



## Workplace Violence Among Iraqi Female Medical Doctors, 2020

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**Received:** March 01, 2021

**Published:** March 08, 2021

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### Abstract

Workplace violence among healthcare workers is a serious phenomenon in Iraq. This cross-sectional design was conducted to estimate the prevalence and identify types, and characteristics of workplace violence against female medical doctors in a sample of hospitals in Baghdad, Iraq, 2020. A self-administered questionnaire used to collect demographic and relevant workplace violence data. Among the 265 participants; 86% experienced workplace violence. Verbal abuse reported in 92%, threat in 23.1%, sexual harassment in 14.2%, and physical violence in 6.7%. The emergency department was the most frequent site (81.1%), and the evening shift was the most frequent time of exposure (65.0%). Patients' relatives were the most frequent perpetrators (86.8%). Based on victims' perception, overcrowded workplace (44.5%), dissatisfaction with the quality of healthcare (41.9%), and miscommunication (41.9%) were the most likely causes. Marital status was the only statistically significant factor associated with workplace violence ( $P = 0.002$ ). Control and prevention strategies involving legislations and improving communication skills of healthcare workers should be in place.

**Keywords:** Workplace; Violence; Iraq; Medical Doctors; Female

### Abbreviations

WPV: Workplace Violence; HCW: Healthcare Workers

### Introduction

Workplace Violence (WPV) has become an alarming phenomenon worldwide [1]. There were a lot of definitions for the WPV. The Occupational Safety and Health Administration (OSHA) defines WPV as any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behaviors that occur at the worksite [2]. A number of organizations including the World Health Organization (WHO) and the International Council of Nurses (ICN) defines workplace violence as "incidents where staff are abused,

threatened, or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit or implicit a challenge to their safety, well-being or health" [3].

In the US, 2016, 17% of workplace deaths were the result of violence, and about 2 million people each year report some type of WPV; 25% goes unreported [4]. Healthcare Workers (HCWs) are particularly at risk of WPV [1]. Some studies reported the prevalence of WPV among physicians for example to be 56%–75% [5,6]. The WHO states, "Between 8% and 38% of health workers suffer physical violence at some point in their careers." Many more are threatened or exposed to verbal aggression, mostly by patients and visitors [7].

WPV affects the physical and psychological well-being of the health staff, and their job motivation. WPV in the health sector has a major impact on the effectiveness of health systems. It compromises the quality of care, puts health-care provision at risk and negatively affects their performance and health-care services delivery [8].

The problem of aggression towards healthcare staff is global and, on the increase. It is difficult to measure its extent since under-reporting of violent incidents is common and is probably influenced by social roles or cultural factors [9].

The medical doctors in Iraq are living in panic through being continuously at risk of assassination, kidnapping, threats, and forced displacement which have become part of everyday life in Iraq. Around 70% of Iraq's fully qualified physicians have left the country to seek asylum in other countries due to violent deaths (1.65%), threats (3%), and kidnappings (0.67%) [10].

Lack of trust in the doctor-patient relationship is a major blow to the medical and health professions nowadays. The shortage of doctors, debilitated infrastructure, inadequate supplies and facilities, long waiting hours, delay in treatment, and miscommunication exacerbated this crisis.

It is crucial to examine the magnitude of the WPV as a serious problem in Iraq particularly among female HCWs and medical doctors in particular. This can be a step towards developing a database and a general profile of the problem. This, in turn, can help policymakers develop policies that address this devastating problem which can seriously undermine the provision of medical services in the already redundant and fatigued health system.

This study aimed at estimating the prevalence of different forms of violence (verbal, the physical, threat, and sexual harassment) and identify the determinants and attributes associated with the occurrence of these forms of violence among female medical doctors working in a sample of hospitals in Baghdad, Iraq, 2020.

## Methods

### Study design and setting

This cross-sectional study was conducted on female medical doctors working in a sample of six main hospitals in Baghdad city (Baghdad Teaching Hospital, Medical city, Al-Kindi Teaching Hospital, Al-Elwiya Teaching Hospital, Sheikh-Zayed Hospital, Al-Karkh General hospital, and Karama Teaching Hospital).

### Study population

All the female medical doctors working in these hospitals who were available during the study period and who accepted to participate were included.

**Data collection tool and process:** Data were collected using a questionnaire form that was developed after review of the literature and consulting five experienced faculties in the College of Medicine, University of Baghdad. The data collection process was done through visiting the assigned hospitals during Feb/2020-Apr/2020, distributing the questionnaire to the study participants, filled by them, and collected immediately later. The questionnaire was intended to gather the following information:

- Basic demographic variables, included: Age, Marital status, Residence (inside or outside Baghdad)
- Wearing a scarf (yes or no).
- Job-related variables included: designation (Junior resident, Senior resident, general Practitioner, and Specialist), specialty (Medicine, Surgery, Obs/Gyn, Pediatrics and others) and years of service in the field of health.
- Exposure to violence included: exposed or not, number of times exposed to WPV (Once, Twice, <sup>3</sup>3), place of having WPV (Emergency department, Outpatient department, ICU, Inpatients Ward, and other places) the attack time (Morning, Evening, Night), and source of violence (Patient, Patient's relative, Military/Police, co-worker, and others)
- Types of violence, included:
  - Physical, defined as: any act where an individual attempts to use physical force against another person or group, to harm them physically, sexually, or psychologically, which includes beating, kicking, slapping, stabbing, shooting, pushing, biting, pinching, among others [11,12].
  - Verbal, defined as attacks and threats made by others, such as yelling, cursing and insulting, any threatening statement or complaint [13].
  - Threat, defined as: promised use of physical force or psychological force that might hurt you, resulting in fear of physical, sexual, psychological harm or other negative consequences to the targeted individuals or groups [14].
  - Sexual harassment, defined as an unwelcome sexual advance, unwelcome request for sexual favors or other unwelcome conduct of a sexual nature which makes a per-

son feel offended, humiliated and/or intimidated, where a reasonable person would anticipate that reaction in the circumstances [15]. In this study, we further classify sexual harassment into fondling and suggestive remarks, use of sexual language, or physical act by beneficiaries, colleagues, or supervisors).

- Factors associated with the violence as perceived by the victim, included: Dissatisfaction with the quality of provided healthcare, Aggression attitude, Patient’s death, Dissatisfaction with the context of healthcare setting, Agitation and misunderstanding, Shortage of staff, Overcrowded workplace/ Long waiting lists, and Inadequate security support.
- Reaction to violence, included:
  - Family/Tribe engagement (reported as yes or no). The victims who did not engage their families or tribes were asked about the causes.
  - Immediate response included: called for hospital security/Police help, De-escalation of the situation, Fightback, Called for colleagues help, Absence from work, or Did nothing.
  - Measures taken by health facility included: Nothing, Raising a claim/Penalty against the offender, or Improve security measures.
- Sequela of violent attack included: Consider changing workplace, Consider changing Job, Consider migration, Impact performance, Prolonged feeling of insecurity, and the Perspective of future practice (Getting worse, No change, Getting better).
- Prevention measures (from the perspective of the victim), included: Re-arrangement of the hospital (workplace) setting, Better provided medical services, Improving security measures, Increasing staff number, Reducing duty hours, Increasing public awareness, Educate the responsible police force to be more aware, and Empowering the legislation of HCWs’ protection.

**Statistical analysis**

Statistical Package for Social Sciences (SPSS) [16]. was used for data entry and analysis. Descriptive data were presented as tables. Categorical data were tested using chi-square test. P<0.05 was considered statistically significant.

**Ethical consideration**

Verbal consent was granted from all participants and names were kept anonymous. Also, data was exclusively used for the sake

of this research and was kept confidential. The protocol was approved by the Scientific and Ethical committee in the College of Medicine, University of Baghdad (No. 142, Jan 29, 2020).

**Results**

The total number of the study group was 265, 56.2% aged 26-30 years, 54% were currently married, of whom 56.6% of their husbands were also physicians and only 16% of their husbands were working in the same hospital. The majority of the study group were wearing a scarf (71.1%), and 63.8% were senior residents. Around one third were working in the “medicine” departments, the rest were working in other specialties and around two-thirds of the group had a duration of service for six years or less (66%) (Table 1).

Variable	No.	%
Age Groups (years) (n = 265)		
£ 25	29	10.9
26-30	149	56.2
31-35	71	26.8
36-40	10	3.8
³41	6	2.3
Marital Status (n = 265)		
Single	115	43.4
Married	143	54.0
Divorced/Widow	7	2.6
Occupation of husband (n = 143)		
Medical Doctor	81	56.7
Others	25	43.3
Husband working in the same place (n = 143)		
Wearing Scarf (n = 265)	189	71.3
Residence in Baghdad (n = 265)		
Designation (n = 265)	227	85.7
Junior resident	55	20.8
Senior resident	169	63.8
General practitioner	21	7.9
Specialist	20	7.5

Specialty (n = 265)		
Medicine	89	33.6
Surgery	17	6.4
Obs/Gyn	30	11.3
Pediatrics	16	6.0
Others	112	42.3
Missing	1	0.4
Years of service (n = 265)		
1-2	53	20.0
3-4	43	16.2
5-6	80	30.2
7-8	50	18.9
<sup>3</sup> 9	39	14.7

**Table 1:** Distribution of the study group by certain demographic characteristics and wearing scarf.

Among the whole 265 participants in this study, 228 (86%) reported WPV; 95% confidence interval: 82-90%.

The commonest types of WPV were verbal assault (208, 92.4%). Sexual harassment was reported by 32 participants (14.2%); of whom 19 (57.6%) exposed to fondling suggestive remarks and 23 (69.7%) exposed to sexual language. Around 55% (125) exposed to WPV for three or more times. The emergency ward was the commonest department where the participants exposed to WPV (185, 81.1%), the evening time was the most frequent time for the exposure (147, 65.0%) and the patient's relative was the most frequent source of the WPV (198, 86.8%).

Among the 228 exposed to WPV, 205 (89.9%) preferred not to engage their families or tribe for the following reasons: around 63% (130) considered the subject not important, 19 (9.3%) were afraid, 8 (3.9%) were ashamed and 48 (23.4%) did not mention a cause.

The most important immediate measures that the victims took after the incident were: called for hospital security/police help (123, 53.9%), de-escalation of the subject (74, 32.5%), fight back (27, 11.8%), called for colleagues help (39, 17.1%), absenteeism from work (13, 5.7%), and 36 (15.8%) did nothing (Table 3).

Variables	No.	%
Types of WPV (n = 225)		
Verbal	208	92.4
Physical	15	6.7
Threat	52	23.1
Sexual harassment	32	14.2
No. of times (n = 228)		
Once	50	21.9
Twice	50	21.9
<sup>3</sup> 3	125	54.8
Missing	3	1.3
Place of violence (n = 228)		
Emergency department	185	81.1
Outpatient department	42	18.4
ICU	14	6.1
Ward	81	35.5
Other places	13	5.7
Attack time (n = 226)		
Morning	119	52.7
Evening	147	65.0
Night	56	24.8
Source of Violence (n = 228)		
Patient	64	28.1
Patient's relative	198	86.8
Military/Police	23	10.1
Co-worker	34	14.9
Others	6	2.6

**Table 2:** Type, and characteristics of WPV among female medical doctors.

Following the incident, 151 (66.2%) of the victims felt somewhat worried; 44 (19.3%) were very much worried, and only 30 (13.2%) were not worried.

Regarding the sequel of the violent attack, 134 (62%) experienced a prolonged sense of insecurity, 64 (29.6%) considered

Variables	No.	%
Perceived Reasons behind violence (n = 227)		
Dissatisfaction with the quality of health care	95	41.9
Aggression attitude	78	34.4
Patient's death	86	37.9
Dissatisfaction with healthcare setting	61	26.9
Agitation and misunderstanding	95	41.9
Shortage of staff	53	23.3
Overcrowded workplace/long waiting lists	101	44.5
Inadequate security support	76	33.5
Perceived preventive measures (n = 222)		
Re-arrangement of the hospital setting	188	84.7
Better provided medical services	193	86.9
Improving security measures	205	92.3
Increasing staff number	186	83.8
Reducing duty hours	178	80.2
Increasing public awareness	205	92.3
Educate the responsible police force to be more aware	199	89.6
Empowering the legislation of doctor's protection	205	92.3

**Table 3:** Perceived reasons and measures to prevent WPV against female medical doctors.

migration, 35 (16.2%) considered changing the workplace, 30 (13.9%) considered changing job and 32 (14.8%) stated that the incident had impacted their performance.

From the perspective of the victims, 128 (48.3%) thought that their practice will worsen, 112 (42.3%) thought this will not change their practice, while 18 (6.8%) thought that their practice will get better, and 7 (2.6%) did not respond to this question.

The health authority of the hospital did nothing for 186 victims (81.6%), claim for a penalty to the offender for 21 victims (9.2%) and improve security measures for another 21 victims (9.2%).

The victims of the WPV perceived that the most important causes of the violence were overcrowded workplace/long waiting

lists (101, 44.5%), dissatisfaction with the quality of health care (95, 41.9%) and agitation and misunderstanding (95, 41.5%) (Table 3).

Also, from the perspective of the victims, the most important preventive measures for the WPV were: improving security measures (92.3%), empowerment of legislations of HCWs protection (92.3%), and increase public awareness (92.3%) (Table 3).

On studying the factors that might be associated with the WPV, there was a statistically significant association between WPV and marital status (P = 0.002), where the highest proportion was reported among single (90.4%). There was no statistically significant association between violence and age (P = 0.395), wearing a scarf (P = 0.528), years of service (P = 0.675), residence (P = 0.725), designation (P = 0.776), and specialty (P = 0.897). On the other hand (Table 4).

		Total	No. with WPV	%	P Value
Age group	≤25	29	23	79.3	0.395
	26-30	149	132	88.6	
	31-35	71	61	85.9	
	36-40	10	8	80.0	
	≥41	6	4	66.7	
Marital status	Single	115	104	90.4	0.002
	Married	143	121	84.6	
	Divorced/Widow	7	3	42.9	
Husband working the same place	Yes	23	23	100	0.073
	No	119	97	81.5	
	Missing	1	1	100	
Wearing Scarf	Yes	189	161	85.2	0.528
	No	76	67	88.2	
Residence	Inside Baghdad	227	196	86.3	0.725
	Outside Baghdad	38	32	84.2	

Designation	Junior resident	55	46	83.6	0.776
	Senior resident	169	147	87.0	
	General practitioner	21	17	81.0	
		20	18	90.0	
	Specialist				
Specialty	Medicine	89	76	85.4	0.897
	Surgery	17	16	94.1	
	Obs/ Gyn	30	25	83.3	
	Pediatric	16	13	81.3	
	Others	112	97	86.6	
	Missing	1	1	100	
Years of Service	1-2	53	44	83.0	0.675
	3-4	43	38	88.4	
	5-6	80	72	90.0	
	7-8	50	42	84.0	
	9+	39	32	82.1	

**Table 4:** Association between exposure to WPV and certain demographic variables and wearing scarf.

## Discussion

Violence against healthcare workers especially medical doctors in Iraq is of special concern and has become a serious problem in the health sector, following the increasing numbers of medical doctors subjected to different types of violence, including verbal, physical, threat, and sexual harassment.

In this study, 86% of Iraqi female medical doctors had been exposed to some form of WPV. This is quite higher than the rates reported in other countries like the USA (78%) [17], Pakistan (74%) [18], Morocco (70%) [19], and India (69.5%) [1]. This higher rate could be due to the redundant security and administrative situation, the poor law implementation, and social disruption in Iraq since 2003. People are increasingly relying on their families and tribes instead of the government to resolve conflicts. This breakdown of the legal and social system has created a very difficult liv-

ing environment and negatively affected the population's morale. These factors had increasingly encouraged some individuals to offend HCWs and eventually end with increased WPV.

In the current study, verbal abuse was the most common form of violence (92.4%), followed by threats (23.1%), sexual harassment (14.2%), and physical violence (6.7%). This was comparable to other studies performed in India, Pakistan, where verbal abuse has a higher prevalence (70% in India [1], 42% in Pakistan [20]). In this study, the physical violence exhibited the lowest rate, this might be because the study was performed on a sample of female doctors in Iraq where it is still difficult for strangers, for cultural values, to attack females in public. Meanwhile, the consequences of physical violence on the offenders particularly the legal ones are usually more likely and more serious. Physical violence was also found to be the least common type of WPV against critical care physicians in India [21].

Similarly, sexual harassment against female doctors has a low rate. This could be due to denying, hiding in reporting such issue, and feeling of fear that reporting sexual harassment may provoke social stigma against the victim, again due to cultural issues. This is consistent with a study done on doctors in Pakistan where sexual harassment and physical violence were found to be the least experienced types [20].

The present study revealed that the emergency department was found to be the most commonplace of violence (81.1%). A similar finding was reported in a study from India (68.4%) [1]. The reasons behind rising violence in the emergency department (ED) are numerous. ED is considered to be a highly stressful workplace. Also, in addition to the understaffed ED and the high number of patients, most of the cases are critical which makes the anxious patients and their relatives more liable to resort to violence [22-25].

Most of the WPV had occurred during the evening shifts. A higher rate of WPV during the evening shift was also reported in the literature [26,27]. In general, the number of HCWs at the evening shifts is lower than other times of the day, a situation that makes the staff overwhelmed with the workload. On a similar basis, the number of administrative and security supervisors is lower in the evening and night shifts. Those people are responsible for running the hospitals' activities and maintaining the security situation in different departments of the hospitals. These factors are

most probably behind the increased chance of assaults against the HCWs in the evening shift.

This study showed that in most incidents, it is patient's relatives (86.8%) who are involved in WPV, and to a much lesser extent the patients themselves (28.1%). Other studies also reported that the patients' relatives and the patients were the main sources of violence [7,26]. The patients and their relatives are under high stress associated with feelings of anger and frustration which in turn lead to different forms of violence against healthcare providers. Also, communication skills are not regularly and properly taught in most national medical and health colleges. This makes the capacity of the HCWs to communicate bad news and absorb the anger and tension of the patients and their relatives poor and inefficient.

From the perspective of the victims, the most important reason for the violence was the overcrowded workplace/long waiting lists (45%), dissatisfaction with the quality of provided healthcare (42%) and agitation and misunderstanding (42%). A similar study from India indicated more or less related reasons for violence such as long waiting periods, delayed medical provision, violation of visiting hours, and patient's dissatisfaction with nursing care [21]. Additionally, other factors such as poor hospitals infrastructure, lack of adequate health personnel, equipment, medications, and lack of trust between the health personnel and the public may also have an impact on WPV.

The consequences of WPV on the participants' future life were serious. Around 62% experienced a prolonged feeling of insecurity, 30% think of leaving the country and almost one third considered changing the workplace and another one third think of changing the job. This is in agreement with different studies reported in other parts of the world. A study from Michigan, USA reported that 44% of participants feel less secure as a result of WPV [28]. Another study conducted in Canada showed that 73% of respondents had fear of treating patients due to WPV. Around 74% reported reduced job satisfaction and 67% had a job change [29].

From the perspectives of the victims, the most important measures suggested for the prevention of such incidents were empowering the legislations of HCWs protection, improving the hospitals' security measures, and improving public awareness about the value of HCWs. Many other measures were suggested but none of the victims highlighted the value of improving the communication skills of the healthcare providers in approaching angry patients or their relatives and how to communicate bad news.

Apart from the marital status, all the studied demographic characteristics and wearing a scarf were found not statistically significant determinants of WPV in the current study. Gillespie, *et al*, [30] also found marital status an important risk factor for WPV, but they also reported other significant risk factors like age, years of experience, and hours worked.

## Conclusion

We conclude that the overwhelming majority of Iraqi female medical doctors had experienced some sort of WPV, and verbal abuse was the most common type of violence. Most WPV occurred at the emergency departments, during the evening shifts and the majority of perpetrators were patients' relatives. Overcrowded understaffed workplace, miscommunication, and dissatisfaction with the quality of provided healthcare were the most perceived causes of WPV. Further studies are needed to deeply assess the risk factors behind the WPV affecting HCWs in Iraq. The Ministry of Health is requested to assemble a multidisciplinary team to develop a prevention and control strategy that includes (but not limited to) empowering the legislations of HCWs protection. Also, medical and health institutes should seriously work on improving the communication skills of HCWs and empower their capacity of dealing with aggressive behavior and stressful events.

While this study is the first that focused the light on WPV among female medical doctors in Iraq, still, it has a number of limitations. This study was conducted in the hospitals, so the results cannot be generalized to female medical doctors working in other health outlets like Primary Healthcare Centers. This study was conducted in the capital Baghdad and did not include other cities in Iraq, that probably might have a different context. While, this study reflects the opinions of the victims, the clients' perspectives can be addressed in a separate study using exit interview.

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