Abstract
Objective: The aim of this study was to estimate the prevalence of sexual intimate partner violence (SIPV) and to investigate its associated factors among women attending public obstetrics, gynecology, and family planning health services of the city of Marivan, Iran.

Materials and methods: This multistage cluster sampling study recruited 770 women attending the public obstetrics, gynecology and family planning health services of the city of Marivan from May to November, 2009.

Results: Our findings confirmed that about one-third of the women experienced SIPV (32.9%). Statistically significant differences were found (p < .001) in SIPV by almost all demographic and characteristic variables. Woman’s circumcision, forced marriage, spouse's infidelity, level of sexual desire, woman's pleasure from intercourse, and spouse’s inattention to woman’s sexual satisfaction during intercourse were statistically significant predictors of SIPV, and also, were accounted for 61.8% of the participants.

Conclusion: Public health centers and health-care providers should focus on both women and their spouses in order to participate in both national and community level of educational and promotional intervention programs. Without their participation, the likelihood of success in decreasing SIPV against women would be low.

Keywords: Sexual Intimate Partner Violence, Domestic Violence, Women, City of Marivan

Introduction
Intimate partner violence (IPV) is one of major public health problem worldwide, defined as the use of actual or threatened physical, sexual, and psychological IPV by current spouse (1). IPV comprises four types of behavior, including physical violence, sexual violence, threats and emotional abuse (2). As a definition, sexual violence is “a completed or attempted sex act against the victim’s will, involving a victim who is unable to consent or to refuse, abusive sexual contact, and non-contact sexual abuse, including sexual harassment” (3). Sexual violence is forcing a partner to take part in a sex act when the partner is not consent (2).
World Health Organization (WHO) has announced that, worldwide, at least one out of five women has been sexually or physically assaulted by a man or men over their lifetime (1). The Australian component of the International Violence against Women Survey has found that about two-thirds (57%) of Australian women have experienced at least one incident of physical violence or sexual violence by a man at sometime in their life (4). Also, in Ethiopia and Zimbabwe, nearly 26% to 59% of women are forced to have sex by intimate partners (5).

Victims of sexual intimate partner violence (SIPV) may experience the following factors: (i) Psychological consequences, such as depression, low self-esteem, anxiety, and suicide attempts, (ii) Health-related consequences, like sexually transmitted diseases, gastrointestinal disorders, gynecological or pregnancy complications, and sexual dysfunction, (iii) Substance abuse, like trauma to reproductive organs and (iv) Chronic infections, including pelvic inflammatory diseases (PID) (3, 6-10). These consequences may cause hospitalization, disability, or death (3). Although all types of SIPV results to depression, women experiencing SIPV may have more depressive symptoms (11-14).

Previous studies have shown a strong correlation between SIPV and the following factors: impoverishment, addiction, lack of religious commitment, sexual disability, male occupational status, and socioeconomic factors, such as lower level of education, income, and unemployment (15-22). For example, previous studies in Iran (21-22) found that weak commitment to religion may be a risk factor for IPV.

In Iran, IPV is a social problem (23) and a significant concern, as well. As reported by Office of United Nations High Commissioner for human Rights (OHCHR), there is lack of access to evident and precise information on domestic violence against women in Iran(24). In a study on IPV against women in the city of Kazeroon, Iran, it was reported that the prevalence of sexual violence against women is 30.9% (22). Another study in the city of Babol, Iran, also, found that about 43% of women had experienced sexual assault from their spouses in the previous year (16).

An enriched comprehension and thorough knowledge of the causes of IPV behavior, especially SIPV against women and its related factors, and suggestions for investigating the burden of the problem and its risk factors, could establish a significant part of effective intervention programs, specifically in settings where knowledge is confined and data are scarce and difficult to access (25). Moreover, the number of studies in a small and underprivileged border city for investigating the prevalence of SIPV and its associated factors does not go beyond the number of fingers. Therefore, the aim of this study was to estimate the prevalence of SIPV and to investigate its related factors among women attending public obstetrics, gynecology, and family planning health services of the city of Marivan, Iran.

**Materials and methods**

This multistage cluster sampling study recruited 770 women attending the public obstetrics, gynecology and family planning health services of the city of Marivan. The 5-month study was from May to September 2009. The city of Marivan has totally 14 centers of obstetrics, gynecology and family planning health services among which six centers are placed in the urban regions and eight in rural areas of the city. The age of participants was ranging from 15 to 75 years old. The respondents were married women who signed consent forms to participate in the study. The response rate of the cases was 96%.

The study started at the fourteen centers, simultaneously. Before starting the study, a female healthcare provider of every health care center had been trained to provide emotional support to the participants before beginning of the interview. The interview continued for 20 to 40 minutes. The participants were assured of the confidentiality of the information released. The formula \( n = \frac{Z^2 PQ}{d^2} \) was used to estimate the sample size, where \( p = 0.65, Q = 0.35, \) and \( d = 0.05 \). As cluster sampling method was used, the estimated sample size was doubled (n = 702). The power of the study was 80%.

The Human Subjects Committee at the School of Public Health of Kurdistan University of Medical Sciences reviewed and approved the original survey protocol. Then, the Medical Research Council of Ethics Committee of the Kurdistan University of Medical Sciences issued the ethical approval for the study.

The Sexual Intimate Partner Abuse Questionnaire (SIPAQ) applied for this study was developed by the researchers after a review of the relevant literature (16, 18, 22, 26). The SIPAQ is a 3-item scale, and the respondents should select “Yes” or “No” for each item. Then, the possible score ranged from 0-3. This
questionnaire was pilot-tested, and was also found to
be suitable for the purpose of the study (α in pilot
sample was 0.60, while in final sample was 0.61). If
all answers were positive, we considered the
individual as an abused one.

One-way ANOVA, t-test, bivariate correlations,
and binary logistic regression were used to analyze
the obtained data. The statistical package for the
social sciences (SPSS), version 17, was used for the
purpose of data entry, manipulation, and analysis.
The level of significance was set, a priori, at 0.05
(p<0.05).

Results

Table 1 demonstrates the basic characteristics of the
participants and their spouses, as well as the
relationship between SIPV and demographic
characteristics of married women attending public
obstetrics, geneceology and family planning health
services of the city of Marivan, Iran. The mean age of
the women was 36.5 ± 12.7 years, ranging from 15 to
75 years. The duration of marriage among
participants ranged from 2 months to 59 years
(X = 17.27; SD = 16.6).

Our results showed that about 32.8% (254) of the
participants had experienced SIPV. Forty-three
percent (341) had the experience of forced
intercourse, and 12.5% (96) were forced to have non-
vaginal sex. Moreover, 144 (18.7%) women reported
that they had the experience of annoying during
intercourse. Also, 140 (18.2%) women reported that
they were circumcised.

Applying a series of t-tests for independent
samples, statistically significant differences
(p < .001) were found in sexual IPV by woman’s rival wife, woman’s circumcision, woman’s forced marriage, spouse’s infidelity, and spouse’s inattention to woman’s sexual satisfaction during intercourse (Table 2). Moreover, statistically significant differences (p < .01) were found in sexual IPV by woman and spouse’s level of religious commitment, woman’s level of sexual desire, woman’s pleasure from intercourse and woman’s sex with strangers to take revenge from spouse, using a series of ANOVA tests (Table 2). Table 2 also shows the relationship between sexual IPV and some baseline characteristics of married women attending public obstetrics, gynecology and family planning health services of city of Marivan, Iran.

**Table 2:** Relationship between sexual IPV and some baseline characteristics, as well as statistical differences in sexual IPV by some baseline characteristics of married women attending public obstetrics, gynecology and family planning health services of the city of Marivan, Iran (n = 770)

| Characteristic | Women (n = 770) | p value | Pearson r (p) |
|---------------|----------------|---------|---------------|
| Woman's level of religious commitment [n (%)] | | | |
| Weak | 50(6.5) | .000 | -.230 (.000) |
| Moderate | 463(60.1) | | |
| Substantial | 257(33.4) | | |
| Spouse's level of religious commitment [n (%)] | | | |
| Weak | 105(9.6) | .000 | -.319 (.000) |
| Moderate | 426(58.3) | | |
| Substantial | 239(31) | | |
| Woman's rival wife [n (%)] | | | |
| Yes | 22(2.9) | .000 | -.064 (.075) |
| No | 748(97.1) | | |
| Woman’s circumcision [n (%)] | | | |
| Yes | 140 (18.2) | .001 | -.122 (.001) |
| No | 630 (81.8) | | |
| Woman’s forced marriage [n (%)] | | | |
| Yes | 164 (21.3) | .000 | -.303 (.000) |
| No | 606 (78.7) | | |
| Spouse’s infidelity [n (%)] | | | |
| Yes | 96 (12.5) | .000 | -.307 (.000) |
| No | 659 (85.6) | | |
| Spouse’s inattention to woman’s sexual satisfaction while intercourse [n (%)] | | | |
| Yes | 493 (64) | .000 | .613 (.000) |
| No | 277 (36) | | |
| Level of sexual desire [n (%)] | | | |
| Very low | 100 (13) | .000 | -.298 (.000) |
| Low | 208 (27) | | |
| Moderate | 409 (53.1) | | |
| High | 50 (6.5) | | |
| Very high | 3 (0.4) | | |
| Woman’s pleasure from intercourse [n (%)] | | | |
| Never | 80(10.4%) | .000 | .650 (.000) |
| Sometimes | 560(72.7%) | | |
| Always | 130(16.9%) | | |
| Woman’s sex with strangers to take revenge from spouse [n (%)] | | | |
| Yes | 11(1.4%) | .022 | -.079 (.028) |
| No | 749(97.3%) | | |
| I do not answer | 10(1.3%) | | |
Multiple regression analysis was employed to explain the variation in SIPV score. As there is shown in Table 3, all variables (circumcision, forced marriage, spouse’s infidelity, level of sexual desire, woman’s pleasure from intercourse, and spouse’s inattention to woman’s sexual satisfaction during intercourse) accounted for 61.4% of the variation among which woman’s pleasure from intercourse and spouse’s inattention to woman’s sexual satisfaction during intercourse were the strongest predictors of SIPV.

**Discussion**

The aim of this study was to determine the prevalence of SIPV and its related factors among women in city of Marivan, Iran. The results showed that the SIPV prevalence in city of Marivan is 32.9%, which is somewhat close to the prevalence (30.9%) reported by Vakili et al. (2010) (22) in the city of Kazeroon, Iran, but not so close to the prevalence (42.4%) reported by Faramarzi et al. (2005) (16) in the city of Babol, Iran. Similarly, in a study conducted in India (2006), the lifetime coercive sexual intercourse was reported as 31.8% (27). In a study performed in Nevada (2010) (28), about 68% of women had experienced some kind of lifetime SIPV.

The results of present study showed that the most frequent SIPV experienced by women in the city of Marivan was, “forced intercourse”. Also, the less prevalent SIPVs were “annoying during intercourse” and “forced non-vaginal sex”, respectively. In the study conducted by Vakili et al. (2010) (22) in city of Kazeroon, Iran, the prevalence of “forced intercourse”, “forced non-vaginal sex” and “annoying during intercourse” were 26.3%, 10.5%, and 11.3%, respectively. Although, these results in terms of the order of SIPV domains are similar with those of our study, but as it is clear, the prevalence of each SIPV domain is much less than its equivalent in our study. Therefore, our findings show that the prevalence of SIPV in the city of Marivan, as a small, deprived and border city, may be much more than the other places in Iran. Further research in different locations of Iran and other developing countries may provide a better understanding of the prevalence of SIPV, and also reveals a range of great comparisons between different places.

In this study, there was no significant relationship between either SIPV and woman and spouse’s employment, or SIPV and family monthly income. A reason for this finding may be the deprivation of all people of the city of Marivan, in both urban and rural places, in terms of economic situations, which may, in turn, results in misbehavior of SIPVs. But, significant correlations were found between SIPV and woman’s age, woman’s age at the time of marriage, marriage duration, residence place, as well as woman’s education. These findings are consistent with those in studies conducted in the cities of Kazeroon (2010), (22) and Babol (2005) (16). Moreover, there was a converse relation between woman’s education and increasing rate of SIPV, which is also similar with those reported by Vakili et al. (2010) (22).

In the present study, there were significant correlations between increasing rate of SIPV and all baseline characteristics of the participants, including woman's rival wife, woman's circumcision, woman’s forced marriage, spouse’s infidelity, spouse’s inattention to woman’s sexual satisfaction during intercourse, woman and spouse's level of religious commitment, woman's level of sexual desire, woman’s pleasure from intercourse, and woman’s sex with strangers to take revenge from spouse. In another study conducted in Iran (2007) (21), significant differences were found in rate of IPV by woman's coercive marriage, as well as woman and

**Table 3: Regression analysis of circumcision, forced marriage, spouse’s infidelity, level of sexual desire, woman’s pleasure from intercourse, and spouse’s inattention to woman’s sexual satisfaction during intercourse as predictors of sexual IPV**

| Predictors                                                       | Standardized-B | t     | p value | R²       |
|------------------------------------------------------------------|----------------|-------|---------|----------|
| Woman’s circumcision                                             | 0.007          | 0.285 | 0.776   |          |
| Forced marriage                                                  | -0.104         | -4.372| 0.000   |          |
| Spouse’s infidelity                                              | -0.108         | -4.543| 0.000   | 0.614    |
| Level of sexual desire                                           | -0.014         | -0.518| 0.604   |          |
| Woman’s pleasure from intercourse                                | 0.466          | 17.694| 0.000   |          |
| Spouse’s inattention to woman’s sexual satisfaction during intercourse | 0.395          | 15.743| 0.000   |          |

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spouse’s level of religious commitment. Considering the religious context of the setting in the present study, having substantial level of religious commitment may prevent the spouses from performing SIPV, as they believe in the futurity and punishment of the people violating others.

In the present study, multiple regression analysis showed that woman’s forced marriage, spouse’s infidelity, woman’s pleasure from intercourse, and spouse’s inattention to woman’s sexual satisfaction during intercourse were significant predictors of SIPV, and they accounted for 61.4% of the variation among which woman’s pleasure from intercourse and spouse’s inattention to woman’s sexual satisfaction during intercourse were the strongest predictors of SIPV.

The present study may have some limitations as followings: (i) collecting data using self-report assessment (ii) considering the sensitive nature of SIPV, (iii) underestimating the true prevalence, and (iv) presence of bias in recalling of lifetime experience. But, in spite of these limitations, our findings may have several implications for health promoters and policymakers. Furthermore, our findings may be considered as a contribution to the literature and research on the prevalence of SIPV, or it may influence future research for filling in the gaps of literature about Iranian society.

Public health centers and healthcare providers may have a more significant role in detection of SIPV and in establishing of education centers in order to inform women about their main rights and to show them how to tackle this harmful problem. A major strategy to prevent SIPV against women may focus on both women and their spouses in order to participate in both national and community level of educational and promotional intervention programs. Without their participation, the likelihood of success in decreasing SIPV against women would be low.

We suggest further research to be conducted, especially in developing countries, to provide knowledge for stopping this conflict against women.

Acknowledgement

The authors thank all women participating in the study conducted in the city of Marivan. There is no conflict of interest in this study.

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