

Homicide among adolescents in the Americas: a growing epidemic

Editor – The article by Falbo, Buzzetti, & Cattaneo (1) in the last issue of the *Bulletin* highlights the growing epidemic of adolescent homicide in Brazil and in the Americas in general. One-third of all deaths due to homicides in the region are among adolescents aged 10–19 years (2). In addition, according to PAHO/WHO, homicide is the second leading cause of death among young males aged 15–24 in 10 out of 21 countries with populations greater than one million, the highest rates being in Colombia (267 per 100 000 in 1994), Puerto Rico, Venezuela, and Brazil (72/100 000). The USA is considered to have an intermediate homicide rate; at 38 per 100 000 it is four times higher than the next highest rate noted among 21 industrialized countries (3).

Registered homicide rates for Colombia, Puerto Rico, Trinidad and Tobago, the United States, and Venezuela among males aged 15–24 are increasing (2). In the last ten years the rate has doubled among adolescents in these countries; similar increases are occurring in Brazil (1).

Income inequality has been cited as a primary factor associated with homicide, particularly in the Americas (4, 5). Falbo and colleagues examined the risk factors for adolescent homicide in a case-control study that included all identified homicides in Recife, Brazil. This approach allowed a dissection of risk factors beyond the usual demographic information available in death certificates, national databases, or ecological approaches. Use of illicit drugs and prior police record were two of the more important risk factors. Education, religious observance, and having a father in the home were the primary protective factors identified. These findings, along with the fact that most homicides are a result of firearms, provide definable risk factors and protective factors that can be addressed through public health policy. Income inequality and social inequity, although theoretically appealing, are a step too far removed from direct public health action in the fight to reduce adolescent homicide. Gun control has been shown to be effective in reducing the homicide rate. During periods when bans on firearms were implemented in Bogotá and Cali, Colombia, the homicide rate fell significantly (6). Gun

storage laws have not clearly demonstrated a reduction in homicides; however, they reduce dramatically rates of unintentional shooting deaths in children (7).

At least two of the protective factors can be addressed from a public health policy perspective: education and the presence of fathers in the home, though the latter may be more difficult to improve. In Brazil, for example, 21% of the households are run by females and over 1% by someone under the age of 20. Also in Brazil, which has an illiteracy rate of 11.6%, 22% of the population have less than one year of schooling. Improving access to education and assuring that adolescents complete their education is pivotal to addressing the epidemic; achieving such a goal will require diverting funds from other items, such as military expenditures.

A number of interventions have been suggested to decrease youth homicide. For example, Holinger et al. (8) have suggested eight primary prevention strategies: improvement of economic conditions for the poor, including job creation; education of the public about the youth homicide problem; improvement of conflict resolution skills; creation of community and school enrichment programmes; improvement and stabilization of family systems; reduction of factors that enhance impulsiveness, such as alcohol; firearms control; and strengthening of ethnic identity. They also suggested three steps for secondary prevention: identification and treatment of potential victims and perpetrators of sublethal violence who may be at risk of becoming assailants or victims; training police, doctors, counsellors, and the clergy in violence intervention; and providing services to resolve domestic disputes. Such strategies have been developed for industrialized countries; however, it is unclear whether they would work or could be implemented in Latin America.

The high rate of adolescent homicide is only a sample of the larger problem of violence in the region. The need is clear: violence is the fourth leading cause of the global burden of disease among males aged 15–44. In May 1996, WHO's Member States passed a resolution declaring violence a worldwide public health problem, and advocated a science-based public health approach to violence prevention. Focusing on youth homicide, however, has an advantage in providing a measure that is identifi-

able, is less likely to be affected by reporting bias, and provides an outcome by which the impact of intervention strategies for lessening violence can be measured. Furthermore, societies are more sensitive to this issue.

Studies such as Falbo's are needed as an initial step in identifying the risk factors that need to be considered. The next phase is to design controlled experimental studies in the community to test hypothesized strategies to reduce homicide. Defined high-risk communities such as that in Recife, Brazil, are fertile opportunities to test interventions that focus on adolescent homicide in the Americas, but also the epidemic of violence in general. ■

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