Lílian dos Santos Palazzo[I]

Alessandra Kelling[I]

Jorge Umberto Béria[I]

Andréia Cristina Leal Figueiredo[I]

Luciana Petrucci Gigante[I]

Beatriz Raymann[I]

Diego Garcia Bassani[II]

Physical violence and associated factors: a population-based study in Southern Brazil

ABSTRACT

OBJECTIVE: To estimate the prevalence of physical violence and its association with sociodemographic aspects, stressful life events, and the use of health services due to emotional problems.

METHODS: A cross-sectional population-based study was conducted with a sample of 1,954 14-year-old or older inhabitants of the city of Canoas (Southern Brazil). They were selected by means of conglomerate sampling according to a pre-established system. Data were obtained in visits to households by means of a confidential semi-structured questionnaire. A bivariate analysis was carried out through multinomial logistic regression, and the multivariate analysis by polytomous logistic regression, categorizing the outcome by age group.

RESULTS: The findings show a prevalence of 9.7% (CI 95%: 8.37;11.03) and association with: women 20 years old and older (OR=2.74; CI 95%: 1.52;4.94); higher schooling rate ($p<0.03$); higher experience of stressful life events at 20 years of age or more (OR=6.61; CI 95%: 2.71;16.1); and doctors' appointments due to emotional problems as of 10 years of age ($p>0.001$).

CONCLUSIONS: The prevalence of physical violence in the population was significant, resulting in important emotional consequences and impact on health services, requiring capacity building of the professionals in the field.

DESCRIPTORS: Violence. Risk Factors. Socioeconomic Factors. Cross-Sectional Studies. Health Services Epidemiology.

INTRODUCTION

Violence is a global concern. According to the Pan American Health Organization Steering Committee (1993 and 1996), violence, in all its manifestations, is a public health priority because it threatens the development of peoples and their quality of life.[14] In Brazil, violence has been a constant topic in debates among those who represent the population due to its repercussion in the quality of life, and the amount of attention and healthcare it requires. However, according Minayo,[12] although advances have been noticed, they are still insufficient to tackle the problem.

Maltreatment encompasses four categories: physical, sexual and psychological abuse, and negligence. Physical abuse, in the present study, is called physical violence and is considered the use of force or physical power, in the form of threat or bodily force against a person, a group or a community. In most cases, it is accompanied by emotional violence in the form of intimidation and verbal abuse.[9]

[I] Programa de Pós-graduação em Saúde Coletiva. Universidade Luterana do Brasil. Canoas, RS, Brasil

[II] Centre for Global Health Research. St. Michael's Hospital. University of Toronto. Toronto, Canada

Correspondence:
Lílian dos Santos Palazzo
R. Dona Laura 414/604
90430-090 Porto Alegre, RS, Brasil
E-mail: lspalazzo@hotmail.com

Received: 4/2/2007
Reviewed: 12/7/2007
Approved: 3/18/2008

According to the World Health Organization (WHO),[9] more than two million people die every year in the world due to the damage caused by violence. An even greater number of people survive, but bear sequelae. Among individuals in the 15-44 age bracket, interpersonal violence is the third highest cause of death, accounting for 14% of the deaths of men and 7% of women. The prevalence of physical violence varies according to country (Paraguay 10%; Canada 34%), context studied, and methodology used in data gathering. In regard to specific groups, the proportion of women who have reported having suffered some type of violence (including having been robbed) varies from 15.3% in Canada to 23% in England, and 25% in Zimbabwe. The rate of adolescents who have been involved in physical fights was 44% in the United States, 22% in Sweden and 76% in Israel. However, these figures may be underestimated, since they are based on self-reports, which would hamper a precise calculation of all kinds of violence in healthcare systems and their effects in economic productivity.

Poverty is closely related to the problem. A survey carried out in the city of Sorocaba (Southeastern Brazil) between 1993 and 1995 showed that people in the sub-proletariat are at a greater risk of suffering physical violence than those who belong to the petit-bourgeoisie, non-typical proletariat, or typical proletariat.[7] Age can also be related to violence: in Atlanta, in the United States, among women who had experienced some kind of physical violence throughout their lives, and who sought primary healthcare services, only 1% were older than 55 years of age.[21]

In its most severe form, violence can lead to death. It is estimated that 40% to 70% of female homicides are committed by the closest male partner.[7] In a study with 1,172 women between 15 and 49 years of age, the prevalence rate was 27% in the state of São Paulo and 34% in the state of Pernambuco.[2]

According to the WHO, the emotional consequences associated to this problem can be physical, sexual and/or reproductive, psychological and/or behavioral, and even fatal.[7] The main emotional consequences are: anxiety, phobias, depression, post-traumatic stress disorder, use and abuse of psychoactive substances including alcohol, suicide attempts, among others.[1,4,15] However, although the Brazilian population suffers with problems related to violence, for most of these issues, there is lack of Brazilian population-based studies.

In Brazil, the official data available suggest that this phenomenon has been growing, mainly in urban areas of large cities. In the field of pubic health, it is known that violence has changed the mortality profile of the country in the 1980s, where it went from the fourth to the second cause of death, preceded only by cardiovascular diseases.[13] However, a large number of violent events are not reported to the authorities, thus being part of a "dark" figure, on which there is no information whatsoever. In addition, many other forms of violence are not even acknowledged by society and, consequently, are also not recognized by our institutions, such as violence against children, adolescents and women. Even what is reported has its setbacks, due to the poor filling in of forms where essential data for clarifying events are not informed.

From the scientific point of view, most national studies are carried out on specific groups such as women and healthcare service users.[15,18] Women, children and the elderly who are victims of violence tend to seek more health-related appointments, are hospitalized for longer periods, go to pharmacies more often, and have more appointments due to emotional problems.[9] These studies follow a standard mainly focused on domestic violence.[2,3,8]

Therefore, the present study aimed at estimating the prevalence of physical violence and its association with sociodemographic aspects stressful events, and the use of healthcare services due to emotional problems.

METHODS

This is a cross-sectional population-based study part of a broader investigation aimed at studying several aspects related to the health of the population in the city of Canoas[6,a] (Southern Brazil).

According to the 1991 population census, the only data available at the time the research project was conceived; there was an average of 3.75 people per household in Canoas. Therefore, to achieve the necessary sample size (3,858 subjects), 1,040 households needed to be visited. Thus, 40 out of the 391 census sectors in the city were randomly drawn, and 26 households per sector were randomly visited according to a pre-established system between November 2002 and June 2003.

During fieldwork, we surveyed less people than originally planned in the sample. There were, in average, 3.2 individuals per household totaling 3,328 people. Out of the 1,040 households visited, 98 refused to participate: in 44 of them it was not even possible to determine the number of people living in the household, and in the remaining 54, the number of people varied from one to eight per household. There were 615 individuals who were not interviewed because 410 refused to take part in the study (66.7%), 189 were not home in three visits (30.7%), and 16 were in no health conditions of being examined or interviewed (2.6%). In the end, 2,609 indi-

[a] Study "Prevalência de Surdez e Outros Transtornos da Audição: um estudo de base populacional em Canoas, RS, Brasil", developed at the Universidade Luterana do Brasil (ULBRA) in collaboration with the Christoffel Blindemission institute, Germany.

viduals belonging to all ages were surveyed corresponding to 78.9% of the total possible number. There was a greater loss among men in the 25-49 age bracket.

Individuals aged 14 and older were considered the target population totaling 1,954 people. This sample represents a loss of 20.3%, which satisfies a sample size capable of estimating outcomes with prevalence between 10% and 40%, with 2.5% error and significance level below 0.05.

The dependent variable was the presence of physical violence during one's life. This variable was stratified by the age bracket in which the violent event took place: non-occurrence of physical violence (reference category); violence between zero and nine years of age;violence between ten and 19 years of age; violence from 20 years of age and above. The independent variables were: sociodemographic characteristics (gender, age, income, living with partner); appointments due to emotional problems (the term "nervous problems" was chosen to express this variable); psychiatric hospitalization, and stressful events (unemployment, separation and robbery).

Data gathering was carried out by means of a numbered questionnaire applied by a speech therapist and a medical student, who received prior training. The section on violence was filled in by the subjects themselves, and placed by them in a sealed envelope, which was then placed in a sealed box, in order to avoid respondent being uncomfortable. In this section, respondents answered whether they had experienced physical maltreatment and, if so, at what age. For quality control, 5% of the households were selected at random, and their members were interviewed by means of a second visit or over the phone. Next, the concordance index was calculated for some questions in the first and second interviews, obtaining kappa index of 0.93. The questionnaires were numbered by the interviewers and reviewed by the coordinator of the study. The data were entered by two research assistants in two separate files and were later compared.

During data analysis, a descriptive analysis was carried out first to measure the frequency of the variables studied. Then, a bivariate analysis (Pearson's chi-square test) was carried out to measure the association between the dependent and independent variables, where $p<0.05$ was considered significant. To obtain the odds ratio (OR), a confidence interval of 95% was considered. By using the nominal variable physical violence categorized according to the age bracket during which the violence took place, a multinomial logistic regression was used with the help of Stata statistics program, version 8.0. Therefore, in the form of OR, the association between each independent variable and the occurrence of violence in the three age brackets was estimated, and the non-occurrence of maltreatment was used as the reference category. Thus, the violence ORs in each age bracket could be estimated at the same time, avoiding the use of multiple statistical tests, and rendering proportional estimates, which were directly comparable, and had a common reference category.

The research project was approved by the Ethics Committee of the Universidade Luterana do Brasil (Process 2004-055H), and all participants signed an Informed Consent Statement.

RESULTS

Women made up 57.4% of the sample, 59.1% had primary school education, 38.7% were aged 20 to 39, and 34.5% were aged 40 to 59, with income of 7.1 minimum wages or more (Table 1). In regard to using healthcare services, 475 respondents (24.4%) reported having emotional problems, and 49 (2.5%) reported having a prior history of psychiatric hospitalization. 95.1% of respondents stated they had not experienced separation, or unemployment (83.9%), or mugging or robbery (90.2%) in the year before the interview.

Physical violence prevalence was found to be 9.7% (95% CI: 8.37;11.03), 57 subjects (2.9%) did not provide answer to the question.

In the bivariate analysis, the variables that presented statistically significant association ($p<0.05$) with the outcome were: income, schooling, gender, stressful events, appointments due to emotional problems, and psychiatric hospitalization.

In the multinomial logistic regression (Table 2), the three age brackets in which the physical violence took place were compared to the non-occurrence of violence in life. Therefore, it was verified that among the respondents belonging to the highest income group, the chance of their having experienced maltreatment during childhood (zero to nine years of age) was higher than when in the 10-19, and 20 and above age brackets. The opposite took place among respondents in the intermediate income category ($p=0.01$). After 20 years of age, it was observed that the higher the schooling rate, the lower the chance of suffering physical violence ($p=0.03$).

The women presented a significantly higher frequency (11.3%) than men (7.5%), with a 1.5 times greater victimization risk (95% CI: 1.12;2.03). In the bivariate analysis, it was found that boys aged 0 to 9 had chance two times higher for physical violence (38.5%) than girls of the same age (17.3%). In the 20-29 age bracket, the opposite was found: women had a higher prevalence (40.9%) when compared to men (21.2%). In the multinomial regression (Table 2), among female respondents 20 years and older, the chance of suffering violence increased with age, their risk was 2.74 times higher than men's (95% CI: 1.52;4.94).

Table 1. Sample distribution by sociodemographic variables and occurrence of physical violence. Canoas, Southern Brazil, 2002-2003. (N=1,954)

Variable	n	%	Physical violence (%)
Sex			
Female	1122	57.4	11.3
Male	832	42.6	7.5
Schooling			
Primary education	1154	59.15	11.5
High-school	566	29.0	5.7
University and above	232	11.9	10.5
Age bracket (years)			
14 to 19	261	13.4	5.1
20 to 39	756	38.7	9.3
40 to 59	675	34.5	11.4
60 and above	262	13.4	11.0
Family income (in minimum wages)			
0 to 3	454	23.4	12.6
3.1 to 7	487	25.1	8.0
7.1 and above	1003	51.6	9.1
Living with partner			
Yes	1176	61.3	10.0
No	743	38.7	9.3

Respondents 20 years or older who reported experiencing two or more stressful events presented 5.85 times the risk of suffering physical violence (95% CI: 2.38;14.39).

Experiencing physical maltreatment at any age bracket increases the chance of using healthcare services due to emotional and/or psychiatric hospitalization (p=0.023 and p=0.05 respectively). However, the two variables behave differently concerning the age of victimization. Violence victims as of adolescence presented a three times higher chance of having health-related appointments for emotional problems (95% CI: 1.60;5.87), whereas childhood violence victims had higher chances of presenting hospitalization history (OR=3.12; 95% CI: 0.92;7.80).

In the multivariate polytomous regression (Table 3), at the first level the variables income, schooling and gender were inserted. Income did not present any association with maltreatment. Schooling and gender remained associated to violence: having a higher schooling rate was a protective factor against violence as of 20 years of age (OR=0.32; 95% CI: 0.34;0.95);being a woman meant having three times the chance of experiencing violence in the 20 and above age bracket (95% CI: 1.52;4.88). However, the difference between the categories (age at victimization) in both variables did not prove to be significant (p=0.08 and p=0.09 respectively). At the second level, stressful events, appointments due to emotional problems, psychiatric hospitalization, and living with partner were inserted. Among these, only stressful events and appointments due to emotional problems presented association to violence (p=0.0024 and p=0.000 respectively), but in both cases the difference between the categories were not found to be statistically different (p=0.72 and p=0.24 respectively).

DISCUSSION

Researchers in health and social sciences are becoming increasingly more interested in the study of violence, due to the great individual and social impact it causes.[7-9] The present study included household visits during which respondents filled out an anonymous self-applied survey, contributing to minimize a behavior which frequently comes with the problem: silence. According to Krug et al,[9] violence is usually underestimated or overestimated, specially violence stemming from interpersonal conflicts in the family environment. Violence is underestimated when the victims, mainly women and children, usually suffer in silence due to shame of fear of retaliation coming from the aggressor; and it is overestimated when data are gathered in health services or with government authorities (police stations, forensic institutes).[9] In the present study, the silence may have been represented by the number of subjects who did not answer whether they were victims of violence (2.9%), seeing that the survey was carried out at respondent's household.

The 9.7% prevalence found reveals the importance of the problem, and is different from prevalence rates found in other locales. The difference is possibly due to the several sources object of study, in an attempt to satisfy the goals and needs of the institutions carrying out the research. In addition, prevalence rates are directly influenced by the known limitations of the reporting systems, which are sometimes difficult to compatibilize.[12,13,21]

The fact that violence is not associated to living with a partner was not expected, seeing that domestic violence is object of much concern, and affects women mostly.[2,9,18] This result may be due to the methodology adopted (population-based), which enabled the study of different population segments, some of which did not live maritally, such as adolescents (13.4% of the sample). In addition, the variable addressed the specific moment of the interview; therefore some of the respondents could have been living apart from their partners, maybe even due to having been victims of violence. Hence, this issue may be enlightened in future studies.

There was no association for the income variable in the multivariate analysis. There is a possibility that many of the respondents not knowing what was the exact

Table 2. Crude odds ratio for age of violence according to multinomial logistic regression. Canoas, Southern Brazil, 2002-2003.

Variable	Age of violence*			p**
	0-9 years OR (95% CI)	10-19 years OR (95% CI)	20 and above OR (95% CI)	
Income (minimum wages)				
0 to 3	1.00	1.00	1.00	
3.1 to 7	0.78 (0.38;1.60)	0.86 (0.46;1.58)	1.48 (0.86;2.55)	0.01
7 and above	1.51 (0.80;2.84)	0.70 (0.36;1.33)	0.50 (0.25;1.03)	
Schooling				
Primary education	1.00	1.00	1.00	
High-school	1.02 (0.55;1.87)	0.34 (0.15;0.77)	0.23 (0.10;0.51)	0.03
University and above	1.67 (0.82;3.41)	1.00 (0.42;2.33)	0.33 (0.12;0.93)	
Sex				
Male	1.00	1.00	1.00	0.04
Female	0.87 (0.54;1.41)	1.66 (0.93;2.95)	2.74 (1.52;4.94)	
Number of stressful events***				
0	1.00	1.00	1.00	
1 stressor	1.53 (0.81;2.89)	1.24 (0.60;2.62)	1.49 (0.74;3.00)	0.01
2 or more stressors	0.68 (0.09;5.14)	1.67 (0.38;7.32)	5.85 (2.38;4.39)	
Health appointments due to emotional problems				
No	1.00	1.00	1.00	0.02
Yes	2.16 (1.25;3.75)	2.40 (1.34;4.29)	3.60 (2.20;5.84)	
Psychiatric hospitalization				
No	1.00	1.00	1.00	0.05
Yes	3.12 (1.08;8.98)	2.57(0.75;8.73)	2.70(0.92;7.80)	
Living with partner				
No	1.00	1.00	1.00	0.47
Yes	1.48 (0.84;2.61)	1.05(0.58;1.88)	0.83 (0.51;1.36)	

* Reference category: not having experienced physical violence
** Estimated p-value for the association between the study variables and the polytomous outcome using the likelihood ratio test.
*** Unemployment, separation, mugging or robbery

family income and, perhaps, the income variable forms a causal complex with schooling and gender, thus losing its power. This hypothesis can be corroborated by the fact that, to people with higher schooling rates, the chance of experiencing violence decreases with age, thus schooling is a protection factor in the age bracket 20 and above. These data confirm what was reported in other studies[9,11,16] in which poverty and low schooling rate are considered risk factors, mainly during adolescence. Among the women who had appointments at a basic health unit (city of Porto Alegre, Southern Brazil), 64% of the cases of violence occurred with women who had low schooling levels, – revealing an inverse association with schooling years –, and 48% of the cases were women who lived in favelas.[8] However, respondents with higher schooling levels are the ones who revealed more chances of having experienced maltreatment during childhood. Although the difference among age brackets was not statistically significant, the number is a warning against the increasing number of children who are victims of violence, including in the school environment.[5] Even so, since education is a protection factor, the present study corroborates a WHO[9] recommendation concerning the need of improving schooling rates as part of global and inter-sector policies, which are essential for fighting violence.

As expected, the relation between violence and gender was confirmed in the present study, and women, in general, are the main victims. However, the male group showed an association with childhood violence. The differences in the distribution of violence according to age and gender did not present statistical significance. This fact should be considered a limitation of this study, due to the loss of male subjects in the 25-49 age bracket. Violence against children, specially boys, can be explained by cultural elements, according to which physical punishments are considered a form of exerting discipline, justified by the need to protect them from dangers or to make them become "good" adults.[11,10,19,20] It is also possible that this violence mirrors a form of parental negligence, since the different forms of violence

Table 3. Adjusted odds ratio for age of violence and associated factors. Canoas, Southern Brazil, 2002-2003.

Variable		Age of violence			p[1]	p[2]
		0-9 years OR (95% CI)	10-19 years OR (95% CI)	20 and above OR (95% CI)		
1	Income (minimum wages)					
	0 to 3	1.00	1.00	1.00		
	3.1 to 7	0.78(0.37;1.61)	0.88 (0.48;1.59)	1.60(0.91;2.80)	0.31	0.44
	7 and above	1.42 (0.74;2.75)	0.86 (0.44;1.69)	0.95(0.44;2.06)		
	Schooling					
	Primary education	1.00	1.00	1.00		
	High-school	1.02 (0.55;1.88)	0.34 (0.15;0.77)	0.23 (0.10;.0.51)	0.0004	0.08
	University and above	1.67 (0.82;3.40)	1.01 (0.43;2.36)	0.34 (0.12;0.95)		
	Sex					
	Male	1.00	1.00	1.00	0.002	0.09
	Female	0.87 (0.52;1.46)	1.66 (0.93;2.97)	2.73 (1.52;4.88)		
2	Number of stressful events					
	0	1.00	1.00	1.00		
	1 stressor	1.55 (0.81;2.96)	1.45(0.69;3.05)	1.84(0.88;3.86)	0.002	0.72
	2 or more stressors	0.69 (0.09;5.30)	1.78(0.40;7.93)	6.61(2.71;16.1)		
	Appointments due to emotional problems					
	No	1.00	1.00	1.00	0.0000	0.24
	Yes	1.77 (0.92;3.42)	3.06 (1.60;5.87)	3.24 (1.68;6.26)		
	Psychiatric hospitalization					
	No	1.00	1.00	1.00	0.407	0.95
	Yes	1.65 (0.35;7.87)	1.56(0.33;7.29)	2.65(0.81;8.64)		
	Living with partner					
	No	1.00	1.00	1.00	0.58	0.63
	Yes	1.56 (0.78;3.14)	1.23(0.55;2.1)	0.90 (0.47;1.69)		

p[1] = association
p[2] = heterogeneity

and acts or omissions that lead to death make up the nucleus of the main factors responsible for pushing children away from home or having them removed from the family environment, thus exposing them to other forms of violence in the streets or in shelters.[5,9] Aggressive children normally live in an aggressive home, because the parents are the children's main role model, thus governing the development of aggressive behaviors in their children.[3] A boy who was a victim of aggression during childhood may grown into an adult who repeats this action within his family, copying the model learned, thus forming a violence cycle which is difficult to break. Overcoming this problem requires inter-sector and interdisciplinary strategies, where the building of an epidemiological database plays a fundamental role and, to which, these findings can contribute.

Maltreatment, both in children and in adults of both genders, has important emotional consequences associated to a worse perception of one's health, higher usage of legal and illegal drug, depression and post-traumatic stress disorder. The impact of these actions does not only affect the individual, but also society, mainly the health system.[9,14] This can be evidenced by the present study, where it was found that those who experienced violence made more appointments at health services due to emotional problems. However, the association with psychiatric hospitalization, shown in the bivariate analysis but not confirmed in the multivariate analysis, may mirror a limitation of this study, because the number of subjects who reported being hospitalized was small (n=49), which affected the analysis.

In any case, the data corroborate findings of other authors[8-10,21,22] according to whom providing care to the victims requires an adequate structuring of the health system in order to give the victims the proper attention in a dignified way: to diagnose violence and meet the demand. In this fashion, the activities carried out by the Family Health Program and the Community Health Agents must be integrated. However, this leads to reflect on the extent to which the Brazilian health system and

Brazilian professionals are prepared to identify and address the problem. In a qualitative study[21] it was found that many primary healthcare providers (doctors, nurses and assistants) find it difficult to deal with the problem, stating that aspects related to the victim, lack of knowledge and adequate skills were the main obstacles. Taking this into account, we notice a positive perspective in the capacity building of these professionals, since education institutions are promoting courses for managers and health professionals aiming at filling this gap. [12]

In regard to stressful events (unemployment, robbery, and separation), the present study found an association between physical violence and the occurrence of two or more stressful events in subjects in the 20 years and above age bracket. Even when considering the limitations of this study (temporality and cross-section), the results can give evidence of a kind of social environment in which several kinds of violence converge, and one that is structured in such a way as not being able to protect the population from the dire consequences of violence.[17]

In conclusion, physical violence is a complex problem, which violates human rights, and has biopsychosocial roots that deserve to be treated as a collective health problem. Collective health policies should include interdisciplinary actions and global political will to fight: poverty; interpersonal conflicts (mainly those stemming from within the family system), intake of psychoactive substances, specially alcohol, and should aim at providing training to the human resources in the field of primary health care so these professionals are capable of identifying the problem, and acting adequately to help solve it.

REFERENCES

1. Adeodato VG, Carvalho RR, Siqueira VR, Souza FGM. Qualidade de vida e depressão em mulheres vítimas de seus parceiros. *Rev Saude Publica*. 2005;39(1):108-13.
2. Alvarado-Zaldívar G, Salvador-Moysén J, Estrada-Martínez SE, Terrones-Gonzáles A. Prevalência de violencia doméstica en la ciudad de Durango. *Salud Publica Mex*. 1998;40(6):481-6.
3. Bauer NS, Herrenkohl TI, Lozano P, Rivara FP, Hill KG, Hawkins D. Childhood bullying involvement and exposure to intimate partner violence. *Pediatrics*. 2006;118(2):235-42. doi:10.1542/peds.2005-2509
4. Day VP, Telles LEB, Zoratto PH, Azambuja MRF, Machado DA, Silveira MB et al. Violência doméstica e suas diferentes manifestações. *Rev Psiq RS*. 2004;25(suppl1):9-21.
5. Dill EJ, Vernberg EM, Fonagy P, Twemlow SW, Gamm BK. Negative affect in victimized children: the roles of social withdrawal, peer rejection, and attitudes toward bullying. *J Abnorm Child Psychol*. 2004;32(2):159-73.
6. Garbinato LR, Béria JU, Figueiredo ACL, Raymann B, Gigante LP, Palazzo, LS et al. Prevalência de internação hospitalar e fatores associados: um estudo de base populacional em um centro urbano no sul do Brasil. *Cad Saude Publica*. 2007;23(1):217-24.
7. Gianini RJ, Litvoc J, Eluf Neto J. Agressão física e classe social. *Rev Saude Publica* 1999;33(2):180-6.
8. Kronbauer JFD, Meneghel SN. Perfil da violência de gênero perpetrada por companheiro. *Rev Saude Publica*. 2005;39(5):695-701.
9. Krug EG, Dahlberg LL, Mercy JA, ZWI AB, Lozano R. World report on violence and health. Geneva: World Health Organization; 2002.
10. Lang JA, Stein MB, Kennedy CM, Foy DW. Adult psychopathology and intimate partner violence among survivors of childhood maltreatment. *J Interpers Violence*. 2004;19(10):1102-18.
11. Lessa, A. Arqueologia da agressividade humana: a violência sob uma perspectiva paleoepidemiológica. *Hist Cienc Saude Manguinhos*. 2004;11(2):279-96.
12. Minayo MCS. Implementação da Política Nacional de Redução da Morbimortalidade por Acidentes e Violências [editorial]. *Cad Saude Publica*. 2007;23(1):4. doi:10.1590/S0102-311X2007000100001
13. Njaine K, Souza ER, Minayo MCS, Assis SG. A produção da (des)informação sobre violência: análise de uma prática discriminatória. *Cad Saude Publica*. 1997;13(3):405-14.
14. Organização Pan-Americana da Saúde; Organização Mundial da Saúde. Repercussão da violência na saúde das populações americanas. Washington; 2003. (Resolução CD44.R13)
15. Romito P, Turan JM, De Marchi M. The impact of current and past interpersonal violence on women's mental health. *Soc Sci Med*. 2005;60(8):1717-27. doi:10.1016/j.socscimed.2004.08.026.
16. Reis JN, Martin CCS, Ferriani MGC. Mulheres vítimas de violência sexual: meios coercitivos e produção de lesões não-genitais. *Cad Saude Publica*. 2004;20(2):465-73.
17. Rubin C, Rubenstein JL, Stechler G, Heeren T, Halton A, Housman D, et al. Depressive affect in "normal" adolescentes: relationship to life stress, family, and frieds. *Am J Orthopsychiatry*. 1992;62(3):430-44.
18. Schraiber LB, d'Oliveira AFPL, França-Junior I, Pinho AA. Violência contra a mulher: estudo em uma unidade de atenção primária à saúde. *Rev Saude Publica*. 2002;36(4):470-7.
19. Sibert JR, PayneEH, Kemp AM, Barber M, Rolfe K, Morgan RJH, et al. The incidence of severe physical child abuse in Wales. *Child Abuse Negl*. 2002;26(3):267-76. doi:10.1016/S0145-2134(01)00324-6
20. Vermelho LL, Jorge MHPM. Mortalidade de jovens: análise do período de 1930 a 1991 (a transição epidemiológica para a violência). *Rev Saude Publica*. 1996;30(4):319-31.
21. Zink T, Regan S, Goldenbar L. Intimate Partner Violence: What are Physicians' perceptions? *J Am Board Fam Pract*. 2004;17(5):332-40.
22. Wise LA, Zierler S, Krieger N, Harlow BL. Adult onset of major depressive disorder in relation to early life violent victimisation: a case-control study. *Lancet*. 2001;358(9285):881-7.