REVIEW ARTICLE

Youth Violence: Understanding and Prevention: Strategies of Intervention

Part II

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Youth violence is a complex problem. The recent youth related violent incidents are of great impact taking in consideration the emotional costs to victims, their families and to the health and safety of citizens; as well as the economic cost to society.

It is a major public health concern that requires participation, collaboration and integration of efforts from parents, citizens and professionals from different disciplines. *Key words: Violence, Youth, Early identification, Prevention, Intervention*

We know that violence is widespread, long lasting and harmful to human health, as Cole and Flanaging stated," a mayor public health problem" (1). Death as a result of violence, is not the only cost. Violent behavior has other outcomes. There is also psychological distress experienced by surviving victims and witnesses of violent events as well as violent-related injuries, violence recidivism and criminality (2).

The criminal justice system alone will not be able to solve these problems. It constitutes a major public health concern that warrants the development of effective prevention.

During the last couple of years in the US and also in Puerto Rico., we had came across violent related incidents involving children and adolescents. There is general concern with youth violence since, there had been observed an increased of involvement in violent crimes over the past decade (3). Our youth seemed to be acting more aggressively and violently while dealing with their daily life events. These concerns had promoted professionals and adults to try to look for answers to questions such as: Can we identify 'potential' for violent behavior? Are there modifiable risk factors? Can we identify at risk-persons and do something to alter their future?

Of all the problems in child/adolescent psychiatry, violent behavior is the one most suited to prevention: it develops slowly, with risk factors gradually accumulating over many years before overt violent behavior emerges (4).

Youth violence is a complex problem and when we need to consider to evaluate its origins we must take an epidemiological approach and consider both risk and protective factors. In this task we should remember that risk factors are addictive and follow a developmental sequence (4). Among the risk factors there is interaction between biological, sociological and psychological aspects.

Although in general terms statistics showed a decreased in violent acts; it is impacting the recent youth related violent events such as the ones in Littleton, Georgia (and recently in Puerto Rico). It worries that even among the behaviors showing decreasing trends; the reduction in rates of violent behavior are not similar for all subgroups(5). The cost of youth violence is staggering: emotional costs to victims, their families, elevated perceptions of danger to the health and safety of citizens, economic cost to society (victims lifetime costs) and of course the most tragic cost: life itself.

Youth violence represents a challenge to parents, educators and professionals. Looking at youth tragic events, we should evaluate how can they be prevented and how can we raise children that can deal appropriately with violent behavior . When one tries to analyze these events, the impact of different possible factors (such as biological, social and psychological) need to be carefully studied. Some of these factors are more difficult to understand and as a result to avoid/control, like for example neurobiological, and/or genetics related-factors. There are

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others, that we need to reevaluate carefully since their impact may have more potential to be changed. The research studies in this area, as well as the literature available in this subject, support the position that violent behavior is the result of an interaction between different factors/events that gradually impact the human behavior. Issues such as affective caregivers, appropriate parenting skills, (acceptance, discipline, supervision, caring/respect, how to resolve conflicts non-violently); having a secure/ safe place to be, role modeling for non-violent behavior; no easy accessibility of guns; connection with the family, school and peers; academic success, etc. are more easy for us to change its negative impact (6-10).

Early identification of risk behaviors such as: weapon carrying on school, recurrent participation in physical fights, injured with weapons on school, drug use/abuse, early onset of sexual relations and lack of success in school are by teachers, parents and healthcare providers are a must. It is our responsibility to identify/treat among others, patients with psychiatric disorders especially children with impulse control problems, aggressive behavior, hyperactivity, psychosis, drug abuse, depressive/suicidal behavior and victims of abuse/maltreatment (11, 12, 13).

Also responsible adults need to advocate for avoid gun availability; better supervision and control of media programming. These areas are more accessible for us to change.

In Puerto Rico we are aware of recurrent violent behavior in adults and youth that should worried us. Risk factors already identify with increased in violent behavior are impacting our society. There is an urgent need to work toward reducing/controlling in a better way, these high risk factors: increased population density, (one of the most density populated areas of the world); high divorce rate, (5.3% per 1,000 inhabitants); poverty index (58.9% of the population is under U.S. poverty level) (14, 15); unemployment rate (over 15%); domestic violence (21,217 incidents reported in 1997) (16); easy accessibility of guns (300,000 legal ones and probably same number illegal), (17). Our youth is also exposed to media violence with poor supervision of TV, movies, video and/or computer programming; eventhough we know that poor control of content of media programs allows youth to receive the wrong message of using violence as a good way to solve interpersonal conflicts (18). Our children and adolescents are exposed to community violence (19) and to a society with a pattern use of alcohol and other substances, which are associated to increased risk for violent behavior (20,21).

In the past, professionals in Puerto Rico have expressed concerns about the problem of youth and delinquency (22). Taking in consideration the 1990 Census, the population of youth between 10-19 years of age for the 1995-96, was estimated to be 652,038. During that same year, 6,727 minors were received at the Juvenile Judicial System for 12,810 complains (23). These minors are already presenting behavioral problems and we, as part of Society, are receiving this impact.

A study done in 1985 about the incidence of mental illness and utilization of clinical services in Puerto Rico, found that there were approx. 151,360 patients between 4-17 years of age with moderate to severe mental illness and just 26% had received treatment (24). Another study done in 1992 in children 9-17 years old found that only 23% had received it (25). These findings suggest that children and adolescents, identify with possible risk for developing violence behavior, are not receiving appropriate clinical services.

Otherwise, in the United States a series of non-traditional shooting incidents occurred in some Middle and High Schools during the period between 1993-1999, with the aggravants of possible impact to such exposure. Schwartz and Kowalski studied children exposed to a fatal school shooting (26). They found that 27% of them met DSMIII-R PTSD criteria when assessed 8 to 14 months after exposure. And eventhough PTSD symptoms spontaneously remit in a proportion of children, there are cases were symptoms may persist for long periods of time(27). These incidents appear to be crimes of vengeance, precipitated by discipline or rejection rather than being drug, inner city or juvenile gang-related (28). They identified the perpetrators of such shootings as "classroom avengers": adolescents without history of severe conduct problems or extensive legal history; usually a Caucasian male with average of 16 years old, raised in middle class family rural/or suburban setting most likely south or northwest section of the US. The identified adolescent has history of difficulty with bonding and attachment; negative body image in spite of "looking perfectly normal" (no tattoos, body piercing, exotic hairstyle), and view themselves as physically unattractive; frequently perceived by other teenagers as "geeks" or "nerds"; and rejected by peers. These adolescents present academic performance usually within normal limits, although a decline in the weeks or months preceding the violent outburst is observed. They like real and fictional violence; had access to guns in their homes and may be proficient with firearms. They may engage in covert vandalism or dishonesty and are extremely distrustful of adults/authoritary figures. These adolescents may exhibit signs of an atypical depression and may meet the diagnostic criteria for a mixed personality disorder with paranoid, antisocial and narcissistic features. It is interesting that they observed significant exclusion criteria in the group conceptualized as "classroom avengers".

These are: participation in prosocial group activities; 100% of the cases the expresses intent to kill, commit suicide or do something highly dramatic prior to the attack (threats, boasts, or warnings communicated to peers). The cost of not identifying these factors on time are high.

It is recognized that violence among youth is not restricted to schools and therefore schools, families and communities need to work together to prevent violence (29). This is important since according to projections the teenage cohort will increase by 25% by the year 2005; bringing with it a possible further increase in violence rate unless we intervene properly (30).

In Puerto Rico Health care providers should look for behavioral profile of children and adolescents identify at risk before school tragic events such as the one reported in Littleton, Georgia, etc. become a reality for us. We need to facilitate directive/active therapeutic approach based on cognitive behavioral techniques that includes: anger management, improvement of social skills, use of medication if appropriate in the patients identified with mental disorders; family counseling to eliminate access to firearms/weapons, and to set firm limits on behavior among other goals. If needed, law enforcement to monitor treatment and or increased supervision in the identified cases.

It is important to explore other risk taking behaviors in adolescents who smoke, such as use of alcohol, illicit drugs and violent behavior. We need to promote skills and behaviors that had been associated with less risk for behavioral problems such as: getting along well, good academic achievement, having friends, good relation with at least one parent, support systems. It is important to create and support programs that will enhance prenatal care and maternal/infant care so as to decreased risks factors such as low birth infants, children with cognitive impairment, etc. We need to be concerned about risk factors such as urban poverty, homeless, social disorganization, child abuse and neglect among others (4).

We should be vigilant enough to spot early warning signs such as: is he/she a child with an usual interest in firearms and/or alcoholic beverages. Is he/she a bully? Does he/she has violent fantasies (watch movies with violent content over and over)? Does he/she is sad/ depressed? What do they access in the computer? What do they do in their free-time? We should demonstrate interest in their school works, listen to their music, watch what they are watching (videos, movies, internet...); meet their friends.

There is also need to educate professionals, parents and teachers about the course of aggressive behavioral development and the importance of its early identification and intervention.

It is also important to prepare parents and teachers regarding early detection and treatment of children with psychiatric disorders since their perception of childrens' needs for child mental health services plays a critical role in taking children to receive professional help on time(31). In Puerto Rico, there is about 15-17% of children and adolescents between 4-17 years of age with mental problems. Small percent had received medical treatment from mental health professionals (32). During the year 1996-1997 the Administration for Mental Health and Addiction Services treated 17,065 children and adolescents (38% children, 61.9% adolescents). Half of these presented a severe emotional disorder.

It is our responsibility as professionals, to advocate their best interest. Among the group of patients that we should be able to identify early; there is the patient with ADHD who is prone to impulsivity, distractibility, to act aggressively and who have higher rates of conduct disorder. There is evidence of persistence of ADHD into adulthood including symptoms of inattention, disorganization, distractibility and impulsiveness along with academic and occupational failure (33,34). Compared with matched controls, without ADHD, adults with ADHD have significantly higher rates of childhood conduct disorder, adult antisocial personality disorder, alcohol and drug dependance, bipolar and non-bipolar mood disorders and anxiety disorders (13, 35). Several controlled studies reported improvement in ADHD and aggressive symptoms in ADHD subjects treated with psychostimulant medication (36,37). Also early intervention of patients with ADHD using stimulants, had demonstrated improvement in structured activities, improvement in mother-child interactions (38, 39).

Psychostimulants also seemed to be effective in reducing aggressiveness in brain-injured patients as well as in violent adolescents with oppositional disorder or conduct disorder particularly when they suffer from ADHD (40). In addition to the use of psychostimulants, studies with antidepressants for ADHD children with comorbid conduct disorder, indicated improvement of aggressive symptoms, too (41).

In general we should remember that children and adolescent psychiatric services save society many times their cost and therefore are a shrewd investment.

In the academic setting staff and teachers have responsibility to take very seriously threats, physical acts of violence as well as identification of the above described risk behaviors for early referral and appropriate professional intervention. They should work together with law enforcement agencies and with staff and students organizations.

From another point of view the school system provides

a single point of access to services in a non-threatening atmosphere and thus reduce the barriers to children receiving help for emotional, behavioral and drug related problems (42). School-based services represent important role in meeting childrens' needs for mental health services; it provides an efficient locust for the cost-effective delivery of these services. There are school-based screening instruments that can help identify children with behavioral problems as well as with changes in academic achievement that may be prodromal of an ongoing psychological condition which may develop into a diagnosable illness. (These may signal important changes in the psychiatric health of the Individual).

Screening for example, children at risk for developing alcohol dependance for academic achievement,(as measured by the WRAT) may provide an inexpensive confirmation of subclinical problems and provide the appropriate impetus for referral before they become exacerbated. This could become a very important preventive strategies, since research has shown that children at risk for developing alcoholism, show higher hazard ratios for depression, affective disorder, ADHD and conduct disorder (43).

In some United States schools after the Columbine High School Massacre a surge of teen spirit had been observed. Through these christian groups they buck peer pressure over temptations like drugs, alcohol and sex. This is an inexpensive and easily accessible intervention that many professionals can consider in their intervention plans (44).

The area of youth violence and preventive psychiatry needs also the input of research professionals. It is important to study more about risk behaviors, short term and long-term impact as well as ways to reach subgroups that are not showing decreasing rates of violent behaviors. We need their impact to guide our interventions and preventive efforts.

As we see, Youth violence prevention and intervention required the participation, collaboration and integration efforts of health professionals. In order to prevent tragedies such as the ones reported in the United States, we need to join efforts.

Conclusions

* The recent youth-related violent incidents that have occurred in the United States and Puerto Rico are of great impact.
* The cost of youth violence is staggering: emotional costs to victims and their families, impact in the health and safety of the citizens in general, economic cost to society and of course the most tragic cost: death as result of violence.
* Youth violence prevention and intervention require participation collaboration and integration of efforts from parents and professionals from different disciplines.
* As members of this society, we need to assume more responsibility for the World that our children and adolescents inherited. We can work together to eliminate conditions that promote violence taking in consideration their upbringing, culture and immediate surroundings.
* Parents, as responsible adults need to take care of some basic tasks. They need to offer consistent love and attention and make sure their children are well supervised. They need to be role models of appropriate behavior by the way they act and use non-physical and consistent methods of discipline to help their children to deal with their emotions. Childrens need to learn non-violent ways to solve problems and disagreements. It is also important that parents do not facilitate access to guns/ weapons and teach their children about the dangers of them. They should not carry a gun or weapon. It's the Parents responsibility to work toward making home a safe, non-violent place and always discourage violent behavior (45). We need to keep children from seeing too much violence in the media, too.
* Parents and professionals should be alert to do early identification and if appropriate, facilitate early interventions to children with history of drug use, mental illness in their families or themselves; to children from homes where guns/firearms/weapons are available and to children with family history of violent and/or abused behavior.
* It is also important to address early the needs of children who are presenting violent behavior (weapon carrying, impulsive/ aggressive developmentally inappropriate behavior, drug dealing etc). Children presenting health-risk behavior such as drug use, early onset of sexual behavior, adolescent pregnancy and sexually transmitted diseases should also worried us.
* Children presenting violent-at risk behavior such as hyperactivity, psychosis, depressive

disorders, suicidal behavior, as well as victims of abuse/domestic violence and academic failure require early identification and intervention.

* Pediatric psychiatric services save society many times their cost and therefore are an excellent investment. These include psychotherapy and appropriate use of psychothropics when needed.
* School-based professionals represent in many cases an important opportunity for the early detection of high risk children and adolescents. They share the responsibility of early mobilization of resources and services. So these professionals need to be trained in these aspects.
* The school system also provides a single point of access to services in a non-threatening atmosphere and this decrease barriers to children receiving help for emotional, behavioral, drug related problems (42).
* School-based services represent an important role in meeting children's needs for mental health services and for the cost-effective delivery of these services.
* The problem of youth violence and preventive psychiatry; needs the input of research professionals to guide our interventions and preventive strategies.
* Regarding the problem of accessibility of gun/firearms recommendations had been proposed: request permit for gun possession, to limit the amount of gun/ firearm sell per buyer, raising minimal age for buying a gun, to limit the number of gun/ household and to include child-safety locks with every gun sell. Also, to build safety locks into guns as a component not an optional extra; refuse to supply dealers who sell a disproportionate number of guns that authorities have linked to crimes and to change advertising so that it appeals less to criminals; are among the recommendations being in consideration by different states.

Resumen

La violencia en nuestros jóvenes es un problema complejo y de gran impacto para la sociedad. Se considera un grave problema de salud pública. Se sugieren estrategias de intervención que requieren la integración de esfuerzos tanto de padres como de ciudadanos y de profesionales de las diferentes disciplinas.

Acknowledgment

The author wish to thank Mrs. Lucy López at the Department of Psychiatry for the help in the typing of this manuscript.

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