

National Survey of Pediatricians' Violence Prevention Counseling

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Background: Recommendations for child health care providers to counsel patients and their families on violence prevention have been issued by a number of major health care organizations.

Objective: To assess the knowledge, attitudes, training, and practices of pediatricians concerning violence prevention counseling in the areas of family violence, discipline, television viewing, peer violence, and guns in the home.

Design: Survey.

Participants: A national random sample of 1350 pediatricians, divided equally among residents in their final year of training, practitioners who had completed their residency training within the last 5 years, and those who had completed their training more than 5 years ago.

Main Outcome Measures: Knowledge, attitudes, training, and current practices regarding violence prevention counseling.

Results: The overall response rate was 41%. When providing health supervision to patients, most pediatricians never or rarely screen for family and community violence, peer violence, and weapons. For example, 68% of residents and 73% of practitioners never or rarely screen

for domestic violence, 56% of residents and 67% of practitioners never or rarely ask adolescents about their involvement in physical fighting, and 54% of residents and 56% of practitioners never or rarely identify families who have guns in the home. Regarding preparation for providing violence prevention counseling, 76% of residents and 83% of practitioners rated their training as inadequate. Receiving training in the prevention of child/adolescent violence in medical school ($P < .001$), residency ($P < .001$), or fellowship/continuing medical education ($P = .002$) were major determinants of more frequent violence prevention counseling. Pediatricians who believed that parents rarely or never follow through on a physician's advice about safe gun storage, switching to nonviolent disciplining techniques, or limiting their child's television viewing were less likely to ask or advise patients in these areas.

Conclusions: Pediatricians are not adequately prepared to provide violence prevention counseling, and few currently screen for exposure to family and community violence, peer violence, and access to weapons. Comprehensive information about violence prevention should be integrated into medical education, and the efficacy of violence prevention counseling strategies should be evaluated.

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Editor's Note: It is disappointing that such a small proportion of pediatricians seem to screen for violence and/or to counsel when appropriate . . . and these findings were in the relatively small proportion (41%) who responded. I'm afraid that the results might be even worse for nonrespondents.

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VIOLENCE IS one of the most serious threats to the health of adolescents both in the United States and around the world. In the United States, young people are disproportionately represented among both victims and perpetrators of violence. Homi-

cide and suicide are the second and third leading causes of death, respectively, for those aged 15 to 24 years, surpassed only by unintentional injury.¹ Within certain geographic areas and population subgroups, firearm deaths surpass deaths from any other cause.² In addition, males aged 14 to 24 years constituted less than 8% of the population between 1991 and 1994 but committed nearly 48% of all murders.³ Nonfatal violence-related injuries result in lost capacity and high costs of medical care and rehabilitation and constitute a major public health problem.⁴

Research suggests that specific early exposures are associated with youth violence, including witnessing domestic and/or community violence,⁵⁻⁸ receiving

SUBJECTS, MATERIALS, AND METHODS

SUBJECTS

The sample for this study was a national random sample of 1350 pediatricians obtained from the AAP. The sample was evenly divided among subjects in their final year of residency training, practicing pediatricians who had completed their residency training within the last 5 years, and practicing pediatricians who had completed their residency training more than 5 years ago. Practitioners were board certified in general pediatrics without subspecialty certification. This sample was part of a larger study assessing violence prevention training and counseling practices of residents and practitioners in pediatrics and family medicine.

SURVEY

A 4-page survey was mailed in May 1996, with a cover letter signed by the principal investigator (I.W.B.) and the executive director of the AAP. A reminder was mailed 1 week later to all physicians, and a second survey was mailed 4 weeks after the initial mailing to all nonrespondents. The survey included questions about the respondents' training and current practices regarding violence prevention counseling for family violence, discipline, television viewing, peer violence, and guns in the home. Published recommendations on these areas by major health care organizations and authorities formed the basis for construction of the questions regarding counseling practices.^{19,20,22-24} Additional items addressed demographic information, practice characteristics, personal experience with firearms, and professional experience with firearm injuries. The survey was pretested with a convenience sample of pediatric residents and practitioners, and revisions were made to ensure survey clarity and ease of completion.

DATA ANALYSIS

The data were initially examined for the frequency distribution of all items. We used χ^2 tests to examine the significance of differences in variables reflecting violence prevention counseling and training when data were stratified by other factors, such as year of residency completion, expectations about parents following through on physician's advice, and office protocol for managing cases involving domestic abuse.

Linear regression analyses were used to assess factors that increase the likelihood of providing violence prevention counseling. The dependent variable was a scale constructed from the 16 questions regarding violence prevention counseling practices. These questions are listed in **Table 1**. The scale showed substantial internal consistency (Cronbach $\alpha = .91$).

corporal punishment,^{9,10} and viewing television violence.^{11,12} Ready access to firearms¹³⁻¹⁵ and adolescent substance use¹⁶⁻¹⁸ also play a major role in both interpersonal and self-directed violence. Historically, our society

has turned to the criminal justice system to prevent injuries and deaths from violence. Only recently has there been a growing recognition that violence can be addressed by public health professionals, introducing a primary prevention focus to the problem of violence.

Recommendations for pediatricians and other clinicians to counsel patients and their families on violence prevention, including domestic violence, corporal punishment, media violence, interpersonal youth violence, and firearms, have been issued by a number of groups, including the American Medical Association,¹⁹⁻²¹ American Academy of Pediatrics (AAP)²²⁻²⁷ American Academy of Family Physicians,²⁸ American College of Physicians,²⁹ Society for Adolescent Medicine,³⁰ and US Public Health Service.³¹ However, the training and practices of pediatricians concerning violence prevention are varied and not well defined. Some studies have assessed practicing pediatricians' attitudes and counseling practices regarding firearms³²⁻³⁵ and corporal punishment,³⁶ but most were conducted at the state level.

The present study was undertaken to determine the training and practices of a national sample of resident and practicing pediatricians regarding violence prevention counseling in family violence, discipline, television viewing, peer violence, and guns in the home. To help determine whether residency training in violence prevention is expanding to address the threat of violence in youths, we compared the violence prevention training and counseling practices of residents, practitioners who had completed their residency training within the last 5 years, and practitioners who had completed their training more than 5 years ago.

RESULTS

Surveys were returned by 373 (41.4%) of the 900 practicing pediatricians and 182 (40.4%) of the 450 pediatric residents. Nine respondents who had retired were excluded. Data on the age, sex, and time out of residency for all of the pediatricians who received a survey indicated that there were no significant differences between the total sample and the survey respondents.

Most pediatricians were women (66% of residents, 60% of practitioners). The mean ages were 32 years for the residents and 38 years for the practitioners. Eighty-two percent of residents and 49% of practitioners described their predominant ambulatory practice setting as urban. The remainder worked in suburban or rural settings. More than one third of all respondents grew up in homes in which a gun was kept. Seven percent of residents and 14% of practitioners indicated that they currently owned some type of firearm. Of note, nearly half of all respondents reported having a patient who had been shot.

Respondents were asked how often they ask or advise patients about a series of topics when providing health supervision to patients. Most pediatric residents and practitioners never or rarely screened for family violence, exposure to neighborhood violence, peer violence, and guns in the home (Table 1). Although some improvement was seen from practicing physicians who had completed their residency training more than 5 years ago to senior resi-

Table 1. Violence Prevention Counseling Practices Among Pediatricians

	Senior Residents, % (n = 182)	Practitioners, %	
		Completed Residency ≤5 Years Ago (n = 188)	Completed Residency >5 Years Ago (n = 176)
	Never or Rarely		
Ask a parent if they ever feel unsafe at home (eg, Are you afraid of your partner? Do you have any concerns regarding physical or mental abuse at home?)	68	68	77
Ask adolescents if they ever feel unsafe at home (eg, How many times have you been hit at home and what were the circumstances surrounding these incidents?)	49	58*	71
Ask parents if their child has witnessed violence in their neighborhood (such as a shooting, stabbing, or rape)?	64†	75	81
Ask adolescents how many times they have been in a physical fight during the past year	56	64	70
Ask adolescents if they ever feel unsafe at school from bullying or from kids who carry weapons	46†	59	61
Ask adolescents if they have ever carried a weapon for self-protection (eg, gun, knife, razor, or club)	54‡	75	78
Identify families who have guns in the home	54	55	58
	Usually or Almost Always		
Ask adolescents about depressive symptoms, including decreased concentration, insomnia, and suicidal ideation	60	53	44
Ask adolescents about their alcohol and other drug use	92§	84	75
Ask how much television the child or adolescent patient watches	44	37	36
Recommend that parents limit their child to no more than 1 to 2 hours of television per day	34	35	43
Ask parents if they are experiencing any difficulties with their child's behavior	80	77	79
Ask parents how they discipline their child	67	62	64
Recommend nonviolent alternatives to hitting for parents who use physical punishment	73	71	73
Offer parents an opportunity to discuss sensitive issues alone, with their child out of the room	49	48	59
Offer adolescents an opportunity to discuss sensitive issues alone, with their parents out of the room	92¶	82	81

*P = .009 compared with practitioners who had completed their residency training more than 5 years ago.

†P < .05 compared with practitioners who had completed their residency training within the last 5 years.

‡P < .001 compared with practitioners who had completed their residency training within the last 5 years.

§P = .01 compared with practitioners who had completed their residency training within the past 5 years.

||P = .03 compared with practitioners who had completed their residency training more than 5 years ago.

¶P = .002 compared with practitioners who had completed their residency training within the past 5 years.

dents, in most cases the majority of physicians in all groups rarely or never asked questions about these topics.

Television viewing, discipline, depression, and substance use were discussed more frequently (Table 1). More than one third of pediatricians usually or almost always discuss television violence, and most pediatricians usually or almost always discuss discipline and screen for depression and substance use.

Only 27% of residents and 11% of practitioners reported receiving training in medical school (eg, any lectures, grand rounds, case conferences) for the prevention of child/adolescent violence (Table 2). Almost three fourths of residents and 38% of practitioners received such training in residency. Not surprisingly, the largest percentage of practitioners received training in the prevention of child/adolescent violence in continuing medical education (43% overall). One fourth of senior residents and 38% of practitioners indicated that they had not received formal training in child/adolescent violence prevention. In rating their training for violence prevention counseling, 76% of residents and 83% of practitioners in-

dicated that they had received "less than adequate" or "no" preparation to provide violence prevention counseling.

The areas in which most residents and practitioners indicated a need to receive more information on violence prevention corresponded to the topics that are least often discussed when providing health supervision to patients. Most senior residents and practitioners indicated a need to receive more information on preventing youth interpersonal violence (assaults and homicides) (77%), conflict resolution strategies (75%), and domestic violence (69%), and almost half (49%) indicated that they needed more information on firearms. Less commonly cited areas of educational need included discipline/corporal punishment (40%), television violence (36%), suicide (34%), and child abuse (25%).

Pediatricians' expectations about parents following a physician's advice were related to their counseling practices in several areas of violence prevention. Pediatricians who believed that parents would rarely or never

Table 2. When Pediatricians Received Training in the Prevention of Child/Adolescent Violence

Training Source	Pediatricians Who Received Training, %		
	Senior Residents, % (n = 182)	Completed Residency	Completed Residency
		≤5 Years Ago (n = 188)	>5 Years Ago (n = 176)
Medical school	27*	14	8
Residency	73†	46‡	29
Fellowship	...	12	9
Continuing medical education	...	42	45
Have not received formal training	25	31§	46

*P = .002 compared with practitioners who had completed their residency training within the past 5 years.

†P < .001 compared with practitioners who had completed their residency training within the past 5 years.

‡P = .001 compared with practitioners who had completed their residency training more than 5 years ago.

§P = .006 compared with practitioners who had completed their residency training more than 5 years ago.

follow through on a physician's advice about storing firearms unloaded and locked up were more likely to rarely or never identify families who have guns in the home (73% vs 55%, $P = .04$). Similarly, pediatricians were more likely to rarely or never recommend nonviolent alternatives to hitting for parents who use physical punishment if they believed that parents would rarely or never follow through on a physician's advice about switching to nonviolent disciplining techniques (19% vs 7%, $P = .002$) and modeling nonviolent ways to settle problems (20% vs 7%, $P = .001$). Pediatricians who believed that parents would rarely or never follow through on a physician's advice about limiting the amount of their child's television viewing were more likely to rarely or never ask how much television their patient watches (39% vs 22%, $P = .001$) and rarely or never recommend that parents limit their child's television viewing (51% vs 31%, $P = .001$).

To examine factors that increase the likelihood of providing violence prevention counseling while controlling for possible confounders, linear regressions were run using a counseling practices scale as the dependent variable (**Table 3**). Receiving training in the prevention of child/adolescent violence in medical school and residency training programs increased the likelihood of providing violence prevention counseling for both residents and practitioners. For practitioners, receiving fellowship training or continuing medical education in the prevention of child/adolescent violence also increased the likelihood of providing violence prevention counseling. In addition, clinical experience with firearm injuries was associated with violence prevention counseling practices among pediatricians. Residents and practitioners with patients who had been shot were significantly more likely to provide violence prevention counseling. Gun ownership, the number of patients typically seen per hour by the practitioner, and involvement of practitioners in teaching residents or medical students at their pri-

Table 3. Predictors of Pediatrician Counseling About Violence Prevention*

Variable	Parameter Estimates (P Values)	
	Senior Residents (n = 182)	Practitioners (n = 364)
	Male (vs female) pediatrician†	0.08 (.29)
Rural (vs urban/suburban) practice†	-0.01 (.91)	0.01 (.79)
Age	0.03 (.69)	-0.13 (.02)
Received training in violence prevention in medical school	-0.24 (.01)	-0.22 (<.001)
Received training in violence prevention in residency	-0.28 (.003)	-0.29 (<.001)
Received training in violence prevention in fellowship or continuing medical education	...	-0.18 (.002)
Have patient who has been shot	0.15 (.04)	0.15 (.005)
Own a gun	0.04 (.47)	-0.01 (.83)
Teach residents and/or medical students at practice setting	...	0.06 (.30)
Number of patients usually seen per hour in office or clinic	...	0.01 (.81)

*Parameter estimates were based on separate linear regression analyses for senior residents and practitioners. The dependent variable was a counseling practices scale (see the "Subjects, Materials, and Methods" section).

†The reference category is in parentheses.

mary practice setting were not associated with the likelihood of providing violence prevention counseling.

COMMENT

We found that few pediatricians in our sample routinely screen for exposure to family and community violence, involvement in peer violence, or access to weapons, the areas of violence prevention in which most pediatricians indicated a need for more information. Training in violence prevention—whether in medical school, residency training programs, or fellowship/continuing medical education—increases the likelihood of providing violence prevention counseling. However, many resident and practicing pediatricians have not received formal training in violence prevention, and more than three fourths of pediatricians rated their training as inadequate in preparing them for violence prevention counseling. These data provide a compelling argument for the need to integrate comprehensive information about violence prevention into medical education.

The primary limitation of this study was the potential for response bias, with a response rate of 41%. For comparison, response rates for other national physician surveys on topics related to violence include 69% for a survey of AAP fellows on firearm counseling³⁵ and 15% for a survey of fellows of the American College of Obstetricians and Gynecologists on domestic violence screening.³⁷ Data on the resident and practicing pediatricians sampled in our study permitted comparison of respondents and nonrespondents with respect to age and sex. Resident and practitioner respondents closely re-

sembled both the age and sex of the total resident and practitioner samples, respectively. Because the study sample was drawn from the membership of the AAP, it cannot be regarded as representative of all pediatricians. Regarding educational needs, the survey assessed only perceived needs, not intentions to participate in training opportunities.

EXPOSURE TO VIOLENCE

Despite the extensive prevalence and profound impact of exposure to violence among children and youth, we found that few pediatric practitioners or senior residents screen their patients for exposure to violence in their home or neighborhood. Campbell and Schwarz³⁸ found that 88% of preadolescent children from an urban middle school and 57% of preadolescent children from a suburban middle school had witnessed a robbing, beating, stabbing, shooting, or murder. Most other studies have focused on inner-city or low-income children and youth and have found comparably heavy exposure to violence.^{7,8,39} A study of parents with preschool-aged children attending an urban pediatric primary care clinic found that 10% reported that their children had witnessed a stabbing or shooting.⁴⁰ While half of the preschoolers witnessed the violence on the street, the other half did so in their own homes. In the United States, an estimated 3.3 million⁴¹ to 10 million⁴² children witness parental violence each year. It is critical for child health care providers to ask not just about child abuse but about family violence in general because children in families where there is violence are at higher risk of being abused themselves.⁴³⁻⁴⁵ Additionally, witnessing violence at home may be as traumatic for children as being the direct victim of abuse, in terms of long-term psychological and behavioral effects.⁴⁵⁻⁴⁷ Finally, children who witness violence in the home are more likely to become perpetrators or victims of violence themselves, both in intimate relationships and on the streets.^{5,6} The AAP recently issued a statement recognizing that family and intimate partner abuse is harmful to children, which encouraged pediatricians to incorporate questions about family violence into anticipatory guidance and to incorporate education in this area into residency training programs and continuing medical education.²⁶

Previous studies have shown that among other physician groups, including obstetricians and gynecologists,³⁷ pediatric emergency medicine fellows,⁴⁸ and family physicians,⁴⁹ most practitioners do not screen for and identify domestic violence in their patients. Lack of education or training was the most common barrier to domestic abuse screening, recognition, and intervention identified by pediatric emergency medicine fellows and obstetricians and gynecologists.^{37,48} Other barriers include lack of time, lack of experience with domestic abuse cases, frustration that they cannot help the victim, feeling that abuse is not a problem in their patients, and fear of offending patients.^{37,48,49} Wright et al⁴⁸ found that 64% of the pediatric emergency medicine fellows whom they surveyed believed that responding to battered mothers did not belong in the purview of pediatrics. Whereas

98% of the fellows had received instruction during medical school and residency in child abuse/neglect, only 30% had received training on battery of women. Parallel with this finding, we found that domestic violence was cited nearly 3 times as frequently as child abuse by pediatric practitioners and residents as an area of educational need.

INTERPERSONAL YOUTH VIOLENCE

In our study, most pediatricians reported that they do not routinely include questions about weapon carrying and physical fighting in health guidance visits with adolescents. The 1993 national school-based Youth Risk Behavior Surveillance⁵⁰ indicates that 42% of adolescents were in a physical fight during the 12 months preceding the survey and 22% carried a weapon during the 30 days preceding the survey. Physical fighting and weapon carrying are associated with other problem behaviors in adolescents, including substance use, sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, suicidal behaviors, and school truancy.⁵¹⁻⁵⁴ Since nonfatal violence often precedes fatal violence among youth, identifying and reducing fighting and involvement with weapons among adolescents is an important strategy to prevent injuries and deaths from violence.⁵⁵ While there is no empirical evidence demonstrating the effectiveness of office-based interventions in changing attitudes about violence, producing desired behavioral changes, or decreasing violence-related injury among young people, studies indicate that violence prevention counseling is well received and remembered by patients and may sometimes result in positive behavioral changes.^{56,57} Incorporating screening questions into a written questionnaire for parents and adolescents may facilitate implementation of violence prevention counseling.^{20,58}

FIREARMS

Our results regarding firearm injury prevention counseling by pediatricians are similar to those of a 1994 national survey of AAP members. Olson et al³⁵ found that half of pediatricians who provide injury prevention counseling report that they never identify families who have firearms in the home. Similarly, in the present study, 55% of respondents overall reported that they never or rarely identify families who have guns in the home. Residents, practitioners who had completed training within the last 5 years, and practitioners who had completed training more than 5 years ago were equally likely to indicate that they never or rarely identified families with firearms in the home and needed more information on firearms. Thus, despite AAP policy statements on firearms that encourage pediatricians to ask about the presence of a gun in the home and counsel on its removal or secured storage if present^{22,23} and the development of educational materials and counseling protocols on firearm injury prevention for pediatric health care professionals,^{25,58,59} residency training does not adequately prepare pediatricians for their role in firearm injury prevention counseling.

The threat of violence to the health of youth in the United States requires a reassessment of priorities in the content of health supervision visits.⁶⁰ Likewise, training must prepare physicians to address the changing issues that affect children's health. Our findings clearly demonstrate the need for educational improvements in the area of violence prevention in medical schools, residency training programs, and continuing medical education. Comprehensive information about family and interpersonal violence must be integrated and reinforced throughout existing medical education. Alpert et al⁶¹ have proposed goals and objectives for teaching medical students, residents, and practicing physicians about violence prevention and strategies for developing and implementing a curriculum on violence issues. Improving education about violence is critical to ensure that pediatricians are adequately prepared to provide effective violence assessment, prevention, and intervention.

The data in this study also indicate that pediatricians who believe parents are not likely to follow their advice are less likely to provide screening and anticipatory guidance in a number of areas of violence prevention, including firearms in the home and discipline practices. However, studies assessing parental reaction to pediatrician counseling about these issues suggest that anticipatory guidance by pediatric providers may influence parental behavior. With regard to firearm injury prevention counseling, most gun-owning parents report that they would follow their pediatrician's advice about gun storage and either follow or think over advice to remove guns from the home.^{62,63} Furthermore, most parents who would consider obtaining a gun if they felt threatened indicate that they would be dissuaded from doing so by a pediatrician's advice about the risks of keeping guns in the home.⁶² Sege et al⁶⁴ observed that brief anticipatory guidance designed to teach parents the use of time-outs as a nonphysical method of discipline resulted in an increase in parents reporting that they had tried a time-out for the first time.

While previous research has demonstrated that primary care-based counseling can reduce childhood unintentional injuries⁶⁵ and specific health-risk behaviors among adults, including alcohol consumption⁶⁶ and smoking,⁶⁷ the overall efficacy of brief office-based counseling interventions to reduce health-risk behaviors has not been adequately studied. Further study is needed to determine the effectiveness of violence prevention counseling in order to inform child and adolescent health care providers on effective violence prevention strategies used in clinical encounters.

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