Suicide: A Preventable Public Health Problem

WD Abel, JS Martin

In this issue of the Journal, there are reports on suicide in Japan (1–3) and a report on parasuicide attempts with Acetaminophen in Jamaica (4). This presents a timely opportunity to explore this major yet preventable public health problem. Suicide accounts for 1.4% of the Global Burden of Disease (5). The WHO projects that by the year 2020 approximately 1.53 million persons will die from suicide and another 10–20 persons will attempt suicide worldwide. In the United States of America, it was reported as the eleventh leading cause of mortality in 2004 and the third leading cause of death in persons in the age range 15–44 years globally (6, 7).

The prevalence data on suicide is limited as many countries do not have reliable systems for the collection and reporting of suicide data. WHO statistics on suicide which allow for cross-national comparison indicate marked variation in suicide rates worldwide. Countries in Eastern Europe are among those reporting the highest suicide rates: Lithuania 42 per 100 000, Russia 38 per 100 000, Belarus 35 per 100 000 and Ukraine 26 per 100 000. Several other European countries fall within the medium range: Belgium 21 per 100 000, Finland 20 per 100 000, Switzerland 18 per 100 000 and Austria 18 per 100 000, and Japan 23.8 per 100 000. Countries in Latin America have suicide rates which fall within the lower range: Costa Rica 6.9 per 100 000. A number of Muslim countries also record low suicide rates eg Kuwait [0.1 per 100 000] (7). For countries in the Caribbean, the WHO data indicate a suicide rate of 12.8 per 100 000 (7) in Trinidad and Tobago, this compares favourably with a previous study by Nehall who reported a suicide rate of 13.6 per 100 000 in Trinidad and Tobago (8). The suicide rates for St Vincent and Puerto Rico are 7.7 and 6.2 per 100 000 respectively. There is no completed WHO data on suicide for Jamaica. However, in an unpublished study, Abel et al have noted suicide rates in Jamaica varying between 1.8 and 2.7 per 100 000 over the period 2002 to 2006. The suicide rate for males (3.6–5.2 per 100 000) was higher than that of females (0.5–0.9 per 100 000) for the period under study.

A trawl of the literature indicates that multiple risk factors for suicide have been reported including: increasing age, male gender, lack of social support, unmarried status and

From: Department of Community Health and Psychiatry, Section of Psychiatry, The University of the West Indies, Kingston 7, Jamaica.

Correspondence: Dr WD Abel, Department of Community Health and Psychiatry, Section of Psychiatry, The University of the West Indies, Kingston 7, Jamaica. E-mail: wendel.abel@uwimona.edu.jm

mental disorder which accounts for 90% of suicide (9, 10). Recent trends indicate an increase in suicide rates among young people (7). Runeson *et al* reported that the rate of suicide was twice as high in families of suicide victims as in comparison families and that a family history of suicide predicted suicide independent of severe mental disorder (11).

In Jamaica, Pottinger *et al* reported that having a poor relationship with the primary caregiver and a history of abuse were risk factors associated with suicidal behaviour (12).

One of the challenges faced in the determination of suicide rates is that of under-reporting as suicide is associated with high levels of silence, stigma and shame worldwide. Another challenge is the variation in methodology for data collection. In many countries, data are collected by the police who often do not have a well developed data collection system; while in other jurisdictions, suicide data are based on information on death certificates which is often associated with misreporting and erroneous information.

Caution must be taken in the interpretation of data indicating correlations such as unemployment rates and changes in divorce and birth rates as the causes of suicide are multifactorial and it is therefore important to control for these variables. Suicide is a preventable public health problem. The WHO has made a call for a coordinated and intensified global action to address this global problem (13).

Greater efforts must be directed towards strengthening the data collection system on suicide worldwide in order to ensure that consistent and reliable data are available to facilitate planning and programme development. Furthermore, efforts must be directed towards devising and implementing culturally appropriate programmes to facilitate the early detection of substance abuse and mental disorders. Finally, the formulation of a comprehensive public health policy and the development of empirically based prevention and treatment programmes are critical to achieving a sustainable reduction in suicide.

REFERENCES

- Inoue K, Tanii H, Fukunaga T, Nata M, Kaiya H, Nishimura Y et al. Changes in the divorce and birth rate correlate with the suicide rate in Japan. West Indian Med J 2008; 57: 182.
- Inoue K, Tanii H, Okazaki Y, Kaiya H, Fukunaga T. The correlation between unemployment and suicide rates in Gifu Prefecture, Japan. West Indian Med J 2008; 57: 183.
- Fujita Y, Inoue K, Tanii H. Present and future subjects of suiciderelated reports in Japan. West Indian Med J 2008; 57: 184.
- Mills MO, Lee MG. Acetaminophen overdose in Jamaica. West Indian Med J 2008; 57: 132–4.

80 Suicide

 Murray CJL, Lopez, AD. The Global Burden of Diseases, Vol. 1. Boston: Harvard School of Public Health, 2004.

- Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS).
- World Health Organization World Mental Health Survey Initiative. Geneva: World Health Organization.
- Nehall J. An analysis of psychiatric inpatient admission for a defined geographic catchment area over a 1 year period. West Indian Med J 1991; 40: 15–21.
- Nock M, Borges G, Bronet EJ, Alonso J, Angermeyer M, Beautrais A et al. Cross-national prevalence and risk factors for suicidal ideation, plans and attempts. Br J Psychiatry 2008; 192: 98–105.
- Beutralis A. Suicide and serious suicide attempts in youth: a multiplegroup comparison study. Am J Psychiatry 2003; 160: 1093–9.
- Runeson B, Asberg M. Family history of suicide among suicide victims. Am J Psychiatry 2003; 160: 1525–6.
- Pottinger AM, Milbourn P, Leiba JW. Suicidal behaviour and risk factors in children and adolescents in Jamaica. West Indian Med J 2003; 52: 127–30.
- World Health Organization. Prevention of suicide: guidelines for the formulation and implementation of national strategies. Geneva: World Health Organization, 1996.