

Editorial

Suicide is a complex problem that requires a range of prevention initiatives and methods of evaluation†

Keith Hawton and Jane Pirkis

**Summary**

A range of factors can contribute to suicide, which means that a multifactorial approach to suicide prevention is necessary. Whereas randomised controlled trials may be suitable for evaluation of some interventions, others require different approaches for assessment of their impact. Also, suicide itself will not always be the most feasible outcome measure.

Declaration of interest

None.

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The challenge of suicide prevention

It has been estimated that globally there are over 800 000 deaths by suicide each year (approximately 1 every 40 seconds),¹ a figure that is likely to be a considerable underestimate of the real size of the problem. Suicide is a highly complex issue, with a range of causes at both the individual and contextual levels. Examples of individual factors are genetic influences, mental disorders and psychological vulnerabilities. Contextual contributions include, for example, family influences, abuse, socioeconomic downturn, exposure to suicidal behaviour by others, access to means for a suicidal act and lack of availability of help at times of crisis. Careful investigation of the processes that lead to specific deaths by suicide usually identify multiple likely contributory factors. Suicide is rarely because of a single cause.

As suicide can be caused by a complexity of factors, if suicide prevention policies are to be effective they must include a range of initiatives.² These include, first, what are termed ‘universal’ interventions, aimed at reducing risk at the population level. Examples include reduction of access to means of suicide through initiatives such as increasing the safety of sites that are often used for suicide (such as certain bridges, cliffs, railways, multi-storey car parks) by installing barriers and other structures that reduce access; limiting amounts of dangerous medicines and withdrawal of more toxic drugs and other substances (for example pesticides) that have frequently been used for fatal self-poisoning; public education and prevention programmes in schools; and promoting responsible media reporting and portrayal of suicide.

Second, there are ‘selective’ interventions focused on subgroups of the population who may have heightened risk but are

not necessarily having suicidal thoughts or engaging in self-harm, such as individuals with mental illness, substance misuse, financial problems and chronic pain. Examples of such interventions include psychological therapy for people with depression, specific programmes for people who have experienced sexual and physical abuse, improvements to the safety of psychiatric in-patient units, and training opportunities for clinicians, police, prison staff and others likely to encounter people at risk in their daily work.

Third, there are ‘indicated’ interventions for individuals who are showing more evident or immediate signs of suicide risk, such as those who have self-harmed, expressed suicidal thoughts or recently been discharged from psychiatric hospital care. Possible interventions include psychological therapy, frequent appointments with clinical services, ensuring early follow-up of patients leaving psychiatric hospitals and use of medication thought to have anti-suicidal effects (for example lithium, ketamine).

The challenge of evaluating suicide prevention initiatives

As a result of the range of types of potential suicide prevention initiatives, evaluation of their effectiveness requires different methodologies. In this issue of the *BJPsych*, Riblet and colleagues³ have focused on one approach to evaluation, namely randomised controlled trials (RCTs). They have conducted a systematic review and meta-analysis of evaluations using this design, using suicide as the sole outcome measure. They have concluded that just one initiative, the World Health Organization brief intervention and contact intervention for people who have self-harmed that was conducted in low- and middle-income countries, ‘is a promising suicide prevention strategy’. This is based on meta-analysis of just three trials.

Policy-makers and clinicians looking for evidence on which to base development of national or local suicide prevention programmes are likely to be disappointed with this conclusion as it does not provide guidance on which other approaches to suicide prevention might be effective. RCTs are undoubtedly valuable for evaluating certain types of approaches, especially some of those in the ‘indicated’ intervention category, but it is not always feasible or appropriate to use them to establish whether

†See pp. 396–402, this issue.

many of the other possible approaches are effective. This is a particular problem in the field of suicide prevention, especially for 'universal' interventions. For example, erection of a barrier to prevent suicide by jumping from a bridge known to be used frequently for this purpose is clearly going to be introduced for the whole community; it is not feasible to randomise half the community to have exposure to the barrier and half not. However, a quasi-experimental approach could be used, involving a before-and-after design, perhaps augmented with a parallel comparison with a similar bridge in another area that also has a relatively high incidence of suicide by jumping but where a barrier has not been erected. Similar problems are encountered in evaluation of other 'universal' approaches where, for example, availability of dangerous medication known to be used in fatal self-poisonings is restricted or terminated across the population. Here, just a before-and-after approach to evaluation may be feasible. An example from the UK was the withdrawal of co-proxamol (dextropropoxyphene and paracetamol combination analgesic) in the UK in the mid-2000s. This was shown to not only reduce the toll of suicidal and accidental deaths involving this drug but also to not lead to an increase in deaths involving ingestion of other (less toxic) analgesics, at least during the first 3 years following withdrawal of the drug.⁴

Another important issue is that although suicide is a relatively common cause of death, indeed the most common cause of death in men aged under 50 years in England in 2015,⁵ the population rate of suicide means that huge and unrealistic numbers of participants are required in RCTs to evaluate whether a specific intervention has an impact on suicides compared with a control intervention. Therefore, other related outcomes need to be assessed. The most obvious is non-fatal self-harm, which occurs very many times as frequently as suicide. Previous self-harm is recognised as a major risk factor for suicide, so it makes good sense that reducing self-harm would ultimately reduce suicide. In any case, self-harm is worthy of attention in its own right, as indicated by its acknowledgement in the recently refreshed National Suicide Prevention Strategy for England.⁵ A recent review and meta-analysis of 18 trials of cognitive-behavioural-based psychotherapy has shown a significantly greater impact on the proportion of trial participants repeating self-harm compared with treatment as usual, and on the basis of three trials, a reduction in frequency of self-harm associated with receiving dialectical behaviour therapy.⁶ There were insufficient numbers of suicides in these trials to meaningfully assess the impact on this outcome.

What is the current evidence for effectiveness of measures to prevent suicidal behaviour?

So, what is the current position regarding which suicide prevention initiatives are effective? In the seminal review by Mann and colleagues of effectiveness of interventions the main conclusion was that restriction of access to means of suicide and education of primary care physicians are effective.⁷ A similar recent review by Zalsman and colleagues has provided a more contemporary overview of what may work.⁸ Evidence regarding effectiveness of restricting access to methods of suicide appears to have strengthened, particularly measures to prevent suicide at sites popular for suicide.⁹ In contrast, evidence for beneficial effects on suicidal behaviour of physician education regarding detection and management of depression appears weaker than it did a decade previously. School-based awareness programmes are beginning to show positive benefits with regard to prevention of

self-harm (and suicidal ideation). It remains unclear whether antidepressants reduce suicide risk, except in older adults. Lithium is probably the drug with most evidence of anti-suicidal effects, although Riblet and colleagues in their review concluded that the evidence was less strong than it had been, but largely because of inclusion of a recent trial of poor quality.³ Further work based on the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness that was not included in the review by Zalsman and colleagues⁸ indicates that certain aspects of care by mental health services may reduce risk of suicide, namely removal of ligature points from hospital wards, specialised community teams such as outreach and crisis resolution/home treatment teams, services for patients with dual diagnoses, implementation of National Institute for Health and Care Excellence guidance for depression and self-harm and multidisciplinary review after suicide, with family input.¹⁰

Conclusions

The evidence for what may help reduce suicides, although far from extensive, is gradually growing. Those responsible for planning and implementing local and national suicide prevention policies now have at least some evidence on which to base their efforts. There is an onus on those of us who are working in the field of suicide prevention to continue to evaluate our activities, and to do so in the most rigorous manner possible. Often we will not be able to use RCTs as our design of choice, and often studies will not be able to examine the outcome of suicide. However, we can draw on the broader discipline of programme evaluation and use a range of methods and data sources to triangulate our findings to strengthen the evidence base. We are confident that this will mean that the gap between what is and is not known about the effectiveness of particular approaches to suicide prevention will decrease considerably in the coming years.

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References

- 1 World Health Organization. *Preventing Suicide: A Global Imperative*. World Health Organization, 2014 (http://www.who.int/mental_health/suicide-prevention/world_report_2014/en/).
- 2 World Health Organization, Western Pacific Region. *Towards Evidence-Based Suicide Prevention Programmes*. World Health Organization, Western Pacific Region, 2010 (<http://www.wpro.who.int/mnh/TowardsEvidencebasedSPP.pdf>).
- 3 Riblet NBV, Shiner B, Young-Xu Y, Watts BV. Strategies to prevent death by suicide: a meta-analysis of randomised controlled trials. *Br J Psychiatry* 2017; **210**: 396–402.
- 4 Hawton K, Bergen H, Simkin S, Wells C, Kapur N, Gunnell D. Six-year follow-up of impact of co-proxamol withdrawal in England and Wales on prescribing and deaths: time-series study. *PLoS Med* 2012; **9**: e1001213.
- 5 Department of Health. *Preventing Suicide in England: Third Progress Report of the Cross-Government Outcomes Strategy to Save Lives*. Department of Health, 2017 (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/582117/Suicide_report_2016_A.pdf).

- 6 Hawton K, Witt KG, Salisbury TL, Arensman E, Gunnell D, Hazell P, et al. Psychosocial interventions following self-harm in adults: a systematic review and meta-analysis. *Lancet Psychiatry* 2016; **3**: 740–50.
- 7 Mann JJ, Apter A, Bertolote J, Beautrais A, Currier D, Haas A, et al. Suicide prevention strategies. A systematic review. *JAMA* 2005; **294**: 2064–74.
- 8 Zalsman G, Hawton K, Wasserman D, van Heeringen K, Arensman E, Sarchiapone M, et al. Suicide prevention strategies revisited: 10-year systematic review. *Lancet Psychiatry* 2016; **3**: 646–59.
- 9 Pirkis J, Too LS, Spittal MJ, Krysinska K, Robinson J, Cheung YT. Interventions to reduce suicides at suicide hotspots: a systematic review and meta-analysis. *Lancet Psychiatry* 2015; **2**: 994–1001.
- 10 National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. *Making Mental Healthcare Safer: Annual Report and 20-Year Review*. University of Manchester, 2016 (<http://research.bmh.manchester.ac.uk/cmhs/research/centreforsuicideprevention/nci/reports/2016-report.pdf>).

psychiatry in dance

Pina Bausch's *Kontakthof*

Philippa Kaina

Age-specific subspecialties within psychiatry reflect the complexities of human experience and their relationship to the temporality of the life course. *Kontakthof*, a performance by the German choreographer Pina Bausch (1940–2009), is a compelling visual enactment of this. Performances alternate two different casts: one comprising teenagers, the other men and women over the age of 65. Although the adolescent and senior dancers enact exactly the same choreographic sequence, each performance is inflected very differently. The smooth-skinned, limber teenagers confidently strut their stuff across the stage, while the halting gestures of the older dancers carry a very different history – that of a long life lived.



Kontakthof with dancers over 65. Last dress rehearsal in Saint Nazaire, 2011. Photograph by Dojërthe Boxberg.
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Kontakthof with teenagers over 14. Photograph by Ulli Weiss.
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Old age is a much maligned and devalued stage of life in modern Western culture, where negative comparisons between the vitality of youth and the withering senescence of age abound. Ageist stereotypes present in our society are also prevalent in the history of psychoanalysis. Freud dismissed the older adult as a viable candidate for analysis, while the Oedipal model pits the young and old against one another, characterising intergenerational relations in terms of a power struggle built on rivalry and animosity.

Kontakthof, however, allows us to imagine something different. The myriad forms of human contact (affectionate, empathetic, rivalrous and, on occasion, violent) between the older adults and their younger counterparts enacted in the performance reflect the 'lateral' dynamics of peer group relations emphasised by Juliet Mitchell in *Siblings*. Played out against a backdrop resembling a municipal dance hall, *Kontakthof* functions as a metaphor for the spaces of communal interaction – nursery, playground, night-club, hospital, care home – where these lateral relationships are forged, and which mark our passage from the cradle to the grave. In foregrounding the dynamics between performers of the same generation, Bausch sidesteps the limiting hierarchical paradigms characterising intergenerational relations in which our culture is sometimes locked, leaving each group free, momentarily, to dance their own dance.

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