Effect of intimate partner violence on antenatal functional health status of childbearing women in Northeastern Thailand

ABSTRACT

We investigated physical, psychological and sexual violence and effects on health status of women attending antenatal clinics at two tertiary hospitals in rural Thailand. We asked 421 pregnant women at 32 weeks gestation or later to complete a survey questionnaire. Participating women reported high rates of psychological abuse (53.7%), threats and/or acts of physical abuse (26.6%), and sexual violence (19.2%). Women abused during pregnancy had poorer health status compared to non-abused women, in role emotional functioning, vitality, bodily pain, mental health and social functioning. Given the high prevalence of violence and poor health status, routine screening by maternity services is urgently required.

Keywords: functional health status, intimate partner violence, pregnancy, rural Thailand
Violence perpetrated by a husband or intimate male partner is one of the most common forms of violence against women (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006; World Health Organization, 2000). It is widely recognized as a serious violation of women’s human rights and an important public health problem (Ellsberg, 2006). In the general population, intimate partner violence (IPV) has short and long term adverse health consequences for survivors. Abused women are more likely to report chronic pain (Weinbaum, Stratton, Chavez, Mohlewski-Link, Barrera, & Courtney, 2001), somatic complaints (Kramer, Lorenzon, & Mueller, 2004), migraine, gastrointestinal problems, hypertension, and musculoskeletal problems (Letourneau, Holmes, & Chasedunn-Roark, 1999). Abused women also report significantly lower quality of life in terms of social relationships and psychological health (Leung, Leung, Lam, & Ho, 2005). Adverse mental health consequences include depression (Caetano & Cunradi, 2003), anxiety (Krantz, Van Phuong, Larsson, Thi Bich Thuan, & Ringsberg, 2005), and suicide (Cavanaugh, Messing, Del-Colle, O'Sullivan, & Campbell, 2011).

IPV adversely affects women’s health, yet there is limited research on the effect of IPV on the health of pregnant women living in rural regions of Thailand. In this study we investigated the prevalence of physical, psychological and sexual violence in pregnant women living in the Northeast region of Thailand. We also compared the health status of abused and non-abused pregnant women. The findings aim to raise awareness of nurses and other health care professionals about the impact of IPV on childbearing women’s functional health. Such awareness may promote interdisciplinary approaches to providing accessible, appropriate and comprehensive services to address IPV. In
addition, our findings may be applicable to health care professionals in other resource poor countries or countries where women’s experience of IPV may be neglected.

BACKGROUND

Intimate partner violence often begins or escalates during pregnancy (Wiist & McFarlane, 1999). Violence at this time is associated with poorer general health, obstetric, and reproductive outcomes for pregnant women. Adverse obstetric outcomes include low weight gain during pregnancy (Moraes, Amorm, & Reichenheim, 2006), anemia, infections, and first and second trimester bleeding (McFarlane, Parker, & Soeken, 1996). Women who experienced physical violence during pregnancy also had a greater chance of miscarriage (Taft & Watson, 2007), premature delivery (Rodrigues, Rocha, & Barros, 2008), higher levels of depression during pregnancy (Martin, Li, Casanueva, Harris-Britt, Kupper, & Cloutier, 2006) and injury (El Kady, Gilbert, Xing et al., 2005). Violence during pregnancy is more prevalent than other routinely screened complications of pregnancy (such as pre-eclampsia or gestational diabetes) with resultant adverse health consequences impacting on women and their babies (Janssen, 2003). Abused childbearing women have a greater number of hospital admissions during pregnancy, are more likely to smoke, and use pharmaceutical and illicit drugs (Murphy, Schei, Myhr, & Mont, 2001; Silverman, Decker, Reed, & Raj, 2006).

Most research on intimate partner violence has been conducted in the United States and western industrialized countries. IPV however, has increasingly been studied in other regions of the world. The World Health Organization (WHO) multi-country study on women’s health and intimate partner violence (Garcia-Moreno et al., 2006) was one such example. This WHO study was conducted in ten countries namely
Bangladesh, Brazil, Ethiopia, Japan, Namibia, Peru, Samoa, Serbia and Montenegro, United Republic of Tanzania, and Thailand. The findings showed that the range of lifetime prevalence of physical violence by an intimate partner was between 13% and 61%, with most countries reporting rates between 23% and 49%. The range of lifetime prevalence of sexual violence by an intimate partner was between 6% and 59%, with most sites falling between 10% and 50%. The range of lifetime prevalence of physical or sexual violence, or both, by an intimate partner was between 15% and 71%. In most countries sexual violence was considerably less frequent than physical violence. Sexual violence was usually accompanied by physical violence, although in some settings a relatively large proportion of ever-abused women reported sexual violence only (García-Moreno et al. 2006). In Thailand, the collaborating researchers of the WHO study identified a disturbingly high rate of violence particularly in rural Thailand but focused on the general female population (Garcia-Moreno et al. 2006). A study conducted by Archavanitkul, Kanchanachitra, Im-Em, and Lerdsrisantad (2003) found that 41% of women (n = 1,536) aged 15-49 years old who lived in Bangkok and 47% of women (n = 1,282) living in a province nearby Bangkok, experienced physical and/or sexual violence by an intimate male partner in their lifetime. DeVries et al. (2010) conducted a secondary analysis of data from the Health Surveys and the International Violence against Women Surveys between 1998 and 2007 among 19 countries, and found that the prevalence of intimate partner violence during pregnancy among ever-pregnant women ranged from approximately 2% in Australia, Denmark, Cambodia and Philippines to 13.5% in Uganda.

In Thailand there are limited studies on IPV during pregnancy. Most of the available studies were conducted with women living in Bangkok. Thanaudom (1996)
investigated the prevalence of IPV by surveying four hundred pregnant women who
attended an antenatal clinic at the Health Promotion Center Region 1, Bangkok. Results
showed that 12% of pregnant women had experienced physical abuse during
pregnancy, and 22.5% experienced mental abuse in the past six months. Another study
of 475 pregnant women recruited from 5 hospitals in Bangkok, found that 4.8% of
participants had experienced physical abuse during pregnancy (Thananowan &
Heidrich, 2008). Women reporting abuse in this study were also more likely to report
higher levels of depression than non-abused women.

The most recent study by Thananowan and Kaesornsamut (2010) surveyed a
convenience sample of 420 pregnant women who attended an antenatal clinic at a
university hospital in Bangkok. Responses on the Abuse Assessment Screen identified
that 9.7% (n = 45) of women were abused during pregnancy. They also found that
abused pregnant women reported higher stress and depressive symptoms, and received
less social support than those who were not abused. None of the studies to date have
included women living in rural areas nor have they examined the negative effects of
IPV on pregnancy outcomes.

Garcia-Moreno et al. (2006) suggested the pattern of violence in regards to physical,
sexual or psychological tactics might differ according to setting. For example, in
cultures of high violence and low empowerment of women, sexual domination may be
considered an acceptable way for husbands to control their wives. In 2008, the
campaign “Say No to Violence Against Women in Thailand” aimed to raise awareness
and mobilize action to eliminate violence against women. This has led to many
training programs on strategies to eliminate violence against women and children
Despite global and international initiatives, violence against women and children in Thailand, IPV is still a worrisome problem.

There are a number of important factors that contribute to IPV against women in Thailand, particularly in rural areas. As in other countries, IPV is still considered a private or family matter in Thai society inhibiting disclosure and outsider’s involvement (Junsri, Sriherunwong & Pornchaikate-Aeu Yong, 2009; Saito, Cooke, Creedy & Chaboyer, 2009). Police and public office bearers tend to consider IPV as a private matter, and not recognize violence against women as a crime. Archavanitkul (1999) stated that in the Thai Criminal Code police were required to only advise couples or act as a mediator but not file a report, particularly when injuries were not severe. In 2007 the Domestic Violence Victim Protection Act was enacted (ThaiLaws.com, n.d.). Under this law, victims and witnesses of domestic violence have a legal obligation to report the action to police. The police then have an obligation to impose provisional remedial measures which may require the abuser to seek medical care, pay financial assistance, not enter the family home, or not stay close to any person of the family. If the victim agrees to press charges, and the perpetrator is convicted, they face sentences of up to six months in prison and/or a maximum of 6,000 Baht ($US 198) fine (ThaiLaws.com, n.d.). This amount is slightly higher than a minimum monthly wage of laborers. The minimum wages for laborers in the Northeast region of Thailand range from 152-157 Baht per day ($US 5).

Although the Domestic Violence legislation requires police to protect victims, many do not understand the new law and victims may be sent home (“Thailand,” 2008). The
tendency by police to not take complaints seriously contributes to adverse social and public health consequences (“Domestic violence,” 2010). These cultural norms inhibit disclosure by victims and a willingness to involve people outside the family, highlighting the need for research to determine the extent of the problem.

In rural Thai communities a range of factors may contribute to intimate partner violence. Many rural families live in an extended family arrangement that include parents, grandparents, or in-laws. As a result, women may be at risk of being abused not only from their partners but also from other family members. Babu and Kar (2009) explained that when the number of people in a household increases, financial stresses and miscommunication also increase, and may lead to wife abuse. Similarly, Kaur and Garg (2010) in rural India found that it was common for husbands' relatives to instigate wife abuse. Fikree and Bhatti (1999) also stated that the presence of in-laws was a risk factor for domestic violence against women.

Although violence occurs in all socio-economic groups, previous research shows that women with low incomes or those who are financially dependent on their husbands are more likely to be abused than those who are not (Babu & Kar, 2009). Financial dependency is a method used by some men to maintain social control and power over women (Levinson, 1989). Economic inequality reduces women’s ability to leave a violent relationship or to live independently. The dependency of women on financial/economic support from their husband can lead to feelings of powerlessness and low self-confidence. It can also limit women’s ability to seek help, and obtain services and assistance they need in order to protect themselves and their children from further abuse. This is supported by Barnett (2000) who argued that family income or
socioeconomic factors have an impact on women’s decision whether to stay or leave the abusive relationship.

Seeking help can be complicated for rural women as personal matters are more likely to be public knowledge, and cultural values influence on the perceptions of people in the community (Archavanitkul et al., 2003). Women who have experienced IPV may not seek help or disclose abuse in order to protect their privacy. Although, there are the One Stop Crisis Centers (OSCC) located in all provincial hospitals in Thailand to provide counseling services and referral system for women and children who are victims of domestic violence not all women seek help. Archavanitkul et al. (2003) found that only 20% of women who experienced physical abuse in Bangkok and 10% in a province in Central Thailand had ever accessed formal services such as a health care service or police for help. Reasons given by the women for not seeking help included that they felt the problem was not serious enough and feeling ashamed (Archavanitkul et al., 2003). In addition, women perceived seeking help would reflect badly on the family, bring unfair treatment to members and result in the family losing face in the community (Archavanitkul et al., 2003).

Being the victim of IPV is perceived as a stigma in rural Thai society (Archavanitkul et al., 2003). Women may feel guilty and believe that they are at fault for not being a good mother and wife. Flinck, Paavilainen, and Astedt-Kurki (2005) explained that abused women ponder their own guilt. Consequently, many women may choose not to disclose their abuse and keep it secret. Rujiraprasert, Sripichyakan, Kantaruksa, Baosoung, and Kushner (2009) in a qualitative study found that by keeping the violence a secret, women tend to suffer adverse emotional and physical symptoms.
Understanding the extent and impact of intimate partner violence on childbearing Thai women’s health may prompt routine screening and intervention by health care professionals working in reproductive health programs. Understanding women’s experiences facilitates trusting relationships, prompts disclosure, enabling health care professionals to provide early effective intervention. The findings of this study will help health care professionals to be aware of the impact of IPV on the functional health status of childbearing women and recognize signs of ongoing violence when women present to primary care units, hospital or health care clinics.

In this study, we examined the prevalence of physical, psychological and sexual violence in pregnant Thai women. Our secondary aim was to compare the health status of abused and non-abused pregnant women. We hypothesized that abused women would report poorer health status than non-abused women.

**METHOD**

**Sample**

Women attending the public antenatal clinic of two hospitals in Khon Kaen Province, Northeastern Thailand were approached by clinic staff to participate in the study. Four hundred and twenty-one women agreed to participate and three declined - two refused due to transport problems and the other was not a permanent resident. This woman was from the Philippines on a working visa. Inclusion criteria required Thai women to be 18 years of age or over; at least 32 weeks pregnant; and in a relationship with their current partner for at least 12 months.

**Setting**
The antenatal clinics of the two major tertiary hospitals were situated in Muang District of Khon Kaen Province. These two government-funded hospitals serve both public and private patients. These hospitals have a similar hospital culture and serve clients with a similar profile.

The first site is a 200-bed public hospital established in 1987 and situated in the municipal area of Khon Kaen. This is a maternal and child health hospital and serves the people of 8 provinces in Northeastern Thailand. The antenatal clinic operates every weekday from 0830 hrs until 1530 hrs. Approximately 20 new cases are registered with the hospital’s antenatal clinic, with an overall daily caseload of 40 to 50 women. In 2010, 8,794 pregnant women attended the antenatal clinic (Health Promotion Center Region 6, 2010).

The second hospital is a 714-bed public facility located approximately 200 metres away from the other participating site. This general hospital provides a range of medical and health services to the people of Khon Kaen and nearby provinces. The antenatal clinic serves approximately 2,975 maternity patients per year (Khon Kaen Hospital, 2010).

Measures

In addition to obtaining personal and obstetric data, we used three standardized measures, the SF-12 (Ware, Kosinski, Turner-Bowker, & Gandek, 2002), the Psychological Maltreatment of Women Inventory – Short Form (PMWI-SF) (Tolman, 1999), and the Severity of Violence against Women scale (SVAW) (Marshall, 1992) to gather information on women’s health status and their experiences of violence during the current pregnancy.
We used the SF-12 Health Survey to assess women’s health. It is a short, valid measure of eight domains of health. The eight domains are physical functioning, role physical, body pain, general health, vitality, social functioning, role emotional, and mental health. Responses are coded, summed and transformed on a scale from 0 to 100 (best possible health state). A high score indicates a high level of functioning. The translated SF-12 Health Survey in the current sample had satisfactory internal reliability with a Cronbach’s alpha co-efficient of 0.72.

In addition, we used the PMWI-SF to obtain information on psychological abuse perpetrated by women’s husbands/ male partners during their current pregnancy (since the known date of conception). The PMWI-SF has 14 items requiring responses on a 5 point Likert scale of 1 = never to 5 = very frequently. Higher scores are reflective of greater psychological abuse. The measure has two subscales; emotional/verbal abuse (e.g., my partner called me names, my partner tried to make me feel crazy); and dominance/isolation (e.g., my partner monitored my time and made me account for my whereabouts). The two factors; dominance/isolation (0.95) and emotional/verbal abuse (0.93) have high reported internal reliability (Tolman, 1999). Cronbach’s alpha reliability co-efficient for the PMWI-SF in the current sample was .84.

We also used the SVAW to measure frequency and severity of threats and acts of physical violence (Marshall, 1992) from the known date of conception. It contains 46 acts categorized into 1) Threats of Violence Dimension which includes symbolic violence (e.g., my husband kicked the wall, door, or furniture), threats of mild violence (e.g., my husband shook his fist at me, my husband made threatening gestures at me),
threats of moderate violence (e.g., my husband threatened to destroy property), threats of serious violence (e.g., my husband threaten me with a knife or gun), and 2) Acts of Physical Violence Dimension which divide into mild violence (e.g., my husband pushed or shoved me), minor violence (e.g., my husband bit me, twisted my arm), moderate violence (e.g., my husband slapped me around the face and head), serious violence (e.g., my husband kicked me), and sexual violence (e.g., my husband physically forced me to have sex, my husband demanded sex whether I wanted to or not). The SVAW is measured on a 4 point Likert scale of 1 = never to 4 = often. Higher scores indicate severity of violence. There is good reported internal reliability for threats (0.89) and actual violence (0.91) subscales (Wiist & McFarlane, 1999). Alpha reliability of the SVAW in our sample was 0.93 with 0.91 for threats subscale and 0.92 for acts of physical violence subscale. 

All measures were translated from English into Thai with permission from the authors by two bilingual Thai nursing lecturers and the researcher. Ten women with similar characteristics to the target sample then completed the translated measures to determine the face validity of the instruments. If there was any misunderstanding the version was amended according to the women’s suggestions. Then, the back-translation technique directed by Jones, Lee, Phillips, Zhang and Jaceldo (2001) was utilized. The translated Thai versions of all forms were translated back into English (original versions) by two bilingual colleagues who had not seen the original version. These included an English native speaking person who had been working in Thailand for 20 years and is fluent in the Thai language, and a bilingual Thai nurse colleague. 

Procedure
We obtained ethics approval from the relevant University Human Research Ethics Committee and participating hospitals. We also followed research principles relating to the conduct of research on violence against women (World Health Organization, 1999) to ensure the safety of respondents and researchers, protect confidentiality, and enhance data quality. Staff at the hospital approached eligible women who attended the antenatal clinic and asked if they were willing to speak with the researcher. Then, the first researcher or one of four female research assistants (three 4th year nursing students and a nursing lecturer) explained information regarding the study to all eligible pregnant women and asked for their informed consent. Our research assistants received a half day training session on IPV including types of violence, effects of IPV on women, myths about IPV, and available support and referral systems for abused women. They were also trained on how to ask questions from the study survey questionnaire.

We assured participating women of their anonymity, confidentiality, voluntary participation, and no effect on their care whether they chose to participate or not. After obtaining informed consent, we asked the participants to respond to questions about their experiences on IPV and their health using a survey questionnaire in a private area/room and without their partners/husbands, or a child aged three years or over. Any accompanying children were supervised by a research assistant in a nearby area. All participants were given a help card containing contact details of relevant support services. Women who reported abuse and wanted assistance were offered referral. During the study, none of the women requested assistance with referral.
Data were analyzed using the Statistical Package for the Social Sciences (SPSS version 12.01 for Windows). The sample was divided into two groups – abused and non-abused women. If participants reported any form of violence (psychological, threats and acts of physical or sexual) at any level of severity and frequency they were categorized into the “abused” group. Independent t-tests with Bonferroni adjustments were used to compare means between groups for data measured at ratio level. An alpha level of 0.05 was used for statistical tests as appropriate.

RESULTS

Sample

Participating women had a mean age of 25.9 years (SD = 5.28; range 18–40). They were 32 to 42 weeks pregnant, with an average of 35.8 weeks gestation (SD = 2.53). Table 1 provides an overview of sample characteristics. Almost all the women were married or in a common law relationship which has not been registered and diminishes the legal rights of women and obligations of men in regards to shared property and custody of the children. Just over half had been in their current relationship for less than 5 years, with a mean of 4.9 years (SD = 3.9, range 1-25 years). Just over two thirds had high school education or greater and around sixty percent were in paid employment while the remainder were housewives. Almost half had a monthly income between 1,000 and 5,000 Baht ($US 33.3 – 166.7). Most women lived with their extended family. Nearly half of the women were first time mothers. The majority of women attended an antenatal clinic at least 4 times during the current pregnancy.

Insert Table 1 about here

Prevalence of intimate partner violence
According to responses on the SVAW, 26.6% of participants were exposed to overall threats and acts of physical violence at some time (once or more) during the current pregnancy. Among these, participants reported rates of symbolic violence (n = 95, 22.6%), threats of mild violence (n = 46, 10.9%), threats of moderate violence (n = 22, 5.2%), threats of serious violence (n = 37, 8.8%), mild violence (n = 26, 6.2%), minor violence (n = 21, 5.2%), moderate violence (n = 12, 2.9%), serious violence (n = 8, 1.9%), and sexual violence (n = 81, 19.2%). The most commonly reported form of sexual violence during pregnancy was “partner demanded sex” (18.3%). Three percent reported their partner often “made me have sexual intercourse against my will”.

There were 46.1% (n = 194) of women exposed to psychological violence according to responses on the emotional/verbal subscale, and 35.6% (n = 150) in the dominance/isolation subscale with 53.7% of women (n = 226) exposed to overall psychological abuse during pregnancy. Between 10 to 14 percent of pregnant women were occasionally (at least once a fortnight) yelled or screamed at by their partners, told their feelings were irrational and crazy, were called names, and not consulted about decisions.

Functional health status

We found that women reporting violence (n = 251) had significantly lower mean scores than non-abused women (n = 170) in role emotional functioning (t (419) = 3.87, p = .001), bodily pain (t (419) = 4.64, p = .001), vitality (t (419) = 3.21, p = .001), and mental health (t (419) = 3.98, p = .001). The mean scores of the remaining subscales were lower for women who reported abuse than those who did not. However, there were no statistically significant differences in these subscales. A comparison of mean
SF-12 subscale scores between abused and non-abused women for any type of violence is presented in Table 2.

Insert Table 2 about here

DISCUSSION

Participating women reported high rates of psychological (53.7 percent), physical (26.6 percent) and sexual (19.2 percent) violence perpetrated by an intimate partner. These rates are disturbing and exceed those reported from the general population of rural women in another Thai province (Archavanitkul et al., 2003), and also higher than pregnant women from other parts of Thailand (Thananowan & Heidrich, 2008; Thananowan & Kaeorsansomut, 2010; Thanaudom, 1996).

Our findings are also disturbing because it is likely that our results underestimate violence experienced by childbearing women. In Thai culture, women are commonly blamed for abuse they receive, and disagreements between couples are perceived socially and legally as “private” matters (Archavanitkul, 1999). During antenatal interviews there was a tendency for women to minimize the violence, accept blame, make excuses for their partners’ behavior, or make “hopeful” statements that the violence would stop. Riddell, Ford-Gilboe and Leipert (2009) also found that women who have experienced IPV reported “pervasive feelings of self blame about causing the abuse, which were reinforced by others in their rural communities, such as a priest who convinced one woman that she was the problem, or police officers who accused women of provoking their partner” (p. 144).
Although the reported rates of violence are site specific, the sample was representative and our findings indicate that violence by an intimate partner is a common experience for Thai women who live in these rural areas. The violence occurred during a time when childbearing women are vulnerable and have few options for leaving a violent relationship. These findings also confirm a suggestion by Garcia-Moreno et al. (2006) that higher rates of violence occur in rural settings where there is low empowerment of women. The dominance of men is perpetuated through Thai culture and legislation that allows women to be controlled or chastised by their partners (Archavanitkul, 1999). In the current study, the majority of women had a monthly income of 5,000 Baht (US$166.7) and below, and almost 40 percent were housewives. This indicates that over one third of participants were reliant on their partners/husbands or someone else for financial support. In Thailand only women who are government employees, or employed in a private company and have a social security card are entitled to receive their monthly income from employers while on maternity leave. These types of employment opportunities are less likely in rural areas. The dependency of some women on their husbands’ financial/economic support increased the likelihood of being abused, and may limit their ability to seek help, obtain services and assistance they need in dealing with domestic violence, and or leave abusive relationships in order to protect themselves and their children from further abuse. Previous studies indicate that women who have a low income or live in poverty are more likely to be affected compared to women in high-income groups (Martin, Mackie, Kupper, Buescher, & Moracco, 2001). Although acknowledging social and demographic characteristics that define risk groups for domestic violence, Jewkes (2002) suggested that poverty increases risk through effects on partner conflict, diminished women’s power, and enhanced male identity. Levinson (1989) also stated that intimate partner violence
against wives occurs more frequently in societies in which men hold economic and
decision-making power in the household, where women do not have easy access to
divorce, and where violence is routinely used to resolve conflict. Having a stable
source of social support and economic independence from husbands and families offers
a woman some protection from violence (Levinson, 1989).

In our study, psychological violence was most prevalent with relatively lower rates of
physical and sexual violence. We found that 46.1% of participants experienced
emotional/verbal abuse and 35.6% reported experiencing dominance/isolation. This
high incidence indicated that Thai men exert power and control over their wives
through the use of emotional/verbal abuse, dominance and isolation. Given the type of
violence identified in our study, it is unlikely that rural Thai women will present to
antenatal clinics or emergency departments with gross physical injuries but
nevertheless are victims suffering high levels of psychological and sexual violence on a
regular basis. Archavanitkul et al. (2003) reported that one-third of women who had
serious injuries requiring hospital care never sought medical treatment. Women often
relate seriousness of violence directly to injuries and do not associate their stress and
ongoing abuse with other health problems, nor do they identify the health care system
as a place where they could go for help (Letourneau et al., 1999; Saito et al., 2009).

This study identified adverse health consequences of intimate partner violence for rural
Thai women during pregnancy. Childbearing women reporting any form of violence
had poorer health status compared to women who disclosed no violence. Our findings
are consistent with studies in other countries that found women who experienced abuse
score significantly lower functional health status than non-abused women (Bonomi et
al., 2006). Bonomi et al. found that women with any recent IPV (physical, sexual, or non-physical) had lower SF-36 mental and social functioning scores (range, 4.3-5.5 points lower across subscales) than women who had never experienced IPV. Women with recent physical and/or sexual IPV were 2.8 times as likely to report fair/poor health, and had SF-36 scores that ranged from 5.3 to 7.8 points lower, increased risk of depressive symptoms and severe depressive symptoms, and more than one additional symptom. The findings of our study also showed that IPV adversely affect physical role functioning, emotional role functioning, social functioning, bodily pain, mental health, and vitality. Similarly, a study conducted by Hazen, Connelly, Soriano and Landsverk (2008) found that physical violence was associated with psychological functioning of women. Abused women who experienced physical violence showed symptoms of depression, hostility, and somatization. Thananowan and Kaesornsamut (2010) also found that abused pregnant women had significantly higher stress and depressive symptoms, and lower self-esteem than those who were not abused. In addition, Tomasulo and McNamara (2007) found a significant relationship between exposure to verbal, physical and sexual abuse, and low mental and physical health among women who were abused. Women who were abused also tended to engage in fewer healthy behaviors.

There are limitations of the study that may affect the generalizability of results. Our study was conducted at two sites in a rural province and studies with larger, representative samples of childbearing women are required. Women’s reluctance to disclose violence may hamper research in this area and possibly hide the true nature of the problem. Although efforts were made to ensure women’s safety and encourage disclosure, some women may not have felt able to do so due to factors such as shame or
stigma, negative experiences with legal or authorities, or view of IPV as a private and primary issue (Saito et al., 2009). Despite the barriers to disclosure, health professionals have a responsibility of care to make direct inquiries and such efforts are appreciated. For example, one Australian study reported that pregnant women found routine screening questions about violence to be acceptable and helpful (Webster, Stratigos, & Grimes, 2001).

Under-reporting may have also occurred because participants identified violence only in relation to their partner. Given the extended family living arrangements in rural Thailand, status of the husband’s parents, and expectations of the son’s partner to be subservient to them, possible violence perpetrated by members of the extended family went undetected. In the general female Thai population Archavanitkul et al. (2003) found that only 44 percent of women disclosing physical violence had been injured by an intimate partner. Archavanitkul et al. (2003) also found 2% of participants living in Bangkok and 9% in a province in Central Thailand experienced sexual violence by their relatives or family members. Similarly, Babu and Kar (2009) found that Indian women were abused by their in-laws. This indicates that women may not be only at risk of being abused by their intimate partners but also by their in-laws or siblings. Future studies should therefore investigate all perpetrators of violence against childbearing women.

It is uncertain as to whether studies about violence should be conducted by independent researchers or known hospital staff. Women may be more willing to disclose violence to someone in a trusted position, but with whom they do not have on-going contact. Furthermore, the quality of interactions with women for research purposes needs to be
monitored, through professional supervision, to ensure that subtle judgmental attitudes do not hinder any initial attempts by women to discuss their experiences with interviewers. Although the first researcher provided training to the researcher assistants, there was no ongoing monitoring of interview quality in the present study.

We used tools that were originally developed in industrialized, western cultures, therefore they may not have captured the cultural context that influences intimate partner interactions between Thai couples. Future research could continue to adapt tools to different cultures. Finally, we did not investigate risk and protective factors which may inform future screening activities and interventions for at-risk women.

**CONCLUSIONS AND RECOMMENDATIONS**

Our findings add to knowledge about the association between intimate partner violence and adverse health consequences, regardless of type of violence. Respectful and culturally sensitive questioning and early interventions are important to obtain early identification of victimization and prevent further harm. Screening is particularly important in Thailand where disclosing family/personal problems is socially unacceptable. Despite the disturbingly high prevalence identified, this rate is likely to under-estimate the problem. The pattern of psychological and sexual tactics and relatively less physical violence in this rural Thai population may also contribute to non-disclosure and decrease perceived need to access health services. In addition to psychological violence, we found a high rate of sexual violence which is more stigmatized. Many women may prefer to suffer in silence than risk the shame associated with disclosing a sex-related matter (Ellsberg, 2006).
Health care professionals need to be aware of the impact of intimate partner violence on the functional health status of childbearing women and recognize signs of ongoing violence when women present to hospital or health care clinics. Their understanding of women’s experiences of abuse and willingness to help may facilitate trusting relationships and prompt disclosure. Health care personnel need to understand the complexity surrounding intimate partner violence, identify signs and symptoms of all types of violence, provide adequate attention and early, effective intervention, and raise awareness of the direct consequences of violence on the health of women, their infants and other children (Wathen & MacMillan, 2003).

Overall, our study highlights the urgent need for violence screening to identify risk, provide early intervention, and effectively manage the adverse consequences of violence for childbearing women. However, support systems for abused women must be available to accommodate women’s needs following screening. It would be disempowering for women to disclose violence but then receive no support to enact change in their lives.
REFERENCES


Table 1: Women's demographic and obstetric characteristics (n = 421)

<table>
<thead>
<tr>
<th>Demographic and obstetric characteristics</th>
<th>Study sample</th>
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<tbody>
<tr>
<td></td>
<td>n (%)</td>
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<tr>
<td><strong>Marital status</strong></td>
<td></td>
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<tr>
<td>Married</td>
<td>396 (84.1)</td>
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<td>Common law marriage</td>
<td>22 (5.2)</td>
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<tr>
<td>Separated</td>
<td>3 (0.7)</td>
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<td><strong>Length of relationship (years)</strong></td>
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<tr>
<td>Less than 5 years</td>
<td>243 (57.7)</td>
</tr>
<tr>
<td>5-10 years</td>
<td>144 (34.2)</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>34 (8.1)</td>
</tr>
<tr>
<td><strong>Education of women</strong></td>
<td></td>
</tr>
<tr>
<td>Primary school</td>
<td>134 (31.8)</td>
</tr>
<tr>
<td>High school</td>
<td>186 (44.2)</td>
</tr>
<tr>
<td>Diploma/certificate</td>
<td>72 (17.1)</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>27 (6.4)</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>2 (0.5)</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td>166 (39.4)</td>
</tr>
<tr>
<td>Paid employment</td>
<td>255 (60.6)</td>
</tr>
<tr>
<td><strong>Monthly Income</strong></td>
<td></td>
</tr>
<tr>
<td>Below 1,000 Baht (less than $US 33.3)</td>
<td>171 (40.6)</td>
</tr>
<tr>
<td>1,000 - 5,000 Baht ($US 33.3- 166.7)</td>
<td>179 (42.5)</td>
</tr>
<tr>
<td>5,001 - 9,000 Baht ($US 166.8- 300)</td>
<td>47 (11.2)</td>
</tr>
<tr>
<td>9,001 – 20,000 Baht ($US 300.03- 666.7)</td>
<td>21 (5.0)</td>
</tr>
<tr>
<td>More than 20,000 Baht (more than $US 666.7)</td>
<td>3 (0.7)</td>
</tr>
<tr>
<td>Parity</td>
<td>Count (Percentage)</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Nulliparous</td>
<td>202 (48.0)</td>
</tr>
<tr>
<td>Multiparous</td>
<td>219 (52.0)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>First antenatal check up</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 13 weeks gestation</td>
<td>203 (48.2)</td>
</tr>
<tr>
<td>13-20 weeks</td>
<td>159 (37.8)</td>
</tr>
<tr>
<td>21-28 weeks</td>
<td>46 (10.9)</td>
</tr>
<tr>
<td>29-32 weeks</td>
<td>9 (2.1)</td>
</tr>
<tr>
<td>33-40 weeks</td>
<td>4 (1.0)</td>
</tr>
</tbody>
</table>
Table 2: Comparison of mean SF-12 scores for abused and non-abused women

<table>
<thead>
<tr>
<th>SF-12 Subscales</th>
<th>Abused women (n = 251)</th>
<th>Non-abused women (n = 170)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{x}$</td>
<td>SD</td>
</tr>
<tr>
<td>Physical Functioning</td>
<td>71.9</td>
<td>20.6</td>
</tr>
<tr>
<td>Role Physical</td>
<td>65.7</td>
<td>23.6</td>
</tr>
<tr>
<td>Body Pain*</td>
<td>75.2</td>
<td>20.4</td>
</tr>
<tr>
<td>General Health</td>
<td>51.0</td>
<td>18.5</td>
</tr>
<tr>
<td>Vitality*</td>
<td>49.0</td>
<td>25.7</td>
</tr>
<tr>
<td>Social Functioning</td>
<td>84.6</td>
<td>23.4</td>
</tr>
<tr>
<td>Role emotional*</td>
<td>84.1</td>
<td>20.4</td>
</tr>
<tr>
<td>Mental Health*</td>
<td>72.9</td>
<td>15.8</td>
</tr>
</tbody>
</table>

*p <.05