Emergency Medicine: Competencies for Youth Violence Prevention and Control

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Abstract

By any standard one wishes to apply, the impact of violence on the health and safety of the public is significant. The expression of violence among children in the United States has increased significantly during the modern era. Homicide and suicide are the second and third leading causes of death in youths 15–24 years of age. The emergency department (ED) is a common site for the care of these victims, and because victims often become assailants, the emergency care provider needs to know the epidemiology, treatment, and methods for prevention of youth violence in order to curtail the cycle. A multidisciplinary task force was convened by the Centers for Disease Control and Prevention (CDC)-funded Southern California Center of Academic Excellence on Youth Violence Prevention and the Keck School of Medicine at the University of Southern California to define competencies for health professionals in youth violence prevention and control. Three levels of competence were identified: the generalist level, which should be obtained by all health professionals; the specialist level, which should be obtained by health professionals such as emergency medicine providers, who frequently work with populations affected by violence; and a third, or scholar level, to be acquired by health professionals who wish to become experts not only in the care, but also in research and advocacy. This article reports the details of this group's efforts and applies them to emergency care provider education. These competencies should shape the development of curricula for the span of emergency medical training from emergency medical services scholastic training to postgraduate continuous medical education.
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Youth violence is a serious public health problem in the United States; indeed, homicide is the second leading cause of death for young persons aged 15–24 years.[1] The data on more common nonfatal violent injuries are less available and reliable than the data on homicide, in part because many victims do not seek medical attention.[2] The situations in which fatal and nonfatal adolescent assault injuries occur are similar,[3] and violent injury and death result from altercations between family members and acquaintances more often than from criminal activity.[4] A growing number of reports confirm that children frequently witness violence,[5–8] and exposure to violence and victimization is strongly associated with subsequent acts of violence by the victim.[9–11] There is no doubt, when children are exposed to domestic and other forms of violence, they are harmed cognitively, emotionally, and developmentally.[7,12–17.] The psychological and descriptive profiles of assailants and victims of intentional injury are quite similar, and victims are often offenders in other assaults.[18] In the United States, there are more than 100 million emergency department (ED) visits each year, of which 37 million are a result of injury[19] and at least 3 million are the result of violence. Injuries resulting from violence lead to a substantial number of ED visits, and the proportion is particularly high in adolescents.[20]

For a variety of reasons, most current interventions focus on treating the victim, rather than on treating the perpetrator. Understandably, priority has been placed on the immediate safety and security of the victims of intimidation and assault. Other possible reasons for placing emphasis on victims include more frequent interaction with the health care system, overdiagnosis of the victim because of poor understanding of the emotional and psychological effects of the cycle of violence, and the erroneous belief that violence is innate and, therefore, untreatable. The victim is, however, not the only one needing treatment.

While violence has typically been considered a

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criminal issue, in the 1980s the U.S. Surgeon General also identified it as a public health problem.[21] This position was recently reconfirmed by Surgeon General David Satcher in his report on youth violence in the United States.[22] When seen through the lens of the public health model, violence results from risk factors that can be identified through epidemiological research, and then modified through community and individual interventions, thereby preventing the occurrence of violence.[23]

Youth seen in urban EDs are more likely to die of violence than any other illness.[24] When these findings are considered, it is not surprising that health care workers in urban trauma centers have noted that traumatic assault is recurrent, with hospital readmission rates for subsequent assaults noted to be as high as 44% and subsequent homicides as high as 20%.[25–29] The ED staff are thereby positioned to intervene during acute episodes that either reflect an ongoing pattern of violence or may precipitate a cycle of violent retribution. Child abuse, youth violence, intimate violence, and elder abuse are commonly encountered in the ED. In the past, these types of violence were studied in isolation. More recently it has become apparent that they are often closely interconnected and their root causes are similar. Interventions directed at one form of violence may be beneficial for others. Intervention strategies should try to address the multiple forms of violence whenever feasible. Many of these interventions can and should begin in the ED.[30]

BACKGROUND

Because emergency physicians (EPs) deal with victims throughout the life cycle, and are often the first to encounter individuals after violence, they can play an important role in addressing violence. Many patients who sustain nonfatal injuries are often seen in the ED and released without requiring hospital admission.[29] The ED may be their only source of medical contact for this injury. The window of time during acute presentation and treatment is an opportunity to intervene in the cycle of violence. This immediacy between an injury event and treatment of risk-taking behavior may create a very powerful teachable moment.[31] Other benefits of an ED setting include the availability of parents/guardians when treating underage youth. Family connections and parental support have also been identified as protective factors from youth violent behavior.[32] In other settings, such as schools, parental involvement may not be as accessible. Finally, the ED has a strong history of referral to medical and mental health services, and is an ideal location for referral to community services for violence.

Emergency physicians can have an impact on violence through medical education, research, surveillance, clinical practice, public education, and advocacy.[30] Understanding the scope of the problem, we recognize that violence is really the end result of social diseases that many EPs see regularly. If we are to have an effect on the cycle of violence, we can no longer afford to treat physical and psychological trauma without assessing the causes, and the risk and protective factors, that together can help the practitioner identify and offer treatment options to patients in danger.

THE PROBLEM

The EP encounters both victims and perpetrators of violence in the ED and, in many instances, these individuals may be one and the same. Thus, EPs are in a unique position to intervene both to prevent reinjury of the victim and to reduce the probability that the victim may later perpetrate violence. Unfortunately, many EPs are not adequately prepared to conduct these interventions and often the resources for appropriate referral and in-hospital intervention may not be available. When only the consequences of violence are treated, the opportunity to intervene in future violence is lost. Professionals who provide treatment for youth violence in the ED will find many opportunities for intervention if they are educated on the specifics of youth violence and have established protocols for action/referral.[33]

THE RESPONSE

In April 2001, the CDC-funded Southern California Center of Academic Excellence on Youth Violence Prevention and the Keck School of Medicine at the University of Southern California convened a working group of experts in youth violence prevention, health care practice, and health professional education. This was in response to the mandate for the CDC-funded centers on youth violence prevention[34] to provide training for health professionals in youth violence. A report[35] was published in 2000 by the Commission for the Prevention of Youth Violence,[36] which was composed of representatives from many of the major health professional associations in medicine, nursing, and public health. The commission was convened by the American Medical Association and funded by the Robert Wood Johnson Foundation. The mission of the Youth Violence and the Health Professions Working Group was to define principles of effective

practice in youth violence prevention for health professionals and to outline the training needs of health professions to meet this goal. Similar strategies to address training for health professions in violence prevention have been used by Brandt in defining curricular principles in family violence for health professionals,[37] and the Institute of Medicine's recent report on family violence.[38]

The group, a collaborative endeavor of the CDC-funded youth violence prevention centers, included representatives from the American Medical Association and other health professional associations, as well as expert clinicians and researchers from eight of the ten Centers of Academic Excellence on Youth Violence Prevention. The group published a report, ''Youth Violence and the Health Professions: Core Competencies for Effective Practice,'' on their findings in Fall 2001.[39] The monograph is being used to guide the development of this paper. The central premise of the working group was that health professionals require training in order to make significant contributions to national and local efforts to prevent youth violence through clinical interventions, and through social and political advocacy. Based on this premise, the working group established two objectives for the meeting: first, to define core competencies needed for the effective practice of youth violence treatment and prevention by health professionals, and second, to outline basic educational principles for training in these competencies.[39]

In developing competencies, the group referred to more extensively researched areas of violence prevention such as family violence,[30,40–50.] findings from general prevention research including the Blueprints series on effective violence prevention interventions,[50–52] the Surgeon General's recent report on youth violence,[22] the research on youth violence prevention in the health professions and health professional training,[53–94] and group members' extensive clinical expertise. Research on interventions conducted in the health care setting also informed the group's deliberations. While research on interventions in the health care setting is more limited, given the fact that health professional involvement in this area is in an early stage of development, the findings of these preliminary studies suggest that health professional involvement can lead to reductions in exposure to factors that place young people at risk for lethal violence, and increases in factors that protect young persons against this involvement. As research continues to be conducted, the findings from these studies should be continually incorporated into the training of health care professionals.[51,95–99]

This article describes competencies for effective practice defined by the working group and examines their implications for the training and practice of EPs.

PRINCIPLES FOR EFFECTIVE PRACTICE IN YOUTH VIOLENCE PREVENTION

Effective practice for health professionals in youth violence prevention will require an expansion of traditional strategies used in medical practice. However, in many ways this re-definition of the role of the EP lies well within the current context and scope of emergency medicine (EM). Indeed, the ''model of the clinical practice of emergency medicine,'' which was designed for use as the foundation for medical school and residency curricula, defines an EP's tasks to include recognition and treatment of traumatic conditions such as burns and penetrating neck trauma as well as prevention and education ''in which the EP applies epidemiological information to patients at risk, conducts patient education, and provides appropriate disease and injury prevention techniques.''[100]

First, the EP must understand and respond to youth violence as part of a larger continuum of violence, one that recognizes the relationship between the perpetration of violence and prior victimization. Many young persons who perpetrate violence against others have themselves been victims of violence.[101] In most instances the psychological and emotional trauma that results from these experiences has gone unrecognized and untreated. This exposure has been found to contribute to later violent behavior and future victimization by violence in the exposed youth.[10] Effective practice must recognize and respond to this complex interrelationship between perpetration and victimization. Second, the EP can take advantage of opportunities for prevention that occur throughout the child's life span starting in prenatal care and continuing through young adulthood. Because many individuals seek care in the ED for non-injury-related complaints, and some particularly high-risk groups may receive the majority of their care in the ED, the EP has many opportunities for preventive interventions. A common thread appears to run through the influencing factors of delinquent and violent behavior. One of the strongest and most frequently replicated findings in studies of deviant behavior is the importance of the family's role. The presence of ineffective parenting results in a lack of role models, lack of a nurturing environment, and lack of supervision for the children.[102–104] Psychosocial aspects may be identified by the EP during visits for prenatal care, acute non-emergency care, and post-injury follow-up exams. Research sug-

gests that appropriate parental education, and the linking of at-risk families with support services, can help prevent or at least reduce behavioral and emotional problems in children and youth, including violence.[21]

Researchers have found that interventions effective in preventing youth violence impact, and involve, multiple areas of a child's life ranging from the child's own beliefs and behavior, to relationships with his or her family, to the child's school and the social capacity of his or her surrounding community.[105, 106] Effective intervention by health professionals should attempt to engage or activate multiple sectors and, as such, should extend the traditional health care encounter to include interactions with families, schools, communities, and beyond. For the EP, this means recognizing violence as a public health problem, conducting surveillance and data collection, identifying causes as well as risk and protective factors, developing and testing interventions, and disseminating new knowledge.

Youth violence prevention efforts will require work in other settings such as government, schools, communities, and the media. A key element will be improving our strategic collaboration skills in these areas. Effective practice requires engaging youth, families, and communities as ''partners'' in the prevention of violence, recognizing and utilizing the assets and expertise already available, and developing new interventions that will focus on the causative, risk and protective factors instead of only the symptoms. Clearly, different EPs will engage in this process to different degrees, but the need for a foundation of knowledge and capacity in these areas is inherent in the prevalence and treatability of this public health problem.

COMPETENCIES FOR EFFECTIVE PRACTICE

The working group identified three levels of competence in youth violence prevention among health professionals. The levels are hierarchical, with each successive level building on the competencies of the preceding level, and are designed to accommodate variations in need and interest among health professionals in violence prevention. All health professionals, including ED nurses, ED techs, medical students, and EPs, should acquire competencies at level 1. Because of the nature of EM and the fact that EDs and emergency medical services (EMS) systems are usually the first point of contact for those at risk, EPs and health professionals should achieve both the generalist (level 1) and specialist (level 2) competencies in youth violence prevention. Table 1 outlines these competencies specific to violence in the context of the six general competencies for residency training developed by the Accreditation Council for Graduate Medical Education.[107]

At the generalist level of competency, all health professionals, including EPs, should acquire a body of knowledge about youth violence, including the relationship between youth violence and other forms of violence, an understanding of risk and protective factors that may modulate a youth's involvement in violence, and self-knowledge about the impact of the EP's personal experience on practice in this area. The EP should also develop the attitudes necessary to work effectively in violence prevention, including recognition of assets and resources for violence prevention in youth, family, and community. Finally, he or she should become skilled in culturally competent and empowering communication with patients and their families, and in basic social advocacy.

At the specialist level of competence (level 2), the EP should become skilled in specific clinical interventions for the prevention of violence and related injury. The EP already is a competent director of outpatient and inpatient referral for follow-up medical care and social intervention such as orthopedic referral and outpatient substance use counseling. At level 2 competency, the EP will effectively initiate important violence-related referrals. In addition, at the secondary level of competency, emergency professionals should be skilled at brief screening techniques for young persons who may be at risk for violent injury, and in connecting these young people and their families to comprehensive services in the community. At level 2, EPs should be aware of what the local community offers in violence-related services and political/social advocacy.

Similarly, the EM professional should be skilled in interventions that strive to reduce the incidence of re-injury among victims and perpetrators of violence. These are analogous to skills that EPs use in practice now to assess, for example, risk of re-injury of patients presenting with suicide gestures/self-inflicted injuries. As applied to the wider spectrum of violence, these include skills in assessing the potential for retaliatory violence, strategies for reducing risk (substance abuse counseling, gun use/availability assessment), and developing safety plans for the young person. At its most basic level, this intervention may be no more than a brochure with appropriate community resources for youth, analogous to giving the victim of domestic violence information on safe shelter. At a more advanced level, as research in the field continues and successful intervention strategies are identified in a department with more resources, this intervention may take the form of brief ED interventions by ED

TABLE 1. Incorporating Task Force Recommendations into Emergency Practice

General Competencies for Residency Training	Level of Education*	Competencies Specific to Youth Violence
Patient care	Level 1	N/A
	Level 2	1. Obtain a basic patient history to determine exposure to violence and involvement in violence either as victim or perpetrator. 2. Screen patients for risk behaviors associated with violence, such as substance abuse, and make appropriate referrals including referrals for mental health services. 3. Make referrals to community-based services that reflect characteristics researchers have identified as common to effective youth violence prevention programs. 4. Facilitate crisis intervention efforts for young perpetrators and victims of violence to address psychological and social morbidity and reduce the probability of future incidents. 5. Brief counseling with parents and other caregivers on risk factors associated with violence and strategies for reducing risk, including counseling on the risks associated with firearms and safe storage procedures.
	Level 3	6. Greater skill/expertise at eliciting nuances of patient history and exam that provides information to determine exposure to violence and risk factors in effective, compassionate manner.
Medical knowledge	Level 1	7. Recognize violence as a public health problem. 8. Describe interconnections among different types of violence. 9. Identify risk and protective factors for youth violence including the socioemotional competencies that research suggests are protective against violence. 10. Understand violence is preventable.
	Level 2	11. Understand pertinent signs/symptoms of clinical exam and medical history related to youth violence, and the interconnections with other types of violence as they commonly present in the emergency department (ED).
	Level 3	12. Expertise in violence presentations in the ED. 13. Expertise in interconnections/spectrum of violence and risk/protective factors.
Practice-based learning and improvement	Level 1	14. Recognize the value of research and evaluation on violence prevention. 15. List interventions that have been found to be effective in the prevention of youth violence and know the characteristics common to effective interventions.
	Level 2	16. Identify existing community programs/resources for violence prevention and know effective procedures for referral. 17. Analyze practice for resources for violence prevention (i.e., Is there a system set up for referrals?). 18. Introduce changes into procedures/structures to support violence prevention protocols (i.e., set up basic referrals). 19. Collaborate with other health professionals and support staff in making changes such as referrals possible.
	Level 3	20. Evaluate the efficacy and effectiveness of health care interventions to prevent youth violence and disseminate findings. 21. Introduce changes into procedures/structures based on current scientific evidence to support violence prevention protocols and interventions. 22. Evaluate implementation and effects of changes.
Interpersonal and communication skills	Level 1	23. Demonstrate skill in culturally appropriate and empowering communication with youth and their families around issues of violence. 24. Engender ``hope'' in youth and families regarding violence prevention. 25. Examine personal beliefs and experiences with violence and know their impact on professional practice and attitudes. 26. Understand people do not want to live in a violent environment, nor do they want their families to live in a violent environment.
	Level 2	27. Communicate and interact in an empowering manner with youth, families, and community residents about issues of violence.
	Level 3	28. Communicate and collaborate effectively with other professionals working in violence prevention. 29. Teach health professionals and students competencies in youth violence prevention. 30. Raise public awareness of the causes of violence and methods for preventing it.

continued

TABLE 1 (*cont.*). Incorporating Task Force Recommendations into Emergency Practice

General Competencies for Residency Training	Level of Education*	Competencies Specific to Youth Violence
Professionalism	Level 1	31. Perceive youth, families, and communities as useful resources and partners/colleagues with health professionals in reducing risk, increasing protection, and preventing violence.
	Level 2	32. Demonstrate a sensitivity to the diverse patient population affected by youth violence. 33. Adherence to ethical and legal standards of documentation and reporting.
	Level 3	34. Teaching/distribution of information on ethical principals related to youth violence.
Systems-based practice	Level 1	35. Know possible roles for all health professionals in youth violence prevention. 36. Know legal requirements for health professionals as they relate to youth violence. 37. Understand violence prevention is an appropriate and important role for health professionals, and that this role occurs in the context of larger multi-sector efforts to prevent violence. 38. Demonstrate knowledge of roles health professionals can play in social and political advocacy for the health of youth, families, and communities.
	Level 2	39. Demonstrate knowledge of roles physicians can play in social and political advocacy for the health of youth, families, and communities.
	Level 3	40. Identify needs and assets for violence prevention in the community. 41. Work effectively in nontraditional health care settings, such as schools and community centers, to deliver violence prevention interventions. Work collaboratively with community residents, neighborhood associations, faith-based institutions, city leaders, and diverse professionals (police, educators, city officials, etc.) to prevent youth violence. Work with community coalitions, comprehensive community initiatives, and community-based organizations to prevent youth and other forms of violence. 42. Build coalitions among community residents, service providers, and institutions to support implementation and evaluation of comprehensive youth violence prevention services in the community. 43. Advocate with local, state and federal policy makers for resources and policy changes, including the development of an integrated system of youth violence prevention services. 44. Work with other health professionals in strategies to evaluate and reduce risk factors associated with violence, including counseling on the risks associated with firearms and safe storage procedures; the impact of media violence on youth and methods for reducing exposure; and the effects of observing violence in the home and community and methods for modeling nonviolent solutions to conflict. 45. Work with other health professionals to educate parents and other caregivers on healthy socioemotional development in children and youth and teach them methods for strengthening their development.

*Level 1: health professionals, nurses, social workers, allied health professionals; Level 2: emergency physicians; Level 3: emergency physicians who become scholars/leaders/researchers in the field of youth violence.

staff (nurses, social workers, physicians) analogous to brief alcohol/substance abuse interventions.[108] Because they encounter all types of violence at all stages and degrees of severity, it is particularly important that emergency professionals are skilled in responding to the continuum of violence as it presents in the ED. For example, they should be able to recognize and respond to the needs of the children of a woman who has been battered even if the children themselves have not been physically injured.

Emergency physicians are already familiar with and well trained in the importance of interacting with parents/family of younger patients. For example, brief counseling with parents of children who have had an unintentional ingestion of medicine, about safe storage of medicines, is a routine part of the EP's practice. These skills will need to be specifically applied in the second level of competency to effectively interact with parents. Issues of violent related injury recurrence, strategies for reducing risk of youth violence, developing safety plans for young persons, reducing risks posed by firearms through strategies such as safe firearm storage, etc., should be addressed. Finally, EPs at this second level of competency will apply their skills to interact effectively with protective services in cases of abuse, and law enforcement in instances where serious threat to the child or another's safety is suspected.

Some EPs will choose to become scholars/leaders in youth violence prevention, level 3. These individuals should develop competence in training other health professionals in violence prevention, evaluating the effectiveness of interventions in the health care setting and basic research on youth violence including, but not limited to, surveillance. At level 3, health professionals should also develop the skills needed to work effectively with community groups such as coalitions to prevent violence, and in political and social advocacy. Finally, these individuals should be skilled change agents in the health care system, and skilled in social and political advocacy.

As the specialty of EM has developed, EPs have taken on important leadership roles in prevention research. This is especially true for nonviolent injury such as car crashes and the quasi-violent injury caused by alcohol-intoxicated drivers.[109] Youth violence prevention has much in common with these areas of research and, similarly, the need for excellent research in this area should draw some of the best and brightest of our specialty to the area of youth violence prevention and control. This has programmatic implications at the departmental level, and academic faculty in departments of EM should be encouraged to pursue their interests in this area.

THE EDUCATIONAL PROCESS

Emergency physicians should receive training in competencies for youth violence prevention throughout their professional careers. For the EM professional, there is an acute need for curriculum development to provide for this process. In particular, we need to have the spectrum of interpersonal violence, and its treatment and prevention, incorporated in the school of medicine and EM residency curricula. As this area of practice becomes a portion of the competencies expected for the effective practice of EM, these curricula will be essential to prepare the gamut of emergency health care providers.

The training should be provided as part of the main curriculum and not only as a freestanding workshop or course. Integrating content on youth violence throughout the training curriculum increases not only the relevance of the information to the health professional's practice, but also the professional's retention of the information and skills. Similarly, training on youth violence should be integrated with training on other types of violence to form a comprehensive package that accurately informs the practitioner about the continuum of violence. This should be done while allowing for specialized training that may be needed to adequately address the unique demands of the different types of violence.

In order to address the complexity of effective responses to violence and the basic skills of cross-sector collaboration that are needed, training should be interdisciplinary and include members of the community. Interdisciplinary training also provides students with the opportunity to experience firsthand the contributions that other disciplines and community members can make toward addressing the problem. Inclusion of a community member on the training team signals to the student the importance of involving the community as a ''partner'' in violence prevention efforts, and, once again, models empowering collaborative interactions with individuals and groups.

DISCUSSION/CONCLUSIONS

For many young persons in our country, violence is not a new element in their lives, but rather an ongoing part of daily living. Professionals working in EM are uniquely positioned to act in this arena. Perhaps more than any other health professionals, we encounter the progression of violence from simple assaults to the ravages and tragedy of youth executions. It is critical that we respond to the needs of our young people, and protect them now, as we also work to protect their future.

The competencies contained in this report should be used to guide development of comprehensive and interdisciplinary training for emergency physicians in youth violence prevention. As research and understanding of youth violence, like that of interpersonal violence, is in perpetual motion, these recommended competencies should be viewed as informative rather that authoritative, and should be amended to include new findings as they become available.

The task force on youth violence prevention and health professions was convened by Lyndee Knox, PhD, and the Southern California Youth Violence Prevention Center. The task force developed recommendations for health care professionals, which are posted on the YVP Center's website as an internal document. This article expands the recommendations to include emergency practitioners. The participants in the Youth Violence Prevention and Health Professions Working Group, Los Angeles, CA, April 2–3, 2001, were: Elaine Alpert, MD, MPH, Boston University, School of Public Health; America Bracho, MPH, CDE, Latino Health Access, Community Health Organization; Rebecca Cunningham, MD, University of Michigan Developing Center on Youth Violence Prevention; Kurt Denninghoff, MD, University of Alabama at Birmingham Youth Violence Center; Margaret Dolan, MD, Virginia Commonwealth University Developing Center on Youth Violence Prevention; Arthur Elster, MD, American Medical Association, Clinical and Public Health Practice and Outcomes; Paul Giboney, MD, Southern California Developing Center on Youth Violence Prevention; Nancy Graff,

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