

# A study conducted on the demographic factors of victims of violence in support and administrative departments of hospital in 2013

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## ABSTRACT

**Background:** Violence is now regarded as a serious problem and its complication causes heavy costs on the healthcare systems. The present study aimed to investigate the correlation between some demographic characteristics and confrontation with violence. Since there is no study on the prevalence of violence among the support and administration staff of hospitals in Iran, this study was conducted to investigate violence in these departments. **Materials and Methods:** This descriptive–analytical and correlation survey was carried out by census among the support and administrative staff interacting with patients and their companions in Al-Zahra University Hospital of Isfahan in 2013. Research tool was a researcher-made questionnaire including five domains: Personal information, workplace information, verbal violence, physical violence, and other violent acts. Its validity was evaluated by experts reviewing it and its reliability by test–retest ( $r = 0.9$ ). Finally, data were analyzed using descriptive statistical indicators and statistical tests such as Chi-square for sex, marital status, and work department and Mann–Whitney U test for age, level of education, work experience, and violence types by the statistical software SPSS version 20. **Results:** According to the results obtained, 81% of subjects had been abused at least once and the most reported violence was related to verbal violence (78.4%). There was significant correlation between sex and violence and men were the main victims of violence, but there was no relation between marital status, age, and violence. Work experience was correlated to physical violence and other violent acts conversely. There was also an inverse correlation between physical violence and education; also, security staff faced more violence than others. **Conclusion:** As high prevalence of violence was found especially among the security staff and personnel with less education and work experience, it is suggested to take actions such as educating about patient accompaniment and visiting condition, holding training workshops on confronting with violence and appropriate communication with patients and families, using experienced and patient staff to interact with clients.

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## INTRODUCTION

Workplace violence is one of the occupational hazards in hospitals.<sup>[1]</sup> The World Health Organization has defined violence as the intentional use of physical force or power, threateningly or really against self, others, or a group or society, which causes injury, death, mental harm, or deprivation or

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increases the probability of these events,<sup>[2]</sup> and has classified it into four categories: Physical violence (knuckling, kicking, slapping, pushing, biting, pinching, and wounding with sharp objects), verbal violence (behaviors such as insult, humiliation, intimidation, ridicule, and insults), racial violence (threatening conduct because of race, color, language, nationality, religion, working with person from a minority group, birth place, or financial facilities or any other status), and sexual violence (any unwanted conduct related to sex which is regarded as an attack on the person and would cause threat, insult, and shame).<sup>[3]</sup> Studies indicate that violence is increasing in many workplaces. Health caregivers are more exposed to violence than others in the world, as more than 50% of health staff experience violence while working. This is regarded a serious issue in health systems<sup>[4]</sup> because some violent events have important long-term effects on healthcare staff, such as low morale, anger, loss of confidence, job burnout, inability and change of job condition, intermittent headaches, gastrointestinal problems, anxiety, depression, hopelessness, and loss of self-confidence.<sup>[5]</sup> Since this problem causes heavy costs on the healthcare systems, it should not be neglected.<sup>[6]</sup> Unfortunately, violence against employees of healthcare centers in the world has increased more than ever<sup>[7]</sup> and staff working in different wards of hospitals face all types of violence.<sup>[8-11]</sup>

Several studies conducted in hospitals in Iran have examined violence against clinical staff, especially nurses; results of these studies indicate that prevalence of violence in these centers is high, many staff have experienced violence, and the most reported violence was verbal violence<sup>[6,12-21]</sup> and the least reported ones were racial and sexual violence.<sup>[14,19,20,22,23]</sup> In most studies, the main attackers were companions and relatives of patients<sup>[6,13-15,17,21-25]</sup> and men inflicted more violence than women.<sup>[15,20,21,26]</sup>

Researchers consider increase in violence in hospitals as one of the major health problems and believe that this is due to the increase in violence in society.<sup>[27]</sup> Economic insufficiency, social, family frustrations, and imitation of unhealthy patterns and aggressiveness can be the factors causing aggression. Researchers try to recognize some causative and intensifying factors of aggression by investigating it in various groups and strata, and use this information to take actions for resolving or reducing that. Age groups, occupations, and gender are among the factors that have been investigated in several studies.<sup>[26]</sup>

Since the prevalence of violence among support and administrative staff of hospitals in Iran has not been studied so far, the present study aimed to investigate the prevalence of violence and the correlation between some individual and demographic characteristics and confrontation with different types of violence among the hospital support and administrative staff.

## MATERIALS AND METHODS

This was a descriptive–analytical and correlation survey that was carried out in 2013 in Al-Zahra University Hospital of

Isfahan. The study population consisted of all the support and administrative staff employed in administrative affairs and secretariat, and in the departments of revenue development and insurance, admission and medical records, nutrition and diet therapy, food distribution, hygiene, security, and social work, who used to interact with patients and their companions. Sampling was done by census and the exclusion criterion was unwillingness of the employees to cooperate in the study. At the end, 125 people of the above-mentioned departments participated in the study. The research tool was a researcher-made questionnaire including 26 objective questions in five domains: Personal information (6 questions), information related to workplace (5 questions), verbal violence (5 questions), physical violence (5 questions), and other violent acts (5 questions). Physical violence included violence through physical contact, such as knuckling, kicking, slapping, etc. Verbal violence included cases such as yelling, expression of terms that are insulting, humiliation, intimidation, ridiculing, and also other violent acts such as offensive look, banging on the table, tearing up the sheet, etc. The first question in any area of violence was about exposure to violence in the past 12 months; if the response was positive, the participant responded to questions about exposure time, attacking person, attacker's sex, and severity of disease. Face and content validity of the questionnaire was evaluated by a review made by five experts and professors, based on which some changes were made including removal of some questions and changing the content of some other questions, and its reliability was confirmed using test–retest method and McNemar test ( $r = 0.9$ ). Thus, the questionnaires were distributed to 20 employees and collected from them. After a week, the questionnaires were distributed to the same people and the reliability of the questionnaire was confirmed by investigating the correlation between the responses. Questionnaires were distributed and collected anonymously and collectively, coordinating with the hospital authorities. Finally, data were presented using descriptive statistical indicators and analyzed by tests such as Chi-square for sex, marital status, and work department and Mann–Whitney U test for age, level of education, work experience, and type of violence by the statistical software SPSS version 20 (Armonk, NY: IBM Corp).

## RESULTS

The studied subjects included 125 people employed in support and administrative departments of the hospital; among them, 66.4% (83 people) were males and 33.6% (42 people) were females. Majority of them had 10–15 years of work experience. Their age ranged from 35 to 45 years. Also, 43.2% were diploma and associate degree holders, 32.8% had bachelor's degree or higher, and 22.4% had done less than a diploma. Of the study subjects, 91.2% were married and the rest were single.

According to the results, 81% of subjects had been abused at least once in 2012 and the most reported violence was related to verbal violence (78.4%), followed by other

**Table 1: Frequency distribution of victims of violence in separation of background variables, experience, and work department and correlation in each variable**

Variable	Physical violence			Verbal violence			Other violent acts		
	Number	Percent	Significance level	Number	Percent	Significance level	Number	Percent	Significance level
Sex									
Male	45	57	0.001	70	85.4	0.015	51	62.2	0.007
Female	7	17.9		28	66.7		14	35.9	
Age, years									
25-30	7	46.7	0.891	12	80	0.202	5	33.3	0.13
30-35	14	38.9		34	85		22	57.9	
35-40	13	52		21	80.8		18	69.2	
40-45	11	42.3		16	61.5		14	53.8	
>45	6	46.2		12	85.7		5	35.7	
Education level									
<Diploma	13	50	0.001	22	81.5	0.571	17	60.7	0.087
Diploma-Associate degree	30	60		44	81.5		31	59.6	
Bachelor's and higher	7	17.5		30	73.2		15	38.5	
Marital status									
Single	5	50	0.693	9	81.8	0.812	4	36.4	0.226
Married	47	43.5		89	78.8		61	55.5	
Work experience, years									
0-5	7	33.3	0.037	18	81.8	0.1731	9	40.9	0.049
5-10	19	61.3		28	90.3		22	71	
10-15	19	51.4		32	82.1		24	63.2	
15-20	3	17.6		11	61.1		6	35.3	
20-25	4	44.4		8	80		4	40	
Department									
Revenue Development and Insurance	8	47.1	0.0011	17	81	10.033	10	55.6	10.002
Social Work	4	40		9	90		6	66.7	
Security	34	70.8		45	91.8		37	74	
Admission and Medical Records	0	0		9	60		4	26.7	
Nutrition and Diet Therapy	0	0		2	66.7		0	0	
Food Distribution	4	25		9	56.2		5	31.2	
Hygiene	1	25		3	60		1	20	
Administrative Affairs and Secretariat	1	20		4	80		2	40	

Significance level was not valid

violent acts (52%) and physical violence (41.6%). Table 1 demonstrates the frequency distribution of victims of violence based on sex, age, education, marital status, work experience, and department, and the correlation between them.

## DISCUSSION

According to the results, 81% of staff had experienced violence at least once and the most reported violence was related to verbal violence (78.4%), other violent acts (52%), and physical violence (41.6%). Also, in other studies conducted among the clinical staff in hospitals<sup>[6,12-19,24,28,29]</sup> and medical emergency centers in Iran,<sup>[22,23]</sup> the most reported violence was verbal abuse, and other forms of violence including physical violence, sexual, and racial were also reported. Studies in the emergency departments of Turkish hospitals<sup>[27]</sup> and among nurses in a hospital in Hong Kong<sup>[28]</sup> and southern Thailand<sup>[29]</sup> have also shown that the most frequently reported form was verbal violence (79.6%, 73%,

and 38.9%, respectively), which is consistent with the results of the present study.

In relation to the victims of violence, there existed a correlation between sex and all types of physical, verbal, and other violent acts. Men were the main victims of violence. Results of several studies are consistent with that of the present study, and there were significant differences between sex and workplace physical violence and men were exposed to more violence than women.<sup>[6,13,16,17,25]</sup> In another study, all types of violence except sexual violence was more against male doctors and medical students.<sup>[20]</sup> In relation to verbal violence, its frequency was more significant among male nurses,<sup>[30]</sup> which is consistent with our study. Nevertheless, in the study by Yousefi, sexual violence against female employees was reported to be more.<sup>[20]</sup> In another study, prevalence of violence was higher among women too,<sup>[6]</sup> and a study reported that female nurses had been abused with bullying more than men.<sup>[31]</sup> In a review study about violence in the emergency department, it

was also reported that people with smaller physical size and women were more vulnerable to violent attacks.<sup>[32]</sup> Based on the fact that discrimination and violence often existed against women<sup>[33]</sup> and mainly women were victims of crimes such as domestic violence, harassment, and sexual violence,<sup>[34,35]</sup> it was expected that women were more likely to be exposed to violence than men, but the inverse was found to be true. This may be due to the fact that women are able to feel the emotions of others more than men, so they can have more empathy toward patients and make more efforts in order to understand their clients and calm them down. Another issue is that more subjects of the study were employed in the security unit and personnel of these units are males in the hospitals of Iran; less exposure of women to violence than men is due to this employment condition.

No correlation was found between age and violence, whereas in some studies, a significant correlation was found between age and aggression. With an increase in age, the prevalence of violence was reduced.<sup>[6,26]</sup> In other studies, the opposite was true.<sup>[16,25,30,36]</sup> However, in some studies, the correlation between age and violence was not confirmed as in this study.<sup>[6,12,15,17,18]</sup> But the relation between work experience and physical violence and other violent acts was significant and people with more work experience had been less attacked.

Consistent with the present study results, several studies reported that people with less work experience were abused more and with increase in work experience, violence was reduced.<sup>[6,12,26]</sup> It was also pointed out in a review study that younger and less inexperienced staff are more prone to violent behaviors.<sup>[32]</sup> Kamchuchat *et al.*, in their study on a hospital in Thailand, showed that young nurses do not have the ability to handle and encounter difficult situations because of less work experience.<sup>[29]</sup> However, in some studies, it was reported that with increase in work experience, verbal abuse was increased.<sup>[30,36]</sup> In another study, it was reported that people with more than 10 years of work experience had more exposure to physical violence.<sup>[25]</sup> But some researchers believe that with increase in work experience, a person can anticipate and handle stressful situations,<sup>[30]</sup> which seems more logical.

Also, in relation to education, there was a correlation between physical violence and education only. People with diploma and associate degree were exposed to more violence than others and those with bachelor degree or higher were exposed to less violence than others. In another study, most cases of violence were reported in people having an education of diploma or less, and the lowest level of verbal and physical violence occurred among workers with bachelor's degree.<sup>[16]</sup> This could be due to the fact that education improves people's awareness of proper ways to communicate and their ability to control their behavior, and people with higher education do not involve in physical violence.

Marital status had no significant correlation with violence. In Shoghi *et al.*'s study also, there was no relation between marital

status and prevalence of violence.<sup>[30]</sup> In another study, the difference between married and single people was significant and married people had higher aggression scores than singles.<sup>[26]</sup> In another research, it was found that singles were attacked more physically and verbally than married people.<sup>[5]</sup> Thus, it could be said that marital status plays a twofold and important role in people's mental health. Successful marital life contributes to improving the mental health of people by providing appropriate social, emotional, and economical support for them. On the other hand, various problems arising from unsuccessful lives have adverse effects on people and increase the incidence of violence and aggression.

With regard to the work departments, the significance level was not valid. Nevertheless, security staff had been exposed to physical violence and other violent acts more than the staff of other units, and social work and security staff had been abused more than others verbally. Personnel of nutrition and hygiene units were exposed to less violence than other employees because they have less interaction with patients and their companions. In a study conducted in the emergency department of Rasoul Akram Hospital as well as in the present study, the security staff had been attacked more than others due to the nature of their duty, i.e. establishing the order and security of the department,<sup>[21]</sup> and the fact that staff of other departments have less communication with clients.

This study suffers from limitations such as recall bias and non-cooperation of some authorities due to some reasons like lack of time and fatigue. As high prevalence of violence was found among the staff, especially personnel with less education and work experience and security guards, it is suggested to take actions such as educating about patient accompaniment and visiting condition, holding training workshops on confronting violence, anger management, and also appropriate and respectful communication with patients and families, using experienced and patient staff to interact with clients. It is also recommended to conduct other qualitative studies for examining other effective factors on the incidence of violence and to find strategies to cope with them.

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