Cooling suicide hotspots

Lancet Psychiatry 2015
Published Online
September 23, 2015
http://dx.doi.org/10.1016/S2215-0366(15)00315-6
See Online/Articles
http://dx.doi.org/10.1016/S2215-0366(15)00266-7

The results of the meta-analysis by Jane Pirkis and colleagues[1] again underscore that restricting access to methods of suicide saves lives.[2] They showed that inhibiting access greatly reduced suicide rates at suicide hotspots, and that promoting help-seeking or third party intervention also seemed to offer protection for those who seek to end their lives at these sites. When examined in a tight focus that looks exclusively at these settings, suicides are clearly preventable.

But what happens when we take a larger view? Garret Glasgow reported[3] that restriction of access to bridges had no measurable effect on suicide when measuring regional statistics. Even as Pirkis and colleagues acknowledge the likelihood that the interventions might not have had a broader effect on death rates, they assert that impeding access to hotspots and offering other protection is worth the cost.

Let's weigh these issues. Pirkis and colleagues used meta-analysis, a reasonable approach, because no single study of hotspots could provide a definitive answer regarding effectiveness. The cumulated data, however, further underscore the small numbers involved at each site. Although the percentage changes were substantial, few cases occurred: 863 suicides occurred over 149·85 study-years before the interventions were introduced (an unweighted mean of 5·8 suicides per year), whereas 211 suicides were recorded during the 88·0 study-years after the introduction of interventions (an unweighted mean of 2·4 suicides of per year). Considering that these interventions were far apart in space (ie, in different countries) and in time, the measured effect was very small in terms of the number of suicides that contributed to local and regional rates.

But numbers alone are not sufficient to decide whether such interventions have merit or should be implemented. They have moral or social value—demonstrably saving lives otherwise lost. However, public health interventions require public resources: what is the cost of saving one life? And what is the cost of not saving that life when it is known that a hotspot will be the setting for the preventable death of several people each year? Blocking access to lethal methods can lead to sustained changes in death rates, despite substitution.[2] Although few deaths occur at hotspots, societies (and families) often accept high costs for prevention initiatives that are based on choice rather than a measured economic return—such as vaccinations to prevent bacterial meningitis.[4] In 2010, my colleagues and I recommended that Cornell University install nets on seven nearby bridges. Although the rate of suicide among Cornell students was the same as the national average, Cornell gained notoriety as a so-called suicide school because 44% of the deaths by suicide occurred in the vicinity in the past two decades had involved jumping into Ithaca's East Hill gorges, where Cornell is located, adding urgency to local discussions.

Blocking access to a hotspot can serve as an expression of important values, if done in a way that builds community awareness and support for broader efforts to prevent suicide, attempted suicide, and antecedent risks. However, given the small numbers involved, blocking access to suicide hotspots should be part of an overall regional or national approach to suicide prevention, which together constitutes a well-considered, carefully implemented strategy intended to generate sustained measurable effects.[5] If done out of context and only to satisfy cosmetic concerns, such efforts become like a tweet supporting a noble cause: laudable but ornamental, and not able to fully address the situation at hand.

Jim West/Science Photo Library

Suicide prevention telephone

Eric D Caine
Injury Control Research Center for Suicide Prevention, Department of Psychiatry, University of Rochester Medical Center, Rochester, NY, USA
eric_caine@urmc.rochester.edu

I am supported in part by Centers for Disease Control and Prevention grant 5 R49 CE002093. I declare no competing interests.

1 Pirkis J, Too LS, Spittal MJ, et al. Interventions to reduce suicides at suicide hotspots: a systematic review and meta-analysis. *Lancet Psychiatry* 2015; published online Sept 23. http://dx.doi.org/10.1016/S2215-0366(15)00266-7

2 Yip PSF, Caine E, Yousuf S, Chang SS, Wu KCC, Chen YY. Means restriction for suicide prevention. *Lancet* 2012; **379:** 2393–99.

3 Glasgow, G., Do local landmark bridges increase the suicide rate? An alternative test of the likely effect of means restriction at suicide-jumping sites. *Soc Sci Med* 2011; **72:** 884–89.

4 Scott RD, Meltzer MI, Erickson LJ, De Wals P, Rosenstein NE, Vaccinating first-year college students living in dormitories for Meningococcal disease: an economic analysis. *Am J Prev Med* 2002; **23:** 98–105.

5 Caine ED. Forging an agenda for suicide prevention in the United States. *Am J Prev Med* 2013; **103:** 822–29.