Mental health

Assessing suicide and self-harm risk in adolescents

The incidence of suicide in adolescent boys is more than twice that among adolescent girls, whereas non-fatal self-harm is much more common in girls than boys, an English retrospective database study has found.

Data were obtained for the period January 2011 to December 2013 from national mortality statistics and a multicentre study of general hospital presentations for self-harm (intentional self-poisoning or self-injury). Death with undetermined intent was also classified as suicide. Data on self-harm in the community were obtained from a questionnaire survey of schoolchildren carried out in 2015.

During the three-year study period, 171 adolescents aged 12-17 years died by suicide: 119 boys and 52 girls. During the same period, 1,320 adolescents presented to the five participating general hospitals following an episode of non-fatal self-harm: 292 boys and 1,028 girls.

The community survey found that 322 (6%) out of 5,506 participating students reported self-harm during the past year (self-injury or overdose): 72 male and 250 female students. Most suicides (78%) and hospital self-harm presentations (74%) occurred in the 15-17 years age group, whereas self-harm in the community was equally common in younger (12-14 years) and older (15-17 years) children.

The authors liken suicidal behaviour to an iceberg, the tip of which is the highly visible but rare event of suicide. Below this are the higher rates of hospital-treated self-harm and at the base is the very common but largely hidden phenomenon of self-harm in the community.

Table 1

Warning signs for adolescent suicide[3]

- Sudden change in behaviour
- Apathy
- Withdrawal
- Change in eating patterns
- Unusual preoccupation with death or dying
- The giving away of valued personal possessions
- Signs of depression
- Moodiness
- Hopelessness

The iceberg representing suicidal behaviour in girls has a smaller tip and is much deeper than the iceberg representing suicidal behaviour in boys.[1] In the 12-14 years age group, for every male suicide there were 109 hospital presentations of self-harm and 3,067 individuals reporting self-harm in the community. For every female suicide, there were 1,255 hospital presentations of self-harm and 21,995 community cases. In the 15-17 age group, the ratios were 1:120:838 in boys and 1:919:6,406 in girls.

Hanging or asphyxiation was the most common method of suicide, 125 out of 171 cases (73%), self-poisoning was the most common hospital presentation of self-harm, 849 of 1,195 cases (71%) and self-cutting the most common method of self-harm in the community, 286 of 322 cases (89%).

The UK Office for National Statistics classifies death with undetermined intent as suicide for those aged 15 years and over, but not for those aged 10-14 years. The reason given is that there is a possibility that the deaths in the younger age group were caused by unverifiable accidents, neglect or abuse.[2] However, the present study does classify these deaths as suicide. I do not know which is the right approach but this illustrates the problem of defining suicide for research purposes.

Mental health disorders, particularly mood disorders, are the most important risk factor for adolescent suicide and it is vital to recognise and treat adolescent depression. However, this can be difficult as young people often present with somatic symptoms or behaviour problems. Other risk factors for suicide include: a previous suicide attempt, substance abuse, conduct disorder, impulsivity, childhood maltreatment and a family history of suicide. The most common precipitants are conflict with parents or the breakdown of a relationship. It is important to be aware of warning signs (see table 1, left).[3]

This study confirms that suicide in adolescents is a fairly rare event, although it was relatively more common in boys and those aged 15-17 years. Particularly among girls the number of suicides was dwarfed by the number of those reporting self-harm. Nevertheless, on average 57 families in England experience the trauma of adolescent suicide each year and GPs have a key preventive role to play through the recognition and treatment of depression, identification of risk factors for suicide and response to warning signs.

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