

A Primer on School Violence Prevention

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ABSTRACT: *Violence has reached epidemic proportions in the United States with particularly serious health implications for school-age children and adolescents. Schools that experience the daily threat of potential student violence have their primary mission of education eroded at great cost to students. This article reviews the problem of violence in public schools and summarizes existing knowledge on school violence prevention. Violence prevention programs that use educational, regulatory, technological, or combined approaches are reviewed. Recommendations are presented addressing both policy and program needs related to control of violence in public schools. School health professionals should be active participants in violence prevention efforts. A critical need exists to carefully evaluate any planned prevention program so future efforts can be built on methods proven successful. (J Sch Health. 1994;64(8):309-313)*

Once considered "safe havens" from violence, schools have become increasingly involved both in violence and violence-prevention efforts. The following statistics illustrate the magnitude of school violence:

- Almost 3 million crimes occur on or near school campuses each year.¹

- Nationally, more than 400,000 students were victims of violent crime at school during a six-month period in 1988-1989.²

- An estimated 430,000 students took something to school to protect themselves from attack or harm at least once during a six-month period in 1988 and 1989.¹

- A survey of high school students nationwide found that one in 25 students had carried a gun in 1990.²

- In a survey of high school students conducted in 1987, 48% of 10th-grade boys and 34% of eighth-grade boys said they could get a handgun if they wanted one.³

- A 1993 national survey on the opinions and experiences of American teachers found that 11% of public school teachers and 23% of students reported being victims of violence in or around their school.⁴

Traditionally, violence has been viewed as a social problem, to be dealt with primarily by the law enforcement and judicial systems. Recently, however, violence has been recognized as a major public health problem requiring the effort of health care professionals. In an October 1993 address, President Clinton spoke of how closely violence and health care have become intertwined.⁵ Accordingly, the lead federal agency for public health in this country, the Centers for Disease Control and Prevention, has be-

come active in violence prevention efforts.

The public health approach to violence uses the classic host, agent, environment triad to identify potentially modifiable risk factors for violence. Violence prevention efforts then can be designed using educational, regulatory, technological, or combined approaches. Mentoring programs to improve the self-esteem of children at risk for becoming violent are examples of educational efforts directed toward a host risk factor. Metal detectors provide one example of a technological effort directed toward the agent or vector of violence. Community policing is an example of a regulatory effort directed toward the environment at risk.

Since violence has been recognized as a major health problem that affects not only the health of students in schools, but inhibits schools from accomplishing their primary mission of education, it follows that school-based health services should be involved in violence prevention efforts. School-based health care professionals have both an obligation and an opportunity to become involved in violence prevention. This article summarizes what is known about school-based violence prevention programs and provides recommendations for school personnel regarding implementation of these programs.

SCHOOL-BASED VIOLENCE PREVENTION PROGRAMS

Prevention of youth violence is in its early stages as a collective scientific enterprise. Most violence prevention programs have been rather limited in scope and based primarily on a particular aspect of current sociological or psychological thought. While a commonly felt sense suggests that "something must be done," few efforts undertaken have been adequately evaluated.

School violence prevention efforts can be categorized into four prevention strategies: educational, environmental-technological, regulatory, and combined. The task of

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developing violence prevention programs involves integrating these approaches into the organizational structures of individual classrooms, schools, school districts, and communities. Examples of programs from each category are reviewed below. Special attention has been given within the four categories of violence prevention to interventions in the area of weapon- and firearm-related violence. Guns are the “tools by which aggression and violence turn fatal.”⁶ Guns are five times more lethal than the next most serious weapon, knives. An established link exists between gun ownership and gun-related homicides.⁷

Only those programs with interventions specifically directed toward school violence prevention were explored. Many other approaches exist including programs to affect risk factors such as drug use or programs to influence such conditions as job availability, minimum wage, and access to care. Efforts in these areas are equally important and may affect school violence but were beyond the scope of this report. See the comprehensive review by the Centers for Disease Control and Prevention for other prevention strategies for both youth violence and school violence.⁸ In addition, Figure 1 provides details on how to obtain additional information on the violence prevention programs reviewed in this article.

Educational Approaches

One promising area involves peer education and mentoring, shown effective in both chronic disease and alcohol programs. At least one author referred to educational approaches as perhaps “the most effective way of intervening” in violence programs.⁹ Students at either high or low risk of violence can be trained as advocates for violence prevention. Components of mentoring programs include identifying trainers and trainees and instructing the participants in leadership skills, public speaking, and the relationship of guns, drugs, and family discord to violence.

The largest and best documented school-based educational program for violence prevention is the “Resolving

Conflict Creatively Program” based in New York City. The program emphasizes conflict resolution and intergroup relations. It has been operating since 1985 and in 1993 served 225 schools, 4,000 teachers and administrators, and 120,000 students nationwide. The program’s primary strategy for affecting change in school violence involves professional development of teachers, administrators, school personnel, and parents in methods for handling conflicts. This program offers a training course and curricula to teachers in conflict resolution, provides consultations to the classroom, offers parent workshops, and establishes student-peer mediation programs. Although not yet documenting any quantifiable change in student violence, the program has been positively accepted by teachers and can be integrated into the school routine.

The “Violence Prevention Curriculum for Adolescents” is another widely disseminated educational program developed by Deborah Prothrow-Stith, MD, in collaboration with the Education Development Center in Boston, Mass. Some methods used by this program include providing factual information on an adolescent’s risk of being involved in a violent act, having the student analyze precursors of a fight or violent act, showing alternatives to fighting by discussing the potential gains and losses, and practicing conflict resolution through role playing.

This curriculum has been widely acclaimed for its success in dealing with interpersonal violence. However, program effects varied widely across the schools in which it was offered. According to the National Research Council, “The widespread interest in this curriculum is not due to systematic evaluation results so much as other factors: the concern by school administrators that something be done about adolescent violence, the lack of an alternative intervention clearly demonstrated to be effective, and the impressive credentials and visibility of the author...” “The results of this evaluation are not persuasive that this approach is helpful in reducing aggressive behavior by high school students.”¹⁰

Some educational programs aimed at specifically reducing injuries from firearms hold promise. One example of a such a school-based curriculum program is “Straight Talk About Risks (STAR),” formerly known as *Kids + Guns = A Deadly Equation*, in Miami, Fla. Educational interventions are provided for teachers through two curriculum guides, kindergarten through fifth grade and sixth grade through high school. The interventions offer alternatives through use of audiovisual materials, public information campaigns, counseling, peer education, mentoring, and crisis intervention. However, no evaluation component has tested the program’s effectiveness.

Environmental and Technological Approaches

Environmental and technological approaches focus on minimizing hazards and risks by setting protective barriers, reducing access to danger, limiting exposure, and mitigating results of violent behavior. They include modifications to both the social and physical environments.

Violence prevention through environmental design assumes violence is less likely to occur in places where it will be seen. For example, parking lots or places of frequent altercations might be monitored by additional security personnel or video camera surveillance. Or, by limiting the number of potential entrances to a school,

Figure 1
Resources in Violence Prevention Programming

Organization	Address	Telephone	Type of Service
Boston Conflict Resolution Program	11 Garden St. Boston, MA 02138	617/492-8820	Conflict resolution training; teacher training programs
Resolving Conflicts Creatively	163 Third Ave., #239 New York, NY 10003	212/260-6290	Conflict resolution curriculum; student mediation
Violence Prevention Project	Health Promotion Program for Urban Youth 1010 Massachusetts Ave, 2nd floor Boston, MA 02118	617/534-5196	Conflict resolution curriculum; educational media; counseling of high risk youth
Straight Talk About Risks (STAR)	1450 Northeast 2nd Ave., Room 904 Miami, FL 33132	305/995-1986	Children and youth curriculum regarding the dangers of guns
Community Youth Gang Service Project	144 S. Fetterly Ave. Los Angeles, CA 90022	213/266-4264	Street outreach; neighborhood programs
Mid-night Hoops Program	Columbia, SC	803/777-5709	Recreational activity.

unlawful entry may be minimized. Other examples include metal detectors, concrete barriers, increased lighting, safe corridors, identification cards, hidden or non-intrusive surveillance, and dress codes.

Several types of therapeutic programs have been developed for victims or observers of violent events. Such programs may assist in breaking the cycle and learning of violence, but evaluations of such programs are rare. Examples of therapeutic programs include foster care programs for abused youth, respite day care for short-term reaction to problems, and crises management services to deal with a violent event.

Recreational approaches also may reduce risk by providing alternatives and promoting comradery. Examples include clubs, after school programs, evening and late night sports leagues, and camps. For example, in the Midnight Hoops Program in Columbia, S.C., boys and girls ages 12-18 participate in late night organized leagues on weekend evenings. The literature is conflicting, however, on the role of physical fitness programs in decreasing the risk of initiating adverse behaviors such as weapon carrying or substance abuse.^{11,12} Furthermore, when considering such after school programs, monitor possible gang activity or involvement as this involvement generally has a negative impact.¹³

Some environmental controls to reduce weapon carrying appear useful:

- In the Baltimore (Md.) City School District, dress codes aimed at both reducing the risk of theft and concealing weapons contributed to a lower incidence of firearm and weapon-related incidents, according to the school system. Cases dropped from 55, to 35, to 28 over three years.

- Unannounced use of portable metal detectors in New York City was associated with reductions in weapon carrying at 13 of 15 schools [personnel communication from Renee Wilson-Brewer, Adolescent Violence Prevention Resource Center, October 1994.] It should be emphasized that this program was conducted in conjunction with other violence prevention curricula, peer mediation, and crisis intervention teams. This emphasizes the role of multifaceted prevention efforts.

Regulatory Approaches

Legal interventions impose academic, civil, and criminal penalties on certain unwanted behaviors to lower the risk of violence. Common examples include youth curfews, school policing, weapon carrying laws, and community policing. Legal countermeasures to reduce weapon carrying include laws regulating sales, distribution, nature, possession, and use of firearms. The success of any regulation, be it school policy or state law, depends on support from the population it serves and the level of enforcement. In 1976, the District of Columbia banned the purchase, sale, transfer, or possession of handguns by civilians. The homicide rate dropped 25% the "first year after the ban went into effect and remained lower than expected until the end of the study in 1988."⁸ However, gun availability from neighboring jurisdictions and remaining high rates of gun-related homicide in D.C. suggest other actions are necessary to reduce handgun violence. No convincing data currently are available regarding effectiveness of other commonly used regulatory

approaches, such as increasing school security or student suspensions.

Combined Approaches

The Violence Prevention Project, a primary and secondary prevention and education program in Boston, Mass., is based on the previously discussed "Violence Prevention Curriculum for Adolescents." The curriculum design allowed it to be adapted for use in nonschool settings, so it became the foundation for the Violence Prevention Project. The project currently provides a combination of services such as a community-based education program, a training program for junior and senior high school teachers, counseling and referral services for high-risk youth, community coalitions, public information about violence, and a youth leadership development program. Training and educational materials also are provided to hospitals and communities. Program evaluations show some changes in knowledge and attitudes among students who complete the program and some limited shift in self-reports of fighting.

A second program that combines education in the schools with community-based crisis intervention, job counseling, recreational opportunities, and modification of the environment is the Community Youth Gang Services in Los Angeles, Calif. This school-based curriculum, which educates students to avoid gangs, is supplemented with community-based crisis intervention teams that help existing gang members resolve disputes peacefully. Community volunteers and agencies provide alternatives to gang membership.

Program Evaluations

Few school-based violence prevention programs have been adequately evaluated. A report by the Carnegie Council on Adolescent Development noted the rudimentary nature of the evaluations. As part of a multiyear project, the Carnegie Council surveyed and assessed violence prevention programs operating nationwide. The authors of one of their reports stated:

"Based on the data obtained through the questionnaire and follow-up interviews, it is impossible to state with conviction which types of violence prevention programs or intervention strategies reviewed are the most effective."¹⁴

Such reviews¹⁵ indicate few violence prevention programs even collect evaluation data. In these cases, data collection has been limited to measures of the attitudes of individuals who complete the program or the number of services provided. No programs exist with solid data on the behavioral outcomes regarding violence by program participants. Most interventions are aimed at changing attitudes about violence or increasing social skills for handling conflict. Only limited evidence, however, addresses the strength of the relationship between these types of changes and violent behaviors. Several projects, however, developed detailed curricula, offered sound rationales about their approach, and documented their implementation efforts.

RECOMMENDATIONS

FOR SCHOOL HEALTH PROFESSIONALS

1. Establish violence prevention as a long-term priority in school districts. The magnitude of violence and its disruptive influence on teaching and learning mandate that schools place priority on violence prevention. School involvement is a critical component in any intervention to reduce violence in a community. Evidence from analogous prevention efforts aimed at reducing other adolescent antisocial behaviors, such as drug and alcohol use, document the importance of a strong component of these programs located in schools.¹⁶ One way to establish such a priority involves appointing a fulltime violence prevention coordinator for the school district.

2. Establish structures that promote community, student, family, and teacher involvement. The importance of having program participants "own" the program is stressed in the literature on interventions. Parents, teachers, community leaders, and students all are seen as key participants who must be courted to active involvement in any prevention effort.¹⁶ Such efforts require careful assessment of the school and community cultures as well as community organization activities. Adequate time for these activities should be built into the start-up phase of the program.

3. Include violence prevention as part of school-based health services. According to Dr. Joycelyn Elders, U.S. Surgeon General, "The goal of school-based health services is to improve the overall physical and emotional health of children and adolescents...and promote healthy lifestyles...by enriching classroom experiences to include teaching about preventive health care and consumer behaviors and promoting the development of good decision-making skills in relation to health and other life issues."¹⁷ Violence and the injuries resulting from violent acts represent a major health problem for students. Comprehensive school health services provide counseling/education on alcohol and drug abuse prevention, safety measures (seat belts, car seats, helmets), and suicide prevention. Health service programs also routinely collect data on visits and illnesses treated. Expanding these services to include education on violence and violence prevention and collection of data regarding violent episodes is a natural and desirable activity. School-based health service professionals should be part of a comprehensive effort that also includes administrators, public safety officials, parents, teachers, students, and community leaders. School health services can play a particularly important role in evaluating new programs, dissemination of information, and as a convener of interested parties.

4. Carefully evaluate any program or intervention that is implemented in the schools. The evaluation component should be integrated into the program design of any new initiative. Data enable the public, administrators, funders, and researchers to take a systematic and comprehensive approach to preventing youth violence. It allows program participants to assess the magnitude of the problem; detect changes in the occurrence of violence and injury patterns; develop quantifiable prevention program objectives and measure progress toward those objectives; identify high-risk victims, perpetrators, and locations; convince decision-makers about the impor-

ance of the problem and justification for the program; and evaluate the overall program. Ample opportunities exist to collect violence-incidence data at the school.

As part of the Safe Schools Project in Pittsburgh, Pa., data sources within and outside the schools were examined in the Pittsburgh Public School District for their content and usefulness.¹⁸ Some of the most promising data sources include complaint forms, logs, or weekly reports that document individual calls regarding violence to a security office; monthly reports of student misconduct leading to in-school or out-of-school suspensions; attendance and dropout statistics; police crime reports; and juvenile court data (Table 1).

5. Allocate resources to those at highest risk. Resources should be focused on very young children at risk of developing aggressive lifestyles. Aggressive behavior is one of the most stable problems exhibited by children. Studies show that children identified at ages 8-10 as aggressive by their teachers or peers have a markedly higher chance of becoming aggressive adults.¹⁹ Based on these studies, a reasonably accurate screening mechanism for identifying aggressive elementary school children could be devised and these children should be offered special group sessions aimed at increasing their social problem solving, with behavior management sessions for their parents. Offering these services at a later age would probably have a lesser effect.²⁰

Although a focus on young children may provide the most effective way to effect long-term changes, adolescents should not be ignored. At middle and high school levels, it would make more sense to intervene with adolescents at risk for gang involvement. Programs that explore reasons for being attracted to gangs and instruct on ways to resist gang involvement have been developed and should be considered for implementation and evaluation.

Likewise, offering comprehensive services within particularly disadvantaged or high-risk locales is preferable to a limited number of services offered across the entire school district. Indirect indicators of "high risk," such as schools with the highest dropout rate, the highest suspension rate, the most number of calls to school police for fights, the most weapon confiscations, and the highest cost for vandalism repair on a per student basis should be considered for priority setting.

Finally, resources should not be expended on program elements proven unsuccessful. Attempts to involve gangs, for example, in constructive activities in the school should

Table 1
Data Elements for Program Evaluation

- Number of violent events
- Weapon category (handgun, shotgun, knife, blunt object, razor, glass)
- Weapon specifics (caliber, automatic, length of object, switchblade)
- Location within school (hallway, classroom, bathroom, recreational grounds, parking lot)
- Offender relationship (boy/girlfriend, family member, acquaintance, stranger, gang members)
- Evidence of intent (good evidence, suggestive evidence, not suggestive, no opinion)
- Possible motives (drugs, robbery, rape, hate-related, self-defense)
- Circumstances (verbal argument, fight, sexual assault, robbery, other crime related)
- Drug involvement (intoxication present, buying, selling)
- Type of injury (laceration, blunt trauma, stabbing, shooting, etc.)
- Body part affected (face, head, neck, extremities, etc.)
- Severity/outcome (home, nurse, emergency department, hospitalized, death)

be discouraged. This approach has generally shown little or no positive effect, and has often instead increased the cohesiveness of gang members.¹¹

6. Establish a consistent, developmentally and culturally sensitive curriculum teaching conflict management and peer mediation from elementary through high school. Limited data exist that support the effectiveness of these methods, but the magnitude of the problem, acceptance of such curriculum, and anecdotal evidence support their implementation and further evaluation. In addition to providing factual information and skill development as part of the curriculum, methods of conflict resolution taught should be integrated into ongoing procedures for mediating disputes.

7. Technological and environmental controls should be integrated into a comprehensive violence prevention effort. Metal detectors appear to work best when applied randomly during times of heightened tension. Programs such as hallway and locker supervision, random locker checks, transparent book bags, and use of dress codes as a measure to reduce gang identification and weapon carrying should be considered. Student, parent, and community involvement will be essential in developing and enforcing such policies. ■

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Job Opportunities

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LIFESPAN-HEALTH PSYCHOLOGY/HEALTH EDUCATION Assistant Professor to conduct research, instruct and advise undergraduate and graduate students in youth health promotion. Applicants whose interests focus on adolescent development/risk behaviors (such as violence, sexuality, drug/alcohol abuse, or eating disorders), *at-risk* youth health counseling, and or *inter-disciplinary* bio-behavioral health interventions in school and community settings are particularly encouraged to apply. Collaborative work with Educational Psychology welcomed. Qualifications: Doctorate in Lifespan-Health Psychology, Health Education, Public Health, Behavioral Health Sciences, or Adolescent Medicine with a strong quantitative background. Please send all inquiries to: Neil H. Gottlieb, PhD, Dept. of Kinesiology and Health Education, College of Education, Belmont Hall 222, University of Texas, Austin, TX 78712. **Closing date is Feb. 15, 1995.** The University of Texas is an affirmative Action, Equal Opportunity Employer and specifically encourages applications from women and minorities.