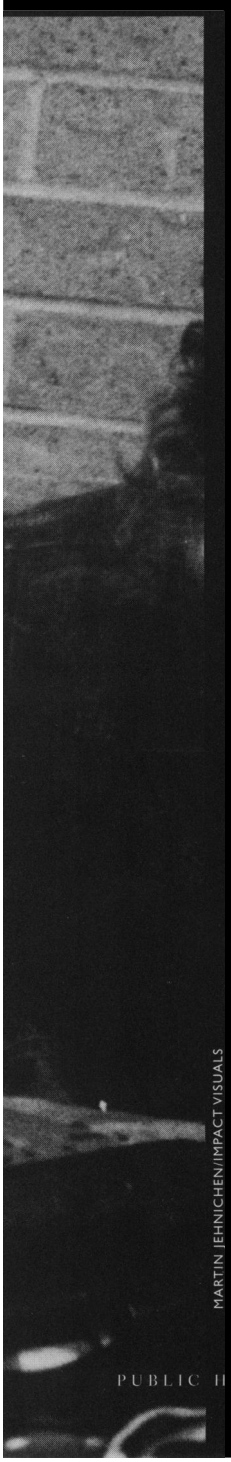
Liana B. Winett, DrPH

CONSTRUCTING VIOLENCE AS

A PUBLIC HEALTH PROBLEM



MARTIN JEHNICHEN/IMPACT VISUALS

VIOLENCE HAS ALWAYS BEEN BAD for the public's health. The nearly inevitable outcomes of violence—injury, disability, and death—are primary benchmarks of public health status. Yet only in the last two decades has the problem of violence been widely adopted by the public health community. William Foege, former Director of the Centers for Disease Control and Prevention (CDC), attributes this in part to the work of a 1977 advisory group whose task was to identify the key preventive measures the nation should take to reduce morbidity and premature mortality. Because this group looked not only at leading causes of death but also at years of potential life lost, violence came to the fore as a primary cause of premature death.[1] While it was not the first time homicide rates had risen to staggering heights in this country, the period from the mid-1960s through the 1970s saw a steady increase in homicide,[2] which must have added a sense of urgency for public health practitioners interested in including interpersonal violence on the roster of problems addressed by the field. Add to this a mature and successful injury prevention sector within public health in the late 1970s and early 1980s whose expertise and skills in unintentional injury prevention seemed to extend naturally to the problem of intentional injuries,[3] and the conditions necessary to construct violence as a public health problem were all in order.

SYNOPSIS

ONCE VIEWED PRIMARILY as a criminal justice problem, violence and its prevention are now often claimed by public health professionals as being within their purview. The author reviewed 282 articles published in public health and medical journals from 1985 through 1995 that discussed violence as a public health problem. She found that while authors tended to identify social and structural causes for violence, they suggested interventions that targeted individuals' attitudes or behaviors and improved public health practice. Her study illuminates the tension between public health professionals' vision of the social precursors of violence and their attempts to apply a traditional set of remedies. In targeting individuals to rid the nation of violence, the public health community is de-emphasizing societal causes.

The grim and rising toll of violence is trumpeted daily in the media. In 1995 there were 20,232 homicides in the United States; of these, 11,282 or roughly 56% were committed with handguns.[4] The CDC estimates that, from June 1992 through May 1993, for every firearm-related homicide there were 3.3 nonfatal firearm injuries.[5] Young people are disproportionately the victims in our violent society: for example, murders of children ages 12 to 17 increased 95% between 1980 and 1994.[6] The U.S. Office of Juvenile Justice and Delinquency Prevention reports that in 1994 children under age 18 were murdered at a rate of seven per day.[6]

Human costs are not the only adverse outcomes of violence in this country; substantial financial burdens are also borne by society as a result of interpersonal violence. Research has shown that acute medical care for patients with firearm-related injuries costs nearly $32,000 per hospital admission.[7] It has also been estimated that 80% of the costs for treating firearm-inflicted injuries is paid for by taxpayers.[8]

One of the first times that violence was publicly recognized as a public health concern at the Federal level was in the 1979 Surgeon General's report, *Healthy People*, which highlighted 15 priority areas for improving the health of the nation, including interpersonal violence. Violence was seen as an important contributor to morbidity and premature mortality.[1,9,10] Later, in 1985, the Institute of Medicine published *Injury in America*, a treatise on the mounting threat that intentional and unintentional injury posed to public health.[11] In October of that year, then-Surgeon General Koop convened the Surgeon General's Workshop on Violence and Public Health, which cast a national spotlight on reconstructing violence as a public health concern.[1] At the workshop, William Foege, then Assistant Surgeon General and Special Assistant for Policy Development at CDC, noted that until the early 1980s violence had typically been seen as a law enforcement or welfare problem.

> Public health is in the business of continually redefining the unacceptable. This changes the social norm, which in turn changes the problem.... It should be understood that many have seen violence as being unacceptable just as many saw polio as being unacceptable. But until recently, violence has not been regarded as a public health problem.[1]

The Public Health Service continues to devote resources to understanding and preventing violence. In 1991, *Healthy People 2000* was published as a national blueprint to reduce disparities in morbidity and mortality across social groups.[12] Eighteen of 298 objectives addressed the reduction of aggressive and violent behavior, including reducing the homicide rate to no more than 7.2 per

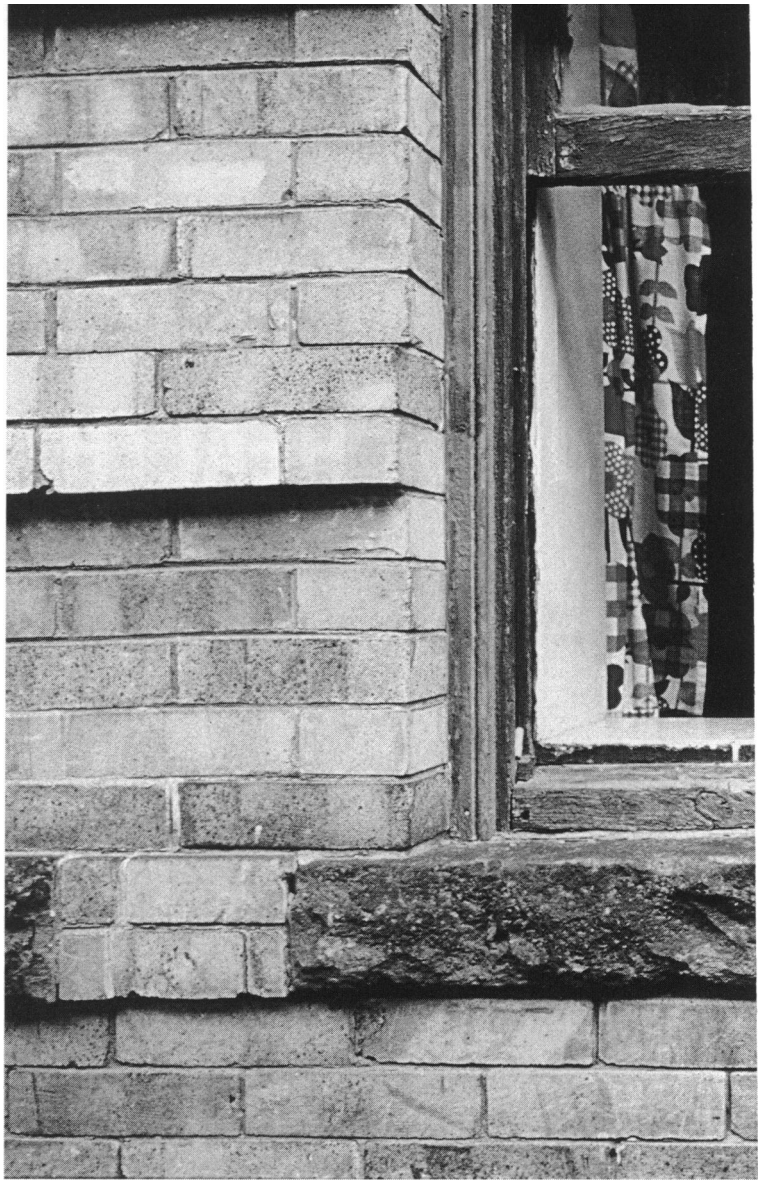
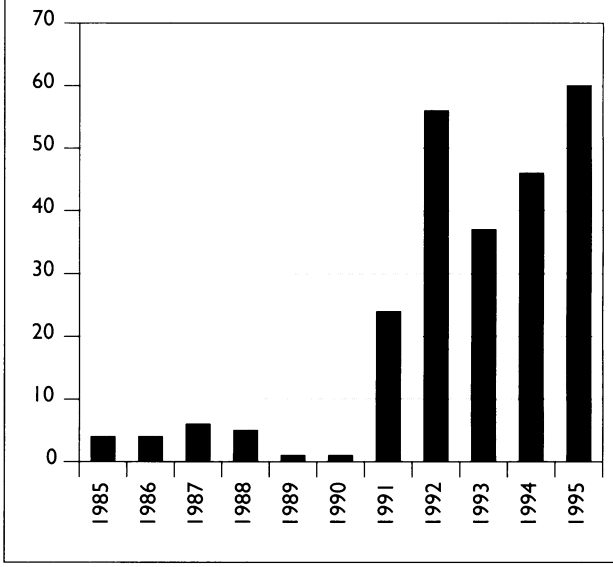


Figure. Number of articles in which violence was discussed as a public health problem, by year, 1985–1995 (*N* = 282 articles)



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100,000 people from an age-adjusted baseline of 8.5 per 100,000, and reducing weapon-related violent deaths (particularly those due to firearms and knives) to no more than 12.6 per 100,000 people.[12] In 1991 the CDC established a Division of Violence Prevention, which was later elevated to center status as the National Center for Injury Prevention and Control.[13,14]

State and local health departments have also organized to address violence. And violence has become a legitimate topic for academic public health research.

To find out how violence was constructed as a public health problem beginning in the mid-1980s, I reviewed the English-language public health literature for the 11-year period from 1985 (the year of the Surgeon General's Workshop) through 1995.[15] My research focused on four questions:

- How was public health's role in violence prevention justified?
- What types of violence were discussed?
- What were identified as the causes of violence?
- What interventions were proposed?

I performed both quantitative and qualitative content analyses, with an emphasis on the ethnographic content analysis methods described by Altheide,[16–19] to review the 282 articles in which the authors discussed violence as a public health problem. (See Figure and Table 1.) Details of the study's methodology are available on request.

JUSTIFYING PUBLIC HEALTH'S ROLE

The authors of the articles I reviewed used a variety of arguments to explain why the public health community should pay attention to the issue of violence. The argument that appeared most often—in about a third (34%) of articles—was that violence is a *pervasive threat*. This perspective draws on the fundamental public health princi-

Table 1. Public health and medical journals publishing five or more articles in which violence was discussed as a public health problem, 1985–1995

Journal	*Number of articles*	*Percent of total articles in sample*
Journal of the American Medical Association	60	21.3
Public Health Reports	35	12.4
Journal of Health Care for the Poor and Underserved	21	7.4
Health Affairs	17	6.0
American Journal of Public Health	13	4.6
Pediatrics	10	3.5
Annals of Internal Medicine	7	2.5
California Physician	6	2.1
American Family Physician	5	1.8
New Jersey Medicine	5	1.8
Morbidity and Mortality Weekly Report	5	1.8

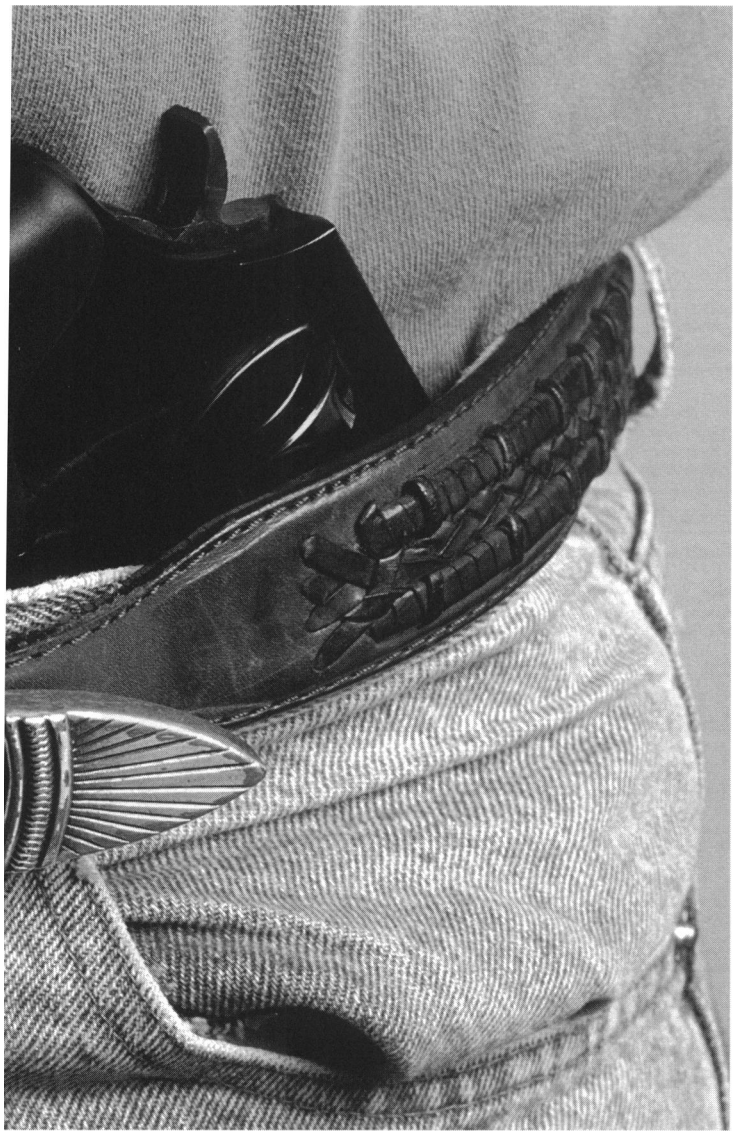
Table 2. Causes of violence mentioned in articles in which violence was discussed as a public health issue, by frequency of mention, 1985–1995 (*N* = 282 articles)

Risk factor	*Number of articles*	*Percent of total articles in sample*
Access to firearms	140	49.7
Drug and alcohol use	86	30.5
Poverty/unemployment	84	29.8
Victim/perpetrator characteristics	61	21.6
Witness to violence	50	17.7
Violent culture	49	17.4
Family breakdown	45	16.0
Racism	44	15.6
Media violence	42	14.9
Perpetrator was victim of violence	38	13.5
Psychological problems of perpetrators	37	13.1
Learned hopelessness	35	12.4
Academic problems/lack of opportunity	35	12.4
Gang membership	33	11.7
Lack of skills in conflict management and coping with anger	32	11.4
None specified	26	9.2
Other (non-gun) weapons	22	7.8
Neurochemical/hormonal imbalances	21	7.5
Victim pregnant	20	7.1
Lack of moral/behavioral guidance for youth	20	7.1
Gun lethality	19	6.7
Low self-esteem	18	6.4
Sexism	14	5.0
Guns valued in American culture	14	5.0
Childhood/early aggression	12	4.3
Lack of access to adequate health care	12	4.3
Environmental toxins	10	3.6
Community infrastructure lost	8	2.8
Lack of values/wrong values	8	2.8
Corporal punishment recipient	8	2.8
Toy guns	6	2.1
Workplace characteristics	5	1.8
Geographic density of alcohol outlets	4	1.4
Ageism	3	1.1

NOTE: Percentages do not add to 100 because some articles discussed more than one cause.

ple of population exposure. Articles expressing this theme emphasized that no segment of society is immune from the effects of violence and that, in particular, young people are in jeopardy. The working group on homicide at the 1985 Surgeon General's Conference summed up this position:

> Violence in the United States has become so pervasive that it can no longer be usefully viewed as only a problem of disparate acts by individual offenders. Violence is a public health problem because of the toll it exacts in injuries and deaths, especially among younger people. Too many victims are victimized again and again.... Public health has continually redefined its role so as to address more effectively the changing needs of a changing nation. It is for public health to accept the challenge presented to our country by violence and its consequences.[20]



The second most frequently invoked argument (19.1% of articles) was that violence is *costly to society*. From this perspective, violence was framed as a problem of major import not only because of its toll in terms of morbidity and mortality but also because of its financial impact on both individuals and society.

In 16.7% of the articles violence was described as being *as urgent as other health problems*. These articles compared the adverse effects of violence to those of other health conditions to which the public health community has historically dedicated resources—such as HIV/AIDS, tuberculosis, and childhood infectious diseases.

Another argument, used in 16.3% of articles, was an appeal to *correct injustices*. In general, the authors of these articles briefly mentioned the effects of racism, poverty, and inequality as causes of violence, yet they did so without detailed discussion. While some authors may have dedicated as much as a paragraph to the far-reaching ill effects of social inequity, most failed to delve into the complexities of these situations or to offer practical suggestions for redress.

Twenty-four (8.5%) articles referred to the need to *protect children*. One author, then-Surgeon General Antonia Novello, expressed this view as follows: "As a pediatrician, I am struck by the efforts that have improved the health of children, the efforts to develop vaccinations and to monitor growth and development. Yet violence kills even more surely than pertussis, harms more often than measles. Our society has not responded with the intensity required to deal with such a menace to public health."[21] Protecting children is a widely shared societal value, usually framed in terms of shielding the innocent from harm; some authors employing this theme advocated for interventions to benefit even those whose innocence might not be accepted by readers, such as in the case of gang violence. As one author wrote, violence is "a problem of children as victims and children as perpetrators."[22]

The human costs of violence were presented using *years of potential life lost* (YPLL) or similar measures in 15 (5.3%) articles. YPLL is calculated as the number of years affected individuals would have lived had they achieved normal life expectancy. These authors highlighted the wastefulness associated with preventable premature mortality and morbidity.

A number of incidents in which physicians were shot while at work gave rise to the argument that the public health and medical communities should attend to violence because *health practitioners are at risk*. Finally, a theme that can be described as *veneration of life* touched on the value of human life and framed violence prevention as a natural expression of that value in our society.

Seven articles raised the claim that violence is a public health problem only to refute it. The authors of these articles asserted that public health has no place trying to intervene in what is essentially a social problem.

KINDS OF VIOLENCE

The National Center for Injury Prevention and Control defines violence as the "threatened or actual use of physical force against a person or a group that either results or is likely to result in injury or death."[14] This definition encompasses the forms of violence described in the literature I reviewed and included in my analysis: "interpersonal violence," "rape," "sexual assault," "child abuse," "youth violence," "gang violence," "domestic violence," "family violence," "elder abuse," "assault," "aggravated assault," "gun violence," and "homicide."

In my definition of violence, I excluded war or military action, human rights abuses, violence against oneself (self-mutilation or suicide), violence secondary to the international illegal drug trade, corporal punishment (except as a risk factor for other types of interpersonal violence), and

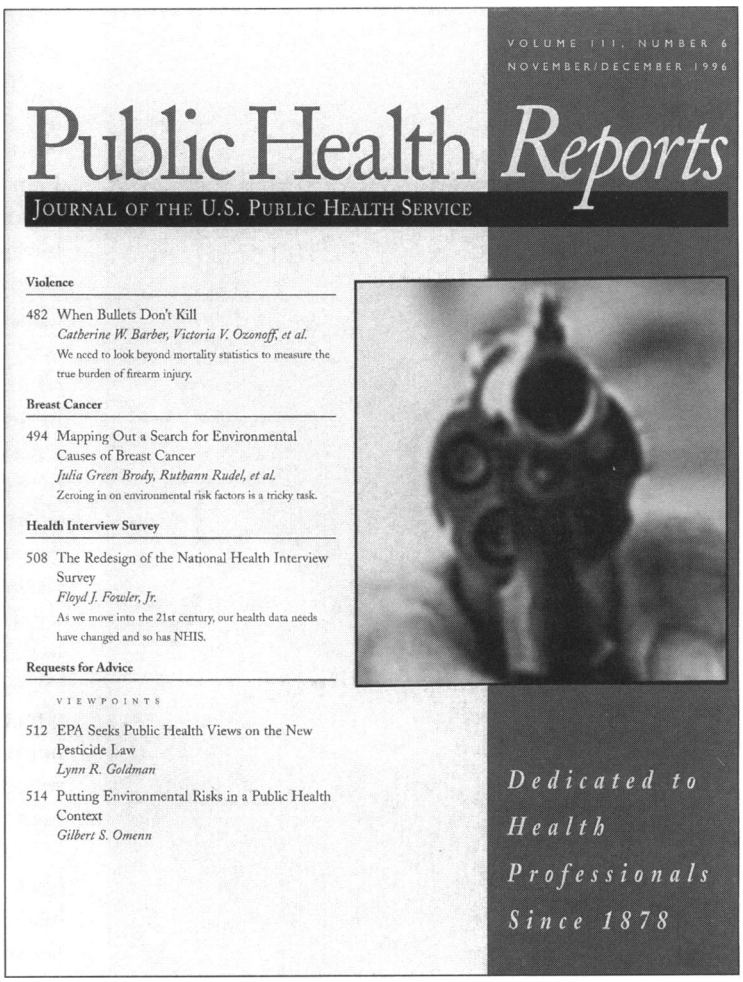
institutional violence (for example, manufacturing and selling products known to be harmful or polluting a community's water supply).

In coding the type of violence, I assigned articles that mentioned more than one category according to the following hierarchy: victim > circumstance/weapon > outcome. Thus an article about drug-related homicides of gang members would have been assigned to the category *youth/gang violence*.

The type of violence mentioned most often in the articles was *youth/gang violence* (25.2% of articles). This category did not include child abuse—victimization of a child by an adult. Because "youth" and "gang" violence were frequently mentioned interchangeably in the same article, I collapsed them into this single category.

The same proportion of articles fell into the *unspecified* category—they discussed violence in general or presented a list of types of violence to show the breadth of the problem and the need for public health intervention. The third most common category was *gun violence* (24.1% of articles), which included references to all types of handheld firearms—handguns, rifles, semi-automatic, and "assault" weapons.

The fourth most frequently identified type of violence was *domestic* or *family* violence (14.2% of articles). Because authors often addressed "domestic/ spousal," "family," "child," and "elder" abuse within single articles, it was impossible to maintain distinctions between these types of violence, and I collapsed them into a single *domestic/family* category.



CAUSES OF VIOLENCE

Table 2 shows the underlying causes of, or risk factors for, violence cited by the authors, in order of frequency of mention. The most frequently cited cause of violence was *access to firearms*—the widespread availability of guns and insufficient regulatory oversight of gun and ammunition design, manufacturing, marketing, sales, importation, storage, possession, and use.

The second most frequently cited cause was *drug and alcohol use,* described as leading to lowered inhibitions, depression, impaired judgment, and/or heightened aggression among victims or perpetrators.

The third-ranked cause was *poverty and unemployment*, characterized by authors as a lack of economic opportunity leading to increased frustration and anger among individuals and in communities. The relationship among poverty, crowding, and violence was also cited.

The fourth most common category of causes was a list of *characteristics of victims and perpetrators*—for example, being between the ages of 15 and 34 or being age 65 or older, living in an urban environment, being dependent upon caregivers, or being socially isolated.

The fifth-ranked cause was having been a *witness to violence*, particularly as a child witnessing family violence. According to several authors, this is believed to teach a child that violence is an acceptable or normal means of resolving conflict and is described in terms of contributing to the "cycle of violence."

Other causes mentioned less frequently included *racism, lack of academic opportunity, gang membership, neurochemical/hormonal imbalances,* and the *absence of moral and behavioral guidance for young people.*

PROPOSED INTERVENTION STRATEGIES

The most commonly recommended strategies to reduce interpersonal violence fell into the category of *changes in gun laws and regulations* (see Table 3). These proposed changes ranged from an outright ban on private ownership of certain types of guns—especially assault rifles and small, cheap, poorly made handguns called Saturday Night Specials—to increasing manufacturers' and dealers'

liability and holding gun owners responsible for the injury and loss of life caused by their weapons. Also mentioned were more stringent enforcement of sales restrictions to "high risk" individuals, higher sales taxes for both guns and ammunition, tighter Federal dealer licensing standards, placing limits on the number of guns a person may purchase within a month, and new gun designs intended to reduce their lethality. Such design modifications include load indicators, magazine safety devices, push button locks, fingerprint or voice recognition chips, and a magnet ring to be worn by the shooter without which the gun could not be fired. (See "Attacks on Gun Control.")

The second most commonly proposed intervention was *public education and awareness programs* focusing on the causes and effects of violence and the hazards of particular types of weapons. The third most commonly mentioned violence prevention strategy was *behavior modification programs* to model and reinforce skills in the areas of conflict resolution, stress and anger management, impulse control, problem-solving, and empathy.

The fourth most frequently mentioned intervention was *clinical services to victims*—authors advocated for physical and psychological services and referrals for victims of

ATTACKS ON GUN CONTROL

A discordant note was struck by opponents of gun control who saw violence as the work of "predatory aberrants." According to this argument, the entire focus on guns as a major public health threat is dramatically overstated in comparison to other more severe hazards. In fact, according to this point of view, the potential for "law-abiding citizens" to defend themselves means that firearms *protect* public health.

These letters are a testament to the power of a few sources to frame professional debate. Seventeen of the 22 articles appealing to this theme appeared within four clusters of letters to editors, written in response to articles promoting violence prevention through regulation or modification of guns and ammunition. These letters either called into question the data gun control advocates provided in constructing their arguments or challenged the constitutionality of proposed legislation. Responding authors, sidetracked from the original issues, were forced to address the challenges to their data or the questions of constitutional law. These back-and-forth exchanges often continued through subsequent articles in the same journals. The ability of anti-gun control forces to repeatedly pull the debate back to these fundamental questions is evidence that, through a mere 19 letters, one perspective can temporarily redirect the trajectory of an entire debate.

Table 3. Interventions recommended in articles in which violence was discussed as a public health issue, by frequency of mention, 1985–1995 (*N* = 282 articles)

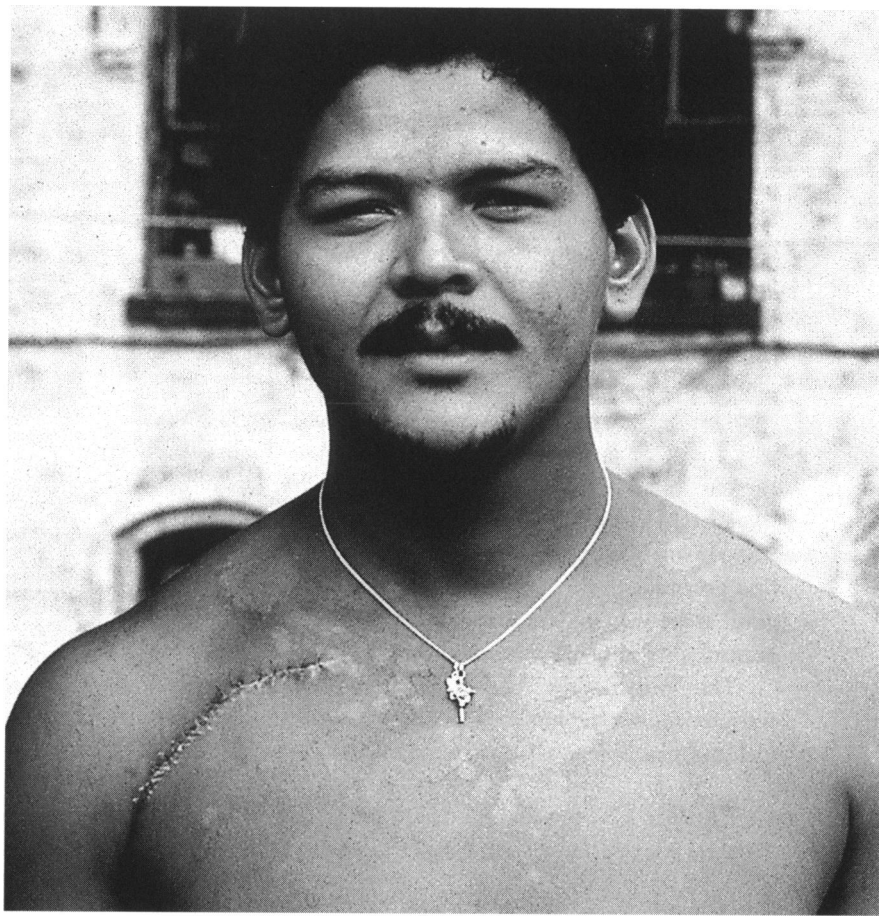
Recommended intervention	*Number of articles*	*Percent of total articles in sample*
Gun legislation	111	39.4
Public education/awareness	103	36.5
Behavior modification programs	90	31.9
Clinical victim services	82	29.1
Better reporting/data collection	73	25.9
Health professionals' education/awareness	71	25.2
Practitioner-patient communication	70	24.8
Community involvement	60	21.3
Multisector alliance (Federal/state/local and across professions outside of public health)	46	16.3
Multidisciplinary approach (within public health sector)	42	14.9
Evaluate current intervention programs	40	14.2
Economic opportunity	35	12.4
Limit portrayals of violence in the media	34	12.1
Parenting education	33	11.7
Role model/mentoring programs	33	11.7
Practitioners as advocates of violence prevention	30	10.6
Academic achievement and opportunity	27	9.6
Changes in physical environment	26	9.2
Decrease acceptability of violence in society	26	9.2
Recreation programs	20	7.1
Drug and alcohol rehabilitation programs	20	7.1
Government funding for research and programs	20	7.1
None specified	18	6.4
Strengthen and support families	16	5.7
Enhance self-esteem within at-risk populations	15	5.3
Biomedical/pharmacological treatment	7	2.5
Access to adequate health care	7	2.5
Enforce alcohol sale and consumption laws	6	2.1
Limit toy guns	2	0.7

NOTE: Percentages do not add to 100 because some articles discussed more than one intervention.

violence and their families as well as for guaranteed reimbursement for these services.

The fifth most commonly discussed strategy was to *expand current reporting and data collection systems*—such as those recording victim characteristics, injuries, and types of weapons—and to develop others that would capture data on phenomena currently not recorded (such as systems to track nonfatal injuries and victim-perpetrator relationships or refined E-codes).

Further down the list of intervention strategies were *increasing economic opportunity for at-risk groups*, *role model/mentoring programs for young people*, *drug and alcohol rehabilitation programs*, and *developing systems to strengthen and support families.*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IMPLICATIONS

While the risk factors identified in these articles consistently reflected sociosystemic concerns, the most commonly proposed interventions—other than gun regulation—tended to focus on changes in people's attitudes and behavior and on improved public health practice.

The literature thus reveals a tension between the authors' vision of the broad social precursors of violence and their attempts to apply a traditional set of remedies. This analysis suggests that, with the notable exception of gun regulation, we as public health professionals tend to focus primarily on individual-level and not social or institutional solutions to interpersonal violence. We make reference to the social predictors of violence—principally poverty, inequality, and racism—without providing substantive discussion of how public health might contribute to society's solutions for these problems.

Within public health, distinct factions may be competing for "ownership" of the problem of violence, each in vigorous pursuit of the resources available to the victors.[23] Understanding who benefits at whose expense when a given ideology prevails offers perspective on the societal values that reward and support certain viewpoints over others.[23–25] To the extent that the most common perspectives in this sample receive the most recognition and/or resources, the professional groups that benefit most would be injury control specialists focusing on firearms and health educators and others focusing on behavioral change.

There are several possible explanations for the authors taking a narrow view of solutions to the problem of violence. Some may not have seen broad societal approaches as realistic "first-step" interventions. (Many public health interventions over the years—such as campaigns against smoking, for better diets, and for safer sex—have focused on public education and behavioral change.) Some authors may have recognized the social risk factors for violence but felt that strategies to address them were not within their professional purview. In other words, targeting racism and social inequities as a means to mitigate violence-related morbidity and mortality may have been seen by some as simply "not my department."

The authors who acknowledged the social injustices leading to violence but failed to address them in a meaningful way may not have seen the connection between societal causes and societal solutions. Given the pervasive individualism in this society, the tendency in diagnosing a social problem is to look to the characteristics of the individuals believed to be causing the problem. Some public health practitioners may simply be unable to view population-based problems through anything other than an individual-level lens.

Finally, while public health professionals may see the causal relationships between social factors and violence in populations, the toolbox from which we draw may limit us to interventions directed toward the agents of injury (such as firearms) and individual-level variables such as knowledge, attitudes, and behaviors. Thus in some sense the toolbox may define the mindset.

We need to explore why the public health community is unable or unwilling to craft solutions for population exposures. If we lack the arsenal of tools necessary to address such apparently predictive risk factors as poverty and racism, then perhaps we need to engage with those who do have such tools—at the same time addressing, and if possible correcting—our limitations.

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At the time of the study described in this article, Dr. Winett was a doctoral candidate in the School of Public Health, University of California, Berkeley. She is currently Research Coordinator, Berkeley Media Studies Group, and Research Associate, School of Public Health, University of California, Berkeley.

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ERRATUM

In the article "Residential Smoke Alarms and Fire Escape Plans" by Pauline A. Harvey et al. in the September/October 1998 issue (p. 459–64), several errors appeared in the table on page 462, as follows:

For "Household income/Below poverty level," the percent reporting fire escape plans should read 51.5 (95% CI 46.9, 56.0), and for "Household income/Above poverty level," the percent reporting fire escape plans should read 60.5 (95% CI 58.8, 62.2).

For "Metropolitan Statistical Area/Urban," the unweighted number of households surveyed for fire escape planning should be 4258, not 4528.

One category (≥ graduate school) for the "Highest educational level in household" variable, and a four-level "Income group" variable were omitted.

A corrected table is available from the authors or on the NCIPC website at **www.cdc.gov/ncipc/duip/correction/phr.htm.** Address correspondence to Ms. Harvey, NCIPC, 4770 Buford Hwy. NE (K63), Atlanta GA 30341; tel. 770-488-4592; fax 770-488-1317; e-mail <pdh7@cdc.gov>.