



PRACTICE MANAGEMENT GUIDELINES FOR VIOLENCE PREVENTION PROGRAMS

I. Recommendations

- A. Level I: There are insufficient data to make a recommendation on this topic.
- B. Level II: There are insufficient data to make a recommendation on this topic.
- C. Level III: Violence prevention programs for children and adolescence may result in increased knowledge about the risks of violence. Further research is necessary in order to evaluate the results of such programs on violent behavior.

II. Statement of the Problem

The incidence of violent crime in the United States is extremely high compared to the industrialized countries of Western Europe. Many of these crimes result in injuries or fatalities, thereby linking the medical profession with a matter of judicial and public concern. Although many physicians might regard the problem of violent crime as one in which they should play only a reactive role (i.e., treatment of the victims of violence), there is a growing sentiment among physicians who treat trauma victims that they should take a proactive role in the prevention of violence.

A number of violence-prevention programs have been developed, but there has been no systematic evaluation of the effectiveness of such programs.

III. Process

- A. A Medline search from 1992 through September 1997 was performed. All citations during this interval with the subject words "violence" and "prevention" were retrieved. There were 2,418 citations on violence, 373 of which were also concerned with prevention. These articles were reviewed and categorized as follows:

<u>Type of Article</u>	<u>Number</u>
Editorial	91
Review	76
Psychiatric Patient	54
Descriptive (no results)	50
Letter to Editor	31
News Item	23
Survey	20
Philosophic	11
Outcomes Research	8
Interview	4

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An additional three articles addressing the results of violence prevention programs were identified by systematic literature review. These three studies, plus the eight outcomes research studies identified by the Medline search were reviewed in depth.

- B. Quality of the references: The references were classified using methodology similar to that established by the Agency for Health Care Policy and Research of the United States Department of Health and Human Services. These classifications are as follows:

Class I: Prospective, randomized, control trials, preferably with blinded assessment.

Class II: Clinical studies in which data were collected prospectively, and analyzed in a retrospective fashion.

Class III: Studies based on retrospectively collected data.

IV. Scientific Foundation

Although no one could deny the need for violence prevention, the current status of the scientific basis for violence prevention is woefully inadequate. Despite the existence of thousands of conflict resolution programs in educational institutions around the United States, there is a dearth of clinical investigation into the benefits of such programs. Most of the studies on violence prevention were not randomized, and in the two studies which were,^{3,7} it was the school, and not the children, which were randomized to treatment. This could have introduced multiple confounding variables due to differences in the communities in which the schools were located.

Another weakness in studies evaluating violence prevention programs is that the interventions were usually brief, usually involving less than one hour of contact for one or two days each week, for less than two months. Most programs do not incorporate families, members of peer groups, or other support mechanisms which might play a major role in either encouraging or dissuading an individual to engage in violent or delinquent behavior. It would be unrealistic for a brief intervention to alter a lifetime of learned responses, especially when that intervention does not alter the social milieu in which an individual spends the vast majority of his or her time. Furthermore, the focus of most conflict resolution programs do not take into account the typical causes of violent confrontations between adolescent males. Teaching negotiation skills probably has little bearing on a situation in which one aggressive male is provoking another in order to achieve status or respect among his peers.

Most studies on violence prevention have measured changes in opinions, or changes in self-reported behavior. The likelihood of bias in such studies is obvious, since students who participate in programs which emphasize concepts and attitudes will quickly learn the correct response to an artificial or hypothetical situation. Real changes in behavior are rarely evaluated. Even if behavioral changes are measured, the focus of observation is usually on school-related behavior. Changes outside of the school are rarely addressed, and may be more important. The implied social controls of the school environment provide a deterrence to certain excesses of behavior, which might become manifest outside of school.

The time course observation in the published literature is usually very short. Only Borduin et al' had follow-up as long as four years, but this study was flawed by a lack of randomization, and a high refusal and drop out rate (30%). Most studies have evaluated the results at one week to one year after intervention. There are no data to suggest that measurable changes will be sustained for years, or will be reflected in more appropriate behavior. Measured behavior alterations should go beyond fighting in school. Other variables should include completion of high school, likelihood of attending or graduating from college, arrests for violent crimes, and other socially meaningful behaviors.

Recommendations for future investigation:

Violence prevention is a legitimate concern for physicians and surgeons. Our enthusiasm for embracing specific programs should be tempered by the realization that the scientific basis for violence prevention has not been well established. Our goals should be to identify the causes of violence, and to evaluate programs designed to avoid or prevent violent confrontation. Appropriate scientific and epidemiologic methods should be used, and long-term follow-up is necessary.

REFERENCES

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11. Orpinas P, Parcel GS, McAlister A, Frankowski R. Violence prevention in middle schools: a pilot evaluation. *J Adolescent Health*; 17: 360-71, 1995

First Author	Year	Reference	Number of Participants	Randomized Entry	Length of Evaluation	Summary	Class
1. Borduin CM	1995	1	140 (24 refusals, 36 dropouts)	No	4 years	Multisystemic therapy (based on family and peer-group factors) was associated with significant reductions in arrests and violent offences.	III
2. Callahan CM	1994	2	1172 (firearms relinquished)	No	1 month	95% of relinquished firearms were handguns. Nonsignificant decrease in firearm injuries but increased homicides in the month after the program	III
3. Durant RH	1996	3	225 yes (by school, not by child)	1 week after completion of program	Self-reported reductions in use of violence in hypothetical conflict situations, use of violence in previous 30 days, and frequency of physical fighting in 30 days, both in intervention groups	III	
4. Durkin MS	1996	4	N/A	No	10 year review	Reduction in incidence of assault and gun injuries in Harlem after institution of comprehensive Injury Prevention Program. Small increase in incidence of such injuries in a neighboring community with out prevention program	III

First Author	Year	Reference	Number of Participants	Randomized Entry	Length of Evaluation	Summary	Class
7. Grossman DC	1997	7	790	yes (by school, not by child)	2 weeks, 6 months	No change in parent or teacher reported behavior scales, but behavior observation showed reductions in physical aggression and increase in neutral/prosocial behavior	II
8. Hammond WR	1991	8	27	No	"after training"	Reduction in social-skill deficiencies in participants, and reduction in suspensions and expulsions for fighting, compared to control group.	III
9. Hausman AJ	1995	9	800	No	12 months after implementation	Community telephone survey regarding adolescents' knowledge and attitudes about violence showed that males increased knowledge due to media exposure, but no effect from workshops or one-on-one discussions.	III
10. Hausman AJ	1996	10	1523	No	1 year	Comprehensive educational program for at-risk adolescents with exposure to a violence prevention program was associated with a reduction in suspension rates between sophomore and junior years	III

First Author	Year	Reference	Number of Participants	Randomized Entry	Length of Evaluation	Summary	Class
11. Orpinas P	1995	11	223	No	1-2 weeks; 3 months	Inconsistent reduction among boys in self-reported aggressive behavior early after participation. More negative attitudes toward violence as a response to provocation. Changes not maintained over 3 months. No behavioral measures.	III