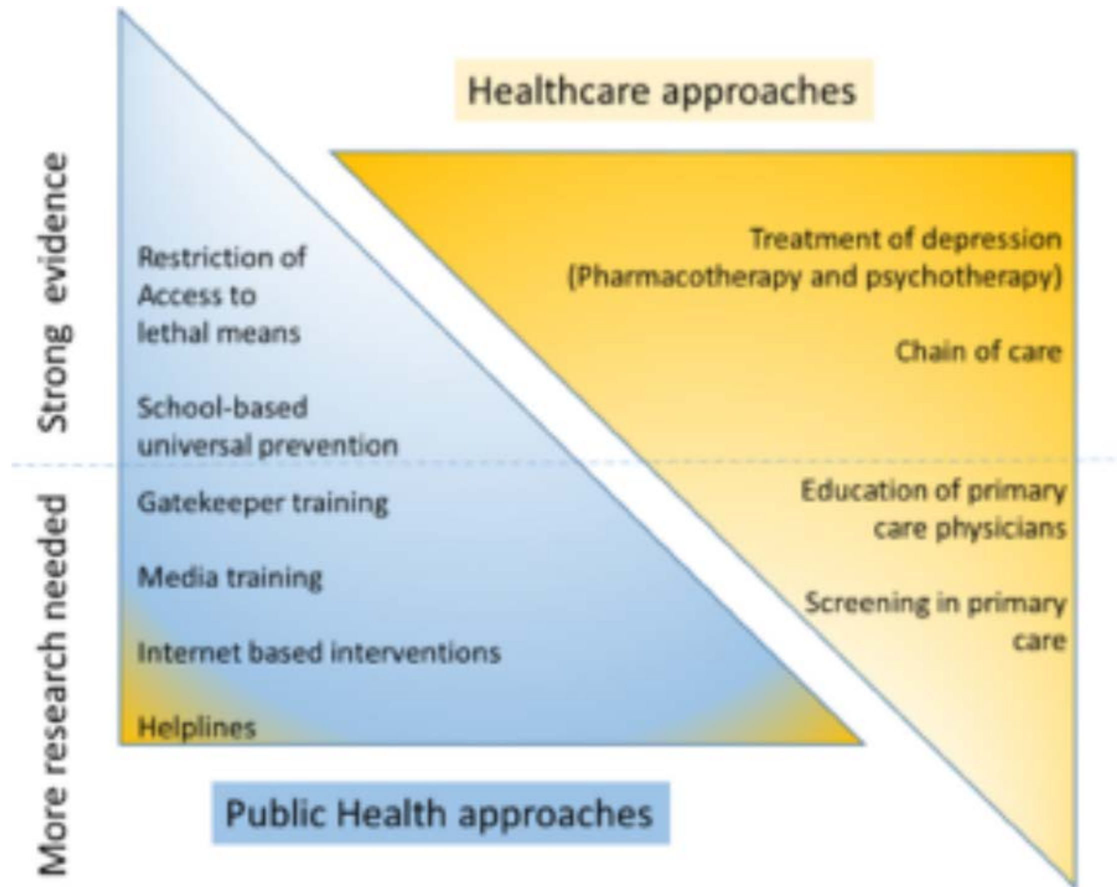
Evidence-based strategies - 4

- **School-based universal prevention (public health)**

- Strong evidence for mental health literacy, suicide risk awareness and skills training in schools
- Significant reduction in suicide attempts and ideation at 12 month follow-up

(Wasserman et al., 2015)



Evidence-based strategies of suicide prevention in mental health care and in public health approaches. (Zalsman et al., 2017)

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Promising approaches - Healthcare

- **Education of general practitioners** (targeting depression recognition and treatment)

- Increased use of antidepressants
- Decreased suicide rates

(Henriksson et al., 2006; Szanto et al., 2007)

- **Screening in primary-care settings**

- Lowered suicide prevalence by 61% in the elderly

(Gardner et al., 2010; Oyama et al., 2010)

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Promising approaches - Public health

- **Gatekeeper training** (e.g. peer helpers, youth workers, indigenous people)

- Positive impact on knowledge, skills and attitudes of trainees
- Some reductions in suicidal behaviours

(Clifford et al., 2013; Isaac et al., 2009)

Public health approaches continued…

- **Media training**

- Shown to be protective for the general population when emphasising positive coping
- Better reporting quality associated with decreased suicidal behaviour

(Niederkrotenthaler et al., 2007; 2009)

Internet-based interventions and helplines

- Only low levels of evidence at this stage
- Some evidence of reductions in suicidal ideation
- Acceptability to users, and improves compliance with referrals

(Marasinghe et al, 2012; van Spijker et al., 2014; Kaminer et al., 2006)

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Some promising areas in Australia

- Zero Suicide framework
- Non-clinical support models (e.g. The Way Back Support Service)
- Workplace suicide prevention
  (e.g. Mates in Construction; also in Mining and Energy)

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Zero Suicide

- Evaluation of the Zero Suicide framework (Henry Ford Health System, USA) showed a 75% reduction of suicide in service users (Coffey, 2006; Hampton, 2010)
- However; comprehensive evaluations across different countries and regions are lacking
- Formal studies are required to evaluate the effectiveness of Zero Suicide (Baker et al, 2018)

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Zero Suicide in Queensland

- Gold Coast University Hospital implemented Zero Suicide in 2017 – AISRAP conducting evaluations
- Zero Suicide framework will be adopted across 10 Queensland Government Hospital and Health Services (HHSs) sites
- Expected to drive significant cultural change for suicide prevention in health services
- All 10 sites to be evaluated

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Non-clinical support

- The Way Back support Service – *Beyondblue*
- Person centred, non-clinical care and practical support in the critical three months after a suicide attempt
- Support coordinators contact the client within 24-48 hours after referral
- Adopts a culturally sensitive, strengths-based and collaborative approach to care

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Workplace suicide prevention

Mates in Construction: integrated program of training and support for suicide prevention in the construction industry

- 3 levels of training:

General Awareness Training – delivered to 80% of workers onsite

Connectors (volunteers) – trained to assist a person in crisis and connect them to help

ASIST (volunteers) – onsite 'mental health first aid officers', trained to respond to a suicidal person and keep them safe

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Evidence base for MIC

- Some evidence for a reduction of suicide rates in the construction industry
- Evidence for change in male attitudes and greater willingness to seek help and offer help to co-workers
- Ongoing evaluations

(Martin et al., 2016; Ross et al, 2017)

Why evaluation is important

- Provides essential info about a program's strengths and weaknesses
- Provides evidence for necessary modifications
- Demonstrates accountability to funders and legislators
- Ensures the most effective approaches are maintained – money is not wasted on ineffective programs
- Process, outcome and impact evaluation

Other issues to consider

- Take advantage of potential synergistic effects of integrated (universal, selective and indicated) suicide prevention programs
- Understanding interacting policies – drug and alcohol policies can reduce suicide (Martin & Page, 2009)
- Negative life events are important - imperative to provide services and support in non-health areas

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Conclusions

- Strong evidence for: restriction of access to lethal means; treatment of depression; ensuring a chain of care; and school-based suicide prevention programs
- Some promise for: education of general practitioners; and screening in primary care
- Other innovative approaches such as Zero Suicide; non-clinical support; and workplace suicide prevention needing more evidence

Thank you

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