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Chapter 7

THE IMPACT OF VIOLENCE ON THE MENTAL HEALTH OF PEOPLE LIVING IN URBAN CENTERS IN BRAZIL

Liana R. Netto[1,*], Karestan C. Koenen[2], Jair de J. Mari[3], Wagner S. Ribeiro[3], Marcelo Feijo Mello[3], Sergio Baxter Andreoli[3], Rodrigo A. Bressan[3], Lucas C. Quarantini[1]

[1]Federal University of Bahia, Teaching Hospital- Psychiatry Unit, Salvador, BA, Brazil
[2]Harvard School of Public Health, Departments of Society, Human Development, and Health, and Epidemiology, Boston, MA, USA
[3]Federal University of São Paulo, Department of Psychiatry, Sao Paulo, SP, Brazil

ABSTRACT

Violence has been associated with the rapid population growth of metropolitan areas, and has become a national challenge in Brazil, which has been ranked as the country with one of the highest prevalence of mortality from external causes in the world.

We aimed to do a socio-demographic review, contextualizing the exposure factors of violence (Domestic, Community, Social Collective) and the prevalence of mental disorders of people living in urban centers, where almost 50% of the population is affected by some non-psychotic psychiatric disorder during lifetime, with 31.7% prevalence for anxiety disorders.

Mental disorders in Brazil have a high economic and social cost due to work absence and an elevated demand for public health services. As preventive measures, the necessity of policies and strategies aimed at reducing gender-based violence was emphasized, in order to prevent and reduce anxiety and depression among women, including pregnant ones, and consequently, adverse child outcome, including low birth weight and poor infant growth.

INTRODUCTION

In recent decades, Brazilian society has undergone significant demographic, economic and social changes, including accelerated urbanization, growing employment instability (and thus greater financial insecurity), and increased violence, which has attained epidemic levels and has consistently been identified as an important public health problem.

In Brazil, mortality from external causes ranks as one of the highest in the world; in 1980, traffic accidents were the leading cause of violent death in the country. In 2000, though, violent deaths were predominantly caused by homicides (Gawryszeski, 2003; Gawryszeski and Rodrigues, 2003), with a risk 12 times higher for male (53/100,000) than female (4/100,000) (Soares Filho et al.,2007). Ninety percent of these deaths are perpetrated with firearms in urban areas such as Sao Paulo and Rio de Janeiro. Thus, violence has become a national challenge, being related to the rapid population growth of metropolitan areas (UNESCO, 1998).

Exposure to violence has already been identified as an important stressful life event associated with mental disorders in the developed world (Bond *et al*., 2001; Kilpatrick and Acierno, 2003); however little is known about violence and its consequences in low and middle income countries, since relatively little work has been done on the epidemiology of violence and its consequences in Latin America and specifically in Brazil.

A PROFILE OF BRAZILIAN URBAN CENTERS

In large Brazilian cities there is a series of factors that contribute to the high prevalence of stressful events: with 160 million inhabitants, 35 million are below the poverty line (Lovisi et al., 2005). Lopes et al. (2003) and Paula et al. (2007) call attention to the collapse of the Brazilian Public Health System, usually inefficient and insufficient for the public demand, and their discussion reinforces the necessity of having more available social and psychological services, for treatment and prevention of mental disorders.

The Brazilian society has one of the largest socioeconomic disparities in the world. Wilkinson (1997) suggests that the financial disparity (relative poverty) brings more health damage than precarious life conditions (absolute poverty), that is, awareness of one's socioeconomic dissimilarity to others' compromises one's health. In addition, a large proportion of people have very low levels of attained education, creating a substantial class of non-regulated informal workers (23.6%) and unemployed ones (13.6%) (Ludermir and Melo Filho 2002). Attained education may have a direct effect on psychological health by increasing or decreasing one's opportunities, self-esteem, the spectrum of choices and aspirations, and possibilities of obtaining more knowledge. Education reflects social and material circumstances from the beginning of one's life, which are reproduced from one generation to another. The original social class determines the parents' behavior and the support or not of their children's permanence in school – sometimes abbreviated because of their premature entrance into the working world, maintaining the condition of cheap and unskilled workmanship.

According to Lopes et al. (2003), the variable "severe financial problems" was the strongest factor associated with the presence of lifetime mental disorders, being followed by

"physical aggression," resulting in an overall prevalence of common mental disorder of 35% in Brazilian Society, in agreement with Ludermir and Melo Filho (2002) data.

A PROFILE OF MENTAL DISORDER WITHIN BRAZILIAN URBAN POPULATION

Brazilian studies in primary health care have shown that around 50% of the primary care patients is affected by some non-psychotic psychiatric disorder when seeing the general physician (Mari, 1987). This figure does not differ significantly from community prevalence data drawn from developed countries such as The United States, with 48% (Kessler et al.,1994), or Holland, with 41.2% (Bijl et al., 1998). According to Santos et al. (2005), anxiety disorders were the main mental health problem in the Brazilian urban population (31.7%, with predominance among women); followed by mood disorders (26.1%, with higher frequencies for depressive episodes), and disorders related to psychoactive substance use (10.1% -7.4% for prevalence for tobacco and 3.7% alcohol abuse). For psychotic disorders, the prevalence was 1.8%. Although the overall lifetime prevalence of mental disorders in Brazil does not differ from those in the United States and Holland, the 31.7% prevalence found for anxiety disorders was higher.

For the Ludermir et al. (2008) study, carried out in a population-based survey in Brazil (as part of the WHO multi-country study on women's health and domestic violence), which investigates the association between psychological, physical and sexual violence committed against women by their intimate partners and common mental disorders, having a mental disorder was significantly associated with psychological, physical and all sexual violence, that could act cumulatively, increasing the risk of developing common mental disorders (Lopes et al, 2003).

Many authors (Ellsberg et al., 1999; Kumar et al., 2005; Ruiz-Perez and Plazaola-Castaño, 2005) point out diverse threats to women's mental health caused by violence. The World Health Organization (WHO) (2000) considers violence to be the principal gender-related cause of depression among women. It also gives rise to anxiety and increased use of tranquilizers and antidepressants (Ruiz-Perez and Plazaola-Castaño, 2005). Consequently, mental disorders in Brazil have a high economic and social cost due to work absence and elevated demand for public health services (Ludermir and Melo Filho, 2002).

ASPECTS OF URBAN VIOLENCE AND ITS PREVALENCE

The WHO (2002) defines violence as the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation. According to the WHO, violent acts can be grouped into self-directed violence; interpersonal violence; and collective violence, and, concerning their nature, into physical; sexual; psychological; and involving deprivation or neglect.

There is a variation in prevalence related to urban violence, which is attributed to the heterogeneity of the definitions of violence, to the different research methodologies, as well

as different sample sizes and sampling procedures. Some categories have been used by several different authors, such as Audi et al. (2008), Lovisi et al.(2005), Lurdemir et al. (2008), and Schraiber et al. (2007), to describe the different natures of urban violence. These categories include: 1.physical violence, 2.psychological violence and 3.sexual violence.

In Brazil, research conducted nationally among women have shown that 43% stated they had been subject to violence committed by a man in their lifetime, with 16% - 33% reporting some form of physical violence, 3% - 13% sexual and 18.8%-27% psychological (Audi et al. 2008; Ludermir et al., 2008; Venturi et la., 2004).

1. Physical Violence

This could be comprehended as physically abusive acts or physical aggression and assault or robbery by means of violence, perpetrated with or without objects/ weapons, generally measured in terms of concrete actions such as slaps, punches and shoves. Lopes et al. (2008) found in their study with a big cohort of public servants that: having experienced physical violence was associated with being a woman ($p < 0.05$) and being exposed to at least one previous stressful life event ($p < 0.0001$). Physical violence rarely happens alone: 94% of the women who were experiencing physical violence, according to the Ellsberg (1997) study, also reported verbal insults and humiliations.

Lifetime Prevalence of exposure to violence in Sao Paulo and Rio de Janeiro, Brazil*

Type of violence	Prevalence†
Life threatening community violence	48.0
War experience	0.6
Witnessing bank robbery	6.0
Being physically attacked with a weapon	30.0
Being kidnapped, or held captive	1.0
Fast kidnap	1.2
Torture or terrorism	1.3
Being victim of conflicts between gangs or drug dealers	1.7
Witnessing a shoot-out or being victim of stray bullets	20.5
Having one's house broken into while at home	8.0
Domestic violence	14.4
Being beaten up by parents or relatives	8.7
Being beaten up by an intimate partner	7.4
Sexual violence	4.3

* Source: Andreoli et al 2009. (manuscript in preparation).

† Unweighted prevalence rates.

Ferri et al. (2007) found in their study with adolescent mothers that most of the violence went unreported; only 4% of those who suffered violence with a weapon and 17% of those reporting sexual violence had sought police help. In another report, Ludermir et al. (2008) noticed that the prevalence of mental disorders increased with the severity of violence, being

30.6% for women who were victims of physical violence alone and 62.9% for those who suffered all forms of violence.

2. Psychological Violence

The definition of psychological violence varies widely between women and men in different cultures, thereby giving rise to measurement difficulties (Schraiber et al., 2007). However, we can synthesize the aspects of this expression of violence as: insults, humiliations, intimidation, vilification, forced subordination, emotional violence and threats of violence.

In their population-based study about intimate partner violence against women, Schraiber et al. (2007) found that, in 90% of the cases, psychological violence accompanied the reports of physical or sexual forms of violence; in fact, among the women who reported some form of physical or sexual violence, only 10% did not also report some episode of psychological violence. When occurring alone, psychological violence seemed to be expressed more moderately than when associated with other forms of violence (Schraiber et al., 2007).

Violence against women is not only a manifestation of gender inequality, but also serves to perpetuate injustice against women. According to Watts and Zimmerman (2002), in some cases, aggressors deliberately use violence as a means of subordination, as in the case of an intimate partner who demonstrates and reinforces his position of greater power, while also being head of the household or family. Women suffering psychological violence reported worse self-perceived health than women who had not been abused or who reported other types of violence. Furthermore, higher levels of severity, intensity and duration of the aggression imply a greater impact on women's mental health. (Lurdemir et al., 2008).

Among the women who declared that they had suffered psychological violence alone, the episodes most reported were insults alone (30.7% - 41.5). Among the women who said that they had suffered all three forms of violence (physical, psychological and sexual), 45.33% - 53.85% reported suffering from various expressions of psychological violence (Schraiber et al.,2007). Garcia-Moreno et al.(2005) point out the relatively high levels of psychological violence in Brazil, compared to other forms of violence and to other countries.

3. Sexual Violence

According to Ellsberg et al. (2008), physical and sexual violence can be combined in one variable, because a considerable overlap was noted between experiences of sexual and physical partner abuse, with 20–50% of women in most sites having experienced both kinds of violence: consequently, the specific effect of each of these types of violence by itself is usually difficult to establish.Schraiber et al.(2007) further point out several factors that contribute towards making it difficult to recognize and delimit sexual violence, in their study within stable partner relationship. For example, different names are given to acts of aggression (violence, rape, abuse and, sometimes, harassment), and also in many cultures non-consensual sexual acts are considered to be the wife's duty. They also noted that among the women who declared they had suffered sexual violence, 67.6% - 69.5% had sexual intercourse for fear of what their partner might do.

Degrading or humiliating sexual practices could be included in this expression of violence, such as *voyeurism*, genital manipulation, copula and physical effort outrage against pudency (libidinous acts). Regarding the exposure factors to violence, Audi et al. (2008), Ellsberg et al. (2008) and Ferri et al. (2007) emphasizes domestic interpersonal violence, particularly against gender, while Aded et al. (2007) emphasizes domestic interpersonal violence against children and adolescents; Lopes et al.(2008) and Pastore et al. (1996), by it turns, elaborate their reflection over community interpersonal violence. Both domestic and community violence were perpetrated through the three expressions of violence cited before. The studies of Fleitlich and Goodman (2001), Lovisi et al. (2005) and Santos et al. (2005) emphasizes the role of social collective violence in the urban context. The following topics provide further descriptions of these exposure factors:

1. Interpessonal Violence: Domestic

Against Children and Adolescents

Aded et al. (2007), in their study about sexual abuse against children and adolescents, found out that 79.03% of them were committed against girls, which was in consonance with others studies (Aded et al., 2006; Azevedo and Guerra, 2000; Weiss at al., 1999). They reported that 16.13% were perpetrated by the father or the stepfather, 28.23% by relatives, and 30.65% were not informed, corresponding to a large lack of information, which could be interpreted as victims' dread of declaring the bond with the aggressor. 4.84% were attributed to other kids, only 13.71% attributed to an unknown person, 0.8% happened at an educational institution, 1.64% were a rape attempt, 2.48% were directed to medical clinics for clarification, and 1.61% appeared for evidence of virginity.

In agreement with the Drezett et al. (2001), Islam and Islam (2003) and Santos et al. (2006) studies, Aded et al. (2007) observed that the attacks, at their majority, happen between 12 and 15 years of age, and at that age, probably with the pubescent anatomical changes, it is likely that the aggressors intend to consummate the vaginal copulation.

Intergenerational Trauma

Bordin et al. (2006), executed the first population-based study carried out in Brazil regarding the connection between severe physical punishment and mental health problems in children and adolescents in low income areas. The authors observed that not only severe punishment is common in this population (10.1%) but also that the victims of these punishments have a grater probability of becoming future aggressors. Moreover, PTSD is common among families where exists severe infant abuse, not only among the victims, but also among their mothers, with a prevalence of 35.8% and 15.6%, respectively (Famularo et al., 1994).

Parents that suffer from PTSD in consequence of their own experience of severe punishment present a higher risk of dealing abusively their children; maltreatment during infancy has a tendency to be more prejudicial then maltreatment that happens latter, in the light of interaction among PTSD symptoms and the psychological developmental process. The infant traumatic experience generates permanent deficiencies in regulating behavioral, cognitive and emotional process, which contribute to limiting the parents' abilities to take

care of their offspring and, as a consequence, increase the risk of intergenerational transference (Mendlowicz and Figueira, 2007).

Against Women

Violence against women, defined by psychologically, physically and sexually abusive acts, is widely acknowledged as a severe public health problem. A multicentric study on domestic violence coordinated by the WHO found that the prevalence of domestic violence perpetrated by an intimate partner against women throughout their lifetime varied from 15% in Japan to 71% in Ethiopia and the prevalence of physical/sexual violence in the past year ranged from 4% to 54%, respectively (Garcia-Moreno et al, 2006). In Brazil, nationally conducted researches among women aged 15 years and older has shown that 43%- 50.7% stated they had been subject to violence committed by an intimate partner in their lifetime, with a third reporting some form of physical violence, 13% sexual and 18.8% - 27% psychological (Ludermir et al., 2008; Venturi et al. 2004;).

Even during pregnancy, women are not free from domestic violence: in a review of the literature, prevalence varied from 0.9% to 20.1% (Jasinsk, 2004). According to Audi et al. (2008), having reported difficulties in getting to her prenatal appointments more than doubled the chances of the pregnant woman becoming a victim of physical and sexual violence, and the fact that the intimate partner was unemployed increased in 77% the probability that physical and sexual violence would occur.

Gender based violence has been described as the single most important risk factor for depression in women (Astbury, 2001); both violence and depression during pregnancy have been linked to adverse neonatal outcomes- especially low birth weight- and to maternal survival (Ferri et al., 2007). Lovisi's et al. (2005) study confirms the powerful role of violence as a potentially preventable risk factor for depression.

The prevalence of a common mental disorder was 49.0% among the women who reported some type of violence and 19.6% among those who did not report violence, according to the Ludermir et al. (2008) study; the results showed that, in the final model, having a mental disorder was significantly associated with psychological, physical and all forms of violence, and that there is an association between controlling behavior by the intimate partner and violence (not presented) and mental disorder. Several studies have shown that the more serious the aggression, the worse the impact is on women's mental health (Ellsberg et al., 1999; Ruiz-Perez and Plazaola-Castaño, 2005).

2. Interpessonal Violence: Community

In the context of external violence, that could be perpetrated physically, psychologically and/or sexually, Assis et al. (2008) listed the most frequent experiences of life stressing events (either being the victim, or as the witness) related with the development of PTSD: death threat (8%), physical attack (10%), kidnap (6%), assault (26%), homicide attempt (6%), rebellion with physical attack (6%), sexual abuse (10%), loss of a relative (26%).

In a study carried out among university employees in Rio de Janeiro, Lopes et al., (2003) found a prevalence of 15.54% for victims of physical aggression, assault or robbery. Using a cross-sectional design, they showed an association between exposure to physical aggression and assault or robbery by means of violence and occurrence of common mental disorders. Among children and adolescents, Pastore et al. (1996) observed the association between witnessing violence and an increased risk for mental health problems. Unfortunately, Data

concerning the prevalence of mental health problems in childhood and adolescence in developing countries are scarce (Paula et al., 2007).

3. Social Collective Violence (Socio-economic Deprivation)

We define social violence as poverty, lack of tangible social support and low educational level, which Lovisi et al. (2005) called socio-economic deprivation.A review by Halpern and Figueiras (2004) indicated that poverty is associated with multiple risk factors for mental health problems in childhood and adolescence. Paula et al. (2007) emphasizes that children and adolescents with mental health problems and global impairment are the most affected group, since, in addition to the psychiatric symptoms, they show impaired social relationships, poor academic achievement, and/or poor performance in sports and leisure activities.

According to Lovisi et al. (2005) findings, some of the social elements are also considerate risk factors for domestic violence (psychological and physical/sexual) against women. Examples of that are: difficulties encountered by pregnant woman in attending their prenatal appointments, intimate partner using drugs and not working, and low levels of education. Ferri et al. (2007) listed the following as possible mechanisms linking violence and mental disorder with adverse obstetric outcomes: low birth weight has been attributed to factors such as premature births (caused by trauma), substance abuse (such as smoking), low socioeconomic status (leading to hunger), and maternal medical problems without adequate social assistance.

CONCLUSION

According to Lurdemir et al (2008), the contribution of intimate partner violence to mental health must be recognized and addressed by health care and community development agents. Ferri et al (2007), Lovisi et al (2005) and Lurdemir et al (2008) emphasizes the necessity of policies and strategies aimed at reducing gender-based violence for preventing and reducing anxiety and depression among women.

During pregnancy, violence has adverse consequences for fetal and maternal survival, and Lovisi et al (2005) study confirms its powerful role as a potentially preventable risk factor for depression, and consequently, for adverse child outcomes, including low birth weight and poor infant growth. The authors warn, however, that interventions to prevent post-natal depression may need to begin before childbirth. Ferri et al (2007) suggests for clinical practice that all mothers should be routinely screened for the experience of violence, both lifetime and during pregnancy, as well as for mental disorder, and that exposed mothers should be treated as 'at risk', supported intensively during the pregnancy and monitored for fetal growth. Paula et al (2007) study, however, indicates a large disparity between the estimated demand for treatment and the public system's estimated current delivery capacity. According to their data with children suffering with mental health problems, only 14.0% of them could receive treatment during a one-year period.

Finally, the Assis et al (2008) study, which analyzes the impact of physical exercise preventing and treating mental health problems, although not directly related to PTSD due to violence, demonstrated a positive effect in the mood and life quality, reducing symptoms of

anxiety and depression and increasing the perceived ability to cope with stress. They suggest that physicians and health professionals should encourage these patients to be engaged in leisure time and physical activities and there should be specific campaigns for more physical activity in Brazilian mass media aimed at informing and stimulating these patients to become more active.

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