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Regional update

Depression and intimate partner violence among college students in Iran



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ABSTRACT

Intimate partner violence (IPV) is a significant public health threat and causes mental as well as physical health problems. Depression is a common mental health consequence of IPV. While Iran has a high prevalence of IPV and depression, the association between IPV and depression has not been well examined. The Iranian data from the International Dating Violence Study (IDVS) 2001–2006 (ICPSR 29583) were analyzed. Twenty-three male and 75 female college students were selected in the IDVS Iranian data. Nearly all of the participants, male and female, reported being victims and perpetrators of IPV. Female participants were more likely to report depression compared to male participants. Participants who had experienced sexual IPV reported significantly higher levels of depression compared to those who did not experience sexual IPV. However, when substance abuse and partner conflict were analyzed, the contribution of sexual IPV on depression was no longer significant. This study suggests that IPV prevention and intervention programs should take into consideration that college-aged men and women frequently experience and use violence in dating relationships. Depression interventions should be included for female students. Substance abuse and partner conflict are important risk factors for depression.

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1. Introduction

Intimate partner violence (IPV) is a significant public health threat that contributes to a wide range of acute and chronic medical issues for victims (Ellsberg et al., 2008). Depression is a common mental health consequence of IPV victimization (Warshaw et al., 2009; Kamimura et al., 2014a). While the lifetime prevalence of physical IPV varies from 15% to 71% worldwide (Garcia-Moreno et al., 2006), the association between depression and IPV has not been well examined in some countries which have a high prevalence of IPV, such as Iran (Sabina, 2013; Straus, 2008).

Intimate partner violence includes physical, sexual and/or psychological harm inflicted by a current or former intimate partner, including a dating partner, fiancée, and spouse (Center for Disease Control and Prevention, 2015a). It is common that a victim of IPV experiences multiple types of victimization (Kamimura et al., 2014b; Fanslow and Robinson, 2010). All forms of IPV, i.e., physical, sexual and psychological, have been shown to have a profound impact on the health and well-being of victims (Yoshihama et al., 2009). Most studies have focused on male-to-female perpetration and the differential severity of abuse for female victims (Dutton and Nicholls, 2005; Kimmel, 2002) as compared to male victims. More studies are needed to understand the health impact and interventions needed for both male and female victims and male and female perpetrators.

The majority of studies on IPV in Iran focused on married women abused by husbands, especially during pregnancy (Abdollahi et al., 2015; Hassan et al., 2014). The overall prevalence of IPV victimization in the past year among married women utilizing public health centers in Iran is 78.1% (Moghaddam Hosseini et al., 2013). Furthermore at least 30% of married women

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utilizing public health services in Iran had experienced sexual IPV (Yari et al., 2013). Other studies in Iran found that adverse pregnancy outcomes of IPV on victims and fetuses included low birth weight (Abdollahi et al., 2015) and preterm labor (Hassan et al., 2014). Little is known in Iran about the mental health consequences of IPV, particularly depression, among female and male victims.

Studies that also used data from the IDVS found that Iranian college students had the highest mean level of IPV victimization (Sabina, 2013) and the highest percentage of IPV perpetration (Straus, 2008) among the college students in the 30-plus nations analyzed. Another study conducted in Iran reported that women who have less than a college education had a higher prevalence of IPV victimization (Abdollahi et al., 2015) although Moghaddam Hosseini et al. (2013) found opposite results. In spite of some of the conflicting results from previous studies, the literature supports that college-aged Iranian couples commonly use violence and abuse in their intimate relationships.

The prevalence of depression is also high in Iran. For example, the 12-month prevalence of major depressive disorders among people aged 15–64 years in Iran is 12.7% (Sharifi et al., 2015), compared to the 12-month prevalence in the US of 8% of those 12 years and older (Center for Disease Control and Prevention, 2015b). In addition, US studies find a significant correlation between IPV victimization and/or perpetration and depression in adolescents and young adults (Douge et al., 2014; Illangasekare et al., 2013; Johnson et al., 2014).

Understanding the dynamics involved in intimate partner relationships is crucial in developing effective strategies for prevention and intervention for IPV. Controlling behaviors (Robertson and Murachver, 2011), gender discrimination (Whiting et al., 2012), and high levels of male-dominance attitudes (Volpe et al., 2013; Whiting et al., 2012) have been found to be risk factors for the occurrence of IPV. In support of male-dominance attitudes as a risk factor to using violence in a relationship, Straus (2008) also found that Iranian college students reported high levels of male-dominance attitudes in their intimate relationships.

Although the literature shows that IPV is an important factor affecting depression, scant research is available that examined this association among college students in Iran. Thus, the purpose of this study is to examine the association between depression and IPV victimization among Iranian college students, and provide valuable information on improving interventions for depression and IPV in Iranian college students.

2. Methods

2.1. Data

The data were obtained from the Inter-University Consortium for Political and Social Research (ICPSR), the International Dating Violence Study (IDVS) 2001-2006 (ICPSR 29583). The data were collected from college students at 68 universities in 32 countries by the members of an IDVS research consortium. All measures used in the IDVS have been tested for validity and reliability and have been used widely in many countries (Straus, 2004; Straus et al., 1999). The detailed information of the entire study, including data collection procedures, is available at http://pubpages.unh.edu/ ~mas2/. The current study analyzed the data pertaining to Iran from the IDVS data set. The original collector of the data obtained ethical approval. The analysis of publicly available secondary data from the ICPSR does not require IRB review. The original collector of the data, ICPSR, and the relevant funding agency bear no responsibility for the use of the data or for interpretations or inferences based upon such uses.

2.2. Iran sample

The sample includes 99 participants from one university in Iran with 98 having had an intimate partner relationship at some point in their lives (women n=75,76.5%; men n=23,23.5%). Eighty-four participants (85.7%) currently had an intimate partner while 14 participants (14.3%) previously had an intimate partner. The participant who had never had an intimate partner was excluded from analysis. There were three different types of relationships: dating (n=57,58.2%), engaged (n=21,21.4%) and married (n=20,20.4%). Two of the participants (2%) had a same sex partner. The mean age of the Iranian participants was 22.43 years.

2.3. Dependent variable (depression)

Respondents were asked to describe symptoms of depression using a 4-point Likert scale (1=strongly disagree, 4=strongly agree) (Straus et al., 1999). Some of the items are reversely coded. This study used the scoring method based on the theoretical maximum score, which scaled from 0 to 100. There were eight items to measure depression (e.g., "I have thought about killing myself" and "I feel sad quite often").

2.4. Independent variables (IPV)

IPV was measured using the revised Conflict Tactics Scale (CTS2) (Straus et al., 1996). The CTS2 has been used widely not only in the US but also in many other countries (Straus, 2008). The CTS2 measures both perpetration and victimization of IPV. The physical IPV (physical assault) measure described incidences in which a partner or self kicked, pushed or shoved a partner, or used a knife or gun against a partner. The psychological IPV (psychological aggression) measure described harmful verbal incidents by a partner or self (e.g., "called my partner fat or ugly" and "shouted or yelled at my partner"). The sexual IPV (sexual coercion) measure described behavior by a partner or self which involved sexual coercion (e.g. "made my partner have sex without condom" and "insisted on sex when my partner did not want to but did not use physical force"). Each type of IPV had separate sub-scales for severe and minor IPV. In this study, the lifetime (ever) prevalence of victimization and perpetration of IPV (i.e., physical, psychological, and or sexual) was used for analysis.

2.5. Other independent variables

The following factors were included in the analysis based on previous studies on IPV and depression suggesting these factors moderate or mediate the relationship between IPV and depression: childhood sexual abuse history (Devries et al., 2011; Ouellet-Morin et al., 2015), substance abuse (Illangasekare et al., 2013; Connelly et al., 2013; Evans and Shapiro, 2011), and violence approval (Eaton and Matamala, 2014; Field and Caetano, 2003). Childhood sexual abuse history included sexual abuse by an adult family or nonfamily member or a child family or non-family member. Statements measuring childhood sexual abuse included: 1) "(A family or non-family adult or child) made me look at or touch their private parts (sex organs), or looked at or touched mine;" and 2) "(A family or non-family adult or child) had sex with me (vaginal, anal, or oral)." Statements measuring substance abuse included alcohol use (4 items, e.g., "I sometimes drink enough to feel really high or drunk) and other drug use (4 items, e.g., 'I worry that I have a drug problem'). The violence approval measure has three subtopics: 1) family violence (4 items e.g., "It is sometimes necessary to discipline a child with a good, hard spanking"); 2) male violence (3 items, e.g., "A man should not walk away from a physical fight with

Table 1 Life time prevalence of victimization and perpetration of IPV.

	Victimization—men (n=23)	Victimization—women (n = 75)	Perpetration—men (n = 23)	Perpetration—women (n = 75)
Physical IPV	22 (95.7)	72 (96.0)	22 (95.7)	71 (94.7)
Psychological IPV	23 (100)	71 (94.7)	23 (100)	71 (94.7)
Sexual IPV	10 (43.5)	37 (49.3)	10 (43.5)	35 (46.7)

n (%).

another man"); and 3) sexual aggression (3 items, e.g., "A woman who has been raped probably asked for it").

Characteristics and experiences of couple relationship factors included conflict and dominance variables because conflict and dominance attitudes have been found to increase the risk of IPV and depression (Leisring, 2013; Price et al., 2014; Whitaker, 2013). There were nine items for partner conflict (e.g., "My partner and I disagree about my friends and family" and "My partner and I disagree about how much time we should spend"). The dominance scale has nine items under three sub-categories: 1) authority (e.g., "Sometimes I have to remind my partner of who's boss"); 2) disparagement (e.g., "My partner doesn't have enough sense to make important decisions"); and 3) restrictiveness (e.g., "I have a right to know everything my partner does").

2.6. Statistical analysis

Data were analyzed using SPSS (version 22). Descriptive statistics were used to describe the distribution of the outcome and independent variables. Comparisons were conducted using Pearson's Chi square tests for categorical variables (if each cell had more than five respondents) and independent samples t-tests for continuous variables. Multivariate multiple regression analysis was conducted to test the association between depression and demographic, individual and couple factors. Regression coefficients (standard errors) were used to obtain 95% confidence intervals (CIs).

3. Results

Table 1 describes the lifetime prevalence of physical, psychological and sexual IPV by gender, victimization and perpetration. The lifetime prevalence of physical IPV and psychological IPV as victims and perpetrators was more than 90% among both men and women. The lifetime prevalence of sexual IPV victimization was 43.5% (n = 10) for men and 49.3% (n = 37) for women. The lifetime prevalence of sexual IPV perpetration was 43.5% (n = 10) for men and 46.7% (n = 35) for women. There was no gender difference in the lifetime prevalence of any categories of IPV.

Table 2 summarizes the comparison between the participants with and without sexual IPV victimization and the occurrence of

Table 2 Comparisons by sexual IPV victimization experience in Iran.

	With sexual IPV $(n=47)$	Without sexual IPV (n=51)
Depression*	37.5 (13.7)	30.1 (17.3)
Childhood sexual abuse	10.5 (17.0)	9.4 (17.7)
Substance abuse	8.6 (13.4)	7.7 (12.2)
Violence approval	41.6 (15.0)	40.7 (14.2)
Conflict**	36.2 (14.5)	27.9 (15.6)
Dominance	47.9 (10.2)	38.1 (16.7)

Mean (SD). Compared using independent samples *t*-tests. **p < 0.01. * p < 0.05. Higher scores indicate higher levels of depression, experience or couple problems. Score range 0-100.

depression, childhood sexual abuse history, substance abuse, violence approval, conflict and dominance. Only sexual IPV victimization was analyzed because there was no variation among the participants with regards to experiencing physical and psychological IPV victimization. Participants who experienced sexual IPV reported higher levels of depression (p < 0.05) and of partner conflict (p < 0.01).

Table 3 presents the results of the regression analysis to examine predictors of depression. Age, physical assault and psychological abuse were not included in the analysis because there was little variation among the participants. Model 1 included female gender, dating relationship (i.e., the intimate partner is a dating partner, not a spouse or fiancé), and sexual IPV, and found that dating relationship and sexual IPV experience were significantly associated with higher levels of depression (p < 0.05). Model 2. which added childhood sexual abuse, substance use and violence approval to Model 1, shows that while dating relationship is no longer a significant factor for depression, sexual IPV experience, substance abuse and being a women were significantly associated with higher levels of depression (p < 0.05). When adding couple relationship factors (conflict and dominance) to Model 1, conflict was the only significant predictor of depression (p < 0.05) (Model 3). When the data was analyzed using all the predictors (Model 4), female gender (p < 0.01), substance use (p < 0.05), and conflict (P < 0.05) had a significant impact on depression while sexual IPV experience was no longer significantly associated with depression.

4. Discussion

This study examined the prevalence of depression and IPV among Iranian college students who had had an intimate partner and found high rates of IPV victimization and perpetration. There were three main findings. First, nearly all of the men and women reported being a victim and perpetrator of IPV. Second, female

Table 3 Predictors of depression.

	Model 1	Model 2	Model 3	Model 4
Female	3.65 (3.74)	7.86 (3.52)	7.28 (3.77)	10.43 (3.60)
Dating	7.41 (3.22)*	4.63 (2.98)	5.39 (3.11)	3.95 (2.92)
Sexual IPV	6.78 (3.13)*	6.13 (2.81)*	3.54 (3.17)	4.22 (2.95)
Childhood sexual abuse		0.13 (0.10)		0.14 (0.10)
Substance use		0.38 (0.14)		0.32 (0.14)*
Violence approval		0.18 (0.10)		0.10 (0.11)
Conflict			0.37 (0.12)*	0.29 (0.11)*
Dominance			0.01 (0.12)	-0.05(0.12)
(Constant)	23.28 (4.16)	10.39 (5.28)	10.89 (5.72)	5.81 (5.73)
R^2	0.11	0.30	0.22	0.36
F	3.77	6.63	5.11	6.13
<i>p</i> -value	0.01	0.00	0.00	0.00

N = 98. Coefficients (standard error).

p < 0.05.

p < 0.01.

participants were more likely to report depression compared to male participants. Third, the initial modeling of participants who reported having sexual IPV experience found an association between this experience and depression; however, secondary analysis found that female gender, substance use and partner conflict were significantly associated with depression, while sexual IPV experience was no longer significantly associated with depression.

While most previous studies on IPV focused on male-to-female IPV perpetration, bidirectional perpetration, i.e., both partners are violent, is common among college students in many countries of the IDVS (Straus et al., 1996; Straus, 2008). Straus (2012) found that a higher degree of male-dominance in a nation is associated with a higher probability of female perpetration of IPV. In the IDVS study Iran is ranked third for the degree of male-dominance in intimate partner relationships (Straus, 2008) which is in agreement with this study's finding of the high prevalence of female IPV perpetration. Female perpetration toward a male intimate partner has been shown to be related to self-defense (Shorey et al., 2010) as well as anger and stress (Leisring, 2013). Unfortunately, the CTS2 does not differentiate between using violence in a power and control situation and using violence as a means of self-defense (Shorey et al., 2010). The detailed causes of female perpetration should be examined in future research. As noted previously, most studies on IPV in Iran focused on female victims who were married and pregnant (Abdollahi et al., 2015; Moghaddam Hosseini et al., 2013; Hassan et al., 2014; Yari et al., 2013) so little is known about dating partners' experiences with IPV in Iran. Other studies that have analyzed the IDVS study (Kamimura et al., 2016a: Kamimura et al., 2016b) also have found high rates of the bidirectional use of violence in college students. Therefore, it is crucial to consider not only male perpetrators and female victims but also male victims and female perpetrators.

The results of this study are in agreement with other studies that find that women are more likely to be depressed than men (Ge et al., 2001; Wilhelm et al., 2002). According to a study of women in Iran, abuse experience in childhood and adolescence increases the risk of depressive disorders in later life (Ghassemi et al., 2010). The current study did not find an impact of childhood sexual abuse on depression; thus, there may be other factors affecting depression among Iranian female college students which were not included in this study.

Because nearly all of the participants experienced physical and psychological IPV as victims and perpetrators, it was not feasible to examine the impact of physical and psychological IPV on depression. Only sexual IPV could be used to test the impact on depression. The experience of sexual IPV was no longer significantly associated with depression when the variables substance abuse and partner conflict were considered. Previous studies from Iran found that women who engage in substance abuse increase their risks for IPV victimization and risky sexual behaviors (Merghati-Khoei et al., 2015) and a husband's use of tobacco or drugs increase the possibility of IPV perpetration (Hajian et al., 2014). The results of the current study add to the link between substance abuse, partner conflict and depression in female Iranian college students who experience IPV. Kingsbury et al. (2015) found that partner conflict affects women's long-term depressive symptoms; therefore, managing partner conflict should be included in depression interventions among college students experiencing IPV in Iran.

This study has some limitations. The Iranian data were collected only at one university and had a small sample size; therefore caution should be exercised when generalizing the results. The data are cross-sectional and are limited to examine causal directions among variables. Despite the limitations, this study

provides increased knowledge about depression and IPV among college students in Iran which otherwise had not been known.

5. Conclusion

Nearly all of the male and female college students in Iran in the IDVS reported being victims and perpetrators of IPV. Since most previous studies on IPV in Iran focused on married women who were abused by their husbands this study adds new information with regards to mental health and IPV in college-aged students. Prevention and intervention programs of IPV in Iran should take into consideration that many victims of IPV are also perpetrators regardless of sex. While student victims of sexual IPV reported higher levels of depression than those without the experience, substance abuse and partner conflict are important risk factors for depression in IPV victims and should be included in IPV prevention and intervention programs.

Conflict of interests

The authors declare that there are no conflicts of interests.

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