

EDITORIAL

Building social capital and improving mental health care to prevent suicide

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This month's issue of the *IJE* carries three articles, and accompanying commentaries, on the theme of suicide. Whereas one article¹ has documented the trends of suicide in England and Wales over more than a century, the other two articles have linked national registries or census data with mortality data to explore individual determinants of suicide; namely, mental health² and religious affiliation.³ Apart from the observation that all three papers are based on nationally representative data from rich countries in Western Europe, what do their findings tell us about public health interventions for suicide?

Thomas and Gunnell's paper reports, compellingly, that the rates of suicide vary enormously over time and, reassuringly, that they have shown a steady decline in both genders in recent decades. While their study is not designed to illuminate the precise reasons for this decline, they tell us that suicide rates have been falling at the same time that a number of specific public health interventions, addressing a variety of risk factors, have been implemented in England and Wales—improvements in the care of older people (the age group that has witnessed the largest declines) and reduction in access to coal gas are perhaps the most obvious.⁴ We can also observe that, apart from a peak during the Great Depression, there were sharp falls in rates during the two world wars suggesting, somewhat tantalizingly, that the resurgence of a sense of collective solidarity that one might expect when an entire nation is threatened may confer a benefit in reducing suicide rates. The growth in equality of the two sexes may also play an important role in reduced female suicide rates in recent decades.⁴ On the downside, however, the rates in young adults have shown little change over time, so that today this age group has a similar risk to that of older people.

Gradus *et al.* describe the association between acute stress reactions, a not so well-described mental disorder, and completed suicide in Denmark. Acute stress disorder is characterized by the experience of somatic and psychological symptoms of anxiety and depression immediately after an extremely stressful

exposure and for a relatively short duration up to a few days at the most. Like many mental disorders, it is likely to be on a continuum of mental health outcomes that contemporary classifications have, often arbitrarily, sliced into categories with very blurred boundaries. So, acute stress reactions may simply be the first step in the evolution of post-traumatic stress disorders or other common mental disorders. However, the authors took care in their design to exclude these trajectories from their analyses; thus, they posit that their findings reflect the 'independent' contribution of this condition to the risk of suicide. Furthermore, the risk associated with 'both' the diagnoses of acute stress reaction and other mental disorders (e.g. depression) is larger than the risks associated with either disorder alone.

Spoerri *et al.* describe the association of religious affiliation, as recorded during a national census, and subsequent mortality through suicide, in Switzerland. Catholics, who made up nearly half the country's population in 2000, had the lowest suicide rates, whereas the 12% of the population who professed 'no religious affiliation' had a rate twice as large: Protestants were in between these two extremes. The apparent protective effect of religion appeared to be more robust for older people (in whom, assisted suicide was a major contributor to the overall suicide rates) and in women. In an age where we are often confronted with the potential of religion to divide societies and the world, it seems that being affiliated with a religion confers at least some individual health benefits. Of course, this study is not able to ascertain whether there might be a dose–response relationship (does being 'more' religious as indicated by regular attendance at church mass confer even more protection), nor, indeed, how much of this observed association is affected by residual confounding. For example, it is plausible that there are a number of confounding factors, such as those who are classified as 'not religious' including migrant or refugee groups who face a number of social adversities or who have other lifestyle risk factors for suicide such as substance use. Still, the associations reveal large effects

that are unlikely to be fully explained by these methodological limitations and point towards some protective effect conferred by religious affiliation.

What do these three studies tell us about the factors that contribute to the risk of suicide and public health interventions to address this problem? Perhaps most importantly, that suicide is an eminently modifiable health outcome and that public health interventions targeting both ecological risk factors such as access to lethal methods of suicide, and individual risk factors such as experiencing mental disorders in the context of extreme stress, may act independently (and synergistically) towards reducing suicides. Thus, it is plausible that both the reduced access to coal gas and the considerable increase in mental health literacy and access to mental health care for the common mental disorders in England and Wales may have played an important role in the downward trends observed by Thomas and Gunnell.¹

These papers also potentially tell us something about the influence of social environments on our mental health. The influence of social networks and, at a more abstract level, social capital, on mental health has been the subject of much study and debate.^{5–7} The significant dips in suicide during the world wars may indicate that solidarity that characterized the response of the population of England and Wales during the world wars (as opposed to, say, the recent wars in the Middle East) worked towards reducing suicide. On the other hand, the peak observed during the Great Depression may be linked to the breakdown in ‘bridging’ social capital⁷ during economic recessions, which affect social classes unequally. Spoerri *et al.*’s paper³ provides indirect support to this hypothesis by suggesting that religious affiliation, in this case of the shared religion of the majority of the people of Switzerland, apparently had a protective effect—an example of ‘bonding’ social capital⁷, perhaps.

Both these papers also show that reductions in suicide rates and the protective effects of religion are most evident in older age groups. Could it be, then, that while living conditions for older people have improved a great deal over the past century (not least in terms of better physical health) and they have held on to religious values despite dramatic changes in social mores in recent decades, at the same time younger people growing up in a contemporary European context face greater uncertainties, both in their occupational and personal lives, which in turn explains in part why their rates of suicide remain unchanged? All of this is entirely speculative, of course, but then there is little realistic chance of empirically testing these hypotheses and we may well have to settle for this type of observational evidence to build a case for public health interventions targeting social determinants of suicide.

Understanding and acting on the ecological and individual determinants of suicide is even more important from a global health point of view—suicide is already one of the leading causes of death in young people in low- and middle-income countries⁸ and if the factors that fuel this outcome are in fact related to social capital, then it is equally plausible that the rapid economic change that is potentially unravelling the social fabric of many societies, will inadvertently fuel suicide. There is certainly some evidence that this is indeed the case in countries such as China and India.^{9–10} Another key implication is the need to improve access to mental health care, not just limited to interventions for the more acknowledged conditions such as depression, but also various types of psychological ‘first-aid’, typically provided by well-informed members of the general community, for people who are facing extremely stressful events.¹¹ Perhaps, this too could be seen as an example of strengthening the healing powers of strong social networks through the explicit goals of being aware of and offering help to others, in our communities, who are facing difficult times.

References

- 1 Thomas K, Gunnell D. Suicide in England and Wales, 1861–2007: a time-trends analysis. *Int J Epidemiol* 2010;**39**:1464–75.
- 2 Gradus JL, Qin P, Lincoln AK *et al.* Acute stress reaction and completed suicide. *Int J Epidemiol* 2010;**39**:1478–84.
- 3 Spoerri A, Zwahlen M, Bopp M, Gutzwiller F, Egger M; for the Swiss National Cohort Study. Religion and assisted and non-assisted suicide in Switzerland: National Cohort Study. *Int J Epidemiol* 2010;**39**:1486–94.
- 4 Goldberg D. Commentary: Thomas & Gunnell’s paper. *Int J Epidemiol* 2010;**39**:1475–77.
- 5 De Silva M, McKenzie K, Harpham T, Huttly S. Social capital and mental illness: a systematic review. *Journal of Epidemiology and Community Health* 2005;**59**:619–27.
- 6 McKenzie K, Whitley R, Weich S. Social capital and mental health. *Br J Psychiatry* 2002;**181**:280–83.
- 7 Szreter S, Woolcock M. Health by association? Social capital, social theory, and the political economy of public health. *Int J Epidemiol* 2004;**33**:650–67.
- 8 Patton GC, Coffey C, Sawyer SM *et al.* Global patterns of mortality in young people: a systematic analysis of population health data. *Lancet* 2009;**374**:881–92.
- 9 Vijayakumar L, John S, Pirkis J, Whiteford H. Suicide in developing countries (2): risk factors. *Crisis* 2005;**26**:112–19.
- 10 Phillips MR, Liu H, Zhang Y. Suicide and social change in China. *Cult Med Psychiatry* 1999;**23**:25–50.
- 11 Everly GS Jr, Barnett DJ, Sperry NL, Links JM. The use of psychological first aid (PFA) training among nurses to enhance population resiliency. *Int J Emerg Ment Health* 2010;**12**:21–31.