Original Article

Associations between Intimate Partner Violence, Depression, and Suicidal Behavior among Women Attending Antenatal and General Outpatients Hospital Services in Thailand

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Abstract

Background: Battered women are exposed to multiple types and different severity of intimate partner abuse, however, little is known about the relationship between severity and different types of intimate partner violence (IPV) (physical, sexual, psychological, and danger) and symptoms of depression and suicidal behavior in a sample of women attending antenatal care or general outpatient hospital services in Thailand. **Materials and Methods:** A cross-sectional study was conducted among adult women who were consecutively sampled and screened for IPV in antenatal care and general outpatient clinics in nine randomly selected hospitals in two provinces in the central region. The measures included the "Severity of Violence Against Women Scale," "Edinburgh Postnatal Depression Scale 10," "Danger Assessment Scale," and one item for suicidal behavior. Hierarchical regressions were used to assess the effects of the different types of IPV on depression and suicidal behavior. **Results:** Of the final sample (N = 207) that screened positive for IPV, 49.3% scored positive for depression, and 17.6% reported suicidal threats or attempts in the past 12 months. One type of IPV (sexual) was significantly associated with depression, whereas psychological abuse and femicide risk or danger was correlated with suicidal behavior. **Conclusion:** A high proportion of women with IPV suffered from depression and suicidal behavior. The study provides evidence of an association between the severity of IPV and mental health problems (depression and suicidal behavior). In assessing IPV, the different identified dimensions contributing to poor mental health should be incorporated.

Keywords: *Danger, depression, intimate partner, physical violence, psychological abuse, sexual violence, Thailand*

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Introduction

"Intimate Partner Violence (IPV) refers to any behaviour within an intimate relationship that causes physical, psychological or sexual harm to those in the relationship."[1] IPV, depression, and suicide are major public health concerns that contibute to a large burden of the disease in the world.[1,2]

Regarding Thailand, the World Health Organization (WHO) multicountry study on "women's health and domestic violence against women,"[3] found among women 23% and 34% lifetime IPV in Bangkok and Nakhonsawan, respectively.[3] Other local surveys in the health care setting found among pregnant Thai women a prevalence of 13.1% of abuse,[4] 34% of exposure to violence,[5] and 26.6% of threats and physical violence experiences.[6] Among postpartum women, 9.5% had been subjected to threats and physical violence in Thailand.[7]

Several studies found that the majority of IPV victims, including those with mental health problems, do not seek assistance from health care or other community agencies.[8,9] For example, 80% of women who experienced IPV in Bangkok and 90% in central Thailand had never accessed community agencies such as health care services or the police.[10] Bell and Goodman[11] found that female victims of IPV reported high levels of depression when they first contacted advocacy support services.

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In Vietnam, compared to women who had not experienced IPV, women who experienced IPV in the past year had a considerably elevated risk of sadness or depression and having suicidal thoughts.[12] In a study in the United Kingdom, symptoms of mental illness (depression and anxiety) increased with the increase of the severity of IPV,[13] and Hegarty *et al.,*[14] found that women who had experienced severe violence reported high levels of distress.

Various studies and systematic reviews have suggested that victims of IPV are especially vulnerable to suffer from mental health problems, including depression and suicidal behavior.[2,15,16] According to Beydoun *et al*.,[15] "A sizable proportion (9–28%) of major depressive disorder, elevated depressive symptoms, and postpartum depression can be attributed to lifetime exposure to IPV." Although depression among IPV victims may reduce over time, more research is needed on long-term effects, especially among adult populations.[17-19]

Different types of IPV (physical, sexual, psychological, danger, and stalking violence) may impact depression and suicidal behavior differently.[20,21] Most research studies on mental health consequences such as depression and suicidal behavior of IPV have focused on assessing physical violence.[20,22] Fewer studies on IPV against women have included the assessment of multiple types of violence, such as physical violence, sexual violence, psychological abuse, and stalking.[20,21] In such studies, psychological abuse was found to be correlated with depression symptoms,[20,21,23-25] and suicidal ideation;[8,23,25] physical/sexual violence was correlated with depression;[23,24] physical violence with depression;[20,25] suicidal behavior;[8,25] and sexual violence and risk of femicide or danger with suicidal behaviour.[8,26] However, there is a lack of evidence on the relative association of the various types and severity of IPV on depression and suicidal behavior.[13,27] Some studies[13,28] found that symptoms of mental illness, including depression, increased with increasing severity of IPV, and another study found that experiencing more than one type of IPV increased symptoms of depression and suicidal ideation.[29]

The study aimed at assessing different types (physical, sexual, psychological, and danger) and severity of IPV in relation to symptoms of depression and suicidal behavior in a sample of women attending antenatal care or general outpatient hospital services in Thailand.

Materials and Methods

This is a descriptive, cross-sectional study design. Participants consisted of a consecutive sample of adult women screened for IPV in the antenatal care and general outpatient clinics in nine randomly selected hospitals in two provinces in central Thailand between November 2014 and October 2015. Nine of the 14 public hospitals in two provinces were randomly selected from a computer-generated list of random numbers. The study protocol was approved by the "Office of the Committee for Research Ethics (Social Sciences), Faculty of Social Sciences and Humanities, Mahidol University" (COA. No.: 2014/328.2511).

Sample size calculation

Based on a previous systematic review,[8] 18% (average 9–28%) prevalence of depression in women with IPV experience was expected. The sample size was calculated by using Epi Info software, population size of 14288 adult women hospital attendees, expected frequency of 18%, confidence limits 6%, confidence level 97%, the sample size is 193.

Participants were included in the study if they were: (1) female, (2) 18 years or older, (3) have experienced IPV in the past year, and (4) willingness to provide informed consent. Potential participants were screened with a (self-administered or interview administered) questionnaire on IPV by a health care provider. The Abuse Assessment Screen[27] utilized two questions: (1) "*During the last 12 months, have you been pushed, shoved, slapped, hit, kicked or otherwise physically hurt by someone?"* and (2) "*During the last 12 months, have you been forced into sexual activities by someone?*" Both questions were responded to by yes or no and if yes, by whom.

The health care provider would inform the woman who has screened positive on the Abuse Screen for "intimate partner (i.e., spouse/common-law, ex-spouse/ex-common-law, boyfriend/girlfriend, or ex-boyfriend/ex-girlfriend) physical or sexual abuse occurring within the preceding 12 months"[30] regarding the study and refer her to a female research assistant. Three research assistants, having a university degree, obtained written informed consent from the study participants. After the informed consent procedure, the research assistant interview-administered the questionnaire in the local (Thai) language in a private room to guarantee visual and auditory privacy. The English questionnaire was translated by two independent bilingual translators into Thai and another bilingual translator, who had no knowledge of the original instrument, and back-translated the re-conciliated target language version. Three female research assistants were trained for 4 days on the interview protocols and on safety and confidentiality. The research assistants supervised and monitored to follow the research protocol.[31] After the interview, the participant was referred to the nurse counsellor from the One-Stop Crisis Centre (OSCC) at the hospital for further management.

Measures

The "Edinburgh Postnatal Depression Scale 10" (EPDS) was utilized to assess ten depression symptoms in the past 7 days.[31] The EPDS has also been validated to screen for depression among adults in the general population.[33] The cut-off of 13 scores was used to identify depression.[32] In a validation study in Thailand, the Thai version of the EPDS-10 was found to be a valid self-report instrument.[34] Cronbach alpha was 0.82 in this study sample.

The 46-item "Severity of Violence Against Women Scale" (SVAWS) was used to assess threats of physical violence or psychological violence (19 items, e.g., threats to destroy property), physical assault (21 items, e.g., beating up) and sexual violence (6 items).[35] Response options were 0 = never, 1 = once, 2 = 2–3 times, 3 = 4 or more times in the past year, giving a possible total range of scores of 0 to 57 from the threats of abuse and 0 to 81 for physical violence.[36] Cronbach alpha for the SVAWS in this study was 0.96.

The 14-item Danger Assessment Scale was utilzed to assess the "risk factors that have been associated with homicide in situations involving abuse" in the past 12 months.[37] One-item dealing with sexual violence was removed from this study. Response options were "yes" or "no." The possible range of scores was 0 to 14. Cronbach alpha for the Danger Assessment Scale in this study was 0.88.

Suicidal behavior was assessed with one item from the Danger Assessment Screen if women revealed "threatening or trying to commit suicide" within the last 12 months.[37]

Sociodemographic questions included, age, education, employment status, marital status, living with partner, number of children, and subjective economic household situation (rated from 1 = Low to 4 = High).

Data analysis

Data analysis was conducted using STATA software version 13.0 (Stata Corporation, College Station, Texas, USA). Frequencies, means, and standard deviations were calculated to describe the sample. Data were checked for normality distribution and outliers. Nonparametric tests such as Spearman rho and Mann–Whitney U test were used for non-normal distributions. Logistic regression models were run for depression (using a cut off score of 13) and for suicidal behavior (threatening or trying to commit suicide within the last 12 months) outcomes separately. All regression models included random effects for hospital site to hospital site variability. Physical violence (mild, minor, moderate, and serious violence) and sexual violence were entered in the first step, followed by the addition of danger on the second step, and in the final step the four psychological abuse variables (symbolic violence, threats of mild/moderate, and serious violence) were added. Tolerance (>.70) and variance inflation factor (VIF) values (< 2.0) did not find any collinear variables. Possible two-way interactions between independent variables were assessed and no significant effects were found.

Results

Sample characteristics

In all, 14288 women (3779 in antenatal care and 10409 in general outpatient clinics) in nine hospitals were screened for IPV over a period of 9 months. From the 14288 women screened, 212 screened positive for IPV (0.02%), of which five refused to be part of the study, so that the final sample was 207. The mean age of the study participants was 26.8 years (SD = 9.3). All were Thai, they had a median of 2 children (IQR = 1–3), 61.8% had children, and most (73.8%) had a secondary or higher education. Most (63.2%) of the women had a good economic household situation. In terms of participants' relationships with their abusive partners, 87.0% were married or cohabiting, and 84.4% were living with their perpetrator at the time of the assessment. Finally, 49.3% scored positive for depression and 17.6% reported suicidal threats or attempts in the past 12 months [Table 1].

Intimate partner violence

The overall proprotion of physical violence was 67.1%, sexual violence 27.5%, psychological abuse 82.1%, and danger 72.0%. In women recruited from general outpatients, almost all violence indicators were significantly higher than those recruited from antenatal care clinics. Among women 25 years and older sexual violence were higher than in young adult women (18–24 years). Compared to women with no children, women with children were likely to experience more physical violence and psychological abuse. The different types of IPV assessed in this study did not differ by employment and socioeconomic status [Table 2].

Correlations and associations between violence indicators and depression and suicidal behavior

Spearman rho correlations between major predictors and each outcome variable were computed. All types of violence (physical, sexual, psychological, and danger) were significantly associated with depressive symptoms and suicidal behavior [Table 3].

Depression

Table 4 shows the results of the logistic regression models predicting depression. When entered into the equation in the first step, moderate violence (AOR = 2.50,

Table 1: Sociodemographic and relationship characteristics of sample ($N = 207$)

Variable	Mean	SD
Age (range 18–49)	26.8	9.3
	Median	IQR
Number of children (range 0–4)	2	0-3
	N	%
Has children	123	61.8
Formal education		
Primary or less	54	26.2
Secondary	109	52.9
Post secondary	43	20.9
Recruitment		
General outpatient clinic	69	33.3
Antenatal care clinic	138	66.7
Currently employed	89	51.1
Economic household situation		
Low	75	36.8
High	129	63.2
Marital status		
Married/cohabitating	180	87.0
Single/divorced/separated	27	13.0
Currently living with perpetrator	168	84.4
Left partner in the past 12 months	18	8.7
Depression symptoms (≥13)	102	49.3
Suicidal threat or attempt in the past 12 months	36	17.6

Table 2: Prevalence and means of type of intimate partner violence

Variables	Total sample		Antenatal care	Age >24	Has children	Employed	Low SES
	N	%	%	%	%	%	%
Overall physical violence	139	67.1	55.8***	68.0	70.7	62.9	72.0
Mild violence	105	50.7	39.1***	55.0	56.9**	49.4	50.7
Minor violence	106	51.2	37.7***	55.0	56.9*	43.8	54.7
Moderate violence	73	35.3	26.1***	38.0	42.3**	33.7	36.0
Serious violence	81	39.1	29.7***	40.0	43.9	37.1	40.0
Sexual violence	57	27.5	21.0***	35.0*	31.7	28.1	26.7
Psychological abuse	170	82.1	77.5*	85.0	85.4	82.0	77.3
Symbolic violence	86	41.5	29.0***	42.0	45.5	41.6	41.3
Threats of mild violence	151	72.9	71.0	78.0	74.8	74.2	69.3
Threats of moderate violence	57	27.5	20.3***	30.0	30.1	27.0	29.3
Threats of serious violence	69	33.3	22.5***	39.0	40.7**	29.2	34.7
Danger	149	72.0	64.5***	72.0	77.2*	68.5	76.0
	M	SD	M	M	M	M	M
Physical violence	7.4	10.9	5.0***	8.1	8.6**	6.7	7.0
Sexual violence	1.5	3.1	0.9***	2.0**	1.7	1.8	1.2
Psychological violence	7.3	10.2	5.0***	8.8	8.7**	6.3	7.2
Danger	2.7	3.4	2.3***	2.7	2.8	2.3	2.5

Mann–Whitney U tests were used for comparing differences in proprotion ***$P < 0.001$, **< 0.01; *$P < 0.05$

CI = 1.02, 6.12), serious violence (AOR = 2.45, CI = 1.10, 5.34), and sexual violence (AOR = 3.68, CI = 1.74, 7.77) were found to be significant, and in the second step danger (AOR = 2.31, CI = 1.00, 4.83) was additionally found significant. In the full model, sexual violence (AOR = 3.16, CI = 1.33, 7.48) was identified as a significant independent predictor of depression [Table 4].

Table 3: Correlations between predictor (types of violence) and outcome variables (depression and suicidal behavior)

	Depression total	Suicidal behaviour	Physical violence	Sexual violence	Psychological abuse	Danger
Depression total	1.00					
Suicidal behavior	.28*	1.00				
Physical violence	.29*	.28*	1.00			
Sexual violence	.36*	.35*	.33*	1.00		
Psychological abuse	.44*	.33*	.59*	.40*	1.00	
Danger	.33*	.54*	.62*	.34*	0.54*	1.00

*$P < .01$

Table 4: Logistic regression models predicting depression

	Stage 1	Stage 2	Stage 3
Variable	AOR (95% CI)	AOR (95% CI)	AOR (95% CI)
SVAWS-Mild violence	0.48 (0.21, 1.09)	0.46 (0.19, 1.11)	0.48 (0.20, 1.24)
SVAWS-Minor violence	0.89 (0.37, 2.12)	1.00 (0.41, 2.43)	1.31 (0.50, 3.40)
SVAWS-Moderate violence	2.50 (1.02, 6.12)*	2.37 (0.92, 6.17)	1.67 (0.60, 4.66)
SVAWS-Serious violence	2.45 (1.10, 5.34)*	2.27 (1.01, 5.16)*	1.95 (0.81, 4.72)
	3.68 (1.74, 7.77)***	3.48 (1.57, 7.17)**	3.16 (1.33, 7.48)**
Low		1 (Reference)	1 (Reference)
Medium		1.03 (0.56, 2.44)	(0.46, 2.98)
High		2.31 (1.00, 4.83)*	2.44 (0.89, 5.45)
SVAWS-Symbolic violence			1.14 (0.51, 4.07)
SVAWS-Threats of mild violence			1.87 (0.85, 4.12)
SVAWS-Threats of moderate			1.04 (0.48, 2.81)
Violence			
SVAWS-Threats of serious violence			2.40 (0.97, 5.91)

Note: SVAWS = Severity of Violence Against Women Scale; AOR = Adjusted Odds Ratio; CI = Confidence Interval; [a]Models are adjusted for age, place of recruitment, having children, socioeconomic status and included random effects hospital site to site variability; ***$P < 0.001$; **$P < 0.01$; *$P < 0.05$

Table 5: Logistic regression models predicting suicidal behavior

	Stage 1	Stage 2	Stage 3
Variable	AOR (95% CI)a	AOR (95% CI)a	AOR (95% CI)a
Physical violence			
SVAWS-Mild violence	2.81 (0.96, 8.11)	1.90 (0.47, 7.34)	2.64 (0.60, 11.64)
SVAWS-Minor violence	0.32 (0.10, 1.30)	0.29 (0.06, 1.54)	0.34 (0.05, 2.14)
SVAWS-Moderate violence	3.56 (1.00, 12.68)*	1.93 (0.45, 8.34)	1.96 (0.42, 9.23)
SVAWS-Serious violence	1.54 (0.58, 3.89)	0.53 (0.12, 2.22)	0.49 (0.08, 2.98)
SVAWS-Sexual violence	3.36 (1.50, 7.50)**	2.38 (0.91, 6.21)	2.78 (0.88, 8.78)
Danger			
Low		1.00	1.00
Medium		1.89 (0.29, 12.14)	2.43 (0.35, 16.92)
High		33.61 (8.04, 140.47)***	63.17 (11.32, 352.59)***
Psychological abuse			
SVAWS-Symbolic violence			0.14 (0.03, 0.81)*
SVAWS-Threats of mild violence			7.11 (1.09, 46.43)*
SVAWS-Threats of moderate violence			0.94 (0.24, 3.76)
SVAWS-Threats of serious violence			1.79 (0.44, 7.18)

Note: SVAWS = Severity of Violence Against Women Scale; AOR = Adjusted Odds Ratio; CI = Confidence Interval; [a]Models are adjusted for age, place of recruitment, having children, socioeconomic status and included random effects hospital site to site variability; ***$P < 0.001$; **$P < 0.01$; *$P < 0.05$

Suicidal behavior

Table 5 shows the results of the logistic regression models predicting suicidal behavior. When entered into the equation in the first step, moderate physical violence (AOR = 3.56, CI = 1.00, 12.68), and sexual violence (AOR = 3.36, CI = 1.50, 7.50) were found to be significant, and in the second step high danger (AOR = 33.61, CI = 8.04–140.47) was found significant. In the full model, significant independent predictors of suicidal behavior were threats of mild violence (AOR = 7.11, CI = 1.09, 46.43) and danger (AOR = 63.17, CI = 11.32, 352.59) [Table 5].

Help seeking

Only a minority (17.7%) sought the assistance from any community agencies; 12.8% from a religious leader, 8.6% from a judicial authority (police), 4.3% social services, and 3.5% health care services.

Discussion

The study found among a sample of women attending antenatal care and outpatient hospital services in central Thailand a moderate severity of overall and different types of IPV to be lower than in some previous studies.[20,21] Reasons for this may be attributed to Thai society regarding IPV as a personal family matter and thus IPV remains hidden.[38,39] Further, the results show that a large number of women with IPV in the current investigation scored positive for depression and/or suicidal behavior. This study finding is in agreement with the results of samples of women with IPV in previous studies and reviews,[2,15,16,40] and is significantly higher than in pregnant or postpartum women (without IPV) in Thailand.[41] Further, only few of the women had looked for help from legal authorities or from the health care system, as also found in a study on IPV in Thailand,[10] among married women with IPV in Karachi, Pakistan,[8] and in a study among married women with IPV visiting health centres in Ahvaz in the south of Iran.[9]

In agreement with some previous studies,[23-26] sexual violence contributed to the prediction of depression, and psychological abuse and danger to the prediction of suicidal behavior. These study findings support previous research that found associations between different types of IPV to mental health.[20,21,29] High danger emerged as a very strong predictor of suicidal behavior in this study, as also found in a previous study.[26] The consistent threat triggered by danger that is experienced by the women with IPV may possibly result in suicidal behavior due to the unpredictable nature of the danger stressor.[20] The study findings, however, failed to identify a specific association between psychological abuse, physical violence, and depression, which is contrary to some other previous studies.[20,21,23-25] In the first model, investigating the different types of physical violence in this study, a significant association between serious physical violence and depression was found. Nevertheless, in this sample of Thai women, sexual assault was the most important type of violence associated with depression.

Furthermore, the study found that in women recruited from general outpatients almost all violence indicators were significantly higher than those recruited in antenatal care clinics. It is not clear what should be the reason for this. In agreement with a previous study,[42] older women (25–49 years) revealed a higher proportion of sexual violence than younger adult women (18–24 years), and compared to women with no children, women with children were likely to have exposure to more physical violence and psychological abuse.

In terms of clinical implications of this study, there is a need to assess women reporting IPV for depression and suicidal behavior. In addition, the perceptions of the situations relative to danger of the women with IPV need to be assessed. The increasing severity of IPV and increased danger are associated with poorer mental health needing safety planning and mental health services in conjunction with IPV care.[43]

Study limitations

The study findings cannot be generalized to all female survivors of IPV in Thailand because the current study recruited antenatal care and general outpatients in one region. Further, the study is based on self-reports which may over- or under-report due to recall bias or lack of voluntary disclosure.[26] Other studies[11] have found comorbidity between posttraumatic stress disorder (PTSD) and depression. Therefore, PTSD should also be assessed in future studies.

Conclusion

The study found among a sample of women attending antenatal care and outpatient hospital services in central Thailand that a significant number of abused women suffer from depression and suicidal behavior. Given the association between severity and multiple forms of IPV and depressive symptomatology and suicidal behavior, health care providers are urged to identify those women at risk and provide appropriate management.

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Conflicts of Interest

There are no conflicts of interest.

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