

Analysis

The phantasm of zero suicide

Manne Sjöstrand and Nir Eyal

Governments and non-governmental organisations are increasingly adopting a 'zero-suicide' goal, but what such a goal precisely involves is unclear. Ostensibly it strongly prioritises the prevention and elimination of all suicide. We argue that, so understood, a societal goal of zero suicide risks contravening several ethical principles. In terms of beneficence and non-maleficence, a 'zero-suicide' goal risks being inefficient and may burden or harm many people. Autonomy-wise, a blanket ban on all suicide is excessive. As regards social justice, zero suicide risks focusing on the symptoms of social malaise instead of the structures causing it. With respect to transparency, a 'zero' goal that cannot be met makes these authorities look detached and risks frustration, distrust and, worse, stigmatisation of suicide and of mental health conditions. Instead, we propose a middle path for suicide prevention, founded on harm reduction, 'soft

group paternalism' and efforts directed at increased quality of life for disadvantaged groups. Although soft group paternalism respects autonomy, this approach permits coercive interferences in certain circumstances. We hope that the justificatory framework tying together these largely familiar elements is novel and sensible.

Keywords

Ethics; suicide; philosophy; risk assessment; stigma and discrimination.

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The substantial global health burden of suicide disproportionately affects the already disadvantaged, socially and economically. Suicide rates have decreased slightly during the past two decades, probably thanks to improved standards of living, better access to care and reduced access to means for suicide. However, this development is not universal, with the USA as a notable exception. ¹

In 2008, the Swedish parliament adopted the so-called 'vision zero' for suicide prevention, stating that 'no one should have to end up in a situation of such vulnerability that suicide is seen as the only way out.'^{2,3} In the USA, the Surgeon General's 2012 National Strategy for Suicide Prevention promotes the adoption of zero suicide as an 'aspirational goal' for healthcare systems.⁴ A 'zero' goal for suicide has also been promoted in the UK, Australia, the Netherlands and elsewhere.^{3,5} The US National Action Alliance for Suicide Prevention states that suicide should be a 'never event'.⁶ Although the World Health Organization (WHO), as far as we are aware, does not explicitly recommend a zero goal for suicide, its latest major report on suicide prevention may embrace such a goal in stating that 'every single life lost to suicide is one too many'.⁷

'Zero suicide' is sometimes used as a catchphrase or battle cry signifying that suicide prevention is important or possible. Sometimes it is used as a label for specific approaches or strategies. However, taken literally, a zero-suicide goal in public health goes beyond that. To hold zero as an overarching goal for suicide prevention seems to be based on the following ethical assumptions.

- (a) All suicide should, ideally, be prevented. This further suggests that all suicide is preventable and certainly that the prevention of all suicide is desirable.
- (b) The priority of preventing any death by suicide is at least as high as that of preventing any other human death.
- (c) We should aim not only at reducing suicide rates but at eliminating suicide. Zero is the only acceptable end-point.

We will question the ethics of setting zero as an overarching public health goal for suicide prevention. We will argue that on a societal level not all suicide-prevention efforts serve public health. Setting zero as a public health goal for suicide prevention risks contravening five ethical principles of healthcare and global health policy:

- (a) beneficence,
- (b) non-maleficence,
- (c) respect for autonomy,
- (d) justice and
- (e) transparency.

Instead of a zero-suicide goal we propose a middle path for suicide prevention policy. Global and national public health should primarily aim at offering assistance and treatment to prevent the illnesses and social malaise that drive much suicide. Specific measures to prevent suicide are justified when they serve overall public health goals but may be unjustified when they have adverse results for many people.

Beneficence and non-maleficence: a diffuse risk, and barely effective interventions translate into adverse effects

Risk factors for suicide are well established but algorithms to predict suicide in individual patients are blunt. Many who die by suicide would be categorised as having a low risk, and the overwhelming majority of those who would be categorised as having a high risk will not die by suicide. ^{10,11} Thus, even if directed at comparatively high-risk patients, preventive efforts need to target many, most of whom would not die by suicide. Still, even if effective, such efforts would not be sufficient to achieve even near zero unless comparative lower-risk individuals were also included.

Some efforts are benign or beneficial to the many people who are targeted by the measure regardless of their effect on suicide. Increased access to high-quality mental health services and to primary care, strengthening of social safety nets and efforts to destigmatise sexual orientations and mental health conditions are typically cases in point, and raise little question. When measures are intrusive, restrictive or risk harm, trade-offs are more complicated. This applies to measures that target entire populations, subpopulations or individuals.

At a population level, one of the best-established methods for suicide prevention is reducing access to lethal means for suicide. The positive effects of restricting access to some means through changes of composition of household gas, use of blister packs for pain relief and reduced access to hazardous pesticides typically outweigh minor burdens on end users. 12,13 Restricting other means for

suicide is more complicated and may have unintended effects. ¹⁴ Drugs used in suicide by overdose are often the same drugs used for treatment of depression, anxiety and pain conditions. If we aim at removing causes of suicide, effective treatments need to be accessible for as many affected as possible. Moreover, not all means can be removed, at least short of population-wide restrictions and monitoring.

Likewise, some more targeted measures raise few or no ethical questions. Consider improved treatment for psychiatric illnesses and for pain conditions, or effective follow-up after psychiatric inpatient care. These measures are benign, and desirable for reasons beyond suicide prevention. Other measures are less benign. Take involuntary hospital admission: a brief period of hospital admission to save a person's life may seem like a uniformly justifiable trade-off. However, if the vast majority of apparent high-risk patients do not die by suicide and adverse effects are significant, the trade-off is more problematic. ¹⁵ Unfortunately, evidence of effective targeted efforts is scarce. ^{16,17} Even if we could effectively single out people with a high risk of suicide, there is no simple suicide-reducing effort we could easily offer to all.

Finally, anti-suicide measures may expose an entire population to universal primary suicide prevention. As a thought experiment, take the unconventional idea of adding trace lithium to a population's drinking water for suicide reduction.¹⁸ Even if such a measure were highly effective, for example by halving the suicide rate, in a standard population preventing a single death would require exposing about 17 000 people to lithium.¹⁹ Even if adverse effects from the exposure were rare and mild, cumulative harm might be substantial.

Personal autonomy: the moral permissibility of suicidal acts

Absent reference to religious foundations, it is difficult to ground a blanket objection to all suicide. Specifically, it is far from clear that ending one's life can never be a person's autonomous choice, or in their own considered interests. Narratives of patients contemplating physician-assisted suicide (PAS) often involve intense prior deliberation, terminal illness and incurable suffering and dependence.²⁰

The most important secular argument against all suicide comes from 18th-century philosopher Immanuel Kant. For Kant, suicide for the sake of relieving suffering trades our dignified personhood for mere pain relief irrationally, and immorally, even when it disadvantages no other person.²¹ However, from a Kantian perspective, suicide can also serve personal will or prevent indignities.²² Importantly, contemporary bioethics determines whether decisions are autonomous and dignifying procedurally, rather than by their content.²³ Admittedly, many suicides are seemingly impulsive, non-deliberated acts, associated with mental disorders, substance misuse and poor problem-solving abilities, all factors that can undermine capacity for autonomous decision-making. 24,25 However, the factors leading to a person's suicide are too variegated for all to lack personal autonomy and rationality. Decision-making capacity may be retained even in severe psychiatric disorders.²⁶ The global suicide rate is higher in later ages than in adolescence and correlated to physical ailments and functional impairments, and even when a death by suicide appears impulsive to external observers, it may well have been pre-meditated and considered for a long period of time.²⁷

Whether or not people have a reason or a moral right to die by suicide, it might be argued that society has a duty to prevent suicides. However, liberal societies typically endorse the view that authorities should not interfere with people's capacitated decisions as long as these do not infringe on the rights of others.

Contemporary bioethics assigns competent adults particularly strong rights to decide autonomously on matters central to their own life and death.

Although in rare instances contemporary bioethics may allow either the person's good or the community's good to supersede the person's will, such exemptions are unlikely to rule out all suicide.

To say all that is not to endorse the other philosophical extreme – a certain libertarian position according to which suicide is nearly always an individual's right, such that coercive suicide prevention is nearly always a wrongful interference with individual freedom. Moreover, suicide is often a serious harm to others, ²⁹ and that should also figure in the balance.

These considerations also play out in the international arena. In Sweden, the zero goal has been repeatedly invoked as an argument for retaining a ban on PAS and euthanasia. Therefore, whether or not one agrees that PAS is a permissible practice, international health organisations should arguably not commit to rejecting them altogether. Perhaps inadvertently, international efforts to prevent any suicide risk doing precisely that.

Fighting injustice: attacking the symptom instead of the malaise

Suicides are disproportionally common among those who are less privileged: people with mental illness, people who are socially marginalised and people with limited economic options.³¹ Much of the suffering that drives suicides comes from unjust national and global socioeconomic arrangements, stigmas and deficient medical and social services. We should fight these injustices much harder than we currently do, both for all the independent reasons to fight injustice and because they instigate suicide. However, the duty to fight injustice does not equate to a duty to fight directly all of its results. If workers who are abused and exploited die by suicide because of, for example, terrible work conditions, the solution is not simply to ban suicide or restrict their access to means for suicide. The underlying causes are what must be altered. An obligation to reduce a cause of something (such as bad work conditions) is not the same thing as an obligation to reduce that thing (for example workers' suicide rates) irrespective of the means to achieve it.

The Swedish vision zero states that 'promoting good life opportunities for less privileged groups' is one of its main strategies.³ Yet a goal stated in terms of reducing suicide rates risks diverting from promoting just opportunities – the good experiences that may drive such reductions. We should fight the 'fire' of social injustice instead of the 'smoke' of suicide. Indeed, blowing away the 'smoke' may fan the 'fire': unjust stigma against an ethnic minority or LGBTQA (lesbian, gay, bisexual, transgender, queer/questioning, intersex, asexual) youth increases suicide, but targeted, exclusive monitoring in these communities for signs of intent to suicide could be perceived as discriminatory and distrustful, exacerbating stigma and injustice.

Transparent communication: a goal known to be unrealistic may undermine trust and exacerbate frustration and stigma

Suppose that public health authorities announced a goal of 'zero myocardial infarctions'. That clearly unrealistic goal would only make authorities look detached. The inevitable failure to meet this overambitious goal could sow frustration, distrust and fingerpointing. It would obfuscate realistic goals for reduction of the number of myocardial infarctions, and therefore their proper ranking compared with other realistic public health goals, such as

reducing cancer. Similar dangers lie in the clearly unrealistic zerosuicide goal. While there are methods to reduce suicide in a population, there is no credible strategy to reach zero, making failure unavoidable. Ethically, if we cannot reach an outcome, we cannot have a duty to reach it. By implying that every suicide is preventable, a zero goal risks demoralisation,³² and exacerbating feelings of guilt among staff and among relatives bereaved by suicide.

Advocates of zero-suicide goals may respond that they should be seen as 'aspirational' and are not literally meant to be achieved, or that aiming for zero is instrumental to lowering suicide rates. That, and some of the statements quoted above, can render these goals too vague to give action guidance.

We agree that unrealistic goal setting can be ethical when likely to lead to major improvements. However, such improvements require a clear path: the implementation of specific measures and specified subtargets that can credibly lead to the underlying goal. To the goal of zero suicide, however, no such path has been presented. A recent audit concluded that it was difficult to evaluate the effects of the Swedish suicide-prevention strategy as it did not involve measurable goals or indicators. Perhaps relatedly, Swedish suicide rates have remained largely unchanged since the overarching zero goal was adopted, whereas suicide rates decreased in comparable European countries.

Even if unintended, a myopic focus on suicide prevention may distract from patient-centred care practices towards defensive medicine and, at worst, create attempts at prevention that are ineffective and counterproductive. The more honest and more modest approach would curb these exigencies.

A middle path

How, then, should national and global public health address suicide? If zero suicide is not the goal, what should the goal be? When it comes to suicide, is there any acceptable goal other than zero?

In between the extremes of religious opposition and Kant on the one hand and dogmatic libertarianism on the other lies a middle path for public health. This middle path mirrors predominant positions on decision-making at the end of life in clinical bioethics. It takes seriously the patient's interests and autonomous will, as well as the pragmatic epidemiological considerations we relayed. It also takes seriously the roots of much suicide in impulse or in social injustice and suicide's typical devastating externalities in bereaved families and communities. None of the path's proposed elements is entirely novel, but their combination with our justification, which readily connects to widely accepted principles of healthcare, is surprisingly absent from current literature.

The proposed path recognises suicide as a central public health problem but also the ethical conflicts of suicide prevention. It rejects suicide-prevention efforts when they backfire and when they harm, burden or cost others too much in expectation. It accepts the possibility that in some situations, death can be the least bad option for an individual, and that a person's choice to die is sometimes autonomous and rational. Many patients who currently secure permission for PAS are cases in point. The middle path need not embrace a general legalisation of PAS but, importantly, it does not reject and work against it either. All this leaves wide room for appropriate suicide prevention under four constraints.

First, as we do not know who will die by suicide, suicide prevention should normally employ only benign methods or ones that improve individual and population health and living conditions, and remove conditions that lead up to suicide. Strengthening social and economic safety nets without which people find themselves in crises, and extending universal access to healthcare and

high-quality mental health services would often restore quality of life, health and well-being.³⁸ Preventing suicide may be a byproduct, albeit a highly desirable one. At the individual level, identifying psychosocial needs and offering person-centred care for psychiatric disorders and medical conditions, while strengthening individual autonomy, would help in more ways than one.¹²

Second, the middle path also accepts coercive interventions when truly necessary in order to prevent a likely decisionally incapacitated suicide, especially when the non-voluntary intervention makes their ensuing decisions more autonomous, for instance by providing treatment to restore decisional capacity, and by offering psychosocial interventions to improve living conditions. Such 'soft paternalism' aims to protect individuals from harm when they are unable to make autonomous decisions on the matter.³⁹ At the population level, the middle path accepts non-voluntary interventions on the basis of 'soft group paternalism', 39 which permits limited paternalistic policies towards everyone, to protect nonautonomous individuals from suicide. Soft group paternalism allows laws restricting access to means for impulsive suicide, including guns and certain pesticides. Many such efforts will also have other positive public health effects beyond suicide prevention, for example to reduce accidental gun injuries and interpersonal violence.

Third, interventions need not always make means for suicide completely unavailable (typically a decision with steep social costs), just not readily available; the resulting 'lag time' enables further deliberation and consultation through helplines and other clinical resources. The primary aim here should be to promote autonomy by enabling rational deliberation and by helping vulnerable individuals to get the help they need. Limited additional restrictions on means for suicide could rest on concern about negative externalities from even autonomous suicide.

Fourth, the middle path rejects goals known in advance to be unachievable as hypocritical, misleading and dangerous for public trust and public health campaigns. Treating suicide as a never-event risks exacerbating feelings of guilt, blame and potential burnout among practitioners and patients' families, and, worse, stigma and shame among patients mulling the idea. Warranted suicide prevention is one of many important goals in healthcare and public health, but it is best served without a zero-suicide goal.

Conclusion

No evidence-based measures exist for reaching zero suicide. As we cannot even tell with high likelihood who will die by suicide, and few effective measures exist to reduce suicide rates sharply, a zerosuicide goal is the wrong north star for public health policy on suicide. Such a goal invites suicide prevention measures that are futile or affect many people invasively and adversely. Philosophically, such a goal encapsulates a crude blanket objection to all suicide. It is better to engage in broadly beneficial efforts to reduce social inequities and to improve patients' access to mental healthcare and increased autonomous decision-making. Much suicide results from social injustice: what we should fight is that injustice, and not primarily its symptoms. Efforts that tend to get at the social roots of the problem without widespread adverse results include strong social and economic safety nets, connected communities, accessible high-quality mental healthcare, crisis lines, reduced social stigma, somewhat reduced accessibility to means for impulsive suicide and acute coercive interventions to prevent non-autonomous suicide. Specific preventive efforts along these lines should be linked with metrics to assess their success, without invoking an overarching zero goal.

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None

References

- 1 Fazel S, Runeson B. Suicide. N Engl J Med 2020; 382: 266-74.
- 2 Socialdepartementet [Swedish Ministry of Health and Social Affairs]. Regeringens proposition 2007/08:110 En förnyad folkhälsopolitik. [Government proposal 2007/08: a renewed public health policy.] Socialdepartementet, 2008 (https://www.regeringen.se/rattsliga-dokument/proposition/2008/03/prop.-200708110/).
- 3 Wasserman D, Tadić I, Bec C. Vision Zero In Suicide Prevention And Suicide Preventive Methods. In *The Vision Zero Handbook: Theory, Technology and Management for a Zero Casualty Policy* (eds K Edvardsson Björnberg, M-Å Belin, SO Hansson, C Tingvall): 1–26. Springer International Publishing, 2020.
- 4 US Department of Health and Human Services. 2012 National Strategy for Suicide Prevention: Goals and Objectives for Action. US Department of Health and Human Services, 2012.
- 5 International Initiative for Mental Heath Leadership. Zero Suicide: An International Declaration for Better Healthcare. International Initiative for Mental Heath Leadership, 2022 (https://www.preventsuicidect.org/wp-content/uploads/2021/05/zerosuicidedeclaration_2015.pdf).
- 6 The National Action Alliance for Suicide Prevention. Zero Suicide. The National Action Alliance for Suicide Prevention, 2022 (https://theactionalliance.org/healthcare/zero-suicide).
- 7 World Health Organization. *Preventing suicide: A global imperative*. World Health Organization, 2014.
- 8 Zero Suicide Alliance. Zero Suicide Alliance: About Us. Zero Suicide Alliance, 2022 (https://www.zerosuicidealliance.com/about/about-us).
- 9 Brodsky BS, Spruch-Feiner A, Stanley B. The zero suicide model: applying evidence-based suicide prevention practices to clinical care. Front Psychiatry 2018; 9: 33.
- 10 Large M, Ryan C. Suicide risk assessment: myth and reality. *Int J Clin Pract* 2014; 68: 679–81.
- 11 Large M, Kaneson M, Myles N, Myles H, Gunaratne P, Ryan C. Meta-analysis of longitudinal cohort studies of sicide risk assessment among psychiatric patients: heterogeneity in results and lack of improvement over time. PLoS One 2016; 11: e0156322.
- 12 Duberstein PRH, Marnin J. Person-centered prevention of suicide among older adults. In *The Oxford Handbook of Suicide and Self-Injury* (ed MK Nock): 113– 32. Oxford University Press, 2014.

- 13 Zalsman G, Hawton K, Wasserman D, et al. Suicide prevention strategies revisited: 10-year systematic review. *Lancet Psychiatry* 2016; 3(7): 646–59.
- 14 Florentine JB, Crane C. Suicide prevention by limiting access to methods: a review of theory and practice. Soc Sci Med 2010; 70: 1626–32.
- 15 Borecky A, Thomsen C, Dubov A. Reweighing the ethical tradeoffs in the involuntary hospitalization of suicidal patients. Am J bioeth 2019; 19: 71–83
- 16 Fox KR, Huang X, Guzmán EM, et al. Interventions for suicide and self-injury: a meta-analysis of randomized controlled trials across nearly 50 years of research. *Psychol Bull* 2020; 146: 1117–45.
- 17 Huang X, Harris LM, Funsch KM, Fox KR, Ribeiro JD. Efficacy of psychotropic medications on suicide and self-injury: a meta-analysis of randomized controlled trials. *Transl Psychiatry* 2022; 12: 400.
- 18 Vita A, De Peri L, Sacchetti E. Lithium in drinking water and suicide prevention: a review of the evidence. *Int Clin Psychopharmacol* 2015; 30: 1–5.
- 19 Ng J, Sjöstrand M, Eyal N. Adding lithium to drinking water for suicide prevention the ethics. Public Health Ethics 2019; 12: 274–86.
- 20 Chapple A, Ziebland S, McPherson A, Herxheimer A. What people close to death say about euthanasia and assisted suicide: a qualitative study. J Med Ethics 2006; 32: 706–10.
- 21 Johnson R, Cureton A. Kant's moral philosophy. In Stanford Encyclopedia of Philosophy (eds EN Zalta, U Nodelman). Stanford University, 2022 (https:// plato.stanford.edu/entries/kant-moral/).
- 22 Kerstein S. Hastening death and respect for dignity: Kantianism at the end of life. Bioethics 2019; 33: 591–600.
- 23 O'Neill O. Autonomy and Trust in Bioethics. Gifford Lectures. Cambridge University Press, 2002.
- 24 Hegedűs KM, Gál BI, Szkaliczki A, Andó B, Janka Z, Álmos PZ. Temperament, character and decision-making characteristics of patients with major depressive disorder following a suicide attempt. PLoS One 2021; 16: e0251935.
- 25 Jollant F, Bellivier F, Leboyer M, Astruc B, Torres S, et al. Impaired decision making in suicide attempters. Am J Psychiatry 2005; 162: 304–10.
- 26 Curley A, Watson C, Kelly BD. Capacity to consent to treatment in psychiatry inpatients a systematic review. Int J Psychiatry Clin Pract 2022; 26: 303–15.
- 27 Anestis MD, Soberay KA, Gutierrez PM, Hernández TD, Joiner TE. Reconsidering the link between impulsivity and suicidal behavior. Pers Soc Psychol Rev 2014: 18: 366–86.
- 28 Szasz T. The case against suicide prevention. Am Psychol 1986; 41: 806-12.
- 29 Cerel J, Jordan JR, Duberstein PR. The impact of suicide on the family. *Crisis* 2008; 29: 38–44.
- 30 Holm H. Är självmord alltid psykisk störning? [Is suicide always a mental disorder?] Dagens Medicin, 29 Jan 2016 (https://www.dagensmedicin.se/ opinion/debatt/ar-sjalvmord-alltid-psykisk-storning/).
- 31 Spencer-Thomas S. Suicide Prevention as a Social Justice Issue. National Alliance on Mental Illness, 2022 (https://www.nami.org/Blogs/NAMI-Blog/September-2017/Suicide-Prevention-as-a-Social-Justice-Issue).
- 32 Mokkenstorm JK, Kerkhof AJFM, Smit JH, Beekman ATF. Is it rational to pursue zero suicides among patients in health care? Suicide Life-Threat Behav 2018; 48: 745–54.
- 33 Eyal N, Sjöstrand M. On knowingly setting unrealistic goals in public health. *Am J Public Health* 2020; **110**: 480–4.
- 34 Riksrevisionen [The Swedish National Audit Office]. Statens Suicidpreventiva Arbete – Samverkan med Verkan? RiR 2021:26. [Central Government Suicide Prevention Work – Effective Interaction? RiR 2021:26. [Riksrevisionen, 2021 (https://www.riksrevisionen.se/rapporter/granskningsrapporter/2021/statens-suicidpreventiva-arbete—samverkan-med-verkan.html).
- 35 National Centre for Suicide Research and Prevention of Mental III-Health. Suicide in Sweden. Karolinska Institutet, 2022 (https://ki.se/en/nasp/suicide-in-sweden).
- 36 OECD. Health at a Glance: Europe: State of Health in the EU Cycle: Adult Mental Health. OECD, 2022 (https://www.oecd-ilibrary.org/sites/89109c81-en/index. html?itemId=/content/component/89109c81-en).
- 37 Karlsson P, Helgesson G, Titelman D, Sjostrand M, Juth N. Skepticism towards the Swedish vision zero for suicide: interviews with 12 psychiatrists. BMC Med Ethics 2018; 19: 26.
- 38 Patel V, Saxena S, Lund C, Thornicroft G, Baingana F, Bolton P, et al. The Lancet Commission on global mental health and sustainable development. *Lancet* 2018: 302: 1553–98
- 39 Miller FG, Wertheimer A. Facing up to paternalism in research ethics. Hastings Cent Rep 2007; 37: 24–34.