

Physical Health and Medication Related Consequences of Domestic Violence in Dubai, UAE

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Abstract

Background: Violence is a major obstacle to development. The manifestations and forms of violence vary in different settings. “Domestic violence” has been used to describe acts of violence between family members, including adult partners, a parent against a child, caretakers or partners against elders and between siblings. **Objectives:** To study physical health and medication related consequences of domestic violence among Dubai women population and the extent to which intimate partner violence is associated with a range of health outcomes. **Methodology:** A cross sectional study on 700 Emirati women selected randomly from Primary health care centers by systematic random sampling using Epi-info epidemiological software. All ever-married women aged 15-49 years, and seeking medical care in PHC at Dubai. A structured standardized interview questionnaire was utilized as data collection tool. **Results:** A significant high percentage of women reported a range of current (within the past weeks) effects on health, including self-perceived poor health, problems with activities of daily living, and other physical health indicators. It was noted that a significant high percentage of women exposed to physical violence or a combination of physical with sexual or a combination of three types of violence had current ill health than women exposed to other types of violence or other combinations. High percentage of women experience lifetime of different types of IPV were also significant association with usage of medication (either prescription or over-the-counter) within the past 4 weeks. The results shows that lower percentage of women who are not exposed to physical violence are using medication to sleep (8%), to reduce depression (6.8%), to reduce pain (40%) compared to those exposed to different type of violence. **Conclusions:** Women who were exposed to violence reported current symptoms of many problems. Women who experienced any type of violence alone or in a combination will use medication to reduce pain, sleep and treat depression. Experiencing Moderate to severe physical violence, combination of physical and sexual violence and any type of IPV are the predictors.

Keywords

Physical Health, Medication, Consequences, Domestic Violence, Dubai

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1. Introduction

Violence is a major obstacle to development. The manifestations and forms of violence vary in different settings. “Domestic violence” has been used to describe acts of violence between family members, including adult partners, a parent against a child, caretakers or partners

against elders and between siblings. [1] Violence divides into three broad categories according to who commits the violent act: self-directed violence, interpersonal violence, and collective violence. Women experience all forms of violence, however, interpersonal violence—that is, violence inflicted by another person or by a small group of people on the woman is the most universal form of violence against women, as it takes place in all societies. It is in turn divided

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into two subcategories: family/intimate partner violence and community violence. [2]

Family/partner violence describes violence between family members (often taking place in the home), while community violence describes violence between people who are unrelated and who may or may not know each other, and it generally takes place outside the home. Family/partner violence is usually the focus of researches concerned with violence among women as it is the kind of violence that usually strikes women most and especially at reproductive age, while community violence is more common among men. [2]

Violence against women in particular hinders progress in achieving development targets. [3] Violence affects millions of women worldwide. [4] There is no universally accepted definition of violence against women. In any case, the need to develop specific operational definition so that research and monitoring can become more specific and have greater cross-cultural applicability. [5, 6] The United Nations Declaration on the Elimination of Violence against Women (1993) [6] defines violence against women as "any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life." [5, 6] Violence against women is a manifestation of historically unequal power relations between men and women (violence against women result of gender inequality), which have led to domination over and discrimination against women by men and to the prevention of the full advancement of women [5, 6] The term gender based violence has been defined as "acts or threats of acts intended to hurt or make women suffer physically, sexually or psychologically, and which affect women because they are women or affect women disproportionately". This inequality can be described as discrimination in opportunities and responsibilities and in access to and control of resources that is rooted in the socio-culturally ascribed notion of masculinity as superior to femininity. [2]

Domestic violence can cause significant short- and long-term health consequences for victims, including a broad array of adverse reproductive, maternal, and child health outcomes. Such as arthritis, chronic neck or back pain, migraine, stammering, sexually transmitted infections, unwanted and unplanned pregnancies, miscarriages, chronic pelvic pain, neonatal, infant, and maternal mortality, low birth weight, malnutrition, stunting and wasting, peptic ulcers, spastic colon, and frequent indigestion. Additionally, optimal management and control of other chronic illnesses is defective such as asthma, HIV/AIDS, seizure, diabetes and hypertension in women who are being abused. Emerging research shows that women who are abused are less likely to engage in important preventive health care behaviors such as

regular mammography. [7-11] Mental health outcomes includes Depression, Fear, Anxiety, Low self-esteem, Sexual dysfunction, Eating problems, Obsessive-compulsive disorder, Post traumatic stress disorder, Suicide. 11-14] World Health Organization (WHO) released a report documenting levels of intimate partner violence Domestic Violence as a major contributor to the ill-health of women exploring outcomes of violence in terms of mental, sexual, and reproductive health in ten countries.[1, 15, 16]

Evidence also shows that while women who experience domestic Violence rarely seek help from the police or support agencies, they will seek health care services at some point in their lives whether it is for routine health maintenance, pregnancy, childbirth, illness, injury or by bringing her child for health care services. This is especially the case in developing countries. In fact, women's utilization of reproductive health services has been increasing globally, particularly in developing countries. For example, in 2008, 80% of pregnant women in the developing world received at least one antenatal visit by a skilled healthcare provider, up from 64% in 1990. 10] Virtually every emirates woman interacts with the health care system at some point in her life. Although domestic violence directly or indirectly brings thousands of women to the health care system every year, health care providers often treat these women without inquiring about abuse, therefore never recognizing or addressing the underlying cause of their health problems. Taken together, this evidence on the widespread prevalence of (Intimate partner violence) IPV, resulting adverse health outcomes and costs, and increasing health care utilization among women, not only underscores the need for health care programs and systems to respond to IPV but also suggests that they represent an important opportunity to engage in IPV prevention and management. There is a need to understand better the magnitude and nature of the different forms of violence against women in UAE specially Dubai, some of the risk factors and its health consequence in Dubai by mean of standardized questionnaires on women attending health care system. In order to plan for actions that may serve to prevent it and respond to its consequences.

2. Objectives

To study the physical health and medication related consequences of domestic violence among Dubai women population and the extent to which intimate partner violence is associated with a range of health outcomes.

3. Methodology

A cross sectional study on 700 Emirati women selected

randomly from Primary health care centers by systematic random sampling using Epi-info epidemiological software. All ever-married women aged 15-49 years (as in WHO multi-country study) [8], and seeking medical care in PHC at Dubai. Exclusion criteria was set and operational definition of variables adopted. a well-structured standardized interview questionnaire was utilized as data collection tool. Violence was divided into (physical violence, sexual violence and psychological violence: Emotional and controlling abusive behavior): The questionnaire included the following: The data about socio-demographic characteristics (age, original nationality, educational level of partners, financially dependent women, the drugs and alcohol intake of the husband) that might cause or protect women from IPV. Subjective measure "self-reported health, used by The WHO Study" the women were asked about their general health using a five-point scale (excellent, good, fair, poor or very poor). Women were considered to be in poor health, if they reported one of the two lowest categories. The data about exposure to different types of violence using "the Women's Health and Life Experiences standardized Questionnaire" developed by the WHO for violence research [8] asking direct, clearly worded questions about the respondent's experience of specific violence acts from current or former partner Ethical issues were addressed..

4. Results

Table 1 demonstrates a significant high percentage of women reported a rang of current (within the past weeks) effects on health, including: self perceived poor health, problems with activities of daily living, and other physical health indicators. It is noted that a significant high percentage of women exposed to physical violence or a combination of physical with sexual or a combination of three types of violence had current ill health than women exposed to other types of violence or other combinations. It can be concluded that:

- The more Severe physical violence among respondent's women by an intimate partner, the higher percentage of reported symptoms of ill physical health. Including: Self-reported poor or very poor health, Problems to walk Difficulty with daily activities, Pain or discomfort, Memory loss or concentration problems, Dizziness, Vaginal discharge, with percent (13.6%), (32.2%), (40.7%), (45.8%), (42.5%), (49.2%), (54.2%), respectively.
- Percentage of respondent's women exposed to Sexual violence by an intimate partner, who reported symptoms of ill physical health including: Self-reported poor or very poor health, Problems to walk Difficulty with daily activities, Pain or discomfort, Memory loss or concentration problems, Dizziness, Vaginal discharge, were (4.4%), (13.8%), (25.4%),

(30.3%), (22.8%), (34.2%), (44.3%), respectively.

- Percentage of respondent's women exposed to psychological violence by an intimate partner, who reported symptoms of ill physical health including: Self-reported poor or very poor health, Problems to walk Difficulty with daily activities, Pain or discomfort, Memory loss or concentration problems, Dizziness, Vaginal discharge, were (3.8%), (9.6%), (19.5%), (25.6%), (25.3%), (33.4%), (43.3%), respectively.
- A high Percentage of respondent's women who reported symptoms of ill physical health were among those exposed to a combination of Sexual and physical violence by an intimate partner, including: Self-reported poor or very poor health, Problems to walk Difficulty with daily activities, Pain or discomfort, Memory loss or concentration problems, Dizziness, Vaginal discharge, with percent's of (5.9%), (22.2%), (37.8%), (43%), (33.3%), (43.7%), (51.1%), respectively.
- However the highest Percentage of respondent's women who reported symptoms of ill physical health were among those exposed to a combination of physical, Sexual, and Psychological violence by an intimate partner, including: Self-reported poor or very poor health, Problems to walk Difficulty with daily activities, Pain or discomfort, Memory loss or concentration problems, Dizziness, Vaginal discharge, with percent's of (6.2%), (23.1%), (39.2%), (44.6%), (34.6%), (45.4%), (35.4%), respectively.

Stepwise logistic regression to determine the effect of lifetime exposure to IPV on current physical health symptoms reported by ever-partnered women explained that women exposed to any types of violence were associated with increased risk of reporting symptoms of current ill physical health compared to those who were not exposed. However a dose-response effect was noted in this study with women who reported experiencing a combination of three types of violence by an intimate partner, having stronger risk of current ill health than women who experienced one type of violence; including OR of; Self-reported poor or very poor health 7.41 (95% CI 2.4-23.04)), Some/many problems, or unable to perform usual activities (5.7 (2.9-11.2)), Many problems walking/unable to walk(7.3 (2.6-20.7)), Moderate/severe/extreme pain or discomfort(3.6 (2.0-6.5)), Some/many or extreme memory or concentration problems (5.2 (3.3-8.2)), Dizziness (2.7 (1.7-4.4)), and Vaginal discharge (3.1 (2.1-4.6)). Further more it was noted that another high risk of symptoms of ill physical health were reported by women exposed to physical violence alone with OR of (6.4 (1.9-21.2)), (4.3 (2.1-8.7)), (3.7 (1.2-11.04)), (3.3 (1.9-5.9)), (2.0 (1.1-3.6)), (3.1 (2.1-4.5)), (2.3 (1.6-3.2)) respectively to previous ill physical health effects. As well as in women exposed to a combination of physical and sexual

violence with OR of (7.1 (2.3-21.9)), (5.4 (2.8-10.5)), (7.0 (2.5-19.7)), (3.5 (1.9-6.2)), (4.9 (3.1-7.6)), (2.4 (1.5-4.0)), (3.0 (2.0-4.3)) respectively to previous ill physical health effects. On the other hand women who were exposed to sexual or psychological violence reported current symptoms of Many problems walking/unable to walk with OR of (14.7 (5.6-38.5)), (12.5 (3.8-41.1)) respectively. In addition to that women exposed to sexual violence alone had OR of (1.6 (1.1-2.4)) of complaining of vaginal discharge and this risk increase when sexual violence is combined with physical OR of (3.0 (2.0-4.3)) or with physical and psychological violence (3.1 (2.1-4.6)).

As shown in table 2, high percentage of women experience lifetime of different types of IPV where also significant association with usage of medication (either prescription or over-the-counter) within the past 4 weeks. The results in the table shows that lower percentage of women who are not

exposed to physical violence are using medication to sleep (8%), to reduce depression (6.8%), to reduce pain (40%) compare to those exposed to different type of violence. And as it is clearly shown the highest percentage of women using medication to calm down, reduce pain and reduce depression are those who are exposed to sever form of physical violence with 55.9%, 59.3%, 44.1% respectively. And those exposed to combination of physical and sexual violence with 46.7%, 63%, and 40%. Also those who are exposed to combination of the three types of violence with 45.4%, 63.8%, 40%. Thus we can conclude that exposure to a combination of physical and sexual violence had similar severity to exposure to the three types of violence. However the differences in the percentage of women using medication to reduce pain in those who are exposed to violence compare to none exposed is lower than those who are using the other two medications.

Table 1. Distribution of ever-partnered women experienced lifetime IPV according to prevalence of symptoms of ill physical health reported by them, Dubai, 2013.

Current health problem	Self-reported poor or very poor health		Problems to walk		Difficulty with daily activities		Pain or discomfort		Memory loss or concentration problems		Dizziness		Vaginal discharge	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1. Physical IPV														
No intimate physical partner violence	4	0.8	5	1.0	16	3.1	30	5.8	39	7.6	82	16.0	134	26.1
Mild to moderate physical violence	1	0.8	12	9.4	32	25.0	39	30.5	34	26.6	40	31.3	51	39.8
Severe physical violence	8	13.6	19	32.2	24	40.7	27	45.8	25	42.5	29	49.2	32	54.2
2. Sexual violence	10	4.4	31	13.8	58	25.4	69	30.3	52	22.8	78	34.2	101	44.3
3. psychological violence	13	3.8	33	9.6	67	19.5	88	25.6	87	25.3	115	33.4	149	43.3
4. Physical and sexual IPV	8	5.9	30	22.2	51	37.8	58	43.0	45	33.3	59	43.7	69	51.1
5. Physical and psychological IPV	9	5.3	31	18.3	55	32.5	64	37.9	58	34.3	68	40.2	80	47.3
6. Sexual and psychological IPV	10	5.4	31	16.8	57	30.8	68	36.8	52	28.1	74	40.0	90	48.6
7. Physical, sexual and psychological IPV	8	6.2	30	23.1	51	39.2	58	44.6	45	34.6	59	45.4	35	35.4

Table 2. Distribution of ever-partnered women experienced lifetime IPV according to prevalence of medication usage reported by them, Dubai 2013.

Medication to reduce sadness or depression	Medication to relieve pain	Medication to calm down	Type of violence		
				X ² (P)	No.(%)
			No intimate partner violence		
88.2(.001)	35(6.8)	205(40)	Mild to moderate physical violence		
	36(28.1)	79(61.7)	Sever physical violence		
	26(44.1)	35(59.3)	2- Sexual violence		
72.2(.001)	68(29.8)	128(56.1)	3- Psychological violence		
50.1(.001)	80(23.3)	196(57)	4- physical IPV & Sexual IPV		
95.7(.001)	54(40)	85(63)	5- physical IPV & Psychological IPV		
82.7(.001)	59(34.9)	107(63.3)	6- Sexual IPV & Psychological IPV		
85.9(.001)	63(34.1)	109(58.9)	7- physical & Sexual & Psychological IPV		
91.4(.001)	52(40)	83(63.8)			

Table 3 shows the stepwise logistic regression of the association of lifetime IPV and medication usage reported by ever-partnered women. Furthermore women who experience any type of IPV were more than 6 to 8 times as likely to use

medication to relive mental symptoms, such as medication to sleep or reduce depression. While the greater effect is from moderate to sever physical violence and from combination of physical and sexual violence were women approximately 8 times as likely to use medication to relive mental symptoms.

However women who experience any type of violence alone or in a combination were approximately twice as likely to use

medication to relieve physical symptoms such as using medication to reduce pain.

Table 3. Stepwise logistic regression to determine the effect of exposure to different type of IPV medication usage reported by ever partnered women, Dubai 2013.

Medication to reduce sadness or depression			Medication to relieve pain			Medication to calm down or sleep			Type of violence
95% CI	OR	P	95% CI	OR	P	95% CI	OR	P	
(4.3,10.7)	6.774	0.001	(1.7,3.3)	2.346	0.001	(5.6,13.3)	8.749	0.001	1-physical violence
(4.1,10.4)	6.492	0.001	(1.4,2.6)	1.883	0.001	(2.4,5.5)	3.657	0.001	2- Sexual violence
(3.5,10.5)	6.043	0.001	(1.8,3.4)	2.509	0.001	(3.4,8.7)	5.433	0.001	3- Psychological violence
(5.1,12.9)	8.093	0.001	(1.6,3.5)	2.405	0.001	(4.9,11.8)	7.649	0.001	4- physical IPV& Sexual IPV
(4.4,10.9)	6.959	0.001	(1.8,3.7)	2.597	0.001	(5,11.7)	7.652	0.001	5- physical IPV& Psychological IPV
(4.6,11.6)	7.305	0.001	(1.5,2.9)	2.083	0.001	(2.8,6.4)	4.250	0.001	6- Sexual IPV& Psychological IPV
(4.9,12.4)	7.778	0.001	(1.7,3.7)	2.499	0.001	(4.4,10.5)	6.809	0.001	7- physical & Sexual & Psychological IPV

5. Discussion

The findings of our study are consistent with research elsewhere that established partner violence as a common cause of injury to women. [17, 18] Further qualitative research is needed to fully understand the consequences.

Collectively, the weight of this evidence supports the view that lifetime experience of IPV is a major contributor to women's ill-health, and may underpin a broad range of health outcomes. Furthermore, when combined with the information that approximately 32% of women with a lifetime experience of physical IPV had presented to a healthcare provider (usually a GP or A/E) within the previous 4 weeks, the findings have considerable implications for healthcare delivery.

Comparison of our prevalence of physical IPV (31%) with the prevalence in other studies using similar or different tool of measurement. Almost similar physical IPV prevalence found in Jordan (31%) [19], New Zealand (30.2%) [20], Vietnam (31%) [21], in different area in India (16-40%), [22, 23] where lower physical prevalence found in Australia (15%) [24], different areas in Saudi Arabia (22.8-25.7%) [25, 26] however higher prevalence found in different areas in Pakistan (16-76%) [21], Iran (38%) [27] in different areas of Egypt (47-61%) [28-30]

For sexual violence, it was found that at least one of the three forms of sexual violence investigated was experienced by 22.4% respondent for lifetime. However past year prevalence were 3.7%. Our results are also within the range of most sites investigated by WHO multi-country study with range from 6% (Japan and Serbia/Montenegro) to 59% (Ethiopia). [8] In most settings in WHO study, about half of sexual violence was a result of physical force rather than fear. However, larger proportion of women (22.4%) in our study reported having sex because they were afraid of something their partner might do similarly to what was found in Ethiopia and Thailand. [8] One possible explanation for this lies in the

culture of a dominant gender and the low perception of such duress within relationships of conjugal type.

Comparison of our prevalence of sexual IPV (22%) with the prevalence in other studies using similar or different tool of measurement. The result of our study was higher than prevalence of sexual violence found in Saudi Arabia (11.8) [25] Jordan (19%) [19, 30] despite they used same questionnaire but they removed one of the three questioned about sexual violence which gave them less prevalence, and lower than prevalence found in Egypt (37.1%) [28], eastern India (25%) [21], different places in Pakistan (12-57.6%) [21], Iran (42%) [21].

This study has shown significant associations between lifetime experiences of physical or sexual violence, or psychological, or a combination of any types by a male intimate partner, and a wide range of self-reported physical and mental health problems in women. This observation suggests that experiences of IPV are associated with increased odds of reports of poor physical and mental health, irrespective of the extent to which violence might be tolerated or accepted in her society or by herself.

This is a cross-sectional study and inferences regarding causality cannot be made. In general, it does not distinguish whether the different current health conditions studied or lifetime violence exposure happened first. It is of course theoretically possible that women who report serious ill health are more prone to report an event of violence: mental-health problems, for instance, could be risk factors for experiencing partner violence.

Furthermore, the criteria of plausibility of the effect (for injuries reported as a consequence of physical abuse, a causal link is assumed), consistency of the association, strength of some of the associations (according to the results of this study, the high odds ratios found in this study support the theoretical assumption that IPV contribute substantially to current health conditions studied rather than being a precursors), and theoretical reasoning (the fact that we measured recent

symptoms of health, whereas the violence could have taken place at any time in her life). Additionally, there are indications for temporal sequence for some health outcomes, i.e. for injuries that were directly related to violent acts.

As our findings meet several criteria for the inference of causality, it also supported by numerous other studies that have documented the health consequences of IPV. [31-35] And, previous studies by use of longitudinal research designs indicated that, there is strong evidence that suggests that IPV can have serious health consequences. [13, 36-39]

In our study there were positive significant associations between lifetime experiences of partner violence and self-reported experiences physical symptoms of ill health that occurred in the previous 4 weeks. Women exposed to a combination of three types of violence were associated with high risk of reporting symptoms of current ill physical health, in other ward associated with increase morbidity as our study indicated. Thus it shows dose response effect as it was shown by other study done in News land. [20]

A study by Stephenson *et al.* [40] found that gynaecological symptoms were significantly related to the reporting of sexual violence. In our study it showed the same, women exposed to sexual violence have more than one time risk of complaining of vaginal discharge comparing to non violated women. Furthermore this risk increases to three times when exposure to sexual violence is combined with physical violence. This could be explained that sexual violence comes always in combination with either two other forms or both of them, in addition to dose response effect noted before in general.

The association between violence by an intimate partner and selected physical symptoms of illness is supported by other findings. [31-34]

Although this finding does not prove causality, it provides evidence for the direction of the temporal association between violence and ill health. The vast majority of violence occurs in lifetime and only one quarter of ever-abused women had experienced violence within the last 12 months. This finding suggests that the effect of violence might last long after the actual violence has ended.

Self-reported ill health, a subjective measure, has been shown to predict morbidity in countries where this has been tested. [38]

Women's reporting of poor health overall was extremely low (0.8% or less in women who had not reported violence) and 13% of abused women reported poor health. With OR 1 when exposed to psychological violence alone and OR of more than 9 when women exposed to sexual and psychological. Small amounts of reported ill health are to be expected, and are undoubtedly affected by cultural variations

in perceptions of health and ill health.

6. Conclusion

Women who were exposed to violence reported current symptoms of Many problems. Women who experience any type of violence alone or in a combination will use medication to reduce pain, sleep and treat depression. Experiencing Moderate to severe physical violence, combination of physical and sexual violence and any type of IPV are the predictors.

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