

Suicide prevention: the evidence on safer clinical care is now good and should be adopted internationally

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Suicide rates appear to be rising in many countries and the presumed cause is the global economic downturn (Stuckler et al, 2011). Certainly there is a convincing history of increased suicide risk at times of financial crisis - the 1930s, the early 1980s in the UK and other countries, the late 1990s in the Far East. It would be wrong, however, to rely on historical precedent in understanding the impact of recession and in making plans for prevention. The people at risk may be different – while the recession in the 1980s in England affected suicide rates in young men in social class V, the early signs are that this time the rise is smaller but wider, affecting women as well as men and a wider age range, reflecting the fact that recession for some people is about unemployment, while for others it is about debt, mortgage arrears or the value of their pension.

Nor should we assume that a recession-induced rise in suicide is a social rather than a clinical phenomenon. Mental health patients may be particularly vulnerable to unemployment and other hardships and to cuts in the care they receive. There are signs, despite an overall fall in patient suicide in England in the past decade, that the figures have recently begun to rise (National Confidential Inquiry, 2011a). How should services respond?

There are broadly two approaches to suicide prevention – one targeting the whole population and one high-risk groups. In practice, they are not as separate as they appear. Many whole-population measures target certain groups in particular and many interventions targeted at groups carry a broader benefit.

Whole-population approaches to suicide prevention include promoting better emotional health

in schools or the workplace, and reducing alcohol consumption and drug misuse. They also include clinical practices designed to lower community morbidity rates, such as better identification and treatment of depression in primary care. And they extend to the social causes of depression, such as loneliness and poverty, and to the way a society supports people facing stresses such as bereavement or debt, bearing in mind that those who are facing money problems in a recession need financial advice before they need therapy.

What can mental health services do to prevent suicide?

A fundamental question for suicide prevention internationally concerns the management of risk in mental healthcare. After all, suicide is arguably the most serious outcome of mental illness, taking into account its frequency and the young age of many victims. Although every clinician has the experience of intervening successfully when suicide seems imminent, how can these individual successes be turned into something systematic, a service in which suicide is routinely prevented?

In the UK the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCI) collects information on all suicides by current and recent patients, identifying the antecedents and the clinical circumstances in which they occur (www.medicine.manchester.ac.uk/mentalhealth/research/suicide/prevention/nci/). The data-set currently stands at around 21 000 patient suicides; it is this sample size that makes it possible to study specific aspects of care and to base recommendations on common patterns.

In England, there have been falls in the numbers and rates of patient suicide since NCI reports first appeared in 1999, although cause and effect are hard to show (National Confidential Inquiry, 2011a). Suicides by in-patients fell from 214 in 1997 to 94 in 2008, the fall coinciding with a focus in the NCI and in mental health policy on examining ward safety. Ward suicides by hanging or strangulation fell from 54 to 14 annually over the same period, apparently driven by a policy of removing ligature points, based on NCI findings. Suicides following treatment refusal fell from around 250 to around 150 annually, at a time when NCI recommendations and national policy called for more acceptable drug treatments and assertive outreach teams (National Confidential Inquiry, 1999).

Controlled studies linked to this national project have provided evidence that more care leads to less risk. In one, suicide in community patients was associated with recent reductions in drug dosage, supervision or appointment frequency (Appleby *et al*, 1999). In another, suicide prevention in inpatients was linked to detention under the Mental Health Act (Hunt *et al*, 2007).

Recently, a longitudinal study has examined the possible impact of nine clinical recommendations, taken from NCI findings, on suicide rates in mental health patients attending services across England (While et al, 2012). The study reported three main findings. First, patient suicide rates were lower in services where at least seven of the recommendations had been implemented. Second, patient suicides fell after the date of implementation. Third, recommendations that targeted a specific patient group were associated with a fall in suicide in that group. For example, a recommendation on early follow-up following hospital discharge was followed by a fall in post-discharge suicides, and a recommendation on assertive outreach teams was followed by falls in suicide among patients who were refusing treatment or losing contact with the service.

The problem of risk recognition

The NCI reports consistently show that over 80% of patients who die by suicide are seen by their clinical teams as low risk (National Confidential Inquiry, 2006, 2008, 2011b). There are a number of possible explanations for this. Risk factors for suicide are common and distinguishing imminent high risk from 'general' risk can be difficult. But clinicians may also become desensitised to risk, or may be overinfluenced by the absence of suicidal ideas at the time of assessment, despite the long-standing presence of risk factors such as isolation or alcoholism.

This problem of risk recognition suggests that major reductions in patient suicide cannot be achieved by focusing on patients at conspicuous high risk - only around 2% are in this group. Suicide prevention requires us instead to build safety into the system of care. It means strengthening for all patients the weak points in the service - the first week after hospital discharge, the lack of dualdiagnosis expertise, the frequent absconding from wards. The checklist model of risk assessment, currently the basis of an entire risk industry in mental health, is of limited benefit and can be harmful. Although it can help to keep long-standing risk factors in a clinician's mind, it can also be falsely reassuring in cases of moderate risk. Good risk management takes more than a checklist: it needs the right skills in frontline staff, supervision from experienced clinicians and comprehensive services in which the weak points have been reinforced.

How can we learn from national strategies?

In the past 25 years several countries have developed national suicide prevention strategies to give coherence to preventive measures across a number of sectors. Finland was the first to develop such a strategy, in 1986, and it has been followed

by Australia, New Zealand and several European countries. Most national strategies are variations on the same themes, despite being drawn up independently. Most are a combination of whole-population initiatives, often linked to broader strategies on mental health and well-being, and measures aimed at high-risk groups such as mental health patients, young men or prisoners. Most combine national programmes with local actions. Some are linked to target reductions in suicide rates.

Evaluation has been limited. A review of interventions (rather than strategies) supported only the education of physicians and the restriction of suicide methods (Mann *et al*, 2005). The findings of the NCI mainly appeared after the review.

In England, a new suicide prevention strategy was recently launched for public consultation (Department of Health, 2011). It is built around six main actions: reducing suicide in high-risk groups; providing tailored approaches to mental health-care for a number of vulnerable populations; reducing the availability or lethality of certain suicide methods; better support for families who are bereaved by suicide or worried about a suicidal relative; safer presentation of suicide in the media and on the internet; and more information and research.

The previous strategy was published in 2002 to achieve a national target to reduce suicide by 20%. In the period following publication, the general population suicide rate in England dropped to the lowest recorded figure for 150 years. Suicides in young men – the group causing most concern 15–20 years ago in many countries – fell by a third. There were substantial falls in suicide among mental health in-patients – both numbers and rates (Kapur *et al.*, 2006) – and prisoners (National Confidential Inquiry, 2011c).

As with most such strategies, there has been no formal evaluation and impact has to be inferred from changes in suicide rates. By that yardstick, the English strategy can claim significant success. Realistically, however, falling rates in the past decade seem likely to reflect three things:

- 1 improving economic circumstances (at least earlier in the period)
- 2 better recognition of risk in a range of frontline agencies
- 3 specific steps to prevent suicide in settings such as prisons and by methods such as self-poisoning with paracetamol (Hawton *et al*, 2001) or co-proxamol (Hawton *et al*, 2009).

A national strategy can claim to contribute to (2) and (3) but not to (1) and it is this vulnerability of suicide rates to deteriorating economic circumstances that now presents a major test of suicide prevention strategies across the world. The next few years will show whether they can respond quickly to the rapidly developing effects of recession. It will also become clearer whether national policy-makers can become less insular, whether

they are prepared to learn from each other's experiences, both good and bad. There is now no shortage of evidence on how clinical services and health policies can reduce suicide. What we lack is an effective forum where a rigorous examination of international evidence can take place, with the findings translated into actions across the many countries where deaths from suicide are now on the rise.

References

Appleby, L., Dennehy, J. A., Thomas, C. S., et al (1999) A case control study of aftercare and clinical characteristics in suicides by people with mental illness. *Lancet*, 353, 1397–1400.

Department of Health (2011) Consultation on Preventing Suicide in England. A Cross-Government Outcomes Strategy to Save Lives. DH.

Hawton, K., Towsend, E., Deeks, J., et al (2001) Effects of paracetamol and salicylate legislation in the United Kingdom: opportunistic before and after study of suicide, liver transplantation, and self-poisoning and its consequences. *BMJ*, 322, 1203–1207.

Hawton, K., Bergen, H., Simkin, S., et al (2009) Impact of withdrawal of co-proxamol: time series analysis of prescribing and drug poisoning deaths in England and Wales. BMJ, 338, b2270.

Hunt, I. M., Kapur, N., Webb, R., et al (2007) Suicide in current psychiatric in-patients: a case–control study. *Psychological Medicine*, 37, 831–837.

Kapur, N., Hunt, I., Webb, R., et al (2006) Suicide in psychiatric in-patients in England, 1997–2003. *Psychological Medicine*, **36**, 1485–1492.

Mann, J. J., Apter, A., Bertolote, J., et al (2005) Suicide prevention strategies: a systematic review. *JAMA*, 294, 2064–2074.

National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (1999) *Safer Services*. Department of Health.

National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (2006) *Avoidable Deaths*. National Patient Safety Agency.

National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (2008) Lessons for Mental Health Care in Scotland. Scottish Government.

National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (2011a) Annual Report: England, Wales, and Scotland. National Patient Safety Agency.

National Confidential Inquiry into Suicide and Homicide by People with Mental Health (2011b) Suicide and Homicide in Northern Ireland. National Patient Safety Agency.

National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (2011c) A National Study of Self-Inflicted Deaths in Prison Custody in England and Wales from 1999–2007, 9 Year Report. Department of Health.

Stuckler, D., Basu, S., Suhrcke, M., et al (2011) Effects of the 2008 recession on health: a first look at European data. *Lancet*, **378**, 124–125.

While, D., Bickley, H., Roscoe, A., et al (2012) Implementation of mental health service recommendations in England and Wales and suicide rates, 1997–2006: a cross-sectional and before-and-after observational study. *Lancet*, 379, 1005–1012.



The global spread of clinical trials

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Behavioural and Brain Sciences Unit, Institute of Child Health, London, UK, email d.skuse@ There has been considerable publicity recently in the UK concerning the threatened contraction of the country's pharmaceutical industry. The UK currently has the third highest share of global pharmaceutical research and development expenditure (after the USA and Japan), but the costs of conducting research in the UK are rising.

In February 2011, Pfizer announced it would be closing its entire research and development (R&D) facility in Sandwich, Kent, with the loss of 2400 jobs. *Nature* (1 February 2011) commented that UK governments had repeatedly been warned that the country is perceived as being unfavourable to medical research, although Pfizer claimed its decision was not made on those grounds. The Academy of Medical Sciences recently produced a report expressing concern that it is exceptionally difficult to get ethical approval for clinical trials in the UK (Academy of Medical Sciences, 2011). It

made recommendations for reform of the 'much maligned' European legislation on the matter.

While the number of clinical trials approved in the UK has not dropped significantly in recent years, the UK's global share of patients in trials plummeted from 6% in 2004 to just 2.5% in 2008. It takes an average of 621 days in the UK from the award of a research grant through to the first patient entering a trial, compared with 30–60 days in Canada, because of the complexities of the current system. The chair of the Academy working group that produced the report, Michael Rawlins, highlighting the difficulty getting permission for a funded trial to be enacted, commented: 'at the moment nobody knows half the time where to go and what to do' (quoted in the same issue of *Nature*).

In light of the problems encountered here, and to a similar degree in the USA, it is hardly surprising that 'Big Pharma' has turned to low- and middle-income countries to conduct trials. The attraction of countries where legislation on ethical