Family and community violence of schoolchildren from the city of São Gonçalo, Rio de Janeiro, Brazil

Violência familiar e comunitária em escolares do município de São Gonçalo, Rio de Janeiro, Brasil

Abstract

This descriptive study aimed to investigate the association between violence in the family, school and community experienced by school children/adolescents of the city of São Gonçalo (RJ), Brazil. Questionnaires were administered to the mothers/guardians to assess violence in the family and school and to children to check their perceptions of community violence. Multiple correspondence analysis and cluster analysis, two exploratory descriptive techniques, were employed. Data from 280 schoolchildren were analyzed. A total of 43.9% of mothers reported that their children had been physically abused in their homes. With regard to children’s/adolescents’ perception of community violence, 93.2% said they had experienced or witnessed these events in their communities. For both sexes there was the formation of a cluster of categories with the presence of violence among siblings, presence of severe physical assault and verbal assault committed by parents. Among girls, the presence of violence in the school formed a cluster with the highest category of violence in the community. In conclusion, it should be emphasized that public policies aimed at dealing with violence should expand their scope to the various forms of violence affecting children.

Resumo

O presente estudo descritivo teve como objetivo investigar a associação entre as situações de violência na família, na escola e na comunidade vividas e presenciadas por crianças e adolescentes do município de São Gonçalo (RJ). Foram aplicados questionários às mães/responsáveis para aferir a violência na família e na escola e às crianças para verificar sua percepção sobre a violência comunitária. Empregaram-se a análise de correspondência múltipla e a análise de aglomerados, duas técnicas exploratórias descritivas. Foram analisados dados de 280 escolares. Verificou-se que 43,9% das mães informaram que seus filhos sofrem violência física severa em suas casas. Quanto à percepção das crianças/adolescentes sobre a violência comunitária, 93,2% afirmaram já ter vivido ou presenciado esses eventos em suas comunidades. Para ambos os sexos verificou-se a formação de um aglomerado com as categorias presença de violência entre irmãos, presença de violência física severa e de agressão verbal dos pais contra a criança/adolescente. Para as meninas, a presença de violência na escola formou um aglomerado com a categoria mais elevada de violência na comunidade. Conclui-se salientando que as políticas públicas de enfrentamento à violência devem ampliar seu foco de atuação para as variadas formas de violência que afigem as crianças/adolescentes.


Introduction

The World Health Organization (WHO) estimates that 40 million children/adolescents younger than 15 years suffer abuse and negligence worldwide every year. A recent study on homicides committed in the world indicates that, in 2008, rates ranged between 1 and 2 children of both sexes per 100,000 inhabitants in the 0-to-14-year age group; while, in the 15-to-29 year age group, these rates were highly unequal between sexes: 21.2 per 100,000 inhabitants among men and 3-4/100,000 inhabitants among women. Data from the Centers for Disease Control and Prevention (CDC) in the United States show that, in 2009, homicides were the fourth most frequent cause of death among American children/adolescents aged between 10 and 14 years.

These data indicate that violence involves the lives of children and adolescents unequally. Community violence should be emphasized, which is a common form of violation of children’s rights, characterized by the fact that it is practiced among individuals without family bonds, whether acquainted or not. This type of violence is practiced in acts of violence, such as physical and sexual violence, and it can be performed in public or private institutions, such as schools and health services, in communities and housing complexes.

Studies have warned about children’s and adolescents’ high level of exposure to community violence, as victims and witnesses of episodes such as shootings, physical and verbal assault, and observing dead or wounded people on the streets. The high prevalences of these episodes among children and adolescents become even more alarming when associated with a series of negative consequences for their development. A study pointed out that between 30% and 70% of children of several cities and countries are exposed to threatening and dangerous events in the places where they live. Another study, conducted with a representative sample of adolescent students of the city of São Gonçalo, RJ, Southeastern
Brazil, in 2005, indicated that half of them had already witnessed someone being seriously wounded; one out of every three had already faced a dangerous and unsafe situation in their neighborhood and 12.7% had their homes broken into or robbed.

Community violence is more present in more impoverished areas, where there is a lack of protective resources from public institutions such as health, education, housing and safety. Children and all family members are exposed to high-risk situations and deprived of their right to come and go at any time of the day or night, due to robberies, thefts, murders or drug trafficking. Apart from the visible effects of living in high-risk areas, the fear caused by lack of control and safety stands out in society, becoming as restrictive as the actual events that have occurred.

Children exposed to community violence often have a restricted access to school. They suffer due to the threat, exposure and witnessing of situations that make them emotionally vulnerable. Additionally, they learn that violent situations are part of life, becoming commonplace and being possibly repeated in their current and future relationships. In this context of exclusion where children are the target of violent acts, their health becomes physically and emotionally impaired.

Community violence also affects children in the school environment. Studies conducted in Brazil have shown that the roots of violence in schools are found in the violence occurring in the neighborhood, family and structural conditions such as poverty and deprivation. A study that included a sample survey conducted in households of the city of Rio de Janeiro (914 adolescents) revealed that nearly half of adolescents reported episodes of violence in their schools. Data from a study conducted in ten schools of large cities in the United States show that the victimization of adolescents in schools is frequent: 30% of males and 16% of females reported having been victims of thefts in their school or surrounding areas and 2/3 had already witnessed verbal or physical assaults in the school environment.

In a study conducted with 46,979 students in 13 Brazilian state capitals, Abramovay found that approximately half of them reported violence at school as a factor that prevents them from concentrating on their studies. Two other consequences were mentioned: feelings of nervousness and outrage and the loss of interest in going to school.

Family violence is another relevant form of aggression against children that occurs in hierarchical and inter-generational relationships found in the family. It affects more children than adolescents, due to their greater physical and emotional vulnerability. This form of violence consists in aggressive ways through which family members relate to each other, using violence to resolve conflicts and as a strategy to educate. Moreover, it includes lack of basic care for children. For generations, the praxis exercised in family and school education has been based on the use and often abuse of negative emotional behavior and physical force since childhood. A study conducted by the United Nations Children’s Fund (UNICEF) shows that this form of violence is present in all cultures, classes, levels of education, income strata and ethnic groups and it is frequently approved by society and legalized and authorized by the government.

Problems resulting from the exposure of children to family violence are not limited to their physical health, including their psychological development, social relations and academic performance as well. The impact goes beyond behavioral and emotional problems, affecting the way in which children view themselves and the world, their ideas about the meaning of life, their expectations for the future and their moral development. Furthermore, the impact extends beyond the period when children suffered or witnessed violence, with consequences that will often only appear during adolescence or adulthood.

An analysis of Brazilian studies performed by Reichenheim et al. shows that the number of cases of psychological and physical violence against children and adolescents...
is remarkably high in this country. Although lower than the prevalence rates of certain countries such as India (36%), Egypt (26%) and the Philippines (37%), this prevalence is significantly higher than those of other countries situated in the same continent, such as Chile (4%) and the USA (4.9%) 4, 28, 29.

A survey conducted by the Brazilian Ministry of Health in emergency sentinel health services of 38 cities of this country (24 states and the Federal District) in 2007 showed that, of all 5,756 occurrences resulting from violence that took place in these services, 5% occurred among children aged up to nine years and 20.2%, among adolescents aged from ten to 19 years. With regard to reports of domestic, sexual and other forms of violence that comprise the Ministry of Health Surveillance System (data referring to 27 cities situated in 20 Brazilian states), of all 9,038 cases of violence recorded in 2007, 21.4% occurred among children and 26.2% among adolescents. These data indicate the relevance of violence occurring in these age groups that are found in Brazilian health services 30.

It should be emphasized that the exposure of children to a certain form of violence does not usually occur alone; studies have shown high rates of joint occurrence with community and family violence 31, 32. Concomitant occurrence of more than one form of violence can seriously harm children 33, 34. Bearing this in mind, the present study aimed to investigate the association between violent situations experienced by male and female children and adolescents in their family, school and community. In general, in the studies on violence, the separate investigation of each form of violence is frequent. Thus, this study sought to explore the interrelations among the forms of violence that can affect child growth and development.

**Methods**

**Study design, population and sample**

The results shown in this article originated from the third stage of a longitudinal study performed in 2008 with 434 children/adolescents. This study began in 2005, including 500 children aged between six and 13 years and enrolled in the 1st grade of primary school. School and class records and the mean number of students per class for 2005, provided by the City of São Gonçalo Department of Education, were used in the design of the sampling plan. There was a random selection of schools and students participating in the study and simple cluster sampling with three stages of selection (schools, 1st grade classes and students) was employed. The sample size considered the highest number of sample students possible, using a proportion of 50%, confidence level of 98.02% and relative error of 5%.

The cross-sectional data analyzed in this study refer to 280 children/adolescents who had complete information about all variables studied.

**Data collection**

In 2008, interviews were conducted with the mothers and children. The following data originated from the instrument answered by mothers/legal guardians:

- Sex and age;
- Violence committed by the father and/or mother against the child: the Conflict Tactics Scale (CTS), developed by Straus 35 and validated in Brazil by Haselmann & Reichenheim 36, was used in this study. It corresponds to actions that a family member performs when in conflict with another. Two conflict tactics were assessed: verbal assault against a child (cursing or insulting, becoming sullen, crying, doing things to irritate, destroying, hitting or kicking objects) and severe physical assault against a child (kicking, biting or punching, attempting to hit with objects, beating, threatening or using knives/firearms). One positive item in each of the subscales is considered to be a case.
- Violence among siblings: assessed by two items: 1) to assess humiliation among siblings, and 2) to assess fights
that may cause physical harm. One positive item is considered as presence of physical and/or psychological violence among siblings.

- Violence experienced by a child at school in the previous year: assessed through a scale used by the United Nations in studies on self-reported offenses. There are eight dichotomous questions about being humiliated, threatened, and severely assaulted so that medical care is required; having objects purposefully damaged; having lived with individuals who had cutting weapons or firearms; and having been a victim of robbery or theft\(^37\). One positive item characterizes children as victims.

Information about self-reported ethnicity was used from the questionnaire applied to children and the “Things I Have Seen and Heard” scale\(^38\) was analyzed. In this scale, children themselves assess their experiences with violence at home, at school, in the community and in other locations where they have been to throughout life, including events such as seeing someone being arrested, beaten, stabbed or shot; seeing robberies and break-ins; hearing shots; seeing drug dealing and gangs/criminals where they live. A total of 12 questions about community violence, as proposed by Malik\(^7\), were used to construct the score employed in this article. The final score of community violence was obtained from the sum of frequencies and categorized as follows: (1) 0 events occurred; (2) 1-10 events occurred; and (3) \(\geq 11\) events occurred. The community violence scale showed a Crohnbach alpha \(= 0.775\) (95%CI: 0.730-0.830).

Additionally, the homicide rates per district where children of the city of São Gonçalo lived were used in the analysis, aiming to show in a concrete way one of the most evident forms of violence to which children are exposed. Police reports (PR) were evaluated from micro-data provided by the Instituto de Segurança Pública (ISP – Public Safety Institute) of the city of Rio de Janeiro for the period from July 2007 to June 2008. The population of São Gonçalo per district was obtained from the city’s Department of Finance for 1996, using estimates of population per district from 2008, as the Instituto Brasileiro de Geografia e Estatística (IBGE – Brazilian Institute of Geography and Statistics) does not have census data per district of a city in the 2000 Census. Homicide rates were calculated and categorized as follows: (1) < 30/100,000 inhabitants; (2) 30-50/100,000 inhabitants; and (3) more than 50/100,000 inhabitants.

**Data analysis**

Data were analyzed with the SPSS software, version 15.0. The first moment of data analysis included the construction of the distribution of frequencies of the variables studied and the calculation of summary measures. Next, multiple correspondence analysis (MCA) was used for both sexes, aiming to verify the associations among the several forms of violence studied (in the family, in the community, at school). The MCA is a technique of exploratory analysis of multivariate data that enables the visualization of the most important relationships of a large set of variables without a defined structure a priori. The results of this analysis are shown through graphs where all categories of variables involved are shown together, thus allowing the relationships among them to be more easily visualized. Each category is represented by a point in the graph. The distance between points enables the visualization of the existing relationships. The measure of inertia is used to define the proportion explained by each axis/dimension (the greater the inertia, the better the representation of points in space). The multiple correspondence analysis was performed with the ca package of the R 2.10.1 software (www.r-project.org). As the MCA is a descriptive analysis with a subjective interpretation, a cluster analysis was subsequently performed using the stats package of the R 2.10.1 software (www.r-project.org). This technique was used with the purpose of confirming clusters found by...
the correspondence analysis. The cluster analysis included the cluster method known as average, with the results shown in graphs known as dendrograms. The techniques employed are descriptive and non-inferential. The chi-square test was used with the purpose of comparing proportions, considering a p-value < 0.05.

The present study was approved by the Research Ethics Committee of the National School of Public Health/FIOCRUZ (Official opinion 24/07) and school principals and parents/legal guardians signed an informed consent form.

Results

The sample studied was comprised of data from 280 children/adolescents, of which 142 (50.7%) were boys and 138 (49.3%) were girls. With regard to ethnicity, 48.2% were mixed, 24.3% were black and 27.5% were white. Age varied between nine and 15 years (mean =11.1; SD = 0.9).

Table 1 shows the distributions of frequencies of variables associated with violence. A great number of mothers (80%) informed that verbal assaults were frequent in their routine with the child/adolescent; while 43.9% reported severe physical assault committed by one of the adults. The percentage of children/adolescents who reported having experienced or witnessed violence in the community was very high (93.2%). Additionally, the majority of districts of the city of São Gonçalo had high homicide rates (more than 50/100,000 inhabitants).

Table 1 also shows a similar picture for the variables studied according to sex (none of the variables was statistically significant).

With regard to the multiple correspondence using several forms of violence (family, school and community) against children, three dimensions were obtained and these could explain 73.2% of the variation for data on boys and 75.9% for those on girls. Graphs 1 and 2 show the results of the correspondence and cluster analyses for boys and girls, respectively.

Graph 1 shows a group being formed in the central area, related to the boys who were victims of verbal assault and severe physical assault by their father and/or mother and physical and/or psychological violence by their siblings. Additionally, in the central area, there was another group characterized by the absence of severe physical assault, physical and/or psychological violence among siblings and at school; children who experienced fewer events (1-10) of community violence were also included in this group.

It should be emphasized that the group that reported the highest frequency of adverse events in the community (≥ 11) is not close to any other categories of violence assessed. One must remember that this is the only variable of violence that shows children's perception; the remaining ones reflect the parents’ or legal guardians’ perspective, usually that of mothers.

Graph 2 (girls) shows the proximity between the presence of severe physical assault and verbal assault from parents and physical and/or psychological violence from siblings. The categories associated with the absence of verbal assault and severe physical assault from a mother and/or father seem to form a group.

Being a victim of violence at school and experiencing more events (≥ 11) of community violence formed a cluster, unlike what was observed among boys.

Graph 3 sought to investigate the children's perspective of community violence (assessed with the “Things I Have Seen and Heard” scale) and homicide rates in the district where they live. The relationship among categories (Graphs 3a and b) was found: children who lived in areas with higher homicide rates had experienced 1-10 violent events where they lived; those who lived in areas with average homicide rates had experienced 11 or more violent events. Boys who had never experienced violent events in their community formed a separate group; lower homicide rates in the districts where girls in the same situation lived were also reported. The correspondence analysis among boys showed inertia of
99.6%. This fact occurred again among girls; however, inertia was slightly lower (77.8%).

**Discussion**

The first observation to be made is the high percentage of children who have experienced family violence, whether this is physical or psychological; community violence is also alarming. Schools are the only place where violence was less intense (although present in 23.6% of participants). The high homicide rates recorded by the Civil Police clearly reflect the social and criminal violence found in the city.

There were no significant differences between boys and girls with regard to experiencing the forms of violence investigated in this study. However, studies show that, during adolescence, the exposure of boys to community violence had a greater impact\(^{31,39}\). Furthermore, among children of both sexes, there was a trend towards family violence affecting all its members: victimization due to verbal assault and severe physical assault committed by parents occurs concomitantly with physical and psychological violence existing among siblings. Other studies corroborate the finding that children suffering violence by their parents/legal guardians tend to witness more episodes of violence among parents and to experience more violence among siblings and the larger family\(^{40,41}\). A study conducted with adolescent students of São Gonçalo, RJ, showed that those who are somehow
mistreated by their family witness two times more violence among siblings and parents, indicating the vicious circle of assaults in the universe of family relations. It is important to consider family violence as a potential factor of social violence.

Community violence was found to be more complex. Boys and girls who have not experienced any form of community violence are less likely to experience violence in the family and at school. Boys who experienced fewer events of community violence (1-10) are characterized by the absence of family and school victimization. This situation is similar among girls, although, in their case, the absence of violence among siblings and at school is included to the lower level of community violence. What stands out is the fact that the higher level of exposure to community violence is not as close to all forms of violence assessed in this study; this form of violence is only close to victimization occurring at school and among girls. Understanding all this variation requires the use of more complex statistical techniques than those found in the present study. In the literature, studies emphasize that children who suffer domestic violence are more frequently exposed to violence at school and in the community. Studies with adolescent students of São Gonçalo, RJ, observed that those who are mistreated by their family are three times more exposed to episodes of violence at school and 3.8 times more exposed to assaults in the community. This phenomenon is known as “re-victimization”. There are many hypotheses for this situation, among which that violence is somehow learned and, consequently, could be reproduced in contexts where children

**Figure 1** - Multiple correspondence analysis (a) and cluster analysis (b) applied to the data on family, community and school violence in a sample of 142 male students in the city of São Gonçalo, RJ, Brazil, 2008.

**Gráfico 1** - Análise de correspondência múltipla (a) e análise de aglomerados (b) aplicadas aos dados de violência familiar, comunitária e escolar em uma amostra de 142 escolares do sexo masculino do município de São Gonçalo, Rio de Janeiro, 2008.
and adolescents live\textsuperscript{45}. This re-victimization process has a high potential of harming one’s development, as the accumulation of adverse experiences increases the chances of a child or adolescent having emotional and behavioral problems\textsuperscript{46,47}.

The discussion about the increase in the effects between family and community violence is controversial. While conducting a review of the family’s role towards the exposure of children to community violence, Proctor\textsuperscript{48} found that there is an association between community violence and family maltreatment/conflicts, as well as among family support, supervision and coercion. Conflicting families caught in the dynamics of violence would promote children’s exposure to violence in the community, including their inadequate involvement with peers and perpetrating acts of violence\textsuperscript{49,50}. On the other hand, families who are more involved emotionally could have children who are less exposed to community violence\textsuperscript{51}, although some experts defend the theory that family protection has a lower effect in communities with high levels of violence\textsuperscript{50}.

The fact that children who live in areas with more homicides report experiencing fewer violent events (1-10) and those living in areas with average homicide rates react by reporting more experiences of community violence (≥ 11) could indicate the movement of children throughout different districts of the city. Nonetheless, the mechanism of representation of violence used by children can partly explain this phenomenon. Living in districts with much violence can help it become trivial. Factors such as the closeness

**Figure 2** - Multiple correspondence analysis (a) and cluster analysis (b) applied to the data on family, community and school violence in a sample of 138 female students of the city of São Gonçalo, RJ, Brazil, 2008.

**Gráfico 2** - Análise de correspondência múltipla (a) e análise de aglomerados (b) aplicadas aos dados de violência familiar, comunitária e escolar em uma amostra de 138 escolares do sexo feminino do município de São Gonçalo, Rio de Janeiro, 2008.
of children to a traumatic event, their life history, their subjective mechanisms, and the emotional and social relationships they have are essential to understand the way in which each of them views the violence they experience. A study conducted with children who were victims of a shooting in their school indicated that those who were on the schoolyard, directly exposed to the shooting, minimized the threat to life and the fact that they were in dangerous locations and also tended to omit physical injuries, although having symptoms of posttraumatic stress disorder (PTSD). Children who were inside the school and relatively protected from the shooting had a moderate level of PTSD, including frequent comments about their fear of the shooter invading the school. Children who were absent from school on this day did not have PTSD symptoms, although they were the ones who most frequently remembered that they were close at the exact moment of the shooting, increasing the importance of their participation in the event.

It should be emphasized that the convergence between the homicide rates and the “Things I Have Seen and Heard” scale, especially with regard to its capacity to assess the absence and presence of community violence, indicates that this scale has the potential of assessing this form of violence in the age group studied. The children of São Gonçalo live in an environment where deadly violence is an everyday fact: the rates found in many districts are higher than those of neighboring cities: mean rates of 44.8 homicides/100,000 inhabitants in the city of Rio de Janeiro and 31.1 homicides/100,000 inhabitants in the city of São Paulo were observed between 2004 and 2006. In 2007, the Southeastern region of Brazil had a homicide rate of 22.9/100,000 inhabitants.

The results of the present study point to the complexity of studying mechanisms through which violence can influence child growth and development. What stands out is the need to investigate the interrelations among its distinct forms (community, school and family violence) and to distinguish...
the ways in which children are involved in the violence they experience: as direct victims, when they are victimized by their parents or schoolmates; as indirect victims, such as the cases when they witness violence between their parents or in the community where they live; and as those who commit violence against others, such as their siblings or schoolmates.

One of the limitations of the present study was the impossibility of assessing the frequency of violence in the family or at school, characterized by the presence or absence of this phenomenon, due to the instruments and methodology used in this study. Another limitation was the impossibility of extrapolating the results found here to other groups and contexts. This study had an exploratory design and was focused on the representative sample of public network schools. As a result, it has been useful to analyze interrelations among different forms of violence in specific groups.

The varied forms of violence affecting children, although having the potential to harm their development, must be analyzed in a complex way. In other words, the set of adversities that appear throughout life and the way in which children and their family cope with the difficulties encountered should be analyzed.

In conclusion, it should be emphasized that public policies aimed at dealing with violence must increase their scope to the various forms of violence affecting children and require a multi-faceted response. In this sense, one must pay close attention to the structural violence caused by the socioeconomic difficulties that destabilize families, schools and other social means, making children and adolescents vulnerable, without adequate conditions for their growth and development.

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References


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