Domestic Violence Prevalence and Related Factors in Disabled Women: A Pilot Study in Women with Multiple Sclerosis

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Abstract: Domestic violence against women as a leading cause of injury in women is associated with a range of adverse physical and psychological health effects. Few studies focused on experience of domestic violence in women with disabilities. In a descriptive-analytical pilot study 150 married women 19-59 years who attending to Multiple sclerosis society of Khuzestan were studied in 2010-2011. The overall prevalence of physical, psychological, sexual and any form of violence in lifetime of women with multiple sclerosis were 17.8%, 38.4%, 6.8% and 41.5% respectively. Prevalence of domestic violence in women with multiple sclerosis is high as general population. The finding suggests the need for a study with a larger sample size in women with multiple sclerosis and other disabled women.

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1. Introduction

Domestic violence as one of the most common forms of gender –related violence is defined as the threat of physical, psychological, sexual and any type of force against another person with the intent to control over them(1,2).This phenomenon can occur in all socio cultural classes, regardless of any boundaries (1).

Many physical, psychological and reproductive adverse effects of violence in the nondisabled population are well documented (3).Higher risk of cardiac complaint, digestive problems, Arthritis, migraines. Sexually transmitted disease and Pelvic pain is reported in victims of violence. Anxiety, Depression, insomnia and loss of self-esteem are some psychological consequences of domestic violence. (1,4-8). greater utilization of medical services and more likely to access primary and specialty care , emergency departments and substance abuse services is reported in victim of violence than women without a history of partner violence(4). But little is known about direct and indirect negative impact of abuse on health of disabled victims (3). Disable women are at risk of exposure to violence by family members, caretakers, their friends and others. (9) Higher risk of abuse is reported in women with disability as compare to disabled male. Disabled women experience violence higher or similar than other women(10).In spite of high rate of abuse in disable women, studies on experience of domestic violence, common forms of violence based on type of disability is limited(3).

Multiple sclerosis (MS) is an inflammatory, demyelinating, neurological disease of the central nervous system and disabling young adults. Women are affected about twice as often as men (11, 12). Limited information exists about the effect of multiple sclerosis on women's life.

Using Kurtzke classification, Iran is located in a low-risk area for multiple sclerosis. However, recent studies showed the prevalence of MS has increased to a medium-to-high risk level in Iran (13, 14).

Multi-country WHO study showed between 15% and 71% of the women experienced physical and/or sexual violence by an intimate partner in their lifetime (1).Prevalence of domestic violence within Iran ,in non disabled women vary from 10 % to 55% based on different populations and various forms of violence (15,16). To our knowledge no information has been recorded in women with MS or other disabilities in Iranian population. Due to high prevalence of domestic violence, increased prevalence of MS and non existence data about experience of violence in Iranian women with physical disability particularly in women with multiple sclerosis we designed this pilot study.

2. Material and Methods

In a descriptive-analytical pilot study 150 married

women 19-59 years who attending to Multiple sclerosis society of Khuzestan were studied in 2010-2011.Khuzestan province is located in south western of Iran.MS society of Khuzestan is located in Ahvaz. Khuzestan is one of the 31 provinces of Iran. It is in the southwest of the country. Its capital is Ahwaz and covers an area of 63,238 km².

Overall 365 female patients (single and married) have registered in MS society of Khuzestan .205 women entered to study after acceptance Analysis was done on 150 married women. Every female patient, during the time of sampling, who seek for receiving disease services was interviewed for participation in the study. Patients were assured of the confidentiality of their responses.

We designed a questionnaire based on abuse assessment screening (AAS) questionnaire, without questions related to pregnancy violence, and female sexual function index (FSFI). The questionnaire included demographic details and domestic violence experience in any point of life. Variables in this study included age of patients, education level, and ethnicity, family history of MS, Age at diagnosis, stage of disease, symptoms of disease, complaint related to disease, sexual dysfunction and behaviors related to violence. We asked questions about some behaviors related to physical violence, physical injuries, hospitalization, psychological and sexual violence. Experience of at least one type of three forms of violence was classified as any form of violence.

Using qualitative approach, we checked validity of questionnaire. Use of scientific resources, neurologist and obstetrician evaluation and interview with 10 women with multiple sclerosis were used for evaluation of validity. Cronbach's alpha was used for reliability's evaluation. We trained questioners based on ethical and security recommendations for domestic violence researches (17).SPSS (version19) was used for data entering and analysis. Logistic regression model for the calculating the Odds Ratio and 95% confidence interval was used.

3. Results:

The mean age of patients was 34.2 (standard deviation 8.1; range19–59) years.10% of patients were in age group 19-24, 26.7% and 63.3% in age group 25-29 and more than 30 respectively. Of women 30% had less than high school education level , 38.7% and 31.3% had high school and collage level education respectively . The mean age of patients at diagnosis of MS was 28.4(standard deviation 7.4) years.

32.7% of patients had emotional problems related to disease. At least one symptom of sexual dysfunction was reported in 43.6 % of patients. In 38.1% of patients, multiple sclerosis had a negative effect on their sexual relationship.

The most common complain related to sexual dysfunction was decreased libido (54.4%) and difficulties in achieving orgasm (45.6%).

The overall prevalence of physical, psychological, sexual and any form of violence in lifetime of women with multiple sclerosis were 17.8%, 38.4%, 6.8% and 41.5% respectively.

Higher prevalence of physical violence was reported in patients aged<25 years, educational level less than high school, age at marriage<18, non Fars Ethnic groups and history of emotional problem. Patients suffering from progressive type of the disease had a significantly higher experience of violence ($p<0.01$).

Experience of all forms of violence was higher in patients with history of sexual dysfunction ($p<0.01$).Results of binary regression logistic showed experience of psychological violence [OR= 4.3; CI(2.003-9.611)] and any form of violence [OR =4.99;CI(2.28-10.9)] were significantly associated with history of sexual dysfunction(p<o.oo1).

Table 1. Prevalence of violence experience in any time of life by patients characteristic

Patients Characteristics	Physical violence Number (%)	Sexual violence Number (%)	Psychological violence Number (%)	Any forms of violence Number (%)
Woman's Age				
<25	3(20)	0(0.0)	2(13.3)	3(20)
25-44	21(17.8)	9(7.6)	48(40.7)	53(44.5)
45=>	2(15.4)	1(7.7)	6(46.2)	5(38.5)
Woman's education				
Less than high school	9(20.9)	*3(6.8)*	21(48.8)	21(47.7)
high school and	17(16.5)		35(34.0)	40(38.8)
Collage education		*7(6.8)*		
Woman's age at marriage				
(years)	10(30.3)	4(12.1)	15(45.5)	18(54.5)
18<	12(13.5)	6(6.7)	32(36.0)	34(37.8)
18-24	3(13.0)	0(0)	8(34.8)	8(34.8)
25=>				
Stage of disease				
Remitting	19(15.4)	7(5.7)	46(37.4)	49(39.8)
Progressive	7(30.4)	3(12.5)	10(43.5)	12(50.0)

Ethnicity				
Arab	8(21.0)	4(10.5)	17(44.7)	18(47.4)
Lor	9(21.4)	2(4.8)	20(47.6)	21(50.0)
Fars	9(13.6)	4(6.0)	19(28.8)	22(32.8)
Emotional problem				
Yes	12(26.1)	2(4.3)	26(56.5)	27(57.4)
No	14(14.0)	8(8.0)	30(30.0)	34(34.0)
Sexual dysfunction				
Yes	17(27.0)	10(15.6)	38(60.3)	41(64.1)
No	9(10.8)	0(0.0)	18(21.7)	20(24.1)

4. Discussion

Experience of any form of violence in any point of life in women with MS was 41.5%. Findings of this study emphasized on high prevalence of domestic violence around the world (1, 3). Nouhjah and colleague (2008) reported experience of any forms of violence in healthy women attending health centers of Khuzestan province 47.3 % (18).Although research on experience of violence in women with multiple sclerosis is nearly nonexistent, but few information is reported about association of other disabilities with domestic violence.

Disability as a risk factor of domestic violence has been reported by Young et al In 1987. Results of their study showed that Women with physical disabilities are at risk for emotional, physical, and sexual assault to the same extent as women without disabilities. Prevalence of violence by husbands or partners was similar to estimates of occurrence of domestic violence in any point of life for women residence in the United States. Also Women with physical disabilities were more at risk for experience violence in longer period in comparison with non disable women (19). Nosek et al (2001) reported that women with disability experience violence similar or higher than general population (20).

Hughes et al (2010)In a systematic review and meta-analysis, searched 12 electronic databases published between Jan 1990 and Aug 2010, reporting prevalence of violence against adults with disabilities. Pooled prevalence of any violence (physical, sexual, or intimate partner) was 24•3% (95% CI 18•3-31•0) in adults with mental illnesses, 6•1% (2•5-11•1%) in those with intellectual problem, and 3•2% (2•5-4•1%) in people with non-specific disability. In their study, pooled crude odds ratios for the risk of violence in people with disabilities compared with non-disabled were 1•50 for all studies combined, 1•31for people with non-specific disability, 1•60 for adult with intellectual impairments, and 3•86 for people with mental diseases. The results of their research also showed, available studies in the world have weaknesses in methodology of research in this field (21).

Lin and colleagues (2009) analyzed data from Domestic Violence Report System of Taiwan, and reported significantly changes in prevalence of violence in people with disability. Rate of violence in people with disabilities was 3.7 times of the non disabled people (9.79% vs. 36.08%). Intellectual disability (41.52%), vision or speech disability (38.59%) and chronic psychosis (37.96%) were the most increasing disability types (22).

Jones et al (2010) in a systematic review and meta-analysis estimated prevalence of violence against children aged under or equal 18 years with disability. Pooled prevalence calculated were 26.7% for combined violence measures, 20•4% for physical assault, and 13.7% for sexual abuse. Odds ratios for pooled risk estimates were 3.68 for combined abuse measures, 3.56 for physical assault, and 2.88 for sexual abuse(23)

Leary et all(2006) in only existence study which specifically has focused on experience of domestic violence in women with multiple sclerosis reported psychological violence was experience in all of 150 women with multiple sclerosis participating in REACH(respite care, educational, awareness, change, and hope for people with multiple sclerosis) program. Prevalence of physical and sexual violence was approximately 31% and 20% respectively. In 68.6 % of victim cases, Perpetrators of domestic violence were current or former intimate partners (3).

In the present study prevalence of sexual dysfunction in women with multiple sclerosis was high and experience of all types of violence had a significant association with history of sexual dysfunction. Sexual dysfunction is a prevalent destructive complication of multiple sclerosis that affects quality of life of patients. A complex set of anatomic, biologic, medical and psychological changes may result in sexual dysfunction in women with multiple sclerosis. changes which directly affect libido and orgasm due to damage of the nervous system, complaints which are related to the physical disability of the disease, include fatigue , weakness , rigidity and spasms of muscles and emotional, social problem of MS(24,25).Hastuti and colleagues reported a significant relationship between sexual dysfunction and domestic violence (26).

Small sample size, cross-sectional design of study, conclusion based on patient self-reporting and recall bias in reporting of violence during the life time of patient, were some limitation of the present study.

In spite of limitations, this is the first study in this population in Khuzestan province and in Iran. Our study can provide a guideline for practitioners and

neurologist with useful information for planning and screening domestic violence in women with multiple sclerosis specifically women with history of sexual dysfunction.

Due to limited time in medical routine visits, screening for domestic violence may not possible. It is important that medical practitioners be alerted to this problem. Screening and prevention program providing appropriate services for domestic violence should be a priority for women with multiple sclerosis and other disability.

Conclusion

It can be concluded that Prevalence of domestic violence in women with multiple sclerosis is high, as similar as general population. The finding suggests the need for a study with a larger sample size in women with multiple sclerosis and other disabled women.

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