

Is the Experience of Workplace Violence the Same – General Versus Hospital Medicine Descriptive Cross-Sectional Study

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Abstract

Objective: The present study aimed to assess the frequency of workplace violence from patients and patients' relatives and friends experienced by health care workers.

Method and Design: A descriptive cross-sectional study included health care workers from hospital departments and family medicine practices. Data were collected during December 2016 using a self-administered, anonymous questionnaire. Out of 163 distributed questionnaires, 138 (84.7%) were returned suitable for analysis.

Participants: Respondents were health workers in the Department of Family Medicine of the Health Care Center Mostar, the Department of Gynaecology and Urology at the University Hospital in Mostar, and the Department of Psychiatry at Cantonal Hospital in Mostar.

Results: Some form of aggression at work was experienced by 79.7% of respondents. Verbal aggression was more frequent in the Family Medicine Department, while physical violence was more prevalent in hospital settings, specifically in the Psychiatry Department. Physical forms of aggression were significantly more frequently experienced by nurses than by physicians.

Conclusion: Verbal WPV is more common in primary care, while physical violence is more frequently experienced in hospitals, especially on the psychiatry service. Dissatisfaction with medical care is the most common explanation for the violence.

Keywords: Workplace Violence; Patients; Primary Care Health; Family Medicine; Hospital Medicine

Introduction

Violence in the workplace is a specific risk for health care workers [1]. Aggressive and violent behaviour by patients, or their relatives or friends, toward general-practice staff is a matter of global concern [2]. There is also a growing concern about violence against health service staff in both hospitals and outpatient facilities [3]. Not only has the number of incidents increased, but the severity of the violence has also caused profound traumatic effects on the victims in primary, secondary, and tertiary care settings [4]. When compared to other

work settings, medical sites carry a greater risk to staff of verbal abuse and threats, with 73% of staff on medical premises reporting abuse, compared to 65% on recreational premises and 63% for transport and public administration workers [5].

Violence directed against others can be verbal or physical. Physical aggression includes pushing, hitting, pinching, hair pulling, biting, stalking, sexual harassment and sexual abuse, property damage, and theft [2,6]. Studies from England from the 1990s have shown that verbal abuse is the most frequent type of violence reported by British physicians (25 - 91%), compared to physical violence (1 - 11%) [7]. Of the 'aggressive' individuals, most (79%) show two or more forms of aggressive behaviour, while some (19%) express up to five forms⁶. Evidence shows that psychiatric hospitals, nursing homes, emergency rooms and prehospital care departments are where most violent acts occur [8].

Personal experiences of aggression or violence in the workplace can lead to serious consequences for health workers, their patients, patient care, and the organization as a whole [9,10]. Violence and aggression can, for example, negatively affect quality of care and treatment, cause longer periods of worker absenteeism, and cause deterioration of the work environment [11,12].

Although health care providers are increasingly concerned about the escalating incidence of workplace violence (WPV), there is a lack of evidence to support this concern due to low violence reporting rates [13]. There are various explanations for this underreporting. Some physicians are not aware of what constitutes aggressive behaviour and fail to label it as such. In Bosnia and Herzegovina, there are no mechanisms to protect medical staff from aggressive patients. Recent incidents in some medical centres have raised an alarm, drawing attention to the importance of this issue. If a health professional has the courage to report workplace violence, under a 2014 law on misdemeanours in the Federation of Bosnia and Herzegovina, the patient involved may face a misdemeanour charge, but with no significant repercussions.

The aims of the present study are to assess the frequency of WPV from patients and/or patients' relatives or friends towards health care workers and to evaluate possible reasons for the violence. Findings from the literature suggest that WPV is expected to be more likely to occur at the secondary level of health care, toward nurses, and inflicted by patients. The highest incidence of WPV is expected in the psychiatry department, and the lowest in the surgical departments.

Method and Participants

A descriptive cross-sectional study included health care workers from hospital and community settings. Data were collected during December 2015 using a self-administered, anonymous questionnaire. The questionnaire was distributed to all health care workers in the Family Medicine Department at Mostar Health Care Center at the primary level of health care (PHC), and in the Departments of Gynaecology and Urology at Mostar University Clinical Hospital and the Psychiatry Department at Dr. Safet Mujić Clinical Hospital Mostar (hospital medicine-HM).

The questionnaire contained 16 questions. The first eight questions were related to demographic data (gender, age, years of professional experience, marital status, level of education, scientific degree, and workplace and working hours). Other questions were related to the subjective assessment by health care workers of their experience of aggressive behaviour from patients (how many times they were exposed to aggressive behaviour in the last year, the type and form of aggression to which they were exposed, the motive for patients' aggressive behaviour, its outcome, and their opinion of the frequency of aggressive behaviour). The final two questions asked if there were scheduled appointments for outpatient services and who they think is more likely to be violent against health care workers.

A total of 163 questionnaires were distributed, and 149 were returned; the return rate was 91.4%. After checking for technical and logical controls, 138 were suitable for analysis (84.7%). Seventy-three questionnaires were completed in the Family Medicine Department (PHC) by 24 physicians and 49 nurses. Sixty-five were completed in the hospital services-36 in the Departments of Urology (22 nurses) and Gynaecology (14 nurses) and 29 in the Department of Psychiatry (25 physicians and 4 nurses). The total sample consisted of

49 physicians (24 PHC and 25 HM) and 89 nurses (49 PHC and 40 HM). Sixty (43.4%) of the health care workers had fewer than 10 years of service, 37 (26.8%) employees had between 10 and 20 years of service, and 41 (29.7%) had more than 20 years of service. Seventy-one (51.4%) employees worked on the first shift only, 38 employees (27.5%) worked in two shifts, and 29 (21%) worked in three shifts.

Statistics

Data were statistically analysed using the software SPSS for Windows (version 16.0, SPSS Inc., Chicago, Illinois, USA) and Microsoft Excel (version Office 2007, Microsoft Corporation, Redmond, WA, USA). The results were expressed in absolute and relative frequencies. Testing of statistical significance was conducted using a χ^2 test, and in the absence of expected frequencies, Fisher’s exact test was used. The significance level was set at $p = 0.05$. If p-values could not be expressed up to three decimal places, they are shown as $p < 0.001$.

Data/Results

Of the total number (138) of surveyed health care workers, 110 (79.7%) reported having experienced an aggressive incident by a patient or patients’ relatives or friends in the last 12 months ($p < 0.001$). Aggression was experienced by 53 respondents in the Department of Family Medicine and 57 respondents in the hospital ($p = 0.703$), specifically 30 in the Urology and Gynaecology Departments and 27 in the Psychiatry Department.

Of the 110 respondents who experienced WPV, 42 were physicians (PH), of whom 19 were from PHC (79.2% of responding PHC doctors) and 23 were from HM (92% of responding HM doctors). Aggressive incidents were experienced by 68 nurses, 34 from PHC (69.4% of responding PHC nurses) and 34 from HM (85% of responding HM nurses). In the sample of the surveyed health care workers who reported aggressive incidents by patients, 49 respondents (44.5%) had fewer than 10 years of professional experience, 31 (28.2%) had more than 20 years of service, and 30 (27.3%) had between 10 and 20 years of service.

Types of Attacks

Fifty-three respondents (48.2%) experienced verbal attacks, and 57 (51.8%) reported having experienced both a verbal and some form of physical attack ($p = 0.703$). Table 1 shows a breakdown of types of attacks by health care level, health care worker, work in shifts, branch of medical service, and length of service.

		Type of attack-number of respondents (%)			p
		n	verbal	both verbal and physical	
Health care level	PHC	53	36 (67.9)	17 (32.1)	< 0.001
	HM	57	17 (29.8)	40 (70.2)	
Healthcare worker	PH	42	22 (52.4)	20 (47.6)	0.488
	N	68	31 (45.6)	37 (54.4)	
Number of shifts	1	54	30 (55.6)	24 (44.4)	0.029
	2	29	16 (55.2)	13 (44.8)	
	3	27	7 (25.9)	20(74.1)	
Branch of medicine	F	53	36(67.9)	17(32.1)	< 0.001
	S	30	13(43.3)	17(56.7)	
	P	27	4(14.8)	23(85.2)	
Length of service (years)	< 10	49	24 (49.0)	25 (51.0)	0.665
	10 - 20	30	16 (53.3)	14 (46.7)	
	> 20	31	13 (41.9)	18 (58.1)	
HM Departments	S	30	13 (43.3)	17 (56.7)	0.019
	P	27	4 (14.8)	23 (85.2)	

Table 1: Frequency and types of WPV by various criteria.

*Chi-square test; †Fisher’s Exact Test

PHC: Primary Health Care; HM: Hospital Medicine; PH: Physician; N: Nurse; F: Family Medicine; S: Surgery; P: Psychiatry

Form of Violence and Reasons for Attack

Compared to PHC, manifestations of violence in the hospital setting were significantly greater for throwing, damaging, or grabbing objects ($p < 0.001$), and for pushing ($p < 0.001$).

Compared to doctors, nurses stated that they were significantly more often exposed to pushing ($p = 0.003$), striking of palm or fist ($p = 0.003$), and striking an object ($p = 0.004$).

First-shift employees were significantly less exposed to insults ($p = 0.031$), threats ($p = 0.008$), and throwing, damaging, or grabbing objects ($p = 0.010$) than second- and third-shift employees.

Employees of the Psychiatry Department were significantly more exposed to throwing, damaging or grabbing objects ($p < 0.001$), and pushing ($p < 0.001$) than were employees of family medicine and surgery. Employees with fewer than 10 years of service were significantly more exposed to quarreling ($p < 0.001$), and employees with more than 20 years of service were more exposed to unjustifiably snitching ($p = 0.036$).

Compared to outpatient care in the health centre, in the hospital the more frequent reason for the attacks was dissatisfaction with the quality of medical service ($p < 0.001$).

Compared to nurses, doctors significantly cited the following reasons for the attacks: the ratio of doctors to patients ($p = 0.005$), dissatisfaction with the quality of medical services ($p = 0.015$), the amount of time dedicated to patients ($p = 0.010$), the range of insurance findings (prescriptions, referrals, sick leave) ($p = 0.002$), and the health system as a whole ($p = 0.005$). Surgery employees more often reported allegations of dissatisfaction with the quality of medical services ($p < 0.001$) as the reason for attacks.

Attacker and Trends of Attacks

At the level of PHC, respondents indicated the patient as the most common ‘attacker’ (61.4%), while at the level of HM it was the patient’s relatives or friends who manifested aggression more often (69.2%). The difference between aggressive patients and their relatives or friends in PHC and HM was statistically significant ($p < 0.001$, Fisher’s Exact test). Respondents from PHC and HM who experienced some form of violence during the last 12 months did not differ in opinion about the frequency of violence by patients against health care workers ($p = 0.357$; Fisher’s Exact test). Additionally, all surveyed respondents (regardless of whether or not they experienced attacks) from PHC and HM showed no difference in opinion about the frequency of violence by patients against health professionals ($p = 0.791$).

Form of violence	Total PHC (n = 110)	Reasons for attack	Total HM (n = 110)
Quarreling	97 (88.2)	Physician’s attitude toward the patient	47 (42.7)
Insulting	85 (77.3)	Dissatisfaction with the quality of medical services	68 (61.8)
Making threats	67 (60.9)	Long waiting times	93 (84.5)
Throwing, damaging or seizing objects	36 (32.7)	Amount of time dedicated to the patient	67 (60.9)
Unjustified blaming	85 (77.3)	Scope of patient’s test results	66 (60.0)
Pushing	24 (21.8)	Health care system as a whole	87 (79.1)
Slapping or punching	21 (19.1)		
Hitting with an object	16 (14.5)		

Table 2: Possible forms of violence and reasons for attack.
PHC: Primary Health Care; HM: Hospital medicine

Discussion

In Bosnia and Herzegovina, the possible factors leading to a growing number of aggressive incidents by patients against health care workers include not only poor socioeconomic conditions, the recent war, and health care reform, but also better informed patients and increasing demands on the health care system. Consistent with findings from other countries, this survey also found a high prevalence of WPV (79%). The prevalence of WPV reported in the literature includes rates from Iran [14] (74.7%); Turkey [15,16] (44.7% - 82.8%); Saudi Arabia [17] (67.4%); the UK [5] (63%); Nepal [18] (64.9%); and Poland [19] (90%). Verbal violence, especially at the level of PHC, was significantly more frequent than has been found in other countries [10,14,16,20,21], but nearly three-quarters of the respondents from the hospital level of care indicated that verbal violence was followed by physical violence. While the rates reported in other countries vary with culture, customs, and local circumstances, most studies indicate an increase in WPV from the second half of 20th century [19].

To avoid creating an unpleasant situation or being harassed themselves, but also to protect other patients from being harassed, health professionals usually accede to the abuser's requests. Yet this may additionally support their aggressiveness. Furthermore, health care workers very rarely decide to report violence at work. In Bosnia and Herzegovina, even if someone has the courage to report an aggressive incident to the police, the consequences are often minimal and the violent behaviour goes unpunished, or, at the most, an abuser receives a misdemeanour charge. In this study, physical aggression was usually preceded by or accompanied by verbal abuse; none of the respondents in this study reported having experienced physical aggression at first. These episodes of physical aggression occurred more often in the hospital setting. However, in a Chinese study [22], 12.6% of PHC respondents experienced a physical assault only, and in an Israeli study, 9.5% of hospital physicians, as compared to 8.5% of community physicians, were exposed to physical violence [7]. In a study conducted in Italy, the majority of violent physical incidents perpetrated by patients were reported in hospitals' surgical (21.7%) and emergency departments (20.4%) [12]. In Nigeria [23], physical violence was experienced by 25.1% of hospital-based respondents; in Jordan, the figure from a similar study was 18.3% [24]; and in the UK, an equivalent study found 20% [20]. Instances of WPV have also been frequently reported in the emergency departments of Palestinian hospitals [25]. The high percentage of physical violence (70.7%) reported by the authors of a study conducted in Germany [11] may be due to its having been conducted in a psychiatric institution, where WPV in various forms has been shown to frequently occur [26,27]. In an example from Poland, WPV was most often reported among workers of psychiatric hospitals (94.1%), followed by general hospitals (90%) and primary care practices (88.3%) [19].

In this survey, workers within the Family Medicine Department experienced exclusively verbal WPV more frequently, while employees of the Psychiatric Department significantly more frequently experienced verbal accompanied by physical violence ($p < 0.001$). As might be expected, the incidence of this type of aggressive behaviour was highest among workers who worked in all three shifts. A national survey in Turkey found that employees experienced violence from patients more often between 6 PM and 7 AM [15], while a survey conducted in Palestine did not find a correlation between rotating shifts and increased patient violence [13]. More than 60% of respondents in a survey conducted in Pakistan experienced aggressive incidents from patients between 1 PM and 6 PM and between midnight and 6 AM [21].

In the present study, a statistically significant difference in forms of WPV was found between PHC and HM for throwing, damaging and seizing objects ($p < 0.001$), and for pushing ($p < 0.001$). These forms of WPV were most common in the Department of Psychiatry ($p < 0.001$). This finding is similar to what was described in a study conducted in Poland [19].

Generally, nurses are more exposed to physical violence than physicians [11,13,20,28,29]. In this study, a statistically significant difference was found between physicians and nurses for being pushed ($p = 0.003$), punched or slapped ($p = 0.003$), and being struck with an object ($p = 0.004$). This is not surprising, because nurses are usually the first point of contact in hospital settings; they often triage patients and control entry into the health care system, and those employed in hospitals spend more time with patients, which makes them more likely to experience aggressive incidents from patients.

The difference in the number of instances of WPV depending on health providers' length of service did not prove to be significant ($p = 0.665$). The majority of the respondents in this study who experienced a verbal form of WPV had between 10 and 20 years of service

(53.3%), while those who had more than 20 years of service also more often experienced a physical form of WPV. These results were similar to those from a study in Egypt, where most of the respondents had more than 10 years of service [27]. A study conducted in Germany [11] in health care institutions providing care for psychiatric patients showed that workers with 15 or more years of service experienced the highest number of incidents. It can be assumed that these respondents are in close contact with patients suffering from severe mental illnesses. However, in contrast to these findings, in studies conducted in Palestine [13], Turkey [15], and Pakistan [21], it is the employees with the least number of years of experience who were 'attacked' most often.

In the analysis of verbal forms of WPV, with respect to length of service, a statistically significant difference was found for quarrelling ($p < 0.001$) and unjustified blaming ($p = 0.036$), the former being experienced more by those with fewer than 10 years of experience and the latter by those with more than 20 years. In terms of statistical significance, throwing, damaging, or seizing objects as well as pushing were the most prevalent forms of violence in the Department of Psychiatry ($p < 0.001$). It may be assumed that this is due to the type of illness being treated by the respondent, as well as the working conditions in the health care facilities and the organization of health care.

Respondents from the PHC level reported that patients were the 'attackers' in 61.4% of cases, while at the HM level it was patients' relatives or friends who were the attackers more frequently (69.2%). In surveys conducted in Pakistan [21], in most cases the attacker was a patient's relative or close friend (63.6%), while the patient was the attacker in 20.4% of cases. Hamdan, *et al.* presented similar results for emergency departments in Palestine, where patients' relatives or friends were the 'attackers' significantly more often than the patient [25]. This was true also for a study conducted in China [22], in which patients' relatives or friends perpetrated WPV in 62.3% of cases. In a national survey conducted in Turkey, patients' relatives or friends were more prone to aggressive behaviour than patients [15]. These results can be explained by inpatients and patients in emergency services being more ill than outpatients, and therefore less able to express aggression. The patient's relatives or friends are thus more likely to act on their behalf.

The health care system in post-war Bosnia and Herzegovina is going through a transformation, and often both patients and health care workers suffer in such circumstances. In statistical terms, dissatisfaction with medical services was significantly more often the reason for WPV, especially at the hospital level of health care ($p < 0.001$), and most notably so in the Department of Surgery ($p < 0.001$). Corridors are overcrowded; it is often impossible to devote enough time to the patient; waiting lists are long; and many restrictions have been introduced. These are also the reasons for the aggressive behaviour of patients in eastern China [30]. Waiting time was also a key risk factor for WPV in Palestinian emergency departments [25]. Other reasons for WPV may include the absence of aggression prevention measures; lack of medicine; the attitudes of staff; unmet patient expectations; fear, anxiety, or other mental disorders, including substance abuse; and a lack of awareness in patients [27,31]. Prior negative experiences with the health care system can also lead to aggressive behaviours of patients or their relatives or friends [31], as well as social and economic pressures being felt by patients and families [32].

In the health care setting, workplace violence is not without consequences for health care workers. Aggressive behaviour of patients or their relatives or friends may affect the health of medical staff and may indirectly reflect on patients themselves, which can further complicate the situation [12,16,31].

Sometimes a mere lack of good communication skills in health care workers may trigger aggressive behaviour in patients. The situation in Bosnia and Herzegovina is further exacerbated by the poor socio-economic situation and the vast majority of people living on the edge of poverty, in addition to continuing consequences of the war. The first step in solving this problem can be to develop greater awareness of the risks for WPV and more effective communication skills in health care workers, and also to keep records of and report incidents of WPV. This will provide more in-depth insight into the magnitude of the problem in this country, which can be used to develop and implement specific policies and procedures aimed at managing workplace violence.

Conclusions

The present research shows that exposure to verbal violence was higher in the Family Medicine Department than in the Psychiatry and Urology/Gynaecology Departments. As expected, nurses were more exposed to WPV than were physicians. Physical violence most frequently occurred during the third shift (10 PM - 7 AM). In PHC, aggressive incidents were most often caused by the patient, and in HM by relatives or friends.

Like other studies conducted separately in Bosnia and Herzegovina, this study indicates the need for research at the national level. Results of such research can help health care departments, managers, and workers to develop strategies to minimize risks and to better manage aggressive behaviours in patients, as well as to establish policies for taking appropriate action against perpetrators. Additionally, it would be important in future surveys to include the perspectives of patients and families. This would help to better define the unmet needs of patients and the sources of poor communication that may ultimately result in aggressive incidents. These actions could help to reduce the incidence of WPV, relieve stress at work, and help reduce burnout in health care workers.

Limitations and Disadvantages

The main limitations of this study are the relatively small sample, the limited number of hospital departments surveyed, and the ambivalence of some employees in completing the questionnaire.

Ethical Consideration

Ethics Committee permission of the Health Center in Mostar had been obtained, where this research had also been conducted. There are no quarrels types (financially, intellectual, etc.) among the authors.

The contribution of this paper is warning about this problem which is expressed in a number of States and is a constant problem that health care workers are exposed.

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