Rape, child sexual abuse and mental health in a Brazilian national sample

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Abstract

Objective: To evaluate the prevalence of self-reported rape and its associations with other forms of violence and mental health outcomes. **Methods**: The Brazilian National Alcohol and Drugs Survey is a probabilistic household survey that collected data from 4283 Brazilians aged 14 years and older in 2012. **Results:** The prevalence of rape was 2.3% (*n*=107) and the majority (n=81) of rapes were reported by women. Female gender increased the chances of rape (adjusted odds ratio [AOR] =2.7, 95% confidence interval (CI): 1.7-4.3). Adults aged 35-46 years (AOR=2.0, 95% CI: 1.2-4.4) and, being without religion (AOR=2.2, 95% CI 1.3-3.8) were also associated with increased chances of rape. Participants with a history of childhood sexual abuse (CSA) were 16.5 times (95%CI: 10.1-26.7) more likely to report having been raped. Other outcomes related to been raped were history of child prostitution AOR=5.1 (95%CI 2.1-13.4) and witnesses of violence during childhood AOR=2.4 (95%CI 1.5-3.8). People without social support: AOR≅3 (95%CI 1.8-4.3); victims of multiple recent negative events: AOR=3.7 (95%CI 2.4-5.8); people with depression: AOR=2.6 (95%CI 1.7-3.9); history of suicidal ideation: AOR=3.8 (95%CI: 2.0-7.1) and history of suicide attempts: AOR=2.2 (95% CI: 1.1-4.3) are other outcomes related to having been raped. **Conclusion**: In this sample, rape was related to gender and to other forms of violence and victimisation. Self-reports of rape appear to underestimate the true prevalence as the figures obtained from the survey were low. Other methods should be used to investigate this issue.

Keywords: Rape; child abuse, sexual; mental health; violence; gender

INTRODUCTION

Rape is a form of sexual violence, defined as a sexual intercourse without consent of the victim. It is a global public health problem (Facuri et al., 2013; World Health Organisation [WHO] 2011) with untold physical and mental health consequences for the victims, such as depression, suicide (Brandelli et al., 2017; Dos Reis, Lopes & Osis, 2016); post-traumatic stress disorder [PTSD] (Dworkin et al., 2018; Liu et al., 2017); HIV infection and other sexually transmitted infections (STIs) (Kim, Martin & Denny, 2003), as well as, high costs for health and criminal justice systems (Gatley et al., 2017; Kaplan, 2017; Tennessee, Bradham, White & Simpson, 2017).

Rape is associated with stigma in many societies and is often a taboo subject for discussion; victim-blaming is common (Strunk, 2017). The stigma of rape persists, leading to lack of social support for victims and poor access to social and health services (Kilpatrick, 2004). In addition, rape undermines human dignity and seriously disrespects human rights (Brown, 2012; Kabengele Mpinga et al., 2016).

Some evidence has shown that young women are more likely to be exposed to violence than older women. In addition, many women are sexually molested in their lifetimes. Violence against women is a universal phenomenon (United Nations Organization [UNO], 2015a; 2015b). A review of 41 studies on rape and victimisation in Brazil concluded that the 12-month incidence of rape was 1-40% in women and 1-35% in men (Winzer, 2016). The results of the Brazilian Forum of Public Security survey are alarming: it is estimated that in 2015 about 45,460 persons were raped - one every 11 minutes; in other words, more than five people are raped per hour in Brazil. In 2017, 87% of victims were women (APAV, 2017).

The lack of official data on rape in Brazil - as in many other countries around the world – is a challenge for researchers. Some of the published studies were based on law

enforcement and medical records yet it is believed that only 35% of people who have been raped file police complaints (Winzer, 2016). Under reporting of rape is common, because it is deals with a very private experience that elicits guilt and prejudice and is associated with victimisation and criminality (Abbey, 2011).

Mental Health Impact of Rape

The National Women's Study (Kilpatrick, 2004) provided alarming confirmation of the mental health impact of rape. About 30% of rape victims had experienced at least one major depressive episode at some point, and 21% of all rape victims were experiencing a major depressive episode at the time of being surveyed. Rape victims were three times more likely than non-victims to have a lifetime history of major depression and 3.5 times more likely to be experiencing a major depression at the time of being surveyed. Rape victims were 5.5 times more likely to have PTSD than those who had never been victims of crime and 13 times more likely than non-victims of crime to have attempted suicide (Kilpatrick, 2004).

Other forms of sexual violence, such as molestation and childhood sexual abuse (CSA) are often associated with higher rates of anxiety, major depressive disorder, PTSD, personality disorder, substance use disorder and sexual problems (Pulverman, Kilimnik & Meston, 2018; Tyler & Schmitz, 2018; Jaworowski et al., 2019). Women with a history of CSA tend to become depressed at an earlier age and are more likely to attempt suicide and to engage in deliberate self-harm, as opposed to depressed women who were not exposed to CSA (Galdstone et al., 2004).

The following study demonstrates that rape is an established risk factor for mental health disorders, with a high impact on depressive symptoms and suicide. Zinzow and colleagues (2014) found that posttraumatic stress disorder (36%), major depression (36%)

were most prevalent mental health diagnosis in female rape victims, where the rape had been facilitated by substances or use of force. Multivariate models demonstrated that this victim group have the highest chance of being diagnosed with a psychiatric disorder, even after controlling for the effects of demographic variables, adverse childhood experiences and multiple victimisation history. Substance abuse was more prevalent in women who were victims of substance-facilitated rapes than in women whose rape had involved the use of force.

The Brazilian Context

Despite international literature on rape and it's mental health impact, few large-scale surveys have compared rape with other forms of violence. Additionally, such studies have not been done in low and middle-income countries (LMIC) such as Brazil, where symbolic violence, sexism, gender inequality, misogyny related to a patriarchy culture and the high rates of feminicide are prevalent (Schmitt, 2016).

In Brazil an average of three allegations of sexual abuse of children or sexual exploitation of adolescents were registered every hour in 2014 (Maranhão, 2018). In the second National Alcohol and Drugs Survey 21.7% of Brazilians reported that they experienced violence at least once in their childhood (BNADS, 2012).

Another survey, using multi-stage sampling to collect data from individuals aged ≥ 14 years and from all Brazilian regions over the period 2005–2006 (n = 3007), found that the prevalence of physical abuse in childhood was 44.1% (moderate abuse: 33.8%; severe abuse: 10.3%). In the same sample, the prevalence of exposure to parental violence was 26.1% (moderate parental violence: 7.5%; severe parental violence: 18.6%) (Zanoti-Jeronymo et al., 2009).

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In Brazil, the rate of femicide is high, about 5.86 per 100,000 women died between 2009 and 2011 in the country (Meneghel & Hirakata, 2011; Garcia et al., 2015). In 2015, the Map of Violence showed that between 2003 and 2013 the number of murders of black women increased by 54%, from 1,864 to 2,875 respectively (Garcia, Freitas, & Hofelmann, 2013).

There have been several milestones in the fight to protect women from violence, starting with the Universal Declaration of Human Rights in 1948; followed by declarations on reproductive rights (1975), domestic violence (1979) and violence against women (1992), the Vienna Declaration of 1993, the Platform of Action of Pequin (1995), and the Istanbul European Convention (2014) (Worden & Amanpour, 2012; McMillen, 2008; WHO, 2011; Council of Europe Treaty Series No. 210).

The evolution of Brazilian law has been more recent. In 1934 women won the right to vote, but until 1962 married women were not allowed to own land. In the 1980s the issue of rape within marriage began to be debated. It was only in 1988, with the Federal Constitution, that equality between spouses was introduced. In 2006 the Maria da Penha Law on Domestic Violence was approved following the intervention of international organisations. More recently, in 2015, the Law on Femicide was approved (Rodrigues & Cortês, 2006; Ministry of Health, Brazil, 2006).

The Millennium Development Goals, agreed by the United Nations in 2015 included targets for a reduction in violence against women and improvements in gender equality by 2030 (UNO, 2015b). There are many barriers that maintain this deprivation of human rights as the unequal value attributed to each gender due to sexism, power and the patriarchal cultures (Ministry of Health, Brazil, 2006), such as the continuing lack of public policies, laws that protect women's rights not being enforced (Garcia, Freitas, & Hofelmann, 2013; Garcia et al., 2015).

The lack of official data on rape in Brazil - as in many other countries around the world – is a challenge for researchers; some of the published studies were based on law enforcement and medical records yet it is believed that only 35% of people who have been raped file police complaints (Winzer, 2016). Under reporting of rape is common, because it is deals with a very private experience that elicits guilt and prejudice and is associated with victimisation and criminality (Abbey, 2011).

This study has two main hypotheses; firstly, to try and identify whether there are risk factors that make it more likely for a woman to be raped. Secondly, to identify whether rape is associated with other forms of violence (revictimisation) and mental health problems (e.g. depression and suicide).

The objectives were to evaluate the prevalence of self-reported rape and its association with other forms of violence and with mental health conditions. This study differs from other similar studies in that it is based on data collected via a large-scale household survey as opposed to criminal justice system data on reports of rape or data from clinical samples.

Method

This was a descriptive, cross-sectional analytical study conducted in 2012. Data were obtained from the Brazilian National Alcohol and Drug Survey (BNADS, 2012). A multistage cluster sampling procedure was used to select 4607 individuals aged 14 years and older from the Brazilian household population, including an oversample of 1157 adolescents (14 to 18 years old). The overall response rate was 77%, and 79% for the adolescent subsample. A complete description of the BNADS method was previously published by Madruga et al., 2018.

One-hour, face-to-face interviews were conducted in the participant's home by trained interviewers, who used a standardised, fully structured questionnaire. To guarantee confidentiality, the question about rape for been considered sensitive, and were not asked face-to-face, but self-completed separately and returned in a sealed envelope to the interviewer during the interview. Alcohol and substance use were not amongst the mental health outcomes analysed in this study as analysis of these survey data has been published elsewhere by our research group (Abdalla et al., 2018; Massaro et al., 2019;).**Socio-demographic data.** Data on the following variables were collected**:** sex at birth (female, male), age group (15-34 years and 35-64 years), marital status (married; unmarried), ethnicity (non-white; white), years of education (< 9; ≥ 9), religious affiliation (yes; no), current occupational status (employed; not employed) and income. **Sexual health.** Data on history of sexually transmitted infections (STIs), STI treatment and HIV status (It was asked directly - Have you ever tested for HIV? (in the last 12 months) (yes/not). Childhood prostitution was understood as activity aimed at making money from charging for any type of sexual acts, including exchanging sex for drugs." Have you ever received money to have sex before the age of 18? (yes/no)].

Adverse Early Life Experience (AELE). Two domains were evaluated: (a) sexual violence (CSA): "During your childhood or adolescence, were you ever sexually abused,

touched maliciously, forced to perform oral sex or have sex with someone older than you?" (b) physical violence was assessed in the same way, but the items described instances of physical aggression.

Rape. Investigated through the following question: "Have you ever been forced to have sex with someone in life" (yes/ no). Respondents who replied in the affirmative were then directed to a further question: "Who was involved?" (Response options: relative; family friend; a stranger; do not remember; other (please specify). Information regarding sexual violence was collected in sealed envelopes. The question we used to assess this subject was: "Have you ever been forced to have sexual relations with someone?"

Exposure to violence during adulthood (EVA). Assessed using a Portuguese adaptation (Hasselmann & Reichenheim, 2003) of the Conflict Tactics Scales Form R (Straus, 1979). Respondents were asked nine questions about their experience of different types of violent behaviours in the last 12 months. The questions covered acts of minor violence – (throwing something; pushing, grabbing, or shoving; slapping) and severe violence (kicking, biting, or hitting; hitting or trying to hit with something; burning or scalding; forced sex; threatening with a knife or gun; use of a knife or gun). First, respondents were asked if they had perpetrated these acts against their partner and then were asked to report if their partner has perpetrated these acts against them. A three-level variable was created ((i) none, (ii) one, and (iii) two or more events) (Straus, 1979; Hasselmann & Reichenheim, 2003).

Witnessed parental violence (WPV) during childhood was based on the following items of the Conflict Tactics Scale: (a) 'During your childhood or adolescence, did you see your parents threatening to harm each other or others?' and (b) 'During your childhood or adolescence, did you see your parents physically harm each other or others?' with responses dichotomy (Yes/No).

Perception of Social Support (PSS). PSS was assessed with seven questions taken from the 1987 Health and Lifestyle Survey (Cox et al., 1987) and the Health Survey for England (Breeze et al., 1992; Brugha et al., 2003). Responses were given using a Likert scale (disagree; partially agree; totally agree). The items concerned participants' perception of support, help and acceptance from family and friends. A binary variable was also created (0-20 points indicated lack of social support; ≥ 21 points indicated adequate social support). The Brazilian version of the PSS has shown good internal consistency (Cronbach's alpha = 0.92) (BNADS, 2012).

Depression. Depressive symptoms were investigated using the Depression scale developed for the Center for Epidemiological Studies (CES-D). CES-D, in the semantically validated version by Silveira & Jorge (2000), is to assess the frequency of depressive symptoms experienced in the week prior to the interview. The scale contains 20 items covering mood, somatic symptoms, interactions with others, and motor functioning. The answers are Likert-scale (never or rarely, sometimes, often, always), ranges from zero to 80 points. In the United States original version, the cut off point for identifying depression is > 16 point. The Brazilian version of the CES-D has shown good internal consistency (Cronbach's alpha 0.86), sensitivity (74.6%) and specificity (73.6%) and was shown to have sufficient test-retest reproducibility for use as a screening tool for depression in a community sample of elderly Brazilians (Batistoni, Neri, & Cupertino, 2007, 2010). Responses ranged from 0 (*never*) to 4 (*most of the time*). A score of 16 was considered as the cut-off point for case indication of depressive disorder as suggested by Batistoni and colleagues, and it was used in the analysis. The total score, considered an index accounting for the presence and severity of depressive symptoms, was used in the conditional model equation to estimate its role as a mediator.

Suicidal ideation and suicide attempt. These were assessed with binary (yes/no) questions about suicidal thoughts and suicide attempts in the last 12 months.

Statistical analysis

Prevalence rate estimations accounted for the complex sampling characteristics of the data, and were conducted on data weighted to correct for unequal probabilities of selection into the sample. A post-stratification weight was applied to correct for non-response and to adjust both samples to known population distributions on demographic variables (education, age, gender and region of the country) according to the Brazilian Census of 2010.

Logistic regression (Agresti, 2013) was used to quantify the associations between the outcome variable (rape, with dichotomic answer, dependent variable) and the various predictor variables investigated. A priori, we used a chi-squared test (significance at $p \leq$ 0.02) to select variables for the analysis. Subsequently, the collinearity test (using a variance inflation factor VIF) was used to evaluate how much the variance is inflated and the correlation amongst explanatory variables. Therefore analysis was performed. First, an unadjusted odds ratios (ORs) was calculated relating each rape predictor variable. Second, we calculated the unadjusted odds ratios (ORs) to evaluate the relationship with each predictor variable to rape: (a) sociodemographic information: gender, age group, ethnicity, religion and income; (b) CSA, child prostitution, child witness to parental violence (AELE), STI in the last 12 months, HIV status (test) and sexual orientation; c) perception of social support, recent negative events (EVA), depression (CES-D), and suicide (ideation and attempts). Hence the adjusted odds ratios (AORs) and their 95%

confidence intervals were calculated. Therefore, we have a parsimonious adjusted model with a smaller number of explanatory variables.

Ethical issues

This study was approved by the Federal University of São Paulo (UNIFESP) Ethics Committee (protocol number 1.833.235). All subjects provided written, informed consent. The participants of the present research did not receive any refunds or compensation for participating in this study.

Results

Sociodemographic Data

The sample consisted of 4283 participants, of whom 107 (2.3%) reported that they had been forced to have sex with someone (raped). The majority of the sample was female (55.1%), with age ranging from 14 to 99 years old (mean age = 35.8 years, SD = 18.8). Forty-six percent of respondents were in a consensual union and 41.4% were unmarried. The overwhelming majority (90.2%) reported that they had a religious affiliation. The majority of the sample was non-white (60.3%) and 18.3% had low income (less than twice the minimum wage [MW]); 16.8% had an income of 2-4 MW (data not represented in the table).

Among the participants who reported having been victims of rape were women (3.4%), adult (3.6%), non-white (2.8%), unmarried (2.6%) and widowed (2.5%), with low-income (< 2 MW) and who lived in urban areas (73.1%).

The final logistic regression model indicated that the chances of rape was increased by female sex at birth (AOR = 2.7, 95% CI: 1.7-4.3; $p < 0.01$), adult age (35-46

years) (AOR = 2.0, 95% CI: 1.2-4.4; $p < 0.01$), and lack of a religious affiliation (AOR = 2.2, 95% CI: 1.3-3.8; $p < 0.01$). In this sample neither income nor marital status affected the odds of having been a victim of rape (Table 1).

Insert Table 1 here

Rape, Other Forms of Violence and STI /HIV Status

Adverse early life experience (sexual abuse and violence suffered in childhood) emerged as chances factors for being a victim of rape in both the bivariate and multivariate analyses.

About a quarter (24.2%) of victims of childhood sexual abuse reported that they had been raped, as did 31.6% of those who had been child prostitutes and 5.1% of those who had witnessed parental violence during childhood. Only two victims of rape had had an STI in the past year and 4.4% of participants had been tested for HIV in the last year. With regards to the sexual orientation of the rape victims; 2.2% of all the heterosexual participants in the whole sample group had been raped compared with 7.3% of all the non-heterosexual. The multivariate analysis found no associations between rape and sexual orientation, history of STIs or HIV status (see Table 2).

In the multivariate analysis – an important variable was CSA that was strongly associated with rape, 16.5 (95%CI 10.1-26.7) times more likely to have suffered CSA amongst those participants who had a history of being raped. Besides that, child prostitution was OR= 5.1 (CI 95% 2.1-13.4) and those who witnessed violence between their parents during childhood (OR 2.4 95% CI: 1.5-3.8) were also overly represented amongst those participants with a history of being raped.

Insert Table 2 here

Rape, Depression, Suicidal Ideation and Suicide Attempts

Suicide attempts (14.8%) and suicidal ideation (11.2 %) were more prevalent in victims of rape, 5.9% of rape victims reported several recent negative life events and 4.6% had inadequate social support, but only 1.4% had experienced symptoms of depression in the last weeks prior to the research interview.

Depression (AOR = 2.6, 95% CI: 1.7-3.9), suicidal ideation (AOR = 3.8, 95% CI: 2.0-7.1), attempts **(**AOR = 2.2, 95% CI: 1.1-4.3) and experienced two or more recent negative events (EVA) (AOR=2.6 CI 95% 1.7-3.9) were strongly associated with being a victim of rape. Participants with inadequate social support were almost three times more likely to have been raped compared to the population as a whole (AOR= 2.7 CI 95% CI: 1.8-4.3).

Insert table 3 here

Discussion

This study was conducted amongst a representative sample of Brazilians. In this sample the prevalence of rape was 2.3%. We expected the figure to be higher and it seems probable that rape was under-reported. Research into the phenomenon of rape is always difficult due to the complexities involved in capturing its occurrence. For example, it is estimated that between 2006 and 2010, 65% of rapes in the USA went unreported to police, making rape the most under-reported violent crime in the USA (Langton, Berzofsky, Krebs, & Smiley-McDonald, 2012). Capturing accurate data about rape remains a challenge for those researching and monitoring this type of violence; the continued under-reporting means that to some extent victims are silenced and remain invisible (Ahrens, 2006).

A qualitative analysis of the narratives of eight rape survivors identified three routes to silence: 1) negative reactions from professionals led survivors to question

whether future disclosures would be effective; 2) negative reactions from friends and family reinforced feelings of self-blame; 3) negative reactions from any source reinforced uncertainty about whether their experiences qualified as rape (Ahrens, 2006).

Rape is a gender issue, because the international literature shows that the victims are disproportionately women, particularly young women (Kamdar et al., 2017). The most effective public policies are those that promote gender equality as they may help to reduce the incidence of intimate violence and rape. If the ambition to promote gender equality is not reflected in public policy then society's asymmetric power relationships will persist (PAHO, 2008; PAHO, 2012).

Rape touches that most valuable aspect of personhood, human dignity. Rape is a form of violence that stifles victims, trapping them in a cycle of aggression-fear-silence. Besides the human cost, rape is an on-going serious public health problem, due to the increased social and health costs (emergency care and rehabilitation), social security costs and to absence from work or school, reduced productivity and loss of human capital. These are in addition to the intangible costs of family and personal restructuring and reduced quality of life among adolescents and young people. Rape also hinders family planning (WHO, 2014).

In the final multiple regression model the likelihood of having been raped was increased by being female, adult and without religious affiliation. Our findings partially corroborate other national studies of rape with other types of sample. Young women remain the largest group of victims of rape in Brazil (Winzer, 2016). Data obtained from police reports indicate that black and brown women are more likely to be victims of rape than white women (Winzer, 2016). So far there has been little analysis of how religious affiliation is associated with rape and we do not want to speculate without further, more

consistent evidence, despite continued media reports that rape is linked to certain religious denominations.

The findings from other studies reinforce the hypothesis that rape is associated with other forms of violence as we found in our study such as: history of child prostitution, witnesses of violence during childhood, victims of multiple recent negative events and history of suicide attempts. (Mondin et al., 2016; Steele et al., 2019). The negatives outcomes for victims may contribute to increasing their vulnerability, which subsequently places them at greater future risk of sexual violence. Through similar pathways, children who experience CSA or witness their family experience violence are more likely to experience or perpetrate violence as adults contributing to the cycle of intergenerational violence (Steele et al., 2019).

Studies have consistently pointed out the impact of rape on mental health, especially depression, mood disorder and suicidality (Mondin et al., 2016; Sachs-Ericsson et al., 2017). Different mechanisms may underlie the pathway between rape/ sexual violence to depression and suicide attempts. Verbal abuse can lead to negative cognitive styles of coping with psychiatric disorders associated with suicide. Violent acts, on the other hand, can contribute to greater readiness for suicide attempts and consummated suicide (Sachs-Ericsson et al., 2017).

A study in the south of Brazil, with a sample size of 1,560, found that 3.1% of the sample had suffered sexual violence at some point in their life. The prevalence of depressive, mixed episodes, and (hypo) manic episodes were 10%, 2.4% and 2.3%, respectively. There was an 8.6% suicide risk prevalence rate in the total sample. Young people who have suffered sexual violence are more likely to be subject to mood changes or suicide risk than those who have not (p < 0.05), except for the occurrence of (hypo) manic episodes.

In this sense, psychotherapeutic interventions must be specifically adapted to meet the different needs of individuals who have suffered childhood abuse in the past.

Limitations

We believe that the reported prevalence of rape in this study represents an underestimate of the real extent of this problem. Capturing accurate data on rape, particularly through household surveys, is a great challenge, because rape touches an area of life that are usually private, and a matter of intimacy, and are, for a variety of reasons, difficult for victims to disclose. We tried to make it easier for victims to disclose rape by asking about it separately in a paper-and-pencil questionnaire that respondents completed privately and returned in a sealed envelope, but nevertheless our findings appear far from an accurate representation of the prevalence of rape. It was not investigated when the rape occurred; the question was "Forced sex" across the lifetime. Nor does our data allow one to infer whether victim or perpetrator was intoxicated at the time of the rape. The context in which the question about rape was posed and the wording of the question may have contributed to under-reporting, since what constitutes rape is still a matter of some debate and there is uncertainty about the definition of rape. Nor is the concept of consent fully understood. We recognise that our question about rape should have been accompanied by an explanation of what we meant by the term. Another point to be mentioned is the low level of schooling of the population may have influenced the content of the question and consequently the answers written privately. Respondents only reported their age at the time of the survey (Table 1), not the age at which they had been raped.

The information about child prostitution is also not accurate since we only know that it was before the age of 18 and not exactly when it occurred.

Implications for Clinical Practice and to Public Policy

Rape, and other related forms of violence, are broad and complex health phenomena, with global dimensions; they have lasting consequences for victims and a high cost for society. Violence is preventable, yet countries still invest very little in public policies aimed at reducing it and the harm it causes. A survey by the World Health Organization (2014) found that only 40% of countries provided support or incentives for young people at potential risk for violence to have access to high school. About 24% of countries had policies aimed at reducing levels of poverty in large urban centres. Approximately 80% of countries reported having legislation envisaged for violent crime and 57% have legislation for enforcement of such legislation (World Health Organization, 2014).

Public health interventions that focus on deep-seated, gendered consumption rituals that are anchored in patriarchal beliefs, the commodification of women's bodies, misogynist speeches, rape myths and the stigmatisation of rape victims should be pursued more vigorously in countries round the world (Dumbili & Williams, 2017). Criminal laws only punish depraved behaviour, but more effective, preventive strategies that focus on promoting positive behaviour and health relationships can be implemented in the form of public health social, educational, economic and political interventions (Abeid et al., 2015). Efforts to prevent rape are increasingly recognised as a necessary complement to strategies aimed at preventing re-victimisation or recidivism and ameliorating the adverse effects of this kind of violence has on victims and their families (DeGue et al., 2014). A study of a brief counselling intervention for the non-perpetrating partners of rape victims concluded this was a time-tested, cost-effective, specialist service for victims of sexual violence (Alabarse, 2018). The same support should be offered to perpetrators of rape; the Maria da Penha Law, a legal milestone for Brazil, has not reduced the high rates of gender-based violence. One of the criticisms of the legislation is the criminal punishment

of perpetrators of gender-based violence is not accompanied by psychological or psychiatric assessment and treatment. The possibility of a psychological treatment may offer a greater chance of perpetrators understanding the traumas of having been a victim of sexual violence and to promote education in an attempt to mitigate such behavior in the future (Meneghel, Mueller, Collaziol, & de Quadros 2013; Gattegno, Wilkins, & Evans, 2016).

Another important point is that trained teams of health professionals are needed to identify cases of rape and provide adequate care. Multimedia educational campaigns are also needed to combat all forms of violence, particularly violence against women (WHO, 2014; Abeid et al., 2015).

Recommendations for Future Research

As mentioned before, estimating the real prevalence of rape and its impact remains a challenge. There is an urgent need to improve official data captured in many countries, using data beyond the number of people reporting rape and sexual violence to the police, who in turn are aware of under-reporting (Kilpatrick, 2004; Ahrens, 2006). Methodological researchers might have to change the context of the research perhaps using structured in-depth psychological / psychiatric interviews, in an empathic environment, with guarantees of confidentiality. Furthermore, violence against women researchers may need to employ latent class growth analysis techniques in order to develop more sophisticated methods to collecting data (Swartout, Swartout, & White, 2011).

Due to the gaps in the literature on this topic, it is strongly recommended that in future studies other research methodologies are used to assess sexual assault in a broader way, that is, with definitions other than the legal concept of rape. The diverse and complex

definitions and forms of sexual violence (aggression and threat) allow researchers to identify a continuum from less serious to more serious forms of sexual assault in societies. It also challenges the popular belief that rape is limited only to violent sexual assault by strangers in dark places and shows that it can be perpetrated by anyone, including intimate partners, through even more subtle coercive strategies rather than just the use of physical force . Broadening the research methodologies will contribute to better understanding of the relationship between rape, ethnicity, socioeconomic status, lifestyle characteristics and characteristics of aggression (Winzer et al., 2016).

One of the main challenges has been the failure to detect cases of rape that are often "invisible", that is, they are not reported to police and also the assessment of other forms of sexual assault, which include marital rape and other forms of sexual violence without penetration. The use of declarations (self-report) and less complicated definitions of sexual assault are strategies that can address this research challenge (Abrahams et al., 2014). It is understood that the use of interviews with self-report questionnaires are simple methodological resources available to assess particular behaviors, such as rape, which different health professionals can use. Although the self-report data may be subject to memory bias, related to fear, shame, denial and social stigma, this is still a highly credible way to provide reliable information about rape (Ahrens et al., 2006). This limitation can be minimized by establishing a bond of trust and respect, and the guarantee of voluntary participation and anonymity, following the ethical and moral assumptions of clinical research. Studies that used self-reporting in general are able to detect more case of rape, and related sexual offences, than studies of police reports and complaints (DeGue et al., 2014; Winzer et al., 2016).

Increasingly, social identity theorists argue that social group memberships are interactive; in other words one's ethnicity may influence how social class is experienced

and vice versa. It is possible that ethnicity, class, lifestyle and assault characteristics interact in various ways to influence the outcomes of rape (Abrahams et al., 2017).

The association between suicide attempts and rape has been examined in the literature, showing that more than one-third of subjects confirmed experiencing suicidal ideation at least, "some of the time" in the week prior to the research. Experiencing intimate partner rape was significantly associated with suicidal ideation and symptoms of PTSD and depression (Weaver et al., 2007). A comprehensive assessment of the psychosocial risk profiles of those who report rape remains an important gap in the literature and in clinical settings, precluding meaningful discussion of the implications of the experience of reporting rape (Howard & Wang, 2005). Clinicians should be trained to routinely screen adolescents for violence victimization and should have a low threshold for referring these at-risk teenagers for mental health services (Olshen et al., 2007).

Conclusion

In this sample rape was related to gender and other forms of violence and revictimisation. Self-reports of rape appear to underestimate the real prevalence, as we obtained a lower estimate of prevalence than we were anticipating on the basis of other research. Other forms of investigation are needed to obtain a better understanding of rape and its impact on victims.

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