

Intimate Partner Violence in Methamphetamine Psychotic Users, Psychiatric Inpatients and Healthy People: A Comparative Study

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ABSTRACT

Background: Intimate Partner Violence (IPV) is a severe threat to the physical and mental health of women. The aim of the present study was to find and compare IPV frequency between methamphetamine users, patients with psychiatric disorders and healthy people.

Method: In this cross-sectional study, methamphetamine users (n=30) and patients with psychiatric disorders (n=30) were women whose husbands were hospitalized during 2014 in Shafa Psychiatric Hospital in Guilan. Diagnosis was done with DSMIV-TR. Healthy people (n=60) were women whose husbands had no primary or drug induced psychiatric disorder or addiction. CTS-2 test was used to evaluate violence.

Results: The frequency of psychological, physical and sexual violence in the groups suffering from psychiatric disease and methamphetamine users was higher than that of the healthy group ($P = 0.001$). We observed a direct correlation between the mean of psychological and physical violence in three groups ($r=0.9$, $P = 0.001$), ($r=0.7$, $P = 0.0001$) and ($r = 0.53$, $P = 0.005$), respectively. The direct correlation between the psychological and physical violence was just observed in the healthy group ($r = 0.8$, $P = 0.007$).

Conclusion: The results showed that methamphetamine users such as psychiatric patients are at increased risk of violence. IPV screening in these patients is necessary. It seems that this substance is a new source of increasing IPV and also more undesirable outcomes in Iran.

Keywords: domestic violence, violence, methamphetamine, psychotic disorders, inpatients

Introduction

Intimate partner violence (IPV) means using physical, psychological and sexual violence against someone, being in an intimate and romantic relationship like a spouse, or a girlfriend and boyfriend and is significantly prevalent in patients across a range of clinical settings (1). IPV is associated with a number of adverse medical conditions, such as pain, injury and depression (1-3). IPV has been reported in 7-29 % of patients referring to health clinics (3). 20-40% of women have experienced sexual violence and 90% of them have seen psychological violence during each year (1-3). However, less than one third of those suffering from IPV report it, and most of those who commit this crime are not examined clinically (3-5).

Abusing certain drugs, especially methamphetamine, increases the risk of IPV (6-7). Methamphetamine is a synthetic substance which can be made in some family workrooms and it is recently consumed a lot in Iran as “Shisheh” (8-11). Methamphetamine is a stimulant substance which increases energy and sex desire and decreases the need for sleep and food and rest. The methamphetamine user may be irritable and experience auditory and visual hallucinations, ideas of reference, infidelity and jealousy delusions against his/her partner. This situation can be a potential for violence toward others which has sometimes led to really severe crimes toward an intimate partner (11-15).

As we know it, this is the first study about methamphetamine and domestic violence in Iran. Due to many questions arising about hostility, IPV and their association with methamphetamine use after many criminal acts in Iran, and also regarding the paucity of researches in the Iranian community, this study seems to be necessary in order to compare violence against partners among groups who use methamphetamine, and those suffering from primary psychiatric disorders as well as among healthy people. We just hope that the achieved results can help design health plans among the vulnerable groups in our society.

Materials and Methods

Participants

This cross-sectional study was done in Shafa Hospital, the only psychiatry hospital located in Rasht, center of the province of Guilan in the north of Iran, with a population of about 3 million during 2014 (October to February). The participants were women of 18-50 years of age who had lived with their husbands for at least 6 months before their admission to the hospital. They were classified into 3 groups. The first group were women whose husbands were admitted due to methamphetamine induced psychotic (MIP) disorder (n=30). The second group were women whose husbands suffered from the primary psychiatric disorders (schizophrenia or bipolar) (n=30), and the third group were women with husbands not suffering from primary or methamphetamine induced psychiatric disorder (healthy people, n=60). The participants of the first and second groups were women whose husbands were admitted to Shafa Hospital, and whose psychiatric disorder was diagnosed with DSM-IV-TR diagnostic criteria by a board certified psychiatrist. If the husbands, after clinical evaluation and psychiatric interviews, had diagnosis of borderline or anti-social personality disorder in axis II, according to DSM-IV-TR diagnostic criteria's, they would be excluded.

The married women were to accompany their patients in an outpatient dermatology clinic in Rasht and had lived with their husbands for at least 6 months before the time of the test were randomly selected and formed the healthy group of this study.

All MIP and psychiatric inpatients were screened in the emergency room and were excluded if they tested positive for cannabis and morphine. We also asked the patients' informants about intoxication periods and the probable symptoms or instruments for using other substances and alcohol. Finally, the patients who had mainly used methamphetamine at least three months prior to their admission to the hospital were selected. The fixed doses of

methadone were accepted. The psychiatric group patients were also screened and were excluded if they tested positive for amphetamine, morphine, or cannabis, and if they had a history of using such substances and alcohol in the year before their admission. Finally the selected patient's partners were tested.

Study design

The qualified women, after receiving an explanation about the purpose of the study and giving their informed consent, were tested for detecting IPV. CTS-2 (Conflict Tactics Scale-second revision) test was used to evaluate physical, psychological, sexual and injury violence. All tests were done with enough time and in a secure place. A clinical psychologist and a senior psychiatry resident were present at the time of testing.

This study received ethics approval from the Research Ethics Committee of the Guilan University of Medical Sciences (IRGUMSREC1394233). A written consent was obtained from patients or their families.

Measurement tool

Conflict Tactics Scale (CTS) by Straus was used to measure and evaluate violence (16). The Conflict Tactics Scale (CTS-2) measures the extent to which partners in a relationship engage in psychological and physical violence and their use of negotiation to deal with conflicts. This test examines both the perpetrator and the victim. The CTS-2 is a 39 pair-item questionnaire comprising five subscales demonstrating high reliability coefficients: negotiation ($\alpha = 0.86$), psychological aggression ($\alpha = 0.79$), physical assault ($\alpha = 0.86$), sexual coercion ($\alpha = 0.87$), and injury ($\alpha = 0.95$) (16-19). The reliability and validity of CTS questionnaire was studied by Jazayeri et al. (2011) (20). The questions with odd numbers were to evaluate perpetrator level and those with even numbers were for the state of being victim. Total reliability based on Cronbach's alpha and test-retest respectively in perpetrator was 0.9 and 0.73 and 0.94 and 0.76 in victims. This ratio represents high prestige in

conflict tactics scale is based on reliability. Validity and convergence of this scale along with the questionnaire sub-scales prove that this scale and its sub-scales have the needed internal consistency (α Cronbach between 0.60 and 0.86) (20).

CTS is effective in focusing on specific occasions in a married life. Scoring this questionnaire is done according to Likert spectrum in a domain between 0-7. CTS-2 questions assess “minor” and “major” categories of both psychological aggression and physical assault. Acts of minor versus major psychological aggression and physical assault varied from “insulted or swore” to “threatened to hit or throw something,” and from “grabbed” to “used a knife or gun,” respectively. Men who had committed—in the past year—1 or more minor-category actions more than 5 times, 3 or more minor-category actions 3 to 5 times, or 1 major-category action at least once were classified as currently perpetrating psychological and/or physical IPV; the same criteria were used to classify victimization.(5)

Statistical Analysis

Based on the previous studies of the prevalence of IPV in MIP (80%), psychiatric inpatients (90%) and healthy people (50%), the sample size for $\alpha=0.05$ and $\beta=0.20$ was estimated at least 20 for each group. We finally decided to consider 30 participants for patients' groups and 60 for healthy group. The data were analyzed using SPSS statistical software (version 16.0). One-way ANOVA and chi-square & Fisher's Exact test were used to compare the mean and frequency of violence in three groups, and $\alpha<0.05$ was considered as a meaningful level for the data.

Results

120 women with the mean age 39.35 ± 8 (between 23 and 50 years of age) participated in this study (Table1).

The frequency of psychological, physical, sexual, injury and economic violence are shown in Table 2.

The frequency of different kinds of violence in the MIP and group with psychiatric disorders was higher than in the healthy group and the difference was statistically meaningful ($P = 0.001$) (Table 3). Mean duration of methamphetamine use in MIP group was 16.8 ± 8.4 months.

We observed a direct correlation between the mean of psychological and physical violence in three groups ($r=0.9$, $P = 0.001$), ($r=0.7$, $P = 0.0001$) and ($r = 0.53$, $P = 0.005$), respectively.

The frequency and mean of different kinds of violence among perpetrators are given in Table 3. Having analyzed the mean of different types of violence, we found that the three groups had no significant statistical differences, except for physical violence ($P\text{-value}=0.03$). The direct correlation between the psychological and physical violence was just observed in the healthy group ($r = 0.8$, $P = 0.007$).

Discussion

Like in other countries, many studies have been done in Iran on domestic violence and IPV and its risk factors. Hajian et al. (2014) reported that about 20% of the participants of their study experienced at least one type of physical violence. Increased risk of physical violence was positively associated with the husband's heavy cigarette smoking ($OR=2.62$, $P<0.01$), and his drug abuse ($OR=2.1$, $P<0.05$)(21). In Salari et al. (2008) study, the husband's education, employment, and addiction status, along with geographical settings, are significantly correlated with the rate of IPV (22). Bazargan-Hejazi et al. (2014) carried out an emergency department study to detect risk factors associated with IPV and found that about 16% had experienced IPV. As a group, they were younger, and more depressed and impulsive than the non-IPV group. They were more likely to engage in binge drinking, and use drugs, and had more childhood exposure to violence. In the IPV group, 31% were perpetrators, 20% victims, and 49% both victims and perpetrators. They also commented that

alcohol and drug use in husbands should be screened in emergency rooms in the context of IPV (23). Oram et al. (2013), in a systematic review, reported that the prevalence of physical partner violence in the past year ranged in three studies from 33% to 93% in psychiatric inpatients (24). They did not include studies in non-psychiatric controls representative of the general population (24). Masoudzadeh et al. (2015) evaluated the prevalence of IPV among spouses of men with psychiatric disorders by a researcher-made questionnaire. Women reported emotional abuse in 100%, physical abuse in 99.2% and sexual abuse in 81.5%. They concluded that IPV is higher among families with men suffering from psychiatric disorders (25). These findings are consistent with findings of our study which showed higher prevalence of IPV in this group of patients.

Taherkhani et al. (2014), in their qualitative study about Iranian women's experiences with IPV, indicated that participants experienced overt physical, sexual, and emotional violence. Women who experienced overt violence revealed that emotional violence was the most common and most important to them. But these women considered a husband's betrayal as the most hurtful and intolerable form of violence, which in some cases even made the continuation of marital life difficult (26). This is a very important finding because psychological violence was the most common form of violence in all groups in our study. Psychological IPV prevalence reported by Cohen et al. (2003) was 80% in methamphetamine users (6). Other studies have also reported that psychological violence was more damaging than other forms of violence. Emotional neglect was indicated to be the most common and important type of neglect for women who participated in Taherkhani et al. (2014) study (26). Unfortunately, it is usually underrated while it can have a significantly destructive role in marital relationships. Chang et al. (2010) found that a partner's betrayal/infidelity was considered to be a major factor in reducing a woman's tolerance to violence and encouraging

her to make a change (27). It should be reminded that persecutory, reference and infidelity delusions toward the spouse are frequently seen in MIP.

According to the results of these studies, it seems that substance abuse also plays a known significant role in IPV in the Iranian community. No special attention has been given to the role of methamphetamine in IPV studies in Iran. The hypothesis of this study was that the probability of IPV increases with the hostility and psychiatric symptoms of methamphetamine users. The results of the current study indicated that methamphetamine has a significant and important role in IPV. These findings are consistent with McKetin et al. (2014) and Martin et al. (2009) findings that reported that methamphetamine increases the risk of violence, which agree with many reports about violent behaviors of psychotic methamphetamine users in Iran in recent years (15,38) .

The results of this study showed that all forms of violence in MIP inpatients were similar to psychiatric disorder inpatients and higher than that in healthy people, although the participants of the MIP and psychiatric disorder groups were selected from among inpatient, CTS-2 questionnaire focused on deliberate violence in the past year, not just now. So, it is possible to generalize the results to outpatient samples too. The results of this study showed that IPV is seen much more among patients who use methamphetamine compared to those in the healthy group, but they do not have a meaningful difference with other patients having a psychiatric disorder. Although the participants in our study were chosen from among the patients who used methamphetamine and were hospitalized in the psychiatric ward, and it is not possible to generalize the results to the whole groups of methamphetamine users, it should be noted that what is studied is an individual's behavior in a year in which the patient used the drug but showed no severe symptoms to be hospitalized, but proved to have violent behaviors like increased sexual appeal, verbal violence, physical violence, a tendency to threaten and become talkative, which are the signs of methamphetamine intoxication.

Violence is generally tolerated by a partner, but leads to disturbed and unbearable behaviors like pessimism, or getting naked in public, being followed by hospitalization.

The results of this study also showed high IPV frequency among MIP group and psychiatric inpatients, which is considerably much more compared to the group of healthy people.

Is violence a behavior which is intensified because of drug abuse, or is it because of personal characteristics? Those who suffer from borderline and anti-social personality disorders tend to use drugs more, leading to anti-social and violent behaviors. Of course, this group of people shows a tendency for violence even without drug abuse. Some studies show that lots of offenders who commit different crimes have developed these behaviors due to drug abuse, or have made the situation worse after using drugs (11). Anti-social behaviors predict the violent behaviors against wives and also develop an interest in drug abuse. Therefore, to study the non-dependent role, there should be studies while controlling the anti-social behavior. Although in most of the studies done, the anti-social behaviors were not controlled. In this study, like the one done by False-Stewart et al. (2005), the violent behaviors against wives were observed despite controlling the anti-social personality disorder (28). The sample MIP in our study had no history of primary psychiatric disorder or other mentioned personality disorders as an excuse for their violent behavior. 70% of them in the past one year had jobs with enough income that supported families and it seems that using methamphetamine had a great impact on their behaving violently against their wives. As for methamphetamine, what is supposed to be clarified and broadcasted is about really violent behaviors of those using this drug, but we could not reach a result showing that violence against women by methamphetamine users is very different compared to that of others including those suffering from psychiatric disorder. It seems that this drug is a new source of increasing IPV and also more undesirable outcomes in Iran.

The probability of violent behaviors can be seen due to the consumption of other drugs especially alcohol (29, 30). However, this study focused on methamphetamine.

Unfortunately, the drug use pattern in Iran is multi-drug and multi-substance in which there is a need for more studies to detect IPV frequency and its effect in these situations (8). The frequency of violence in methamphetamine users in our study was similar to Cohen et al. (2003) study results, and in psychiatric disorders group was similar to Heru et al. (2006) findings, and about healthy people was consistent to Noughjah et al. (2001) results(6,30,31). Facing the psychological violence comes along with physical violence and vice versa (32-36). Under specific circumstances like forensic or medical emergencies, physical violence is generally considered, while the other kinds of violence are not considered. The findings are achieved through self-reporting of different kinds of violence among men and women and physical attack comes along with aggression and sexual abuse. As shown, in married life violence, when there is a report of a kind of violence, there might be other kinds of violence, too. Consistent with other researches, we found that methamphetamine can increase violence and hostility (37-40). Due to a correlation between physical and psychological violence, it is recommended that all the staff in every trauma center be educated about different kinds of violence.

Different reports from different cultures and societies present various percentages of IPV which are sometimes high. What makes the studies of family violence and the achieved results hard to interpret is the different methods and definitions for various cases, although the main concept of these different instruments is the same. Data collection methods varied between studies and included researcher-administered questionnaires during face-to-face interviews, self-completed questionnaires and files reviews. The comparability of studies was limited by the methods of data collection and instruments used to assess intimate partner violence. This study was done in Rasht, north of Iran. It cannot be generalized to all the

Iranian provinces due to cultural differences. The hospitalized patients were chosen to be compared with the healthy ones as they probably suffered from more severe diseases. Another limitation of this study was that we had access to all medical documents and evaluations and multiple informants and families of psychiatric inpatients and MIP groups, but in the healthy group, women's information was the only source of their husband's conditions. As for educational conditions, there was no matching among groups, so they can have a confounding role which is better to be considered in future studies.

Conclusion

The result of this study revealed that different types of IPV are more frequent in methamphetamine psychotic inpatients and psychiatric inpatients in comparison with healthy people, but we could not reach a result showing that violence against women by methamphetamine psychotic users is very different compared to those suffering from psychiatric disorders. It seems that this substance is a new source of increasing IPV and also more undesirable outcomes in Iran.

Conflict of interest: None declared.

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Table1 Demographic characteristics of participants.

| Violence | MIP(n=30) | PDI(n=30) | HP(n=60) | p-value |
|----------------------------------|------------------|------------------|-----------------|----------------|
| Age (year±SD) | 39.7±8.5 | 42.3±7.9 | 37.6±7.4 | 0.03 |
| Marital duration(year±SD) | 16.9±11.4 | 19.4±10.2 | 15.5±8.1 | 0.2 |
| Number of child N (%) | | | | |
| one child | 3 (10) | 2 (6.7) | 7 (11.7) | |
| 2-3 child | 24 (80) | 24 (80) | 51 (85) | 0.2 |
| 3< child | 3 (10) | 4 (13.3) | 2 (3.3) | |
| Education N (%) | | | | |
| <12 year | | | | |
| 12 year | 14 (46.7) | 20 (66.7) | 13 (21.7) | |
| >12 year | 11 (36.7) | 10 (33.3) | 22 (36.7) | 0.001 |
| | 5 (16.7) | - | 25 (41.7) | |
| Housing status | | | | |
| Personal house N(%) | 19 (63.3) | 20 (66.7) | 49 (81.7) | |
| Rental house N(%) | 11 (36.7) | 10 (33.3) | 11 (18.3) | 0.1 |

MIP: Methamphetamine induced psychotic disorder; PDI: Psychiatric disorder inpatients;

HP: Healthy people

Table 2 Frequency of different kinds of Violence in victims.

| Violence | MIP | PDI | HP | p-values |
|-------------------------------------|------------|------------|-----------|-----------------|
| psychological <i>N(%)</i> | 26 (86.7) | 29 (96.7) | 28 (46.7) | 0.001 |
| physical <i>N(%)</i> | 25 (83.3) | 23 (76.7) | 15 (25) | 0.001 |
| sexual <i>N(%)</i> | 16 (53.3) | 16 (53.3) | 6 (10) | 0.001 |
| injury <i>N(%)</i> | 12 (40) | 16 (53.3) | 2 (3.3) | 0.001 |

MIP: Methamphetamine induced psychotic disorder; PDI: Psychiatric disorder inpatients;

HP: Healthy people

Table 3 Frequency of different kinds of violence in perpetrators.

| Violence | MIP | PID | HP | p-values |
|-------------------------------------|------------|------------|-----------|-----------------|
| psychological <i>N(%)</i> | 27 (90) | 27 (90) | 46 (76.7) | 0.1 |
| physical <i>N(%)</i> | 11 (36.7) | 8 (26.7) | 8 (13.3) | 0.03 |
| sexual <i>N(%)</i> | 0, 0 | 3 (10) | 2 (3.3) | 0.1 |
| injury <i>N(%)</i> | 4 (13.3) | 1 (3.3) | 3 (5) | 0.2 |

MIP: Methamphetamine induced psychotic disorder; PDI: Psychiatric disorder inpatients;

HP: Healthy people

