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Violence among women living with HIV in Iran: prevalence and related risk factors

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Abstract

Introduction: Because of socio-cultural factors, such as violence perpetrated by intimate partners, women continue to be disproportionately affected by the human immunodeficiency virus (HIV)/acquired immune deficiency syndrome (AIDS) epidemic. Intimate partner violence has an impact on participation in treatment of HIV-positive women. The aim of this study was to estimate the prevalence of lifetime violence among Iranian women living with HIV, and to identify possible risk factors.

Material and methods: The study was conducted among 135 HIV-positive women referring to the Counseling Center for Behavioral Diseases of Imam Khomeini Hospital in Tehran. In this study, a researcher-made questionnaire was used for collecting data through face-to-face interviews. The questionnaire included questions related to basic socio-demographic, sexual practices, stigma/discrimination, and domestic violence.

Results: Of the 135 interviewees, 91.5% had never experienced mental violence, and 84.4% had never experienced social violence, while 97.8% suffered from violence in their marriages. In our study, women's unemployment, low socio-economic status, and patriarchal dominance in families were the main predictors of intimate partner violence (IPV). We found a negative relationship between marital satisfaction and domestic violence. It was revealed that IPV also affects couples' ability to issues related to their sexual life, including negotiating condom use and monogamy.

Conclusions: A high proportion of HIV-positive women in Iran reported an experience of IPV in their lives. IPV was associated with situations involving a woman having an intimate relationship with her male partner. Due to its' high prevalence, we recommend increasing knowledge about IPV among HIV healthcare providers and universal screening.

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Key words: HIV, women, intimate partner violence.

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Introduction

Violence and human immunodeficiency virus (HIV) are two major public health issues that affect many women around the world and require special consideration. By 2020, women accounted for approximately 50 percent of new HIV cases globally, and in some regions, the rates of women and girls were even higher [1]. According to the World Health Organization (WHO), one out of every three women worldwide has experienced at least one kind of physical or sexual violence from a partner during their lifetime [2]. Growing evidence suggests that women who have experienced intimate partner violence (IPV) are more likely to develop HIV compared to women who have not [3]. Studies have shown that direct HIV transmission can occur as a result of enforced sexual contact with an HIV-positive intimate partner [4]. In addition, there is a higher risk of HIV among perpetrators of IPV and at the same time, women's ability to negotiate condom use or refuse to have sex is lower in such relationships [5]. Additionally, women living with HIV are more likely to experience violence [6]. A study in Uganda [7] showed that the prevalence of physical and sexual partner violence in the last 12 months among HIV-infected women was 29%. Studies among women living with HIV have demonstrated that several socio-structural factors, such as relative stigma, cultural norms, lower socio-economic status, and gender beliefs, may be associated with potential violence against them [7, 8]. Moreover, domestic violence may lead to poorer engagement in medical care and sub-optimal antiviral therapy (ART) compliance [9]. Therefore, HIV infection is an important risk factor for violence against women and might have serious outcomes in this vulnerable population.

There is lack of information about the prevalence of violence against HIV-positive women and its' associated risk factors in Iran, where 16,000 women aged 15 and over have been diagnosed with HIV and it has a remarkable increase over the past decade [10]. According to a systematic review by Adineh *et al.* [11] in 2016, the prevalence of violence against women is about 61.8% in Iran. Different factors are assumed to be related to the high-risk of violence against women in Iran, including low literacy, poor socio-economic status, poverty, and patriarchal ideology [12]. One of the significant barriers to providing effective and necessary services to HIV-positive patients by medical staff is the stigma and discrimination that they experience in healthcare centers [13].

Identifying factors connected to experiencing violence among women living with HIV may help prevent violence and its' associated health repercussions among this population. Therefore, this survey attempted to estimate the prevalence of experienced violence and determine the possible associated factors among women living with HIV in Iran.

Material and methods

Study setting and population

This cross-sectional survey was conducted in 2012 at the Counseling Center for Behavioral Diseases of Imam Khomeini Hospital in Tehran. This center has the highest records of HIV cases in the country and serves as the main referral center for these patients. Inclusion criteria were being an ever married Iranian woman with positive HIV status for at least 3 months, having health records in the selected center, and absence of any psychological illnesses based on physician's diagnosis.

Measures and instruments

Data were collected using a researcher-made questionnaire through face-to-face interviews. It included questions related to basic socio-demographic, sexual practices, stigma/discrimination, and domestic violence.

In this study, domestic violence (including psychological violence, physical violence, and social violence) was assessed as follows. Participants were asked whether they had ever experienced certain physical violence by their current intimate partner. Social violence has been defined as preventing women from interacting with the social environment. Thus, in this study, it was described as controlling women in their daily trips, restricting women from going to relatives' homes, restricting women from communicating with friends, and a restriction on women's employment. Psychological violence was defined as any form of criticism, insult, humiliation, teasing, and lack of care in times of illness.

The first part of the questionnaire included 12 questions about demographic characteristics of patients. The second part contained 15 questions related to determination of violence, of which each of psychological, physical, social, and sexual violence had 5, 2, 4, and 4 questions, respectively. We used a scoring system as described below. Patients had to respond either 'Yes' or 'No', with scores of 1 and 0, respectively. The overall score range was between zero and 15. Scores 1-5 indicated mild violence, scores 5-10 suggested moderate violence, and scores of 10 or higher were defined as severe violence.

Ethical consideration

This study was approved by the Allameh Tabataba'i University. To meet ethical obligations, written informed consent was obtained from all participants. To protect participants' privacy and information confidentiality, no identifiers were collected at any stage. Participants were verbally interviewed, and their responses were recorded by interviewing staff on paper and later transferred into an online, password-protected database.

Statistical analysis

Data were analyzed by SPSS software v.22 using descriptive statistics, χ^2 test, independent samples *t*-test, and ANOVA. Significance level was considered at $p = 0.05$.

Results

A total number of 135 female HIV patients were interviewed in the present study. The participants' age ranged from 20 to 61 years (mean age, 32). Almost a third of them were in

the age group of 20 to 29 years, and about half were in the age group of 30 to 39 years. Socio-demographic and clinical characteristics of the study population are shown in Table 1. Only 5.2% of the total sample had a bachelor's degree or higher, 5.2% had a postgraduate degree, 30.4% had a diploma, and 4.4% were illiterate. Around 4.4% of them had continued their education up to high school, 24.4% up to the ninth grade, and 25.9% up to the elementary level. An estimated 28.9% of the participants were employed, and 71.1% were housewives. Almost two-thirds of spouses were employed. All participants were receiving medical care, and the length of time since HIV diagnosis was 1 to 10 years. Around 17% of women living with HIV/AIDS had been diagnosed within less than a year, 37% within the last 1 to 3 years, 15.6% within 3 to 5 years, 15.6% within 5 to 7 years, 8.1% within 7 to 9 years, and 6.7% more than 10 years ago.

The majority of participants had acquired HIV infection through their husbands (84.4%). Of all women with HIV/AIDS, 15% were infected through injections with contaminated syringes, 3% through sex outside the family, 2.2% through contaminated blood products, 3.7% through tattoos, and 5.2% through other routes.

Of all the women participating in this study, 15.9% had a low socio-economic status, while 40.0% had a medium status, and 8.1% had a high status. Regarding the husbands, 12.6% had an income between 300 to 500 dollars, 5.9% between 100 to 300 dollars, and 30.4% less than 100 dollars per month. Around 2.2% of husbands had a bachelor's degree or higher, 3% had a postgraduate degree, 28.1% had a diploma, and 6.7% were illiterate. Also, 5.9% of husbands had continued their education up to high school, 33.3% up to the ninth grade, and 20.7% up to the elementary level. About 8.1% of the husbands had very high, 11.9% high, 29.6% medium, 2% low, and 30.4% very low job ranks. Moreover, about 45.2% of their husbands were in low, 38.5% in average, and 16.3% in high socio-economic groups.

Domestic violence

64% of the participants experienced domestic violence during living with their husbands, of which about 11.9% experienced high levels and 23.7% experienced moderate levels of domestic violence.

Psychological violence

Around 8.1% of the participants experienced very high, 11.1% high, 22.2% moderate, 17% low, and 41% very low levels of psychological violence during living with their husbands.

Physical violence

Around 2.2% of women experienced very high, 5.2% high, 4.4% moderate, 68.9% low, and 19.3% very low physical violence during living with their husbands.

Social violence

Around 15.6% of the participants experienced very high, 6.6% high, 11.9% moderate, 12.6% low, and 53.3% very low social violence during living with their husbands.

Patriarchy

Of the total population surveyed, 31.9% witnessed very high, 25.2% high, 15.5% low, and 27.4% very low patriarchal attitudes in their family.

Satisfaction with marital life

Around 34.8% of the participants were very highly satisfied, 20.7% were highly satisfied, 20.7% were low satisfied, and 23.7% were very low satisfied in their marital relationship with their husbands.

Social activity

Around 16.3% of participants had very high, 16.3% had high, 21.5% had moderate, 20.7% had low, and 25.2% had very little social activity after marriage outside their home.

Discussion

The aim of this study was to determine the prevalence of violence and its' associated factors among women with HIV who attended the Counseling Center for Behavioral Diseases of Imam Khomeini Hospital in Tehran, Iran. The findings showed that 91.5% of HIV-positive women enrolled in the present study experienced mental violence, 84.4% experienced social violence, and 97.8% witnessed violence during their living with their husbands, which is consistent with the results of a research [6] conducted among 945 HIV-positive women in 94 countries. On the other hand, the estimated prevalence of violence in our study is much higher than that of the World Health Organization (WHO) report for the female population in Iran [14], in which 15%, 42.4%, and 81.5% of wives had been reportedly experienced physical, sexual, and psychological violence, respectively. Additionally, it is greater than the rates recorded in studies conducted in Kazakhstan [15] and Rwanda [16] among HIV-positive individuals. The disparity in prevalence might be explained by differences in the research population and setting.

The findings in the current study identified several key predictors of IPV, including the lower level of education for both women and their partners, women's unemployment, low socio-economic status, and dominancy of patriarchy in the families. This finding is in line with the results of previous research by Abramsky [17], Bates [18], and Hoffman [19]. In Muslim populations, such as Iran, HIV-infected women are indirectly encouraged to tolerate their husband's violent behaviors and all types of abuse because of the greater stigma towards HIV-infected individuals [20]. The patriarchal cul-

Table 1. Socio-demographic and clinical characteristics of the study population

Characteristics	*n* (%)
Age, years	
20-29	45 (33.3)
30-39	66 (48.9)
40-49	18 (13.3)
> 50	6 (4.4)
Condition of infection	
Injection with contaminated syringe	2 (15.0)
Marital relationship with husband	114 (84.4)
Relationships outside the family	4 (3.0)
Blood products	3 (2.2)
Tattoo	5 (3.7)
Other	7 (5.2)
Duration of diagnosis (for female patients)	
< 1	23 (17.0)
1-3	50 (37.0)
3-5	21 (15.6)
5-7	21 (15.6)
7-9	11 (8.1)
> 10	9 (6.7)
Education	
Female patients	
Bachelor's degree and higher	7 (5.2)
Associate degree	7 (5.2)
Diploma	41 (30.4)
High school	6 (4.4)
Ninth grade	33 (24.4)
Elementary	35 (25.9)
Illiterate	6 (4.4)
Husbands	
Bachelor's degree and higher	3 (2.2)
Associate degree	4 (3.0)
Diploma	38 (28.1)
High school	8 (5.9)
Ninth grade	45 (33.3)
Elementary	28 (20.7)
Illiterate	9 (6.7)
Employment status	
Female patients	
Employed	39 (28.9)
Housewife	96 (71.1)
Husbands	
Employed	96 (71.1)
Unemployed	39 (28.6)

Table 1. Cont.

Characteristics	*n* (%)
Income	
Female patients	
More than 700 dollars	5 (3.7)
500 to 700 dollars	9 (6.6)
300 to 500 dollars	15 (11.1)
100 to 300 dollars	9 (6.7)
Less than 100 dollars	97 (71.9)
Husbands	
More than 700 dollars	37 (27.4)
500 to 700 dollars	32 (23.7)
300 to 500 dollars	17 (12.6)
100 to 300 dollars	8 (5.9)
Less than 100 dollars	41 (30.4)
Job rank	
Female patients	
Very high	3 (2.2)
High	9 (6.7)
Medium	12 (8.9)
Low	15 (11.1)
Very low	96 (71.1)
Husbands	
Very high	11 (8.1)
High	16 (11.9)
Medium	40 (29.6)
Low	27 (20.0)
Very low	41 (30.4)
Socio-economic base	
Female patients	
High	11 (8.1)
Medium	54 (40.0)
Low	70 (51.9)
Husbands	
High	22 (16.3)
Medium	52 (38.5)
Low	61 (45.2)
Violence	
Mental	
Very high	11 (8.1)
High	15 (11.1)
Medium	30 (22.2)
Low	23 (17.0)
Very low	56 (41.0)

Table 1. Cont.

Characteristics	*n* (%)
Physical	
Very high	3 (2.2)
High	7 (5.2)
Medium	6 (4.4)
Low	93 (68.9)
Very low	26 (19.3)
Social	
Very high	21 (15.6)
High	9 (6.6)
Medium	16 (11.9)
Low	17 (12.6)
Very low	72 (53.3)
Domestic	
High	16 (11.9)
Medium	32 (23.7)
Low	87 (64.4)
Employment status and social violence of husbands	
Employed	
Very high	11 (11.5)
High	7 (7.3)
Medium	9 (9.4)
Low	15 (15.6)
Very low	54 (56.2)
Unemployed	
Very high	10 (25.6)
High	2 (5.1)
Medium	7 (17.9)
Low	2 (5.1)
Very low	18 (46.2)
Patriarchy	
Very high	43 (31.9)
High	34 (25.2)
Low	21 (15.5)
Very low	37 (27.4)
Satisfaction of women with their marital relationship	
Very high	47 (34.8)
High	28 (20.7)
Low	28 (20.7)
Very low	32 (23.7)
Women's social activity outside the home	
Very high	22 (16.3)
High	22 (16.3)
Medium	29 (21.5)
Low	28 (20.7)
Very low	34 (25.2)

ture in the families of participants in this study was associated with a higher rate of domestic violence against women. The patriarchal norms are still dominant in Iranian families, so it is expected for women to be subjected to domestic violence [21]. Similarly, Hajikhani Golchin *et al.* [22] reported similar results in man-dominant families in their study.

We observed a negative association between women's satisfaction in their marital life and the rate of domestic violence. IPV also affects couples' ability to communicate openly about safe sex behaviors, such as monogamy and negotiating condom use [23].

Domestic violence have a severe impact on the physical and emotional health of HIV-positive women. Additionally, it could expose them to discrimination, financial loss, difficulties in personal relationships, and the risk of suicide [24]. Living with HIV and experiencing violence at the same time can have long-term medical and psychological effects for women who had been harmed. Both commitment to therapy and overall well-being might be adversely affected by this double load. Those who experienced IPV were less likely to participate in HIV treatment and have a low viral load, according to previous research among HIV-positive women [9, 25-31].

It is necessary for women living with HIV to be aware of their rights, and be able to recognize and seek help to combat gender-based violence at home and workplace. Therefore, it is recommended that future policies and interventions target this vulnerable population to increase their awareness, and improve their help-seeking behaviors at the time of crisis.

The limited sample size, recall bias, and under-reporting are all potential limitations of this study, as we relied on the participants' accurate recall of their violence experience and related stigma. Also, the hospital-based survey's study design may limit the extent, to which the results can be generalized to the general public. However, because the study was conducted in a tertiary referral center, the sample examined is likely to share some characteristics with the surrounding community.

Conclusions

Nearly four in five women living with HIV had suffered social violence in their lifetime. In the higher education level of the women or their spouse, the less physical or psychological violence occurred. To conclude, women living with HIV experience violence for a variety of reasons, including socio-cultural and gendered norms and beliefs. The findings highlighted the need to raise awareness to identify and support these women in healthcare services. There is a need for strategies to screen and recognize the violence in women attending HIV/AIDS care services. Moreover, interventions, including couple counseling, are recommended. Domestic violence against HIV patients has many hidden aspects; therefore, more qualitative research through in-depth interviews is suggested to explore and identify the details of this social issue, particularly among this vulnerable population.

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Conflicts of interest

The authors declare no conflict of interest.

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