

To Be or Not to Be

Isaac Sakinofsky, MBChB, MD, DPM(Lond), FRCPC, FRCPsych¹

¹Emeritus Professor of Psychiatry and Public Health Sciences, University of Toronto, Toronto, Ontario; Head, High Risk Consultation Clinic, Centre for Addiction and Mental Health (CAMH), Toronto, Ontario.

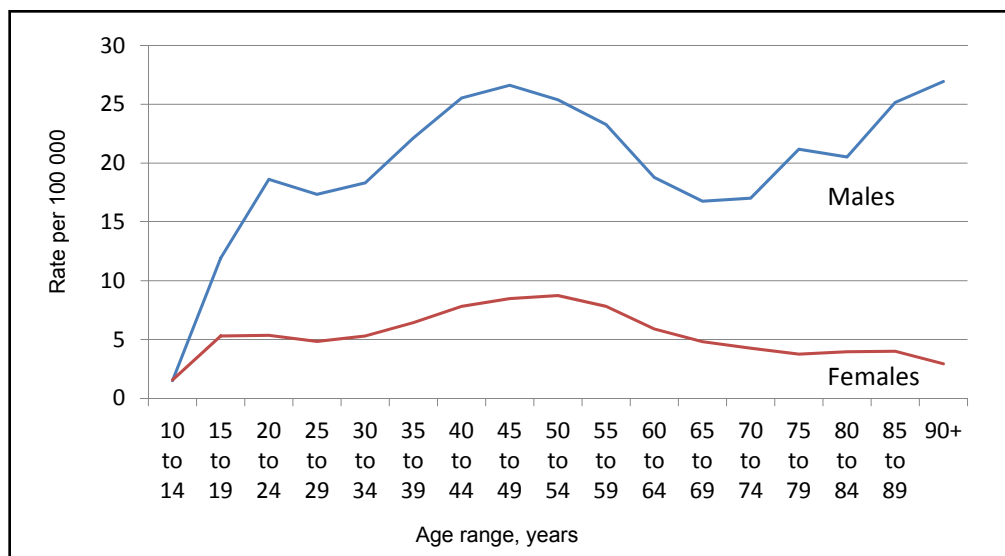
Correspondence: CAMH, 250 College Street, Toronto, ON M5T 1R8; isaac.sakinofsky@utoronto.ca.

According to the World Health Organization, nowadays about 1 million people a year, worldwide, are taking their own lives.¹ Suicide is the third leading cause of death in young people in the United States, and the leading cause of death in young adults in China, Sweden, Australia, and New Zealand.² In Canada, the absolute loss of life from suicide currently appears to be stable: for 2000–2004 it was 18 326,³ and in the succeeding quinquennium (2005–2009) it was similar, 18 461, not allowing for population increases. Nearly 4000 Canadian lives are thus lost to suicide each year. Figure 1 illustrates the gulf that separates suicide rates between males and females; on average, more than 3 times as many males take their own lives. Rates are equal when people are aged between 10 and 14 and then take off steeply in males, with a peak in the early 20s, followed by an even greater rise, ending in another peak in middle life, and then by a decline. The peak period for females is also in middle life, but while rates taper off thereafter in women, old age in men brings a further sharp increase in suicide rates.⁴ To put these suicide deaths in perspective, about a quarter of a million people die from all causes in Canada each year, of

which suicides account for 2%, pale in significance when compared with deaths from cardiovascular causes (32%) or cancer (30%).³ Such comparisons belie the pain and agony endured by the person who ultimately completes suicide, and that of the family left behind. Four thousand people dead from suicide per annum is still a major public health problem; psychiatrists cannot afford to be rendered complacent by perspective. This In Review section of *The Canadian Journal of Psychiatry* embodies 2 systematic reviews of the suicide literature, each of which addresses a significant aspect of suicide prevention.^{5,6}

The first paper is by a noted clinical investigator from Scandinavia, Professor Erkki Isometsä,⁵ who took part in the landmark psychological autopsy study of an entire year's suicides in Finland ($n = 1397$) in which he personally focused on mood disorders. He confronts the conundrum that has puzzled psychiatrists, worldwide, for over a century: as mood disorders account for one-half to two-thirds of suicides, how do we tell which patients with a mood disorder are likely to take their lives and at what point and for which

Figure 1 Canada: mean suicide rates 2005–2009^a



^a Based on unstandardized rates published by Statistics Canada⁴

reasons? This problem is made more difficult by the low base rate of suicide, making prediction more difficult. Professor Isometsä points out that the older published research gave rise to the belief that 15% of patients with mood disorders take their lives (even Kraepelin's patients are quoted as having experienced a 15% suicide rate⁷), were based on the proportionate mortality statistic, that is, the proportion of suicide deaths occupied by patients diagnosed with mood disorders. Recently, investigators have turned to a more accurate but smaller estimate of mortality, the case fatality rate, that is, the percentage of all patients with mood disorder who died by suicide, equivalent to lifetime suicide risk. This reduces suicide risk in men with bipolar disorder (BD) to nearly 8%, to women with BD to 5%, males with unipolar depression to 7%, and females with unipolar depression to 4%, but the target of accurately predicting the individual suicide has thereby been made doubly difficult by being halved in size.

Professor Isometsä thoroughly and thoughtfully goes on to deal with prevalence and incidence of suicide attempts among patients with unipolar and bipolar mood disorder and risk factors for completed suicide and for suicide attempts. Based on prospective studies, the most robust risk factors for both completed suicide and suicide attempts are a history of suicide attempts in the person⁸ or close family member, severe depression with comorbidity (for example, personality disorder, substance use disorder, and physical illness) together with younger age, hopelessness, and suicidal ideation. He points out that these findings may not be generalizable to the community or primary care. In primary care studies, most people who died by suicide were found to have untreated depressions and rarely communicated their suicidal intentions, particularly during the last appointment before the suicide.

"Why are not all patients with mood disorders suicidal?" asks Professor Isometsä,^{5, p 126} echoing the burning question we have all asked ourselves when faced with patients who are suffering deeply in their depressive illness and are mired in an immutable predicament. He posits that even a severe

mood disorder alone cannot explain suicidal behaviour; other factors must play a role, not just impulsivity or aggressivity, but psychological vulnerability, perhaps stemming from childhood neglect or abuse that may lead to developmental and neuroendocrinological scars, possibly through epigenetic mechanisms. We need major advances in understanding how suicidal people think, he concludes.

The second paper⁶ deals with inpatient suicide, which, although it affects relatively smaller numbers, is of great clinical relevance to all psychiatrists at some stage in their careers.

Acknowledgements

Dr Sakinofsky has no funding or conflicts of interest to declare.

The Canadian Psychiatric Association proudly supports the In Review series by providing an honorarium to the authors.

References

1. World Health Organization (WHO). Suicide prevention (SUPRE) [Internet]. Geneva (CH): WHO; 2013 [cited 2013 Dec 1]. Available from: http://www.who.int/mental_health/prevention/suicideprevent/en/.
2. Mann JJ. Searching for triggers of suicidal behavior. *Am J Psychiatry*. 2004;161:395–397.
3. Sakinofsky I, Webster G. The epidemiology of suicide in Canada. In: Cairney J, Streiner DL, editors. *Mental health in Canada: the epidemiologic perspective*. Toronto (ON): University of Toronto Press; 2010. p 357–389.
4. Statistics Canada. Suicides and suicide rate, by sex and by age group 2013 (CANSIM Table 102-0551. Deaths and mortality rate, by selected grouped causes, age group and sex, Canada) [Internet]. Ottawa (ON): Statistics Canada; [date unknown] [modified 2012 May 31; cited 2013 Dec 1]. Available from: <http://www5.statcan.gc.ca/cansim/pick-choisir?lang=eng&p2=33&id=1020551>. An interactive table.
5. Isometsä E. Suicidal behaviour in mood disorders—who, when, and why? *Can J Psychiatry*. 2014;59(3):120–130.
6. Sakinofsky I. Preventing suicide among inpatients. *Can J Psychiatry*. 2014;59(3):131–140.
7. Miles CP. Conditions predisposing to suicide: a review. *J Nerv Ment Dis*. 1977;164(4):231–246.
8. Isometsä E, Lonnqvist J. Suicide attempts preceding completed suicide. *Br J Psychiatry*. 1998;173:531–535.