Factors Predicting Intimate Partner Violence during Pregnancy among Thai Pregnant Women

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Abstract: Intimate partner violence during pregnancy occurs across both developed and developing countries. This violence is of high concern because it leads to adverse effects on maternal health and newborn outcomes, as well as the general wellbeing of the woman and family. This cross-sectional study aimed to examine factors predicting intimate partner violence during pregnancy in Thailand. Two hundred and thirty Thai pregnant women, attending the prenatal clinic at a university hospital in northern part of Thailand were purposively selected to participate. Six questionnaires were used to collect data: a demographic data form, the Index Spousal Abuse, the Revised Rosenberg Self-Esteem Scale, the A-Z Stress Scale, the Revised Multidimensional Scale of Perceived Social Support, and the Kansas Marital Satisfaction Scale. Descriptive statistics and binary logistic regression were employed to analyze data.

Results revealed that the prevalence of intimate partner violence during pregnancy was 11.7%, while physical, non-physical and both physical and non-physical violence accounted for 3.5%, 4.3%, and 3.9%, respectively. Binary logistic regression analysis revealed that stress and marital satisfaction were significant predictors of IPV occurrence during pregnancy. These two co-predictors could explain 26.3% of the total variance for IPV during pregnancy.

The findings of the study enable health care providers to understand the risk factors of intimate partner violence during pregnancy. This finding suggests that the marital relationship should be reinforced during pregnancy. The provision of counseling services should serve pregnant women that experience stress. Furthermore, IPV screening should be planned to identify cases and offer appropriate advice and referrals to support services at the prenatal clinic.

Introduction

Intimate partner violence (IPV) during pregnancy occurs globally and during pregnancy, which is of great concern because it may greater chances of poor health of maternal and newborn, as well as the general wellbeing of the woman and the family. The

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prevalence of IPV as reported by the World Health Organization [WHO][1] was revealed in a study on women's health and domestic violence in 15 sites in 10 countries, using the same methods and definitions. It was found that the prevalence of physical abuse during pregnancy ranged between 1% in Japan and 28% in Peru. Within this range it was found that the prevalence of IPV during pregnancy in Thailand was 4%.[1] While the prevalence rates of physical IPV during pregnancy in developed countries ranged from 1.3% to 12.6%,[2] the data on the prevalence rates of physical IPV in Thailand have been reported in five studies, ranging from 4.8% to 29.6%. It seems that the prevalence rate of IPV during pregnancy varies from country to country, and even within countries. However, much IPV may be unreported, and prevalence disparities may be related to definition, the type of measurement used, sample size, and variations in the selection criteria, which may explain the differences in the rates reported across studies.

The adverse effects of IPV during pregnancy are well documented, such as vaginal bleeding during the first and second trimesters of pregnancy.[3] This can lead to abortion and miscarriage.[4] Women that are physical IPV involving abdominal trauma can lead to premature labor, rupture of membranes, placental abruption, and a ruptured uterus, which lead to fetal death.[4] In addition, the abuse of women has also been associated with delayed prenatal care,[4] inadequate prenatal care,[2] and the increased risk of low birth weight of newborn babies.[4,5] Women abused by their partners have been associated with many mental health problems such as posttraumatic stress disorder (PTSD), depression,[4] and increased risk of homicide.[4]

There are various factors that influence IPV during pregnancy. WHO[4] has suggested that the risk factors for IPV during pregnancy are often similar to the risk factors for IPV in general, such as being younger, unemployed, and unmarried. However, financial difficulties or financial dependency on the part of women may contribute to stressful events leading to abuse during pregnancy.[2,6] IPV during pregnancy in Thailand, as in other countries, has remained a hidden phenomenon because it has been a strongly-stigmatized issue for a long time. In general, IPV may be a long-term problem in an intimate relationship that continues after a woman becomes pregnant or it may begin during pregnancy. Pregnancy may be the only time that a woman willingly and regularly accesses health care.[4] Therefore, prenatal screening for IPV is important to help with early detection and to prevent psychological trauma. The problem is how to identify the related risk factors and subsequent problems in order to implement successful preventive measures. The current state of knowledge lacks strong predictors associated with IPV during pregnancy in Thailand. Therefore this study aimed to examine the variables that influence IPV during pregnancy.

Review of the Literature

Intimate partner violence (IPV) consists of various forms of assault by one partner against the other.[7] The majority of studies examine only physical abuse, as it is the type of IPV that is easiest to define and therefore the easiest to measure.[8] Physical abuse includes hitting, pushing, punching, pounding, slapping, or use of a weapon or object to injure.[7] Physical abuse is the most commonly documented, possibly because it is the most visible evidence of an abusive relationship.[9] Some researchers have defined IPV as controlling behavior that is extended into both physical and non-physical abuse forms.[10] Most feminist researchers define IPV as including both physical abuse and non-physical abuse.[11] The term non-physical abuse is based on the use of coercive power to establish dominance over women.[12] It usually used interchangeably with either emotional abuse, psychological abuse, or psychological battering.[12] Non-physical abuse includes acts like

name calling, threatening to kill the victim's family or pet; controlling access to finances; isolating the victim from family and friends; coercing the victim to perform degrading, humiliating or illegal acts; interfering with one's job, medical or educational opportunities; or making the victim feel powerless and ashamed.[12]

The demographic characteristics and background factors were found to be related to IPV during pregnancy. Previous studies have indicated that adolescents experience a proportionally higher prevalence of pregnancy violence.[13,14] It has been shown that pregnant women less than 20 years old have 4.3 times the risk of abuse during pregnancy compared to pregnant women older than 30 years.[15] Further, a study in South Africa showed that the highest prevalence rate of IPV during pregnancy was found in the age group of 21-25 years.[2]

The experience of IPV prior to pregnancy is a strong predictor of further violence during pregnancy.[2] Saltzman and colleagues[13] revealed that 60% of women physically abused prior to the year of pregnancy continue to be abused during pregnancy. A systematic review of nine studies conducted between 1987 to 2006 reported that 60-96% of pregnant women that were abused during pregnancy had experienced IPV before pregnancy.[2]

Alcohol is always used as a justification for male partners' abuse of their wives. A study among Thai pregnant women found that 78% of abused pregnant women had a husband that drank alcohol, and there was a significant difference between pregnant women whose husbands drank alcohol and that did not ($p < .05$).[16] A study in Rwanda found that pregnant women with a male partner that were an occasional and heavy drinker were 2.5 and 3.9 times more likely to be abused compared with pregnant women that had a male partner that never drank.[17]

Individuals with low self-esteem have also been shown to be more sensitive to rejection, and may perceive their relationship partner's more

negatively, thereby undermining attachment and satisfaction in their intimate relationship.[18] Mruk[19] suggests that an individual with low self-esteem has a tendency to easily engage in negative thinking patterns by over generalizing mistakes and negative events. Heaman[20] reported that pregnant women with low self-esteem were more likely to be physically abused during pregnancy compared with non-abused pregnant women (OR = 4.29, 95% CI = 1.89-9.75). Additionally, the result among 301 Thai adolescent wives (younger 20 years) revealed that self-esteem was a factor associated with wives that were abused ($p < .05$).[21]

Stress within an intimate relationship may affect the ability to process information effectively and the selection of particular conflict resolution behaviors in given situations and may increase frustration regarding the management of the conflict events.[2] For example, women with a high level of stress often withdraw from their partners and decrease their connection at home by engaging in fewer household tasks and fewer leisure activities.[22] A longitudinal study of Australian women reported that women with a high level of stress were 3.5 times more likely to be physically abused than those that had experienced no abuse (OR = 3.50, 95% CI = 2.66-4.55, $p < .001$).[23]

Social support is highly associated with basic interpersonal relationship qualities and processes, such as friendship, intimacy, social skill and conflict.[24] Previous study regarding IPV have linked the occurrence of violence and the presence or absence of social support. For example, a study among 500 Pakistani pregnant women who received adequate social support from friends, family, and significant others showed a decreased risk of violence during pregnancy (AOR = 0.65, 95% CI = 0.51-0.82).[25]

Marital satisfaction appears to be a precursor of marital quality as result of stressful events that lead to violence in an intimate relationship. Marital

satisfaction has been seen to be negatively associated with IPV.[26] After becoming pregnant, many women may feel left out and disconnected from their partner because most of the attention is focused on being a mother. A meta-analytic review among female victims from 10 studies (n = 2,508) found that marital satisfaction had a moderate effect size estimates for IPV (mean $r = -.41$, $p < .001$).[26]

Based on aforementioned, an overview of existing evidence on IPV during pregnancy revealed that age, experience of IPV prior to pregnancy, partner's alcohol drinking, self-esteem, stress, social support, and marital satisfaction have been associated with the IPV during pregnancy. However, a correlational study cannot draw a predictive power conclusion. Therefore, to fill the gap in knowledge concerning the factors that could be predictors of IPV during pregnancy, a study of these factors among Thai pregnant women will provide significant information for nurse midwives so that they can plan intervention strategies for further study.

Research aim and hypothesis

The aim of this study was to examine whether age, the experience of IPV prior to pregnancy, the partner's alcohol drinking, self-esteem, stress, social support, marital satisfaction, and could predict IPV during pregnancy. The research hypothesis of this study was that experience of IPV prior to pregnancy, the partner's alcohol drinking, and stress were positively related to IPV during pregnancy, whereas age, self-esteem, social support, and marital satisfaction were negatively related to IPV during pregnancy.

Methods

Design: A cross-sectional, predictive design was used to determine the factors predicting the IPV during pregnancy among Thai pregnant women.

Ethical Considerations: The study was approved by the Research Ethics Committees of the Faculties of Nursing and Medicine, Chiang Mai University. Each participant received information about the purposes, benefits, risks, and the right to withdraw from participation in the study before signing the consent form. The participants were assured of confidentiality and anonymity regarding their participation in the study. Confidentiality was ensured by assigning a code number to each completed questionnaire instead of using the participant's name, and separating the returned questionnaires and signed consent forms.

Sample and Setting: The study was conducted at a prenatal clinic at a university hospital in northern Thailand with 2,200 in-patient beds and that provided services for the surrounding northern region of Thailand. This clinic serves approximately 1,600 pregnant women each month. The prenatal clinic is open all business days from 8.00 a.m. to 4.00 p.m., and provides routine prenatal care by trimester. Women who are new to the prenatal clinic attend by just attending. The prenatal clinic provides prenatal education, physical assessment of both high and low risk of pregnancy. After completing their prenatal assessment, all of the pregnant women will be given individual advice and make appointments for the next visit with a registered nurse in an examination room. Eligible participants 1) were 18 years or older, 2) had a gestational age between 32–40 weeks, 3) did not have a history of psychiatric problems with medical treatment, and 4) were able to read and write in the Thai language. The sample size was estimated by Cochran's formula[27] with a level of precision at 95% or a significant level (α) of .05 to control for type I errors. Further, the abscissa of the normal curve that cuts an area α at the tails was 1.96. The proportion of an attribute based on the average prevalence rate of physical violence during pregnancy from five previous studies in Thailand was estimated at 0.16%. Considering an attrition rate of 10%, a

minimum of 230 participants was required for this study.

Instruments: Six instruments were used to collect the data and these are described as follows:

The demographic data form was developed by the PI to collect the participants' personal data regarding age, level of education, employment, marital status, experience of IPV prior to pregnancy, partner's alcohol drinking, and pregnancy intention.

The Index Spousal Abuse (ISA),[10] a self-reporting scale, was used to assess the pregnant woman's perception of spousal abuse. This study used the Thai version, which was translated from the original English version by Thanaudom.[16] The ISA divides abuse into two types: physical (ISA-P) and non-physical violence (ISA-NP). An example items of a physical abuse and non-physical abuse subscales are: "My partner threatens me with a weapon" and "My partner belittles me intellectually." The ISA consists of 30 items; 11 items for the ISA-P and 19 items for the ISA-NP. The ISA is a five-point Likert scale ranging from 1= never to 5 = very frequently. The scoring for each subscale was computed by multiplying the item score. The possible scores of the ISA-P and ISA-NP range between 0-100. The cut-off score for the ISA-P was 10 or over and for the ISA-NP score it was 25 or over, indicating that the women have experienced IPV. In this study, the Cronbach alpha coefficients for the ISA, ISA-P, and IPA-NP of the pilot test with fifteen participants were .91, .89, and .87, respectively, and for the main study were .90, .86, and .85, respectively.

The Rosenberg Self-Esteem Scale (RSES) was developed to measure the perception of pregnant women concerning the positive or negative evaluation of themselves. It consists of ten items with five positively-worded and five negatively- worded items on a four-level Likert scale. The revised version of the (rRSES) consisted of six positively-worded and four negatively-worded items. The rRSES that was translated and revised by Wongpakaran and Wongpakaran.[28]

An example of the rRSES item is: "I am able to do things as well as most other people." The positive items were rated on a four-point Likert scale ranging from strongly disagree (1) to strongly agree (4). These scales were reversed from 4 to 1 for the negative items. The total possible score ranged from 10 to 40. A higher score indicated higher self-esteem. In this study, the Cronbach alpha coefficient of the pilot test with fifteen participants was .90, and for the main study it was .80.

The A-Z Stress Scale[29] was used to measure the stress pregnant women feel about family-related concerns, socioeconomic concerns, and pregnancy-related concerns in their life. For this study, the A-Z Stress Scale was translated into Thai by the researcher using the back translation technique. Translation and back-translation procedures were employed to achieve semantic equivalence in translation. The first step was forward translation into the Thai language by the researcher and was confirmed by the advisory committee. Cultural congruence was confirmed by an expert who lives in an Islamic culture to maintain the same meaning and relevance in the cultures of original meaning and the meaning into Thai. The second step was to back translate from the Thai version into the English version by a bilingual person who had not seen to the original the A-Z Stress Scale before. Then, the back-translated versions were compared with the original version. Finally, inconsistent words were discussed with the experts and were modified appropriately. The A-Z Stress Scale is a 30-item Thurstone scale with a yes / no response. Each item had a specific weighted score, and the weight scores range from 0-179. An example of an item is: "Concern about delay in household work due to pregnancy." The total score is arrived at by summing the weight scores of items with a "yes" response. A higher score indicated greater stress. In this study, the Cronbach alpha coefficient of the pilot test with fifteen participants was .95, and for the main study it was .87.

The original Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet and colleagues[30] to measure social support from family, friends, and significant persons of pregnant women. This study used the revised version of MSPSS[30] (rMSPSS) was translated and revised by Wongpakaran and Wongpakaran.[31] The rMSPSS is a 12-item Likert scale with seven response choices ranging from 1 = very strongly disagree to 7 = very strongly agree. An example of a rMSPSS item is: "I have a friend who can share my overwhelming happiness and grief." The total possible score range from 12 – 84; the higher the score the higher the perceived social support. In this study, the Cronbach alpha coefficient for the pilot test with fifteen participants was .90, and for the main study was .90.

The Kansas Marital Satisfaction Scale (KMSS)[32] was used to measure the level of happiness in marital life. The KMSS was translated into Thai by the researcher using the back translation technique. The semantic equivalence in translation process used same process to translation of the A-Z Stress Scale. The KMSS consists of 3 items with a seven-point Likert scale ranging from 1 = extremely dissatisfied to 7 = extremely satisfied. The total possible score had a range of 3 to 21. An example of the KMSS item is: "How satisfied are you with your marriage?" A higher score indicated greater satisfaction in marital life. The Cronbach alpha coefficient for the pilot test with fifteen participants was .97, and for the main study it was .96.

Data Collection: The PI posted an announcement sheet in the women's restroom and on the advisory desk in the examination room to invite attending pregnant women to join this study. After finishing the prenatal examination, if any pregnant woman was willing to participate in this study, she would tell the registered nurse (RN) at the advisory desk in the examination room. Then the RN would attach the red card onto the OPD card of pregnant woman and walk in to the private room to participate in this study. The

pregnant women that decided to participate were asked to sign the consent form. The participants were then asked to complete six questionnaires in a completely private area, which took 15-20 minutes to complete. All questionnaires were arranged from the demographic data form, the rRSES, the rMSPSS, the A-Z stress scale, the KMSS, and the ISA.

Data Analysis: Data were analyzed using descriptive statistics, independent t-test, Chi-square, and logistic regression analysis. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were used to describe the demographic characteristics of the participants. Chi-square was used to examine the differences in the demographic data between the non-abuse and abuse groups. An independent t-test was performed to examine the differences in self-esteem, stress, social support, and marital satisfaction scores between the groups of abused and non-abused participants. Logistic regression analysis was used to determine the predictors of the IPV during pregnancy. Prior to the logistic regression analysis, Spearman rank correlation was analyzed to examine the relationship among seven independent variables for checking for the evidence of multicollinearity. The findings showed statistically significant moderate correlation among the independent variables, with the correlation coefficients ranging from .01 to .45 and indicating a moderate correlation, which were not problematic for this study.

Results

Two hundred and thirty pregnant women participated in this study, whose the mean age was 28.98 years (SD = 5.17). Most of the participants (80.4%) were 25 years or more of age and had completed a university education (57.4%). The majority (77.0%) were employed and cohabiting with others (54.8%), whereas nearly half of them (40.4%) were living as a couple. Most (83.9%) reported that their partners drank alcohol with

frequency ranging from rarely drank (35.6%) to drank every day (10.9%), whereas only 16.1% reported that their partners never drank. Most of the participants (74.8%) had intended their pregnancy, and 91.3% of them did not have experience with IPV prior to the pregnancy. The characteristics of the non-abused group and the abused group are shown in **Table 1**.

Table 1 Demographic characteristics of participants (n = 230)

Characteristics	Non-abused (n= 203)		Abused (n= 27)		Total (n= 230)		χ^2
	n	%	n	%	n	%	
Age							5.91**
< 25	35	17.2	10	37.0	45	19.6	
≥ 25	168	82.8	17	63.0	185	80.4	
Mean (SD)	29.38 (5.20)		25.93 (3.71)		28.98 (5.17)		
Education level							.38
Primary school or less	9	4.4	1	3.7	10	4.3	
High school	79	38.9	9	33.3	88	38.3	
University	115	56.7	17	63.0	132	57.4	
Employment							14.25**
Employed	164	80.8	13	48.0	177	77.0	
Unemployed	39	19.2	14	51.9	53	23.0	
Living arrangement							4.65*
Living in a couple	86	42.4	7	25.9	93	40.4	
Not living in a couple	7	3.4	4	14.8	11	4.8	
Cohabiting	110	54.2	16	59.3	126	54.8	
Partner's alcohol drinking							.51
Never	34	16.8	3	11.2	37	16.1	
Drink (frequency)	169	83.2	24	88.8	193	83.9	
Rarely / less than 1 times per month	72	35.5	10		37.0	82	35.6
Occasionally	76	37.4	10		37.0	86	37.4
Everyday	21	10.3	4		14.8	25	10.9
Pregnancy Intention							.01
Intended	152	74.9	20	74.1	172	74.8	
Unintended	51	25.1	7	25.9	58	25.2	
Experience of IPV prior to pregnancy							1.01
No	190	93.6	20	74.1	210	91.3	
Yes	13	6.4	7	25.9	20	8.7	

*p < .05, ** p < .01, *** p < .001

The prevalence rate of IPV during pregnancy was 11.7%. The percentages of pregnant women that were physically abused only and non-physically abused only during pregnancy were 3.5% (n=8), and 4.3% (n=10), respectively. Nine of the participants (3.9%) were both physically and non-physically abused during pregnancy, as can be seen in **Table 2.**

Table 2 Frequency and percentage of IPV during pregnancy (n = 230)

IPV during pregnancy	Frequency	Percentage
No	203	88.3
Yes	27	11.7
Physical abuse only	8	3.5
Non-physical abuse only	10	4.3
Both of physical and non physical abuse	9	3.9

Results from descriptive analysis showed the differences between self-esteem, stress, social support, and marital satisfaction of the non-abused and abused groups are shown in **Table 3**. When comparing the two groups, it can be seen that the mean scores of the non-abused and abused groups regarding self-esteem (32.3 vs. 29.7, *p*< .01), social support (68.7 vs. 64.0, *p*< .05), and marital satisfaction (17.7 vs. 15.0, *p*< .001) were slightly different, while the mean scores for stress were obviously different (37.7 vs. 73.9, *p*< .001).

Table 3 Range, mean, and standard deviation (SD) scores of self-esteem, stress, social support, and marital satisfaction of the non-abuse group (n = 203) and abuse group (n = 27)

Variables	Possible range	Actual range	Mean	SD	*t*
Self-esteem	10-40				
Non-abuse		21-40	32.3	3.60	3.46**
Abuse		21-36	29.7	3.42	
Total		21-40	32.0	3.66	
Stress	0-179				
Non-abuse		0-146	37.7	29.09	-4.88***
Abuse		23-152	73.9	37.13	
Total		0-152	42.0	32.34	
Social support	12-84				
Non-abuse		24-84	68.7	9.24	2.40*
Abuse		31-84	64.0	12.06	
Total		24-84	68.1	9.71	
Marital satisfaction	7-21				
Non-abuse		6-21	17.7	3.02	4.50***
Abuse		10-20	15.0	2.92	
Total		6-21	17.4	3.13	

* *p* < .05, ** *p* < .01, *** *p* < .001

The results of the binary logistic regression analysis revealed that stress and marital satisfaction were significant predictors of IPV occurrence during pregnancy, as shown in **Table 4**. The odds of stress was 1.03 (OR = 1.03, 95% CI = 1.01 – 1.04, *p* < .05). For marital satisfaction, the odds of IPV during pregnancy was .84 (OR = .84, 95% CI = .73 – .96, *p* < .05). For every one-unit of increased stress, the odds of IPV during pregnancy increased 1.03 times. For every one-unit of increased marital satisfaction, the odds of IPV during pregnancy decreased .84 times.

Table 4 Binary logistic regression analysis for IPV during pregnancy (n=230)

Factors	B	S.E.	Wald	Sig.	OR	95% C.I.	
						Lower	Upper
Stress	.026	.007	15.966	.000[*]	1.03	1.01	1.04
Marital satisfaction	−.179	.069	6.807	.009[*]	.84	.73	−.96

Negelkerke R^2 = .263, * *p* < .05

The goodness-of-fit of the model was examined using the Hosmer and Lemeshow test to measure the correspondence of the actual and predicted values of IPV during pregnancy. The results revealed a Hosmer and Lemeshow value of 8.744, which was non-significant (*p* > .05), indicating that the model fit the data well. The additional descriptive measure of goodness-of-fit. Moreover, the Nagelkerke R^2 value was.263 indicating that two predictors in the model could explain 26.3% of the variance of IPV during pregnancy. The ability of the model of the two predictors to correctly predict the selection of IPV during pregnancy was finally examined. The accuracy of the prediction of IPV during pregnancy was 87.4% (χ^2 = 33.406, *df* = 2, *p* < .001).

Discussion

In this study, the overall prevalence of IPV against pregnant women during pregnancy was 11.7%. Physical abuse accounted for 7.4%, whereas the non-physical abuse was 4.3%. This prevalence rate of physical abuse was quite similar to a previous study in Thailand[33] which reported that the rate of IPV during pregnancy was 8.7. However, it seems that the prevalence of physical IPV in this study was two times higher than that reported by WHO[1] (4% vs. 7.4%). It is possible that there were differences between the definitions and measurements used. Dekeseredy[34] criticized that a narrow definition generates lower estimate prevalence of IPV than a broad definition because the participants were asked questions based on specific events. Regarding the measurement issue, the prevalence of IPV is substantially lower in studies that assess IPV with a few questions compared with studies that assess IPV using a comprehensive questionnaire.[5] Velasco and colleagues[35] found that 4.8% and 7.7% of pregnant women reported that were physical and emotional IPV when assessed by the Abuse Assessment Screen (AAS: 5 items), whereas 3.6% and 21.0% of pregnant women assessed by the Index Spousal Abuse (ISA: 30 items) reported were physical and non-physical IPV respectively. On the other hand, the prevalence rate of the non-physical abuse of this study was lower than the estimated rate in prior studies. It is possible that non-physical IPV depends on the women's subjective experiences.[34] Therefore, some abusive behaviors may be interpreted as normal.

Based on the logistic regression analysis, the findings of this study provide partial support for the hypothesis that stress and marital satisfaction could

be predictors of the IPV during pregnancy, while age, the experience of IPV prior to pregnancy, the partner's alcohol drinking, self-esteem, and social support were not significant predictors of IPV during pregnancy.

Unlike other studies,[2,14] age did not significantly predict IPV during pregnancy. A possible explanation for this finding may be related to the sample of the studies. The participants of the previous studies included pregnant women whose mean age ranged from 22.3 to 25.44 years.[14,25] Prior studies indicated that pregnant women older than 25 were abused during pregnancy at a lower rate than pregnant women younger than 25 years of age.[36] However, the finding of this study is consistent with a recent study by Cengiz and colleagues,[37] which found that age had no significant influence on IPV during pregnancy, in a group of women with a mean age of 29.06.

The experience of IPV prior to pregnancy did not predict IPV during pregnancy. This finding is in contrast with several previous studies reporting that the experience of IPV prior to pregnancy was a strong predictor of IPV during pregnancy.[2,15] A possible reason is that only a small percentage of the participants reported exposure of IPV prior to pregnancy. This study found that only 25.9% of the abuse group had experienced IPV prior pregnancy, whereas the study in U.S. by Saltzman and colleagues[13] reported that 73.0% of the pregnant women that were abused during pregnancy had experienced IPV a year prior to their pregnancy.

A partner's alcohol drinking did not significantly predict IPV during pregnancy. This finding is inconsistent with previous studies, which reported that male partners that drank alcohol were associated with higher rates of IPV.[16] This finding could be explained by the frequency of alcohol drinking of their partners. Although most of the pregnant women reported that their partners drank alcohol, only 10.9% were regular drinkers. The study of Berg and colleagues[38] found that only heavy drinking

(drinking two or three times a week or more), not occasional drinking (drinking once a week or less), was associated with violence.

Self-esteem was not a predictor for IPV abuse during pregnancy. This finding supports one previous study in Thailand that found no direct effect of self-esteem on IPV during pregnancy.[39] However, the finding of this study was not consistent with another study in Thailand which indicated that low self-esteem was associated with being a victim of IPV.[21] Inconsistent findings may be the result of the characteristics of the studied women. The participants of the previous study were mainly low educated (secondary school or lower) whereas more than half of the participants in this study had completed a university education. In support of this idea, the study of Maçola and Carmona[40] found that pregnant women who had a level of education more than 8 years had a higher level of self-esteem compared with the pregnant women that had a level of education less than 8 years.

Also, social support did not predict IPV during pregnancy. This finding did not support a previous study in Pakistan[25] which reported that social support was associated with IPV during pregnancy. This discrepancy may be due to the different characteristics of the study samples. In this study, the majority of pregnant women were highly educated (high school and university level) and employed, whereas most of the samples in those two studies had a lower level of education. Moreover, most of the women in the study in Pakistan were unemployed. Women who have a high education and employment are usually psychologically and economically independent from their partners and families, and they are more likely to rely on self than others.[41] Therefore, women's socioeconomic status may have an effect on the IPV during pregnancy. The effect of these factors needs to be examined in further research since the findings of previous studies were inconsistent.

Limitations and Recommendations of the Study

There are a number of limitations of this study that should be acknowledged. First, the purposive sampling used to recruit the women participants may have limited the generalizability of the findings to other groups of pregnant women. Second, the data were reported from adult pregnant women 18 years or older at a tertiary prenatal clinic and there was an overlapping of the range of age between the adolescents and adult pregnant women in the recruitment process. The effect of age on IPV during pregnancy must be interpreted with caution. Third, the data on the partner's alcohol consumption were obtained from the perceptions of the pregnant women, not from partners or observation, and there may have therefore been a risk of recall and response bias. Fourth, the sample size was small, and therefore the finding produced only two independent variables that could be predictors in the logistic regression model. Finally, this was a cross-sectional study and therefore it cannot be used assessed causality.

Conclusions and Implications for Nursing Practice

This study provides a better understanding of the phenomenon of IPV during pregnancy due to Thai women are more likely to disclose IPV situations than women in the past. In addition, the results provide evidence about the risk factors during pregnancy. The results of this study can contribute to nursing practice in terms of the provision of counseling services that can support pregnant women facing stress during their pregnancies. At the same time, the marital relationship should be supported in order to prevent IPV during pregnancy. Furthermore, screening for IPV should be done on a routine basis as part of nursing care at prenatal clinics.

In terms of further research, a longitudinal study to explore the patterns of IPV around the time of pregnancy—before and during the pregnancy, and during the postpartum period—in order to understand the trajectory of violence occurring during the reproductive period should be designed. Further research exploring other risks, especially male partner risk factors such as the male partner's age, level of education, and substance used, is also recommended.

Acknowledgement

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ปัจจัยทำนายความรุนแรงจากคู่สมรสขณะตั้งครรภ์ในสตรีตั้งครรภ์ไทย

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บทคัดย่อ: ความรุนแรงจากคู่สมรสขณะตั้งครรภ์เป็นปัญหาที่เกิดขึ้นทั้งในประเทศที่พัฒนาแล้วและกำลังพัฒนา ปัญหาความรุนแรงจากคู่สมรสที่เกิดขึ้นขณะตั้งครรภ์ได้รับการตระหนักมากขึ้นเนื่องจากผลกระทบที่เกิดขึ้นสามารถส่งผลทั้งต่อสุขภาพของสตรีตั้งครรภ์และทารกในครรภ์การศึกษาครั้งนี้เป็นการศึกษาแบบภาคตัดขวาง โดยมีวัตถุประสงค์เพื่อตรวจสอบปัจจัยที่สามารถทำนายการเกิดความรุนแรงจากคู่สมรสขณะตั้งครรภ์ในประเทศไทยโดยคัดเลือกกลุ่มตัวอย่างแบบเฉพาะเจาะจงตามคุณสมบัติ ในสตรีตั้งครรภ์ที่ฝากครรภ์ในหน่วยฝากครรภ์ในโรงพยาบาลมหาวิทยาลัยในภาคเหนือของประเทศไทย จำนวน 230 ราย เครื่องมือที่ใช้ในการวิจัยครั้งนี้ประกอบด้วย แบบบันทึกข้อมูลส่วนบุคคล แบบประเมินการเกิดความรุนแรงขณะตั้งครรภ์ แบบประเมินความรู้สึกมีคุณค่าในตนเอง แบบประเมินความเครียดขณะตั้งครรภ์ แบบประเมินแรงสนับสนุนทางสังคม แบบประเมินความพึงพอใจในชีวิตสมรส และวิเคราะห์ข้อมูลโดยใช้สถิติเชิงพรรณนา และสถิติถดถอยโลจิสติค

ผลการศึกษาพบความชุกของการเกิดความรุนแรงจากคู่สมรสขณะตั้งครรภ์ร้อยละ 11.7 โดยที่พบความรุนแรงด้านร่างกาย ความรุนแรงที่ไม่ใช่ด้านร่างกาย และทั้งสองประเภท ร้อยละ 3.5, 4.3, และ 3.9 ตามลำดับ จากการวิเคราะห์สถิติถดถอยโลจิสติคพบว่าความเครียด และความพึงพอใจในชีวิตสมรส เป็นตัวทำทายการเกิดความรุนแรงขณะตั้งครรภ์ ตัวแปรทั้ง 2 ตัว ร่วมกันอธิบายความผันแปรของการเกิดความรุนแรงจากคู่สมรสขณะตั้งครรภ์ได้ร้อยละ 26.3

จากผลการศึกษาครั้งนี้ทำให้ผู้ให้บริการทางสุขภาพเข้าใจปัจจัยเสี่ยงต่อการเกิดความรุนแรงจากคู่สมรสขณะตั้งครรภ์ ข้อเสนอแนะจากผลการศึกษาครั้งนี้ คือ ควรมีกิจกรรมเพื่อส่งเสริมสัมพันธภาพในคู่สมรสขณะตั้งครรภ์ และควรให้สตรีตั้งครรภ์ที่มีความเครียดได้รับคำปรึกษา นอกจากนี้สตรีตั้งครรภ์ทุกรายควรได้รับการคัดกรองการเกิดความรุนแรงจากคู่สมรสเป็นประจำ ในการฝากครรภ์ในหน่วยฝากครรภ์

คำสำคัญ: ความรุนแรงจากคู่สมรส การตั้งครรภ์ สตรีตั้งครรภ์ การศึกษาการทำนายปัจจัยเสี่ยง สตรีไทย

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