

## Why are we not getting any closer to preventing suicide?

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In humanistic domains such as ethics, philosophy and anthropology the debate on the legitimacy of preventing suicide seems to have proceeded in parallel with the history of human development (Minois, 1999). Even in the medical world, where suicide has been acknowledged as a primary public health problem within the past century, and where the World Health Organization declared the fight against suicide as a priority for the first time in the year 2000, there is disagreement about the effectiveness of preventive efforts (Wilkinson, 1994). There are many reasons for such scepticism, all of them more or less centred on the extreme complexity of the suicide phenomenon and its relative rarity. A recent *World Health Report* (World Health Organization, 2001) calculated the number of recorded suicide deaths to be 815 000 worldwide (0.0135% of the global population), a burden slightly lower than the estimate of 1 million published in an earlier technical report dedicated to suicide (World Health Organization, 1999).

### TRADITIONAL DIFFICULTIES

Despite the huge amount of literature and research on the topic, prevention of suicidal behaviours, both fatal and non-fatal, remains an imperfect art based on scant scientific evidence (Hawton *et al*, 1998). The most commonly cited reasons for this are inadequate sample sizes for randomised, controlled studies (Gunnell & Frankel, 1994), and programmes of insufficient duration (Goldney, 2000). Moreover, there are numerous biases inherent in suicide research, notably the use of people who have attempted suicide as research participants; such people only minimally overlap suicide completers, and their use implies the hypothesis of a continuum between non-fatal and fatal suicidal behaviour. Other sources of bias are difficulties in creating clusters of participants with similar

problems (e.g. problems within similar dyadic relationships), the use of retrospective evaluations, the lack or inadequacy of control groups, and the design of psychological investigations performed on proxies of the deceased (psychological autopsies) (Hawton *et al*, 1998). On the other hand, little is known (because they are poorly investigated) about factors that are likely to protect against suicide, such as coping skills, problem-solving capabilities, social support and connectedness. Indeed, the multi-determined dimension of suicide poses *per se* enormous difficulties, even at the level of conceptual models of development of the suicidal process. Clearly, it would be much easier to investigate the prevention of a phenomenon provoked by just one or two possible causes.

### Less traditional (more neglected) difficulties

Multi-disciplinary approaches to the prevention and investigation of suicide are often flagged up but virtually never practised. Research teams have difficulties in achieving a balanced composition between biologically and psychologically oriented investigators (both equally important in the study of suicide). This is further complicated by the need to evaluate also other important concomitant factors, such as socio-economic, cultural and religious aspects. A classic example of the impact of non-biological or psychological/psychiatric factors on suicide rates is provided by the observation of epidemiological data on a century of suicide mortality in Western countries. Socio-economic events (wars, major economic fluctuations) produce tremendous fluctuations in suicide mortality, particularly in men. The intrinsically large-scale nature of those events provoked effects that, if applied deliberately, would be incomparably bigger than any well-targeted anti-suicide initiative (World Health Organization, 1998).

Understandably, the controllability of social events remains hypothetical and their relevance to suicide prevention largely speculative. However, the impact of socio-cultural phenomena should be considered when evaluating suicide prevention programmes, although their interference might render interpretation of outcomes virtually impossible. Categorisation and quantitative/qualitative analysis of these contributory characteristics represent a considerable challenge for every researcher, a process that commonly ends by provoking a rather limiting prioritisation of the many variables involved. Apart from the field of competence of researchers, other factors such as personal attitudes and ideologies, means and funding availability play a major part in hindering the development of meaningful research and prevention on suicide.

Lessons can be learned from approaches to the prevention of life-threatening conditions such as ischaemic heart disease. A significant reduction in mortality from ischaemic heart disease has been achieved only by addressing a wide range of factors: knowledge of family predisposition, exercise, dieting, smoking cessation, cholesterol level control, sophisticated diagnostic techniques that allow early intervention, treatment in highly specialised intensive care units, bypass and angioplastic surgery, and personalised rehabilitation programmes have all contributed to substantial improvements in survival rates and mortality reduction. Suicide is a much more complex phenomenon than myocardial infarction, so it seems illogical that strategies to fight suicide have to be simpler or less integrated than the struggle against coronary artery disease.

### TRENDS IN SUICIDE RATES

Western countries are facing a general decline in suicide rates that seems reasonably unrelated to the existence of any national plan. Reductions in suicide rates have occurred not only in Finland, Sweden, Norway and Denmark (which had or have a structured strategy), but also in nations such as Hungary and The Netherlands which, like most Western countries, do not possess a national prevention programme. The presence of a 'cohort effect' (the ensemble of environmental factors that connote a certain generation) and of its relative size has been postulated several

times in suicidology (see, for example, Cantor *et al.*, 1999), although a clear description of the relevant environmental factors (or a hierarchy of their importance) has never been provided. In any case, the fundamental influence of cultural differences means that cohort effects are unlikely to be universally applicable. For example, the American example of the generation born after the Second World War (the 'baby boomers', characterised also by increased suicidality) has not proved fully valid in the European context (Bille-Brahe & Andersen, 2001). Moreover, the marked decline of suicide rates in the elderly over the past 30 years recorded in predominantly Anglo-Saxon countries has not been paralleled by a similar trend in Latin nations for the same generations (De Leo, 1999).

After many years of worrying increases in rates of youth suicide in nearly all Western countries, a remarkable decline is now occurring. The motives for such trends are puzzling researchers to the point that the International Association for Suicide Prevention has created a task force, headed by David Shaffer in New York and Annette Beautrais in Christchurch, New Zealand, to study the phenomenon from a transcultural perspective. In addition, the World Health Organization headquarters is promoting a new study, the Suicide Prevention–Multi-site Intervention Study on Suicide (SUPRE–MISS), with centres on the five continents, which includes a randomised clinical intervention for people attempting suicide, a biological investigation (into DNA and stress-related hormones), and the comparison of a number of socio-cultural indicators (World Health Organization, 2002).

### INSIDE THE LABYRINTH OF ANTI-SUICIDE STRATEGIES

The conflict between political convenience and scientific adequacy in suicide prevention is usually resolved in favour of the former. Thus, strategies targeting the general population instead of high-risk groups (psychiatric patients recently discharged from hospital, suicide attempters, etc.) may be chosen not on the basis of rigorous calculations (Lewis *et al.*, 1997) but just because they might affect a much larger number of individuals and institutions, especially if the desired outcomes also include a number of conditions frequently

associated with suicidal behaviours (such as poor quality of life, social isolation, unemployment and substance misuse). Indeed, although a reduction in suicide mortality should be the primary outcome of suicide prevention, interventions that target associated conditions appear more rewarding from a political perspective, especially in the light of the limited duration (3–5 years) that normally characterises the funding government. Many governments do not even fix targets in terms of reduced mortality, nor encourage stringent evaluative practices, because when the time comes for evaluation the term of that government is likely to be over.

Thus, for the above-mentioned reasons and many others not commented on but for which review articles are available (e.g. Gunnell & Frankel, 1994), suicide prevention remains essentially a land of hopes and promises but not of certainties. This should not induce discouragement, but must be interpreted as a stimulus to do more and do it better, while endeavouring to avoid past mistakes such as the uni-dimensional interpretation of suicide, the previous abundance of 'epidemiological safari tours' in developing countries – there is a growing awareness of the sterility of many epidemiological investigations (Eagles *et al.*, 2001) – and the use of popular but largely empty slogans such as 'community capacity building', which lack concrete application.

Moreover, countries should not rely on epidemiological surveys and prevention strategies developed elsewhere. Cultural factors have a major role in suicidal behaviour (Vijayakumar & Rajkumar, 1999) and there are huge differences in the dimension and characteristics of this problem around the world. As an example, the average ratios between the lowest and the highest suicide rates internationally are as large as 1:102.4 for men and 1:35.8 for women (Schmidtke *et al.*, 1999). Cross-cultural comparisons, such as the World Health Organization/EURO Multicentre Study of Suicidal Behaviour (Platt *et al.*, 1992) and the more recent SUPRE–MISS, should be encouraged. They may improve our understanding of causative and protective factors, and consequently help to reorient prevention strategies. Detailed discussion of supposed 'best practices' in the prevention of suicide are beyond the scope of this editorial but are offered, for example, by the World Health Organization (1998) and De Leo *et al.* (2002).

### CONCLUSION

Despite the strong association between mental disorders and *mors voluntaris*, suicidal behaviour attracts little interest among contemporary psychiatrists, as witnessed by the low number of contributions to suicidology journals. As a consequence, little is new in suicide prevention, and the current recommendations and traditional wisdom are hardly supported by an acceptable level of evidence. Greater use of antidepressant drugs to prevent mood disorders, functional neuroimaging, and genetic and psychometric screening for early detection of impulsive behaviour and suicide proneness seem to hold promise for future prevention strategies. A more rigorous use of available knowledge now seems to be a legitimate expectation.

Suicide research requires major investment, using multi-disciplinary teams to set up more integrated approaches for large-scale, long-term and thoroughly evaluated projects. 'Think big' – to paraphrase the World Health Organization's motto with a famous entrepreneurial slogan of the 1980s – really seems to capture today's priority in suicide prevention. If lack of substantial scientific evidence continues to characterise this area, loss of interest and progressive withdrawal of investment are inevitable. Cooperation between scientists, administrators and politicians is needed more than ever, with a higher level of planning and organisation. Only in this way we can come closer to preventing suicide.

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### DECLARATION OF INTEREST

None.

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