

Letter to the Editor

Correlates of seriously considering attempting suicide among Jordanian students in grades 8 to 10

Sir,

Among young people, suicide is the third leading cause of death [1]. Myriad stressors with genesis within the family and outside predispose people to suicidal behaviour [2–4]. Globally, out of some 900 000 completed suicides yearly, adolescents and young adults account for about 200 000 [4]. That results in a staggering mortality burden to society and tragedy for the families.

To describe factors associated with self-reported seriously considering attempting suicide in the past 12 months in Jordanian students in grades 8–10 (ages 13–15 years) and its prevalence, we used data from the Global School-based Student Health Survey for Jordan conducted in 2004 by the Jordanian Ministry of Health in collaboration with the World Health Organization and the Centers for Disease Control and Prevention, United States [5]. A two-stage cluster sample design was adopted for the GSHS-Jordan to produce nationally representative estimates for all students in grade 8–10. The factors studied were: gender, grade, bullying experience, number of close friends, and understanding of one's problems/worries by parents/guardians. We selected all students in grades 8–10 who responded to the question, "During the past 12 months, did you ever seriously consider attempting suicide?" Students responding affirmatively to this question were identified as having seriously contemplated committing suicide in the past 12 months. Design-based analysis with *SUDAAN*, 9.01 was done using logistic regression; adjusted odds ratios (AOR) were computed for the

association of self-reported seriously contemplating suicide in the past 12 months with gender and the above-mentioned factors.

The overall prevalence of seriously considering suicide in the past 12 months by the grades 8–10 students was 15% [95% confidence interval (CI): 13%–18%] ($n = 2457$). In male students the prevalence was 13% (95% CI: 10%–17%), while the prevalence in female students was 17% (95% CI: 14%–21%). No statistically significant association was found between gender and seriously considering suicide in the past 12 months when adjusted for the other variables. Compared to students in grade 8 or 9, students in grade 10 were less likely to report seriously considering suicide (AOR = 0.75, 95% CI: 0.59–0.95). Students replying as either never or rarely to the question "during the past 30 days, how often did your parents or guardians understand your problem and worries?" were almost twice as likely to report having seriously considered suicide in the past 12 months, compared to those students replying either sometimes, most of the time or always (AOR = 1.89, 95% CI: 1.44–2.49). Students who were bullied on one or more days during the past 30 days were also significantly more likely to report considering suicide compared to those who had not been not bullied in the past 30 days (AOR = 1.74, 95% CI: 1.21–2.51). Similarly, students reporting having one or no close friends were more likely to report seriously considering suicide in the past 12 months compared to students who reported having 2 or more close friends

(AOR = 1.52, 95% CI 1.21–1.91). Results of the Hosmer–Lemeshow Wald goodness-of-fit test concluded that the model including the above-mentioned factors was a good fit for the data.

The results of this nationally representative survey demonstrate that students in grades 8–10 in Jordan, regardless of their gender, were more likely to report having seriously considered suicide in the past 12 months if they had been bullied in the past 30 days, had no or only one close friend, or felt that their parents or guardians did not understand their problems and worries. This was truer if they were younger, i.e. in grades 8 or 9 versus 10.

The rate of seriously considering suicide we found is lower than the 30% described by Afifi among 1621 Egyptian adolescents who reported a strong death wish in the past 12 months [6]. Nonetheless, the results suggest the need for parents, school nurses and paediatricians/general practitioners to have a high index of suspicion when students in grades 8–10 exhibit any of these warning signs, and intercede appropriately to avoid the tragedy of a successfully completed suicide. Public health education efforts to identify adolescents at high risk of seriously considering suicide for improved general as well as mental health, early diagnosis and counselling/treatment would be particularly beneficial for this school-aged group in the country in addition to continuing professional education of primary care physicians to look for these signs when dealing with students in these grades.

References

1. Bridge JA, Goldstein TR, Brent DA. Adolescent suicide and suicidal behavior. *Journal of Child Psychology and Psychiatry*, 2006;47:372-394.
2. Pelkonen M, Marttunen M. Child and adolescent suicide: epidemiology, risk factors, and approaches to prevention. *Paediatric Drugs*, 2003, 5(4):243-265.
3. Mann JJ. Neurobiology of suicidal behaviour. *Nature Reviews. Neuroscience*, 2003, 4(10):819-828.
4. Greydanus DE, Callas J Jr. Suicide in children and adolescents. *Primary Care*, 2007, 34(2):259-273.
5. Global School-based Student Health Survey: Jordan <http://www.cdc.gov/gshs/countries/jordan/index.htm> (Accessed on August 11, 2007).
6. Afifi M. Depression, aggression and suicide ideation among adolescents in Alexandria. *Egypt. Neurosciences*, 2004, 9:207-213.

Irshad A. Shaikh

Emergency and Humanitarian Action, World Health Organization Regional Office for the Eastern Mediterranean, Cairo, Egypt.

Masood A. Shaikh

Independent Consultant, Cairo, Egypt (masoodali1@yahoo.com).

Suicide facts

Every year, almost one million people die from suicide; a "global" mortality rate of 16 per 100 000, or one death every 40 seconds.

In the last 45 years suicide rates have increased by 60% worldwide. Suicide is among the three leading causes of death among those aged 15-44 years in some countries, and the second leading cause of death in the 10-24 years age group; these figures do not include suicide attempts which are up to 20 times more frequent than completed suicide.

Although traditionally suicide rates have been highest among the male elderly, rates among young people have been increasing to such an extent that they are now the group at highest risk in a third of countries, in both developed and developing countries.

Further information about the work of WHO in suicide prevention can be found at: http://www.who.int/mental_health/prevention/suicide/suicideprevent/en/index.html