INTERVENTION INSIGHTS

Suicidality – the challenge for public mental health services

Suicide is a devastating event, which has long-lasting effects on family and loved ones. Understandably, it is a highly emotive and political topic. Many countries including Britain, Australia and New Zealand now have national suicide prevention strategies, which acknowledge the multifactorial aetiology of suicide and the need for a broad-based community approach to its prevention (1–3). Contextual factors of importance that need to be addressed include reducing access to means (e.g. in China, reducing the availability of pesticides and rodenticides, which are commonly used as a means of suicide) and reaching agreed standards with the media, given that the media can report on suicide which can lead to increased suicidal behaviour in vulnerable individuals.

Background causes that contribute to suicidality include individual level factors such as genes and personality, macrosocial factors such as unemployment rates, and individual social factors such as substance abuse, stress and social support. A major route by which these background factors contribute to suicidality is by influencing individual susceptibility to mental illness (4). Primary prevention, however, is not yet a feasible alternative to secondary and tertiary prevention, and population-based prevention and treatment of high-risk patients must proceed synergistically (5). This relationship between suicide and psychiatric illness is important. More than two thirds of suicide completers and suicide attempters are suffering from a major depressive episode at the time of their suicidal episode, and most of these are untreated (6). Up to 15% of these patients will eventually commit suicide (7). Over their lifetime, the vast majority of psychiatric patients with bipolar disorder have either suicidal ideation or ideation plus suicide attempts (8). It is believed that about 5% of those with a schizophrenic illness (9) and 10% of those with a borderline personality disorder (10) will commit suicide. However, even for the most suicide-prone populations such as those with depression, schizophrenia and substance use disorders, prevalence rates of suicide are not greater than 1–2% per annum.

Public knowledge about suicide is limited: many people expect that mental health professionals can predict and prevent suicide when, sadly, this is generally not the case. Most of us working in mental health will have had the experience of families who expected that once suicidality was identified in a relative, it should have been possible to prevent it. The difficulty is well illustrated by Werry (11) who points out that in 2001 in New Zealand, there were 45 suicides in people younger than 20 years. A previous survey had shown that 7.8% of secondary school youths had admitted to attempting suicide within the previous year, which equates to about 18 500 attempts in the total secondary school population. This is a mortality rate of approximately 45/18 500 or 0.24%, which means that for every patient seen expressing suicidal ideation, using that as a predictor of suicide could lead to a false-positive rate as high as 99%. Compounding this massive false-positive rate, suicide is associated with a very significant rate of false negatives, i.e. people who actually commit suicide often have given no warning, or a least one that cannot be forcibly acted on before the event. De Leo et al. (12) conducted randomised telephone interviews of more than 11 000 people and found that almost half of the people who had attempted suicide had contended with their suicide crisis by overdrinking alcohol and that less than 30% of subjects went to hospital after their suicidal behaviour.

Recently, examination of data in our own area of Geelong, Australia, comparing the number of suicides that our area mental health service became aware of, compared with conclusions from the coroner, showed that in the 1990s, the service had some prior contact with approximately one in five suicides. Recent data from 2000 to 2007 are showing us that we are now aware of one in three suicides, although the overall number of suicides in the region has not increased. This reflects the fact that we are now seeing approximately 1.6% of the population annually compared with 0.8% of the population annually in the second half of the 1990s. From the services' perspective, without this background information, there would appear to be an increase in suicide numbers in the region, whereas this appears to reflect increased service coverage.

To those who run public mental health services, it is essential that their clinicians make efforts to distinguish between those who verbalise suicidal thoughts and those who were at true risk of suicide in order to be able to operate cost-effective services. This becomes even more important with the trend for public services to see more people for shorter periods of time (an essential dimension of being able to identify serious illness and intervene earlier). Of course, as we see more acutely ill people, we are more likely to see patients who will carry through on their suicidal ideation.

This raises a number of issues for those who plan and manage modern psychiatric services. First, the huge false-positive rate

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of up to 99% would lead to a paralysing inefficiency in use of available resources to hospitalise most people who express suicidal ideation (and almost certainly would be detrimental to many from a therapeutic viewpoint), and we must support our staff who make these difficult decisions every day and acknowledge that failing to identify people who will go through with suicide threats is inevitable.

Related to this, it must be recognised that in planning and managing services generally and particularly when making decisions in emergency departments and acute units with respect to admission and discharge, there is often a tension between providing the best therapeutic approach and managing risk. Perhaps, the management of those with a diagnosis of borderline personality disorder exemplifies this most, where interventions leading to a reduction in self-determination or ability to take responsibility for one's own actions, such as forceful incarceration, are counter-productive from a therapeutic point perspective.

So what can be performed by public mental health services to minimise the frequency of this disastrous outcome? Appleby et al. (13) in the UK National Confidential Enquiry into Suicide and Homicide by People with Mental Illness found that in approximately 22% of suicides in the community and 30% of in-patient suicides, the suicide seems to have been preventable. In an in-depth audit of 102 suicides in New Brunswick in Canada, Seguin et al (14) found that 12% of suicides were preventable, while 63% had elements suggesting that they could have been prevented. In summary, therefore, the task for those who work in public mental health services is to identify and treat serious illness as well as possible. Screening of all people who present with self-harm to their emergency department by psychiatrically trained staff is desirable, and consideration can be given to using screening for risk using established clinical tools (15,16). All those with a history of a serious suicide attempt should be admitted for a period of assessment. A number of studies have shown that it is in the period immediately after admission and in the weeks following discharge that suicide risk is highest (17,18). Clearly focused attention and repeated re-assessments of risk can be directed to these periods. Public health interventions that emphasise mental health literacy, mental health first aid and stigma reduction are potentially valuable. Helplines offer an accessible and timely resource. These resources interface with public and private psychiatric services as well as with primary care.

Despite the enormous amount of literature and research in the area of suicide prevention, it remains an imperfect art (19). The challenge for public mental health services is complex; in particular maintaining a balance between providing optimal therapeutic conditions and minimising risk of suicide. We are left with little beyond the obvious guidance – that assessment must be carefully carried out and that attention needs to be given to the period immediately after admission and after discharge. While we attempt to improve quality of assessment and care in these areas, we must also support our staff in what is often a stressful role where they sometimes must feel they can never win.

Thomas Callaly[1], Michael Berk[1,2,3,4], Seetal Dodd[1,2]

[1]Community and Mental Health, Barwon Health, Geelong, Victoria, Australia; [2]Department of Clinical and Biomedical Sciences, Barwon Health, University of Melbourne, Geelong, Victoria, Australia; [3]The Geelong Clinic, Geelong, Victoria, Australia; and [4]Orygen Research Centre, Parkville, Victoria, Australia

Dr Tom Callaly,
Swanston Centre,
PO Box 281,
Geelong, VIC,
Australia.
Tel: +61 3 5226 7490;
Fax: +61 3 5226 7454;
E-mail: thomas@barwonhealth.org.au

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