What pediatricians can do to further youth violence prevention—a qualitative study

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Abstract

***Objective*—Youth violence is a public health problem world wide. However, the United States has the worst rate of youth violence among industralized countries. This study was conducted to learn what pediatricians, community leaders, and parents think the doctor's role is in youth violence prevention during the well-child examination for children.**

***Methods*—Interviews were conducted with pediatricians, community leaders, and parents living or working in Los Angeles, California.**

***Results*—All three groups interviewed believed that the physician should incorporate violence prevention counseling as part of the well-child examination. The mechanism of action differed for the three groups. Almost half of pediatricians' statements focused on their role as prevention counselor, with respect to such issues as appropriate discipline and gun safety. One third of community leaders' statements, however, related to physician referral to existing community resources. More than half of parents' statements referred to the pediatrician as someone who can directly educate their child about making positive choices.**

***Conclusions*—Although pediatricians cannot solve the problem of youth violence alone, findings from this study suggest that they should address this issue with their patients and should work in tandem with existing community resources to further a solution to this growing epidemic.**

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Youth violence, defined as any person 18 years old or younger injuring or killing another person in this age group, continues to be a significant public health problem world wide. In low income countries that have been exposed to on-going wars, a new generation of hardened children has emerged. Yet, the rate of homicide in many of these countries is still lower than that of the United States.[1] In fact, even when we compare the United States to high income countries, America has more violent deaths than any other industrialized nation.[1–4] In 1994, the homicide rate for 15–19 year old American adolescents was 20.3/100 000, making it the second leading cause of death for youth.[4–7] Among 12–17 year old youth, 71/1000 had been victims of violent crimes in 1993.[5] For every child that dies as a result of violent injury, there are many more that sustain non-fatal injuries.[8 9] Even though the trend of violent crimes in the United States has declined in most urban areas, youth violence has continued to rise in cities such as Los Angeles.[10–13]

In 1992, Surgeon General C Everett Koop recognized violence as a public health issue. Since then, health care providers have grappled with their potential role in addressing violence prevention. The majority of primary care providers have agreed that they should address this issue,[14–21] but it is not clear to them how to do so.

Ideally, children's primary care providers should focus on *primary* prevention strategies. These approaches involve interventions before an injury occurs. By identifying potential hazards in the child's environment, pediatricians have successfully counseled families during the well-child examination to prevent unintentional injury.[22–29] How can we apply this approach to youth violence? Many have suggested that by addressing the vector of most of these violent injuries, the handgun, clinicians could decrease the number of injuries that occur.[7 15–17 19–21] Major medical organizations such as the American Academy of Pediatrics and the American Medical Association have issued guidelines that recommend counseling patients about the hazards of a gun in the home.[15–19] In addition to guns, there are several other risks for being either a victim or a perpetrator of violence. They include: witnessing violence on the streets, in one's family, or in the media; using alcohol, tobacco, or illicit substances; being a young male of any ethnicity; living in poverty; and being depressed.[7 30–33]

Because physicians are limited in the amount of time they can spend with patients, and the frequency with which they interact with them, it is essential that the doctor's message be reiterated in the child's family and community. What messages can the doctor provide that parents and community leaders will reinforce? Do they think that doctors have a part to play during the course of a routine office visit? Our purpose was to conduct an exploratory analysis of the pediatrician's role in youth violence prevention from the perspective of not only the doctor, but also the parent and the community leader. We did not interview adolescents because we focused on the earlier years when children are developing their sense of normative behavior.[34–37]

Methods

Through a series of interviews with pediatricians, parents, and community leaders we asked participants to elaborate on what they

Table 1 Study population (n=26)

Group	No	Gender		Ethnicity		
		Male	Female	Black	White	Latino
Clinician	6	4	2	1	3	2
Community leader	7	5	2	4	2	1
Parent	13	2	11	12	0	1

thought doctors potentially could do to influence youth violence primary prevention, what barriers they might encounter, and what resources they might use.

INTERVIEW PROCEDURE

We developed a semistructured instrument with 15 questions. All interviews began with the question, "Do you think the clinician has a role in youth violence primary prevention, defined as preventing violent injury in children younger than 18 years old". Because we were interested in primary prevention, we focused our questions on the role of the clinician during the routine well-child examination. Most questions were open ended and the interviewer probed the respondent to elaborate on responses. Interviews with pediatricians and community leaders lasted approximately an hour and were audiotaped with the respondents' consent. We interviewed informants until no new themes were mentioned.[38] For parents, a group interview was conducted for one hour. We allowed all participants the opportunity to voice their opinion on a question before proceeding to the next question. Interviews were transcribed verbatim from audiotapes.

SUBJECT RECRUITMENT

Table 1 shows the details of gender and ethnicity among the three groups interviewed. A convenience sample of pediatricians were randomly selected from the 1995 *Los Angeles County Resource Directory*. This identified doctors working in either South Central or East Los Angeles, the two highest youth violent crime districts in Los Angeles. Eight doctors were invited to participate and six accepted. Two were unable to participate due to time constraints. A convenience sample of seven youth violence community leaders were selected as suggested by the director of the Violence Prevention Coalition of Greater Los Angeles, a coalition of more than 200 grass roots organizations. All those invited agreed to participate. A convenience sample of parents gathered at a community school meeting in South Central Los Angeles volunteered to participate in a group interview subsequent to the school meeting. From a gathering of 30 parents, we asked for 10 volunteers who had young children and teenagers at home; 13 agreed to participate. Notably, parents who agreed to participate were more often African American and female. This reflects the composition of parents in South Central Los Angeles. Participants were compensated with breakfast or lunch.

Although we would have preferred to increase the sample size and make the process random, we were most interested in identifying the salient themes that were associated with youth violence among these three groups. Given the investigators limited time and monetary constraints, we decided to interview just enough participants from each group to attain theme saturation (no longer gathering new themes).

DATA ANALYSIS

Two investigators independently reviewed the transcripts and identified all segments of text that pertained to three major themes: the *potential* doctors possess to deal with this issue; the *barriers* they face; and the *resources* that exist to assist them. The two investigators compared their coding of the text and retained all statements where they agreed. Where there was disagreement, the text in question was reviewed and retained only if both investigators agreed it captured the sense of the theme. In all, the two coders identified 84 statements related to *potential*, 74 associated with *barrier*s, and 41 pertaining to *resource*s. Intercoder reliability (κ) was 0.88 for *potential*, 0.66 for *barrier*s, and 0.72 for *resource*s, indicating moderate to strong agreement.

To identify subthemes in the data, four coders performed pile sorting tasks on each of the three themes' statements. Statements for a theme were typed on separate pieces of paper. Then four coders (three of whom were naive to the participants and the questions) independently sorted the statements into four piles, based on the perceived similarity of statements. After sorting the statements, coders described each pile in their own words. Allowing several coders to sort statements into their own categories reduced the chance of the subthemes being identified simply because the primary investigators found them interesting.[38]

The pile-sort technique produced a statement by statement similarity matrix where the degree to which any two statements were similar was determined by the number of times the two statements were placed in the same pile by the four coders. The matrix was analyzed with non-metric multidimensional scaling[39] and hierarchical cluster analysis.[40] These qualitative analysis techniques identified groups of similar items. Combined with the qualitative descriptions provided by the coders, the two primary investigators identified six subthemes for *potential*, five for *barriers*, and four for *resources*.

To ensure that the newly identified subthemes could be described and identified as independent constructs, the four coders independently read each theme's statements and marked them as either belonging or not belonging to the relevant subthemes. Intercoder agreement produced a crude measure of association between a subtheme and each statement. A statement was considered highly associated with a subtheme if it was marked by at least three coders, weakly associated if marked by two coders, and not associated if marked by one or fewer coders. The results reported below pertain to only those statements that were strongly associated with each of the subthemes. All quotations cited as examples were marked by all four coders, indicating complete coder agreement.

Table 2 Distribution of subthemes across clinicians, community leaders, and parents for the major theme: potential (N=199 unique statements)*

Subthemes	*No (%) clinicians (n=36)†*	*No (%) community leaders (n=39)†*	*No (%) parents (n=9)†*	*No (%) total (n=84)†*
Family education	15 (41.7)	16 (41.0)	1 (11.1)	32 (38.1)
Direct patient education	8 (22.2)	10 (25.6)	2 (22.2)	20 (23.8)
Doctor-patient relationship	5 (13.9)	11 (28.2)	2 (22.2)	18 (21.4)
Referral	4 (11.1)	13 (33.3)	0	17 (20.2)
Gun safety	4 (11.1)	4 (10.3)	0	8 (9.5)
Indirect education	3 (8.3)	10 (25.6)	0	13 (15.5)

*"N" equals the total number of unique statements across all groups and all themes.
†"n" equals the total number of unique statements for each group within a major theme.
Categories are neither mutually exclusive nor exhaustive, so category frequencies may not total to "n".

Table 3 Distribution of subthemes across clinicians, community leaders, and parents for the major theme: barriers (N=199 unique statements)*

Subthemes	*No (%) clinicians (n=27)†*	*No (%) community leaders (n=33)†*	*No (%) parents (n=14)†*	*No (%) total (n=74)†*
Health care system	14 (51.9)	6 (18.2)	3 (21.4)	23 (31.1)
Office limitations	12 (44.4)	4 (12.1)	6 (42.9)	22 (29.7)
Neighborhood violence	4 (14.8)	11 (33.3)	5 (35.7)	20 (27.0)
Family limitations	3 (11.1)	5 (15.2)	1 (7.1)	9 (12.2)
Violent culture	2 (7.4)	20 (60.6)	4 (28.6)	26 (35.1)

*"N" equals the total number of unique statements across all groups and all themes.
†"n" equals the total number of unique statements for each group within a major theme.
Categories are neither mutually exclusive nor exhaustive, so category frequencies may not total to "n".

Results

We were most interested in how pediatricians' perceptions of their role in youth violence prevention compares with the perceptions of community leaders and parents. Tables 2–4 depict this emphasis by listing subthemes in the order most often mentioned by doctors. The qualitative analysis below combines the code frequency data in tables 2–4 with typical quotes taken from respondents in the three groups. We defined a typical quote as one that all coders agreed upon as representing a subtheme. The focus group and semistructured interviews began with the question, "Should doctors counsel on youth violence prevention?" All participants stated that doctors should do so during the routine well-child examination. Below, we present the results for the three major themes.

MAJOR THEME: POTENTIAL

One of the major themes we developed was the *potential* contribution clinicians could make to violence prevention during a routine well-child examination. Coders identified six *potential* areas of intervention: educating the *family* about youth violence; counseling the *child* directly; using the unique bond formed between doctor and patient; advocating gun safety to either the parent or the patient; referring patients and families to community programs, such as parenting classes or Boys and Girls Clubs; and educating patients through impersonal means, such as brochures or posters.

Table 4 Distribution of subthemes across clinicians, community leaders, and parents for the major theme: resources (N=199 unique statements)*

Subthemes	*No (%) clinicians (n=15)†*	*No (%) community leaders (n=19)†*	*No (%) parents (n=7)†*	*No (%) total (n=41)†*
Unique doctor-patient relationship	4 (26.7)	6 (31.6)	5 (71.4)	15 (36.6)
Referral	4 (26.7)	6 (31.6)	0	10 (24.4)
Health care system	4 (26.7)	2 (10.5)	0	6 (14.6)
Total statements for all three themes	78 (39.2)	91 (45.7)	30 (15.1)	199 (100)

*"N" equals the total number of unique statements across all groups and all themes.
†"n" equals the total number of unique statements for each group within a major theme.
Categories are neither mutually exclusive nor exhaustive, so category frequencies may not total to "n".

Of the 36 physician statements related to potential interventions, 41.7% dealt with family education, and 22.0% focused on direct patient education. As one doctor put it, *"You empower the family to focus on the child's development—to really think about TV and think about spanking, and think about the type of music or the type of plays you may view with your child"*.

Community leaders agreed with doctors that education was an important tool in prevention, with 41.0% and 25.6% of their 39 statements being strongly associated with family and direct patient education, respectively.

Community leaders and parents, however, were more likely than physicians to see the doctor-patient relationship as a vehicle of *potential* intervention. A community leader summed up this perspective, *"Everyone needs to do their part if we're going to tackle such a big problem. I think, in particular, doctors have a lot of influence on families and they should use that to address the problem of violence"*.

Additionally, community leaders were more likely than doctors or parents to view the pediatrician's role as one of a liaison between parents and other community services. Of all the community leaders' statements, one third were related to community program referrals. An example of a community program mentioned included Boys and Girls Clubs, which promote positive peer activities as well as the importance of doing homework. One community leader envisioned the process this way, *"So this kid in your office is 5 years old and you have two minutes to impact the family about violence prevention. I think the only thing you could do with a time limit like that is to offer the family a referral to a program like ours. Doctors need to know their community and refer their patients into existing programs"*.

MAJOR THEME: BARRIERS

Barriers refer to those obstacles that either inhibit the pediatrician's ability to promote youth violence prevention during a routine well-child examination or negatively affect the effectiveness of counseling. Coders identified five subthemes: limitations of the *office visit*; limitations of the *health care system* in general; limitations of the *family*; living in a violent neighborhood; and a general culture of violence in our society.

Fifty two per cent of doctors' statements about barriers related to the limitations of the health care system and 44% related to the limitations of the office visit. One clinician stated, *"You can't do it [counsel on youth violence prevention] in a five minute or a 15 minute office visit, even though you have good intentions. You might address it and bring those issues up, but people aren't going to follow through with it.…"*.

Another expressed concern about the lack of continuity in a managed care environment

stating, *"I just don't know what the average life span of a member in a health maintenance organization is because if the employers were to decide to change their insurance, it may be two years or even less [that the patient stays in the same system]"*.

Like doctors, parents are also acutely aware of office limitations. Of the 14 parent statements about barriers, 43% related to this subtheme. One parent expressed her concern this way, *"Once you go to the doctor, you're going for one problem and then bringing up other things. And most of these doctors are in HMOs [health maintenance organizations] and they have too many patients to sit down and talk with you personally"*.

Community leaders and parents were far more likely than physicians to mention that children live in violent neighborhoods, posing a major obstacle to effective clinician counseling. Thirty three per cent of community leaders' statements and 36% of parents' statements related to this subtheme, compared with only 11% of clinicians' statements. One community leader described the situation like this, *"…[the concern] is whether or not they [children] were going to get shot going to and from their homes, whether or not they would be safe in their homes"*.

Parents expressed their concern in a slightly different way, *"It's not every street [that is violent]. Your street can be safe and the next couple of blocks can be safe, but it might be a couple of blocks over…"*.

Community leaders and, to some extent, parents, perceived a *culture of violence* as being one of the fundamental barriers. Over 60% of community leaders' statements and 28.6% of parents' statements pertained to this subtheme. We considered a *culture of violence* as more pervasive than just the physical violence in any particular neighborhood, defining it as an expectation or a norm of behavior. One community leader described it like this, *"It doesn't matter 'cause your life doesn't mean so much anymore. Violence becomes so commonplace and society seems distant and cold. There's no empathy there. Then the child becomes isolated and by the end, the child is fearless because they expect to be killed themselves"*.

MAJOR THEME: RESOURCES

Another major theme we developed was *resources* currently available for the doctor to facilitate counseling during the routine well-child examination. Coders identified three subthemes: the unique doctor-patient relationship; the ability of the clinician to provide community referrals, such as to a parenting class or to a peer social club; and those resources that the health care system can provide the clinician in counseling. Twenty eight per cent of clinicians' statements, 32% of community leaders' statements, and 71% of parents' statements noted that the unique doctor-patient relationship was a valuable resource and provided an important opportunity for intervention. One doctor summarized the relationship by saying, *"I think that pediatrics lends itself very well to trying to modify a lot of these behaviors [those that lead to youth violence]. In so far as the pediatrician has the unique position to observe the child's development and the family's development, the dynamics that occur between the child and the caregivers from birth through life"*.

A community leader put it this way, *"Perhaps the doctor would be one of the best people to bring this up because the families are going to have a relationship with their doctors"*.

Parents mentioned this subtheme most often. One parent stated, *"It all depends on the doctor—if the doctor knows the child real well . . .he can have that personal one-on-one feeling with the child that can make the difference"*.

Twenty seven per cent of physicians' statements and 32% of community leaders' statements were related to the doctor's ability to refer patients to existing community services. A community leader noted, *"You could act as a resource. You see a kid with a broken leg, you have to refer him to the next person that takes care of the bones. Just say that you see a kid that has a problem with violence, you see a kid that looks like he is a gang member or looks like he is heading that way; you might want to refer to the next person that might be able to reach that person [kid] or help him as far as a community youth program"*.

A pediatrician reiterated this subtheme, *"A professional who is highly resourceful, talented, can access the community through referrals, just like that, because he's got the title and name and can focus right on the intervention"*.

Discussion

Although the rate of violence in the United States is down, the rate of youth violence continues to be disproportionately high in urban areas such as Los Angeles.[2–6 10–13] Prior studies have suggested that the doctor taking care of children could influence this problem, but none of these studies examined the role of the doctor from other than the their own perspective.[14 20 21] From a community health perspective, efforts of the doctor to address youth violence might be limited because the physician is only one point of intervention. For this reason, we chose to interview two other important groups of people who influence the lives of America's youths, parents and community leaders. The nature of this study was exploratory; therefore, we focused on a small number of respondents, with the goal of generating new ideas rather than testing them out. The qualitative data we gathered from in depth interviews provided rich contextual information on three themes related to the role of the doctor in office based youth violence primary prevention: *potential* interventions; *barriers* impeding these interventions; and *resources* facilitating such interventions.

The most important point is that all three groups interviewed believed that the doctor should incorporate counseling on this topic as part of the well-child examination. Thus, in addition to counseling their patients on other areas of injury prevention, clinicians are being requested to counsel on youth violence prevention.

Secondly, our findings suggest that the uniqueness of the doctor-patient relationship is seen as a key resource. However, the mechanism of action differed for the three groups.

Pediatricians saw their role as a prevention counselor, focusing on family education that would address issues of appropriate discipline and gun safety. Community leaders' statements centered around the doctor's ability to refer families to existing community resources, specifically to clubs that offer young people the chance to interact with positive peer groups and strong adult mentors. Parents saw the physician as an educator, a person who could directly educate their child to make positive choices that would lead to less violence. Therefore, our data suggest that the pediatrician's role should assimilate these three perspectives. Perhaps this could be done if the physician, after establishing rapport with the patient, could teach the child some basic skills to stay safe. Some studies have examined the need for preteens and teens to learn special skill sets to deflect the potential lethality of adolescence in today's world.[41–43] Additionally, if the doctor recognizes that the patient is exposed to violence in the community or family, an appropriate referral into an existing community program could be made.

Several prior studies have been limited in that they only examined pediatricians' specific beliefs regarding whether they should counsel about gun violence prevention to children of all ages. Because our study was exploratory, it identified common themes across three major groups and did not limit counseling to only firearm safety. Respondents from this study broadened the concept of youth violence prevention to include a discussion of discipline, direct patient education on making positive choices, and appropriate referrals into community based programs.

However, the data strongly suggest that we must be practical in suggesting a role for the doctor in this area. Parents and doctors recognized that time constraints curtail the amount of counseling that can occur during an office visit. Community leaders (and some parents) saw that the broader issue of a violent culture stands in the way of the clinician making a meaningful difference. And parents' statements brought up the reality, that even if the doctor counsels on youth violence prevention, the children return to a neighborhood where violence occurs routinely.

Although these barriers cannot be overcome easily, physicians can work in tandem with existing resources in the community to maximize their influence. Our data suggest that familiarizing clinicians with their community resources could allow for appropriate referrals. This fits efficiently within the medical model. As one community leader stated, *"If you break your leg, you get sent to a bone doctor. If you live in a bad neighborhood, you should get sent to a community program to deal with all the things that happen because of that"*.

Our study had limitations. Although we gathered enough interviews to achieve theme saturation, we collected fewer statements from parents than we did from doctors and community leaders. This was due to interviewing parents in a group environment, as opposed to the other interviews that were conducted one-on-one. It is likely that this limited the breadth of parents' statements and might have even altered the kind of responses we gathered. Future studies should be conducted to examine parents' thoughts regarding the doctor's role in office based violence prevention to verify our findings.

We interviewed a small convenience sample of pediatricians, parents, and community leaders; this makes generalizing the findings to a larger population difficult. Moreover, our study was conducted in Los Angeles, California and might only apply to urban American communities. Also, we defined a community leader as one who actively runs an existing community program designed for young people. We did not interview other individuals who could also influence a child's choices, such as teachers or preachers. Lastly, we did not interview adolescents because we narrowed the scope of our study. In the future, it might be wise to repeat this study with adolescents. Acknowledging these limitations, we still believe that our findings allow for some important insights into the community's perspective of the pediatrician's role in violence prevention.

Implications for prevention

Pediatricians, parents, and community leaders believe that the doctor has a potential role to play in youth violence prevention. However, because doctors have such a short time to counsel on the prevention of youth violence, they could magnify their influence if they strengthened their connection to existing community resources. By providing a message that can be reinforced by people and programs in the community, the physician could become an important link in the chain of youth violence prevention. This exploratory study offers some new ideas with the intention to test them out on larger numbers of participants. Subsequently, future studies could be directed at developing integrated programs that allow for ease of collaboration between the health care provider, the parent, and the community leader.

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