Suicide prevention in developing countries: where should we start?

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According to data from the World Health Organization (WHO), 85% of suicides in the world occur in low and middle income countries (1), but much less than 10% of published research on suicide comes from these countries. Given the huge economic and sociocultural differences between developed and developing countries, it is unlikely that research results and prevention programs from Western countries will be relevant to developing countries. Developing countries can, however, adapt the research methods, program development process and program monitoring methods that have evolved in high income countries (2) to help their own efforts to understand and prevent suicide.

In many developing countries suicide remains a taboo subject, because of political, religious or social sensitivities. Local research projects on suicide can be conducted in such an environment, but prevention efforts require the cooperation of many community and government agencies. Therefore, prevention cannot truly start until this taboo is directly addressed. To do this, experts in each country who are aware of local sensitivities about suicide need to be identified and supported in their efforts to mobilize community and government participation in the suicide prevention effort. This will involve: a) the development of local centers of excellence which can provide reliable information on the pattern, characteristics and risk factors for suicide; b) the appropriate interaction with the media to bring the magnitude of the problem and the need for prevention to the attention of the public in ways that decrease, rather than increase, the political or social sensitivity of the issue; c) high-level meetings with government agencies and other interested actors to promote the development, implementation and monitoring of national and local suicide prevention plans; d) a gentle but persistent pressure from international organizations such as the WHO and the International Association for Suicide Prevention (IASP) to encourage national participation in the international effort to address this important public health problem.

Developing countries that have undergone the "epidemiological transition" (i.e., in which the relative importance of infectious diseases is less than that of chronic diseases) are now committing more resources to non-infectious causes of mortality and morbidity, so there is a real opportunity to get suicide on the "social agenda" in these countries. But once public and government attention has focused on suicide, there is often a strong temptation to immediately institute widespread prevention programs prior to any systematic confirmation of their effectiveness. This has happened in all developed countries, and there is a real danger that developing countries will follow the same course, squandering limited resources on unproven interventions. Strong advocacy is needed at both the national and international level to ensure that science precedes action.

What interventions should be considered in developing countries? Given the great differences between countries and regions, there can be no "standard" model of suicide prevention. Each country must first conduct its own research on the risk factors and protective factors for suicidal behavior in its different communities (e.g., urban and rural communities, religious minorities, different age groups, etc.) and then develop and test the prevention strategies that are most feasible, affordable and likely to produce substantial decreases in the

rates of suicidal behavior. Given the complex interactions of biological, psychological and social risk factors for suicide (3), prevention programs that simultaneously address multiple factors would appear to be most appropriate. For example, in China we have proposed the following types of interventions: a) restricting access to suicide means, particularly pesticides and toxic drugs; b) expanding social support networks for high-risk groups; c) implementing health promotion campaigns focused on mental health and suicide; d) improving health providers' ability to recognize and manage the psychiatric problems associated with suicide; e) instituting community-based screening programs to identify high-risk individuals; f) expanding crisis support services and targeted mental health services for high-risk individuals; g) increasing the ability of primary care facilities to manage the medical complications of suicide attempts.

Assessment of the effectiveness of such interventions depends on accurate information on the rates and pattern of suicidal behaviors over time. Thus, before implementing any prevention program, high-quality, ongoing monitoring systems for suicide and attempted suicide must be developed and tested in the target locations. This is a major challenge in developing countries that have no regular monitoring of attempted suicides and, generally speaking, a poor monitoring of completed suicides. Monitoring both attempted and completed suicides is essential to the assessment of prevention programs, because there is a substantial overlap of these behaviors in situations where many attempted suicides (with a low intent to die) employ highly lethal means and where resuscitation services are not available or ineffective – a common situation in rural areas of developing countries (4). Moreover, in almost all developing countries there is a strong tendency to underreport or misclassify suicide and attempted suicide (5,6), so it is not appropriate to base assessment of the effectiveness of prevention efforts on existing data systems, because relatively small fluctuations in the proportions of misclassified suicides (which could occur due to the attention placed on suicides during an intervention program) could result in substantial changes in reported suicide mortality and morbidity and, thus, be misinterpreted as evidence for or against the utility of the intervention(s) being assessed. New and better monitoring systems are needed first.

Generating the political will, obtaining the necessary resources and identifying and training the personnel needed to develop, implement and monitor effective suicide prevention programs in developing countries will require sustained effort over several years by a core of committed local advocates, as well as substantial intellectual, moral and financial support from colleagues and organizations in developed countries. Expending these resources has several potential benefits: a) the relatively high rates of suicide and attempted suicide combined with the lack of any suicide preventive activities in many developing countries provides a unique opportunity to scientifically test the cost-effectiveness of specific interventions in ways that can no longer be done in developed countries; b) the information generated from work in developing countries will challenge and reinvigorate Western theories about suicide; c) (most importantly) this work can potentially prevent large numbers of unnecessary deaths.

References

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