Prevalence of dating partner violence and suicidal ideation among male and female university students worldwide

Ko Ling Chan[1]

Murray A. Straus[2]

Douglas A. Brownridge[3]

Agnes Tiwari[4]

W.C. Leung[5]

Correspondence concerning this article should be addressed to Dr. Ko Ling Chan, Department of Social Work and Social Administration, The University of Hong Kong, Pokfulam, Hong Kong. Email address: eklchan@hkucc.hku.hk

[1] Department of Social Work and Social Administration, University of Hong Kong, China.
[2] Family Research Laboratory, University of New Hampshire.
[3] Department of Family Social Sciences, University of Manitoba.
[4] Department of Nursing Studies, University of Hong Kong, China.
[5] Department of Obstetrics and Gynaecology, Kwong Wah Hospital, Hong Kong, China.

Biosketch

Ko Ling Chan is assistant professor of the Department of Social Work and Social Administration, The University of Hong Kong. Murray A. Straus is professor of Family Research Laboratory, University of New Hampshire. Douglas A. Brownridge is associate professor of the Department of Family Social Sciences, University of Manitoba. Agnes Tiwari is associate professor of the Department of Nursing Studies, The University of Hong Kong. W.C. Leung is consultant of the Department of Obstetrics and Gynaecology, Kwong Wah Hospital, Hong Kong.

PRECIS : This article describes the prevalence of physical assault, sexual coercion, and suicidal ideation among university students in 21 countries.

ABSTRACT

Objective: This paper presents findings from the International Dating Violence study regarding the prevalence of physical assault, sexual coercion and suicidal ideation among university students, and explores the relationships between suicidal ideation and dating violence. Methods: Nearly 16,000 university students from 22 sites of 21 countries were recruited through convenience sampling. Results: Results showed that although there were large differences between countries, the lowest rates of dating violence were still quite high. Male and female students were remarkably similar in the proportion of those who physically assaulted a partner or reported being a victim of sexual coercion. Correlation analysis revealed that perpetrators and victims of physical assault had an increased rate of suicidal ideation. Depression accounted for the relationship between dating violence and suicidal ideation. Implications: This study highlights a need for the development of universal screening and targeted services for violence, depression, violence and suicide prevention.

(147 words)

KEYWORDS: Suicidal Ideation, Prevalence, Dating Partner Violence, University Students, Depression

INTRODUCTION

Intimate partner violence (IPV) and suicide are universal social problems that cause many people to lose their lives and many more to suffer non-fatal injuries. One in seven couples in the United States has experienced at least one episode of male-to-female violence in the preceding 12 months[1]. In dating relationships, 39.3% of females and 32.9% of males have reported being a victim of violence from their dating partners[2]. This problem is not limited to western industrialized nations. In an international study of dating violence carried out by Straus and colleagues[3], dating violence perpetrated by both male and female students was high in all of the countries studied, with rates of physical assault in the previous 12 months ranging from 17% to 45%. .

Intimate partner violence and suicide are connected in the sense that both involve aggression. Aggressive personality disorders which involve high levels of anger expression, such as antisocial, borderline, and self-harm personality disorders, are common among domestic violence offenders[4]. According to Buteau and colleagues[5], suicidal behavior is often an indication of pending violence toward others in the same way that perpetrators of homicide-suicide have characteristics that are more like those of suicide-only offenders. One third of those who make suicide attempts have a history of domestic violence toward their spouse[6]. At least 30% of violent people have a history of self-destructive behavior, and 20% of suicidal persons have a history of violence[7]. Individuals who are violent against their partners and who engage in self-harm behaviors are often identified among the same group of psychiatric patients[8]. A recent study of dating violence found that suicidal ideation did not have a direct relationship to physical and sexual assault. However, suicidal ideation and dating violence did share some common associated factors[9].

Violence and suicide are also associated in terms of victimization and trauma. The most common problems found among victims of IPV are post-traumatic stress disorder (PTSD), depression[10] and suicidal ideation[11]. Women exposed to acute or prior domestic violence are more likely than unexposed women to have made suicide attempts[12]. Suicide attempt rates among battered women are high, ranging from 20% and 26%[13].

Violence and suicidal behavior vary across different countries[14]. Research has shown that IPV varies across cultures depending on the extent to which they are oriented toward individualism or collectivism[15]. Archer[15] found that women are more likely to be victimized by

their partner in societies that are more collectivist and in which women are less empowered. On the other hand, in societies that are more individualistic and where women are more empowered, men are at least as likely as women to be victimized by an intimate partner. Whereas suicide is one of the leading causes of death in both Western and Eastern societies[16, 17], there are also cross-cultural differences. In the industrialized world, the suicide rate among males is approximately three times higher than that among females[18]. On the other hand, an analysis of 16,568 suicides in China revealed a male-to-female ratio of .92 in urban areas and .81 in rural areas[19].

Recognizing the prevalence and correlates of suicidal ideation and dating violence can lead to the design of effective preventive and intervention strategies. The purposes of the paper are to present results from the International Dating Violence Study regarding the prevalence of physical assault, sexual coercion, and suicidal ideation among university students, to explore the relationships between suicidal ideation and dating violence in different countries, and to identify strategies for early identification and prevention of IPV.

METHOD

The International Dating Violence Study

This paper uses the data on 15,927 students from 22 sites that participated in the International Dating Violence study (IDV). This is a multi-national study of violence between partners in dating relationships among University students, conducted by Murray A. Straus and members of an international research consortium. The study used well-validated instruments to measure interpersonal violence (the Revised Conflict Tactics Scales (CTS2)[20] and a wide range of etiological variables associated with partner violence (the Personal and Relationships Profile)[21].

The IDV data file does not contain individual-level data. The agreement that consortium members signed specifies that consortium members have exclusive rights to their datasets. The data file contains the data aggregated by the national setting of the participating universities. Mainland China and Hong Kong are kept separate in the current paper because of the differences between these two socio-economic societies.

There are 22 sites in the file (Table 1). Each case gives the data for a national setting. The variables consist of the percent of students in each national setting who have a certain

characteristic, such as assaulting a partner; or the mean for the students in each national setting for variables such as the mean Depression score. In order to run analyses separately for male and female students in each national setting, another data file was produced based on the percentages or the means for male and female students from each national setting.

The procedures were approved by the ethics committee of the University of Hong Kong and the IRB of the University of New Hampshire. The members of the consortium agreed to administer the questionnaire under the rules established by the IRB of the University of New Hampshire, and in compliance with specifications for protection of human subjects of their own institutions.

Procedure

The data were obtained through convenience sampling. Questionnaires were administered to students in social science classes at local universities at each site. The questionnaire was completed within one class period. The purpose of the study and the students' right not to participate were explained verbally as well as in printed form before the questionnaire was administered. To respect privacy and the voluntary nature of participation, the instructions emphasized that the subjects were free to omit any question they did not wish to answer. They were also assured of anonymity and confidentiality.

Measures

For the purposes of this study, *dating* was defined as a dyadic relationship involving meeting for social interaction and joint activities with an explicit or implicit intention to continue the relationship until one or the other party terminates the relationship or until some other more committed relationship is established (e.g., cohabiting, engagement, or marriage)[3]. The subjects were asked to identify a current partner with a dating relationship that had lasted one month or more. If they were not engaged in a dating relationship at the time of interview, then participants responded about a partner with whom they had been in a relationship that lasted one month or more in the past. Participants were asked to refer to the same partner when responding to all questions.

Physical assault, injury, and sexual coercion were measured by the revised Conflict Tactics Scales (CTS2)[20]. This scale is widely used to measure the occurrence and severity of tactics to

resolve conflicts between intimate partners. The items of the scales report on actual behavioral acts of violence. The subjects were asked to respond to items that measure physical assault. These included items for minor assault, such as “threw something at my partner that could hurt”, “twisted my partner’s arm or hair”, “pushed or shoved my partner”, “grabbed my partner”, “slapped my partner”. Items also measured severe assault, such as “used a knife or gun on my partner”, “punched or hit my partner with something that could hurt”, “choked my partner”, “slammed my partner against a wall”, “beat up my partner”, “burned or scalded my partner on purpose”, “kicked my partner”. The scale also included specific items for minor sexual coercion, such as “made my partner have sex without a condom”, “insisted on sex when my partner did not want to (but did not use physical force)”, and “insisted my partner have oral or anal sex (but did not use physical force)”. For severe sexual coercion, the items included “used force (like hitting, holding down, or using a weapon) to make my partner have oral or anal sex”, “used force (like hitting, holding down, or using a weapon) to make my partner have sex”, “used threats to make my partner have oral or anal sex”, and “used threats to make my partner have sex”. The psychometric characteristics of the CTS2 are well documented. The internal consistency reliability of the CTS2 scales is generally high, with an alpha coefficient ranging from .79 to .95[20], and it has high cross-cultural reliability[22]. Studies have validated that an increasing severity of tactics has been shown to correlate with increasing injury severity[23]. The questionnaire was translated and then back-translated by each member of the consortium to maintain conceptual equivalence across the sites. In this study, the prevalence rates of physical assault, injury, and sexual coercion in the past year were used for correlation analyses. The prevalence rate refers to the percentage of subjects who reported one or more of the acts in each scale. The CTS2 includes subscales for minor and severe levels.

Depression was measured by the depression scale of the Personal and Relationship Profile (PRP)[21]. It consists of 8 items such as “I am so sad, sometimes I wonder why I bother to go on living”, “I feel sad quite often”, “I am generally in a good mood”, “My life is generally going well”, and so on. The PRP is a self-report multi-scale instrument that provides a profile of scores for variables that have an empirically demonstrated relationship with physical violence against a spouse in a marital, cohabiting, or dating relationship. The validity and reliability of the PRP is satisfactory[24]. All the PRP scales have at least a minimally adequate level of internal consistency reliability (.60 to .69) and two thirds of the scales have good and high reliability (.70 or above).

Twelve risk factors have been found to be associated with an increased probability of assaulting a partner, for instance, anger management, antisocial personality, conflict with partner, communication problem, criminal history, dominance, jealousy, negative attribution, neglect, sexual abuse history, stress and violence approval[25]. *Self-harm* was measured by a subscale of the Borderline Personality Scale, which is one of the scales of the PRP. It consists of 4 items: "I'd do almost anything to keep people from leaving me," "I often get hurt by things that I do," "I've told others I will kill myself," and "I have had thoughts of cutting or burning myself." *Suicidal ideation* is a single item used to indicate the level of suicidal ideation. The subjects were asked to respond to the item "I have thought about killing myself" using a four-response set ranging from 1, indicating "strongly disagree," to 4, indicating "strongly agree."

Data Analysis

Descriptive statistics were used to examine the demographic characteristics of the subjects and the prevalence rates of physical assault, injury, sexual coercion, and suicidal ideation. Correlations were performed to test the associations among violence, suicidal ideation, self-harm, and depression. Pearson's r indicates the degree of linear dependence between two variables; the stronger the correlation, the closer the r value is to either −1 (a negative correlation) or 1 (a positive correlation). Partial correlations then examined the relationship between violence, suicidal ideation, self-harm while holding the test variable, depression, constant. If the relationship between two variables becomes insignificant when the test variable is controlled, then the relationship between the two variables is explained by the test variable. The overall level of significance was set at .05. All analyses were done using SPSS (version 14.0).

RESULTS

Sample

Table 1 presents the descriptive statistics. As shown in table 1, the proportion of female subjects ranged from 50.6% to 82.6% of the total sample across sites. At most of the sites, female participants comprised 60% to 70% of the total participants. Given the predominance of females in the sample, as well as the fact that there are gender-specific cross-cultural variations in violence and suicide, all statistical analyses were disaggregated by gender. The mean age ranged from 20 to 25 years, except for Israel (Mean = 30), Sweden (Mean = 28), and Switzerland

(Mean = 34). The rate of separated and divorced parents ranged from 0.4% to 26.8% across sites. Collectivist countries, which emphasize collective good than individuality, tended to have low separation and divorce rates; examples include India (.4%), China (4.7%), Hong Kong (6.9%), Korea (6.6%), and Singapore (5.8%). Some individualist countries, which place more emphasis on individuality, had higher rates; examples include New Zealand (25.6%), the USA (25.8%), and Sweden (26.8%). The rate of subjects living with parents was below 50% with the exception of seven sites, namely Belgium (74.2%), Brazil (75.3%), Hong Kong (68.8%), Korea (78.6%), Portugal (57.5%), Russia (57.4%), and Singapore (79.1%). The average length of dating relationship ranged from 8.6 to 19.3 months, with Russia reporting the shortest length. The subjects in all the country samples predominantly engaged in heterosexual relationships, with the range from 83% to 100%.

[Table 1 about here]

Tables 2 to 4 contain the rates of physical assault, injury, sexual coercion, and suicidal ideation. The median countries are identified in the tables; half of countries reported higher levels and half reported lower levels of the indicated variable than the median countries reported.

Prevalence of Physical Assault and Injury

A median of 30% of students had physically assaulted a dating partner in the previous 12 months (Table 2). Rates of students perpetrating physical assault ranged from 17% to 44%. Similarly, the proportion of students who reported being the victim of a physical assault ranged from 14% to 39%, with a median of 26%. To identify the pattern of rates across sites, the rate of each country is compared to the median rate. Regarding students' reports of perpetrating physical assault, four out of the six sites in Asia had rates higher than or equal to the median, while in Australia and New Zealand the rates were lower than the median. In other regions, the rates higher or lower than the median were evenly distributed among sites within the region. Among students who reported having been the victim of physical assault, the rates higher or lower than the median were evenly distributed among all regions.

The rate of injury caused by or inflicted on a dating partner in the previous 12 months was 6% in the median country. The rates of perpetration of an assault resulting in an injury ranged

from 1% to 16%, while the rates of being a victim of an assault that resulted in an injury ranged from 1% to 14%. In all regions except North America, the rates higher or lower than the median were evenly distributed among the sites within the region. Canada and the USA consistently showed rates of assault resulting in injury that were higher than the median.

[Table 2 about here]

Prevalence of Sexual Coercion

The rate of sexual coercion perpetrated by a dating partner in the previous 12 months in the median country was 20% (Table 3). Students reported rates of perpetrating sexual coercion that ranged from 8% to 34%. The rate of students who were victims of sexual coercion in the previous 12 months in the median country was 24%, with a range of 9% to 46%. For both reports of being a perpetrator and victim of sexual coercion, Canada and the USA consistently showed rates higher than the median. Students in most of the sites in Asia and the Middle East had rates of being a victim of sexual coercion that were lower than the median.

[Table 3 about here]

Prevalence of Suicidal Ideation

The rate of suicidal ideation among university students in the median country was 32%, with a range of 8% to 48% (Table 4). Generally speaking, sites with rates of suicidal ideation higher than the median had rates of dating violence higher than the median, except Israel, Australia and Belgium which have relatively lower rates of dating violence.

[Table 4 about here]

Gender Differences

Studies of students at American universities have found that a larger percentage of women than men assault a dating partner[2]. In the present study, for 12 out of the 22 sites, the rates of perpetrating physical assault, such as “threw something at my partner that could hurt”, “twisted my partner’s arm or hair”, “pushed or shoved my partner”, “grabbed my partner”, “slapped my partner”, and so on, were higher for females, while for 17 out of the 22 sites, the rates of being a victim of physical assault were higher for males. The rates of perpetrating an assault resulting in an injury, as well as being a victim of an assault that resulted in an injury, were overwhelmingly higher for males.

With respect to reports of perpetrating sexual coercion, such as “made my partner have sex without a condom”, “insisted on sex when my partner did not want to”, and “insisted my partner have oral or anal sex”, 20 sites had rates higher for males. For reports of being a victim of sexual coercion, 12 sites had rates that were higher for females. It was clear that consistently fewer females had perpetrated sexual coercion across the sites.

A majority of sites, 15 out of the 22, had higher rates of suicidal ideation for females. Consistent with past research[19], suicidal ideation was overwhelmingly higher for females in Asia and Middle East regions.

Correlation and Partial Correlation

Table 5 presents the correlations of the mean scores for suicidal ideation, self-harm, depression, and dating violence. Suicidal ideation was significantly correlated with the severe and total levels of perpetrating physical assault and the total level of experiencing physical assault. With regard to gender differences, suicidal ideation was significantly correlated with the total level of being a victim of physical assault for males, whereas suicidal ideation was significantly correlated with the severe and total levels of female reports of perpetrating physical assault and their experiences of being victims of severe physical assault. Moreover, suicidal ideation was also associated with female reports of having experienced an assault resulting in an injury and with and with having experienced a severe level of sexual coercion.

[Table 5 about here]

Self-harm was correlated with almost all levels of physical assault, assault resulting in an injury, and sexual coercion for both perpetrators and victims. Male and female participants showed a similar pattern of correlations to the total level of self-harm, except that the correlation between self-harm and being a victim of an assault resulting in an injury was not significant for female respondents.

Depression was correlated with almost all types of dating violence except being a victim of an assault that resulted in an injury. For male respondents, depression was correlated with all types of perpetration or victimization of dating violence. For female respondents, depression was correlated with both perpetrating and being a victims of physical assault, as well as being a victim of sexual coercion. Suicidal ideation, self-harm, and depression were significantly

correlated with each other.

To summarize the findings on gender differences, the results showed that males' suicidal ideation was not significantly correlated with dating violence except for having been a victim of physical assault. Male perpetration of violence was associated with the thought of killing oneself. A different pattern was found for females. For females, the perpetration of physical assault and having experienced all types of violence was associated with the thought of killing oneself. In short, males and females had different suicidal ideation responses to the experience of dating violence.

Results of the partial correlations of dating violence, suicidal ideation, and self-harm on depression showed that all of the associations between the variables were insignificant when holding depression constant. Thus, the relationships between dating violence, suicidal ideation, and self-harm are explained by depression. Whether suicidal ideation is correlated with dating violence depends on whether depression resulted from perpetration and victimization of dating violence.

DISCUSSION

In the median country in this study, 30% of the students had physically assaulted a dating partner in the previous 12 months and 26% of them had been victimized. The median rates of perpetrating sexual coercion and being a victim of sexual coercion were 20% and 24%, respectively. The rate of suicidal ideation in the median country was 32%. Although there were large differences between sites, the lowest rates of perpetrating physical assault and being a victim of physical assault were 17% and 14%, which are still substantially high. The pattern of the rates of physical assault, injury, and sexual coercion across the sites shows that India, Korea, New Zealand, Germany, Greece, Russia, the UK, the USA and Canada have consistently high rates of assault, injury, and sexual coercion. In contrast, Israel, Australia, Belgium, Sweden, and Switzerland have assault, injury, and sexual coercion rates lower than the median rates.

The rates of perpetrating physical assault and being a victim of sexual coercion for males and females were similar, but more sites showed higher rates of males being victims of all types of physical assault by their partners. For the rates of perpetrating physical assault resulting in an injury and being a victim of an assault resulting in an injury, as well as perpetrating sexual coercion, far more sites had higher rates for males. However, more sites had higher rates of

suicidal ideation for females. Male and female students were remarkably similar in the proportion who physically assaulted a partner. Thus, with respect to both minor and severe assaults, women assaulted their partners at about the same rate as did male students. Straus and colleagues[3] contended that high and similar rates of male and female students who physically assaulted a partner could be explained by the cultural norms and beliefs accepting or approving violence in partner relationships. Violence approval and corporal punishment by parents may be the root causes of high rate of dating partner violence. It should be emphasized that the most important similarity is the high rate of physical violence against dating partners by both male and female students in all the universities. Even the universities that had lower rates relative to other universities, in absolute terms had a high rate of physical assault.

The present study reveals that dating partner violence, in particular perpetrating physical assault and being a victim of physical assault, is associated with an increased rate of suicidal ideation. Depression accounted for the relationship between dating violence and suicidal ideation. This finding is consistent with past studies of partner abuse and suicide that self-harm and depression were associated with the perpetration of violence[26, 27]. Aggression and stress were found to be the common factors of self-harm and IPV[4, 10].

The design of this study had a number of limitations. The sampling used in the study was convenience sampling and the subjects were mainly social science students. The findings cannot be generalized to the larger populations of the included sites. Nevertheless, the study, using standardized instruments and collecting samples from 22 sites, allows a test of the correlation between dating violence and suicidal ideation. It provides evidence that the two constructs are correlated and explained by depressive symptoms. Future studies using representative samples from different sites should be carried out to further confirm the relationship.

Despite these limitations, this study has important implications for health care professionals. An awareness of the association between dating violence and suicidal ideation can lead to the design of effective preventive strategies. As a start, health care providers need to be alert to the possible coexistence of dating violence and suicidal ideation. When screening patients suspected of physical assault victimization, health care providers should also assess for signs of self harm. Studies of common risk factors for dating violence and suicide are necessary to identify essential elements for the development of prevention and intervention programs.

Routine universal screening is regarded as a good public health preventive strategy and has

been recommended in health care settings[28]. Screening and risk assessment for violence and suicide should be conducted simultaneously for early identification of these problems. In this study, the revised Conflict Tactics Scale (CTS2) was used to identify IPV. Although this scale has been widely used, the 39-item tool may not be practical for a busy clinical setting. The Abuse Assessment Screen (AAS)[29], with only 5 questions, in comparison to CTS2 has been used extensively in many healthcare settings throughout the United States and internationally[30], and may be used to assess for IPV. Of paramount importance when assessing suspected victims of IPV is the need to ensure confidentiality and protect them from retaliation from their perpetrators. Once IPV is identified, there should be a comprehensive support and referral system to ensure patient safety.

Furthermore, screening for suicidal ideation and self-harm should also be conducted. Assessment for mental health symptoms (such as depressive and stress symptoms) and aggressive personality should be undertaken as these factors may increase the risk of suicidal ideation. Patients may be asked to self-report on questions related to self-harm, for instance, "I'd do almost anything to keep people from leaving me," "I often get hurt by things that I do," "I've told others I will kill myself," and "I have had thoughts of cutting or burning myself". Suicidal ideation can be identified by asking a direct question like "Have you thought about killing yourself". There are several short scales available to screen for depression, or health professionals can ask patients if they are feeling good or in a good mood, if they enjoy day-to-day life, or if the are feeling sad, or wondering why they bother to go on living. Positive screens require prompt referral for comprehensive diagnosis and management.

Individuals identified as at-risk for suicide or homicide (those suspected of having suicidal ideation with a history of violence, including either perpetration or victimization of IPV) should be referred to psychiatric services immediately. Proactive monitoring of the identified cases through phone calls or home visits[31] may also be considered and psychosocial support programs should be provided to perpetrators or victims who are depressed.

Therapeutic sessions or counseling services are also recommended to safeguard or reduce the possibility of these at-risk individuals committing suicide or further perpetration of violence. Effective interventions in managing the risk of violence will not only lower the risk of recidivism but also educate potential victims in how to recognize factors associating with the risk of violence[32].

To conclude, in the present study, a high prevalence of dating violence among university students was observed. The relationship between dating violence and suicidal ideation is moderated by depression. Further studies are needed to evaluate specific prevention and intervention programs for individuals with a tendency for self-harm or depression and who have a history of IPV. This may help decrease the risk of both suicide and IPV.

REFERENCES

1. Schafer J, Caetano R, Clark CL. Rates of intimate partner violence in the United States. American journal of public health 1998;88(11):1702-4.
2. Sugarman DB, Hotaling GT. Dating violence: Prevalence, context, and risk markers. In: Pirog-Good MA, Stets JE eds. Violence in dating relationships: Emerging social issues. New York, NY, England: Praeger Publishers; 1989. p. 3-32.
3. Straus MA. Prevalence of violence against dating partners by male and female university students worldwide. Violence Against Women 2004;10(7):790-811.
4. Greene AF, Coles CJ, Johnson EH. Psychopathology and anger in interpersonal violence offenders. Journal of Clinical Psychology 1994;50(6):906-12.
5. Buteau J, Lesage AD, Kiely MC. Homicide followed by suicide: A Quebec case series, 1988-1990. Canadian Journal of Psychiatry 1993;38(8):552-6.
6. Bergman B, Brismar B. Characteristics of violent alcoholics. Alcohol and alcoholism 1994;29(4):451-7.
7. van Praag HM, Plutchik R, Apter A. Violence and suicidality: Perspectives in clinical and psychobiological research. Clinical and experimental psychiatry 1990;3(332).
8. Ash D, Galletly C, Haynes J, Braben P. Violence, self-harm, victimisation and homelessness in patients admitted to an acute inpatient unit in South Australia. International Journal of Social Psychiatry 2003 Jun;49(2):112-8.
9. Chan KL, Tiwari A, Leung WC, Ho HWY, Cerulli C. Common correlates of suicidal ideation and physical assault among male and female university students in Hong Kong. Violence and Victims 2007;22(3):290-303.
10. Golding JM. Intimate partner violence as a risk factor for mental disorders: A meta-analysis. Journal of Family Violence 1999;14:99-132.
11. Romito P, Grassi M. Does violence affect one gender more than the other? The mental health impact of violence among male and female university students. Social Science & Medicine 2007;65(6):1222-34.
12. Abbott J, Johnson R, Koziol-McLain J, Lowenstein SR. Domestic violence against women: Incidence and prevalence in an emergency department population. JAMA: Journal of the American Medical Association 1995 Jun;273(22):1763-7.
13. Hillard JR, et al. Accidental and homicidal death in a psychiatric emergency room

population. Hospital & Community Psychiatry 1985;36(6):640-3.

14. Krug EG, Dahlberg LL, Mercy JA, Zwi AB, Lozaro R, eds. World report on violence and health. Geneva, Switzerland: World Health Organization; 2002.
15. Archer J. Cross-cultural differences in physical aggression between partners: a social-role analysis. Personality and social psychology review : an official journal of the Society for Personality and Social Psychology, Inc 2006;10(2):133-53.
16. Simon TR, Anderson M, Thompson MP, Crosby A, Sacks JJ. Assault victimization and suicidal ideation or behavior within a national sample of U. S. adults. Suicide and Life-Threatening Behavior 2002;32(1):42-50.
17. Yip PSF, Liu KY, Law CK, Law YW. Social and economic burden of suicides in Hong Kong SAR: A year of life lost perspective. Crisis: The Journal of Crisis Intervention and Suicide Prevention 2005;26(4):156-9.
18. Brockington I. Suicide in women. International Clinical Psychopharmacology Special Issue: Suicide: The differences in age and gender 2001 Mar;16(Suppl2):S7-S19.
19. Zhao S, Qu G, Peng Z, Peng T. The sex ratio of suicide rates in China. Crisis: The Journal of Crisis Intervention and Suicide Prevention 1994;15(1):44-8.
20. Straus MA, Hamby SL, Boney-McCOY S, Sugarman DB. The Revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. Journal of Family Issues 1996;17(3):283-316.
21. Straus MA, Hamby SL, Boney-McCoy S, Sugarman DB. The Personal and Relationships Profile (PRP). Unpublished Manuscript. Durham, NH: Family Research Laboratory; 1999.
22. Straus MA. Cross-Cultural Reliability and Validity of the Revised Conflict Tactics Scales: A Study of University Student Dating Couples in 17 Nations. Cross-Cultural Research: The Journal of Comparative Social Science 2004;38(4):407-32.
23. Coben JH, Forjuoh SN, Gondolf EW. Injuries and health care use in women with partners in batterer intervention programs. Journal of Family Violence 1999;14:83-94.
24. Straus MA, Mouradian VE. Preliminary psychometric data for the personal and relationships profile (PRP): A multi-scale tool for clinical screening and research on partner violence. American Society of Criminology; 1999; Toronto, Ontario.; 1999.
25. Medeiros RA, Straus MA. Risk factors for physical violence between dating partners: Implications for gender-inclusive prevention and treatment of family violence. In: Hamel J,

Nicholls TL eds. Family approaches in domestic violence: A Handbook of Gender-Inclusive Theory and Treatment New York: Springer Publishing Company; 2007. p. 59-85.

26. Coker AL, McKeown RE, Sanderson M, Davis KE, Valois RF, Huebner ES. Severe dating violence and quality of life among South Carolina high school students. American Journal of Preventive Medicine 2000;19(4):220-7.
27. Kaslow NJ, Thompson MP, Meadows LA, Jacobs D, Chance S, Gibb B, et al. Factors that mediate and moderate the link between partner abuse and suicidal behavior in African American women. Journal of consulting and clinical psychology 1998;66(3):533-40.
28. American College of Obstetricians and Gynecologists. Guidelines for women's health care, 2nd ed. Washington, D.C.: American College of Obstetricians and Gynecologists; 2002.
29. Parker B, McFarlane J. Identifying and helping battered pregnant women. MCN, The American Journal of Maternal/Child Nursing 1991;16:161-4.
30. Campbell JC, Furniss KK. Violence Against Women: Identification, Screening and Management of Intimate Partner Violence. Washington, DC: Association of Women's Health, Obstetric and Neonatal Nurses; 2002.
31. Olds DL, Henderson CR, Kitzman HJ, Eckenrode JJ, Cole RE, Tatelbaum RC. Prenatal and infancy home visitation by nurses: recent findings. Future Child 1999;9(1):44-65.
32. Monahan J. Limiting therapist exposure to Tarasoff liability: Guidelines for risk containment. American Psychologist 1993;48(3):242-50.