RESEARCH ARTICLE

Prevalence of work place violence and its impact on doctors in some Iraqi hospitals

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Abstract

Objective: To estimate the prevalence of workplace violence and its impact on doctors in hospitals.

Method: The cross-sectional study was conducted from August 2021 to January 2022 in Baghdad and Karbala governorates of Iraq, and comprised resident doctors at a number of hospitals. Data was collected using a self-administered questionnaire that focussed on the frequency of exposure to violence, type, source, most common time, and other details about violence as well as its impact on doctors and their careers. Data was analysed using SPSS 23.

Results: Of the 1,079 subjects working at 18 participating hospitals and having a mean age 30.0±5.72 years, 567(52.5%) were females and 512(47.5%) were males, while 570(52.8%) were aged <30 years and 509(47.2%) were aged >30 years. Overall, violence exposure was reported by 811(75.2%) subjects; 427(52.6%) females and 384(47.4%) males. Gender was not significantly associated with exposure to violence (p>0.05). Due to missing data, further analysis was limited to 792(97.6%) subjects who faced exposure to workplace violence. In 671(85%) cases, the assaults were nonphysical. However, 110(14%) doctors reported physical attacks and severe consequences. There were 673(85%) doctors with exposure to violence who expressed their intention to change their job, workplace, or leave the country because of violence.

Conclusion: The problem of violence against Iraqi doctors was found to be highly prevalent with a seriously negative impact on the medical professionals.

Key Words: Violence, Prevalence, Intention, Malpractice.

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Introduction

Healthcare workers (HCWs) are at a very high risk of workplace violence (WPV),[1] as they are four times more likely to be injured compared to other professionals, especially because doctors usually deal with persons who are in an unusually stressful situation.[2] The global prevalence of WPV against HCWs is high, and increasing, particularly in North American and Asian countries, mostly in psychiatric and emergency room (ER) settings, and among male physicians. More experienced HCWs, being single/unmarried, and those working longer hours are more likely to face physical violence.[3, 4] A systematic review of 253 studies in 2019 with a total of 331,544 participants concluded that the global prevalence of WPV was 61.9%.[3,5] A more recent systematic review and meta-analysis of 301 studies reported a WPV rate of 72% in ER.[6]

The problem is known to be augmented in conflict zones, such as Afghanistan, Syria, Iraq, Yemen, Libya and Palestinian territories.[7-10] Further expansion of the problem was noticed during the coronavirus disease-2019 (COVID-19) pandemic.[11-15]

The main impact of WPV against HCWs is its negative effect on healthcare staff, healthcare services and people at large. The negative impact can result in higher absenteeism rate, job dissatisfaction, staff turnover, physical and mental problems, and poor quality of healthcare services.[16-19]

The most common reasons reported for violence are patients' dissatisfaction, miscommunication, weak administration, long working hours and hostile media. Other factors, such as crowd psychology, play an important role as well. Death of a beloved one is sometimes used by powerful groups as a show of strength by looting and damaging healthcare facilities. This, combined with weak security system in government hospitals, can worsen the situation, especially when fed by politicians for publicity purposes.[2-5]

The current study was planned to estimate WPV prevalence, its impact on doctors in hospitals.

Subjects and Methods

The cross-sectional study was conducted from August

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2021 to January 2022 in Baghdad and Karbala governorates of Iraq, and comprised resident doctors at a number of hospitals. Baghdad is the capital of Iraq, while Karbala is located some 70 miles to the south of Baghdad. After approval from the ethics review committee of the College of Medicine, Mustansiriyah University, Baghdad, the sample was raised using consecutive sampling technique from among doctors working at the participating hospitals after permission from the Directorates of Health and respective hospital administrations. Those included were temporary and permanent resident doctors available at the time of visits to the hospitals. Each hospital was visited 5-6 times to distribute the study questionnaire and to collect it on the following day, giving the participants enough time to fill it by themselves. Informed consent was obtained from all the subjects, and those who did not volunteer to participate were excluded.

The self-administered questionnaire was composed of closed-ended and open-ended questions, exploring, in addition to socio-demographic data, the duration of experience, lifetime and recent exposure to WPV, type and reasons for WPV, place, source and consequences of exposure, reporting or otherwise, reasons for not reporting. The questionnaire also aimed at determining the participants' intention to change their job, workplace, or leave the country due to WPV. Recent WPV exposure was taken as an episode within the preceding 6 months. WPV was s defined as incidents where HCWs were assaulted or threatened in circumstances related to their work, involving an explicit or implicit challenge to their safety, wellbeing or health. Sexual harassment was not included as it is extremely rare in Iraqi community.

Data was analysed using SPSS 23 and AMOS. Data was presented as means ± standard deviations, and frequencies and percentages, as appropriate. Intergroup comparisons were done using chi-square test and structural equation model (SEM). P<0.05 was considered significant.

Results

Of the 1,079 subjects working at 18 participating hospitals and having a mean age 30.0±5.72 years, 567(52.5%) were females and 512(47.5%) were males, while 570(52.8%) were aged <30 years and 509(47.2%) were aged >30 years. There were 760(70.4%) doctors from Bagdad, and 319(29.6%) from Karbala. Overall, violence exposure was reported by 811(75.2%) subjects; 427(52.6%) females and 384(47.4%) males. Gender was not significantly associated with exposure to violence (p>0.05) (Table 1).

Due to missing data, further analysis was limited to 792(97.6%) subjects who faced exposure to workplace violence. In 671(85%) cases, the assaults were nonphysical. However, 110(14%) doctors reported physical attacks and severe consequences. Stratified data

Table-1: Exposure to violence in relation to demographic characteristics (n=1079).

Variable	Group	Lifetime exposure to violence		
		Exposed	Not exposed	p value
Age group	< 30 year	445 (78.1%)	125 (21.9%)	0.019
	> 30 year	366 (71.9%)	143 (28.1%)	
Gender	Male	384 (75.0%)	128 (25.0%)	0.829
	Female	427 (75.3%)	140 (24.7%)	
Marital status	Single/divorced/widow	420 (78.2%)	117 (21.8%)	0.047
	Married	391 (72.1%)	151 (27.9%)	
Job description	Rotating residents	280 (77.1%)	83 (22.9%)	0.097
	Permanent residents	177 (78.0%)	50 (22.0%)	
	Board candidates	326 (71.6%)	129 (28.4%)	
Experience (work duration)	< one year	214 (78.1%)	60 (21.9%)	<0.001
	1-3 year	126 (81.3%)	29 (18.7%)	
	4-10 year	351 (75.8%)	112 (24.2%)	
	>10 Year	69 (57.0%)	52 (43.0%)	
Displaced (Internal displacement)	Yes	177 (22.7%)	31 (11.9%)	<0.001
The social media play a negative role	Yes	652 (78.7%)	89 (61.8%)	<0.001
Got lectures/training about dealing with workplace violence (WPV)	Yes	105 (84.7%)	636 (73.5%)	0.007
Any household member exposed to violence	Yes	203 (86.4%)	521 (72.6%)	<0.001
Have any of your family members left Iraq to avoid violence	Yes	308 (81.1%)	427 (69.7%)	<0.001
Witnessed any act of violence against healthcare workers (HCWs)	Yes	55 (80.9%)	653 (77.7%)	<0.001
Feel safe in your workplace	Yes	106 (59.9%)	638 (77.1%)	<0.001

N.B.-The total for some variables was different because of missing data.

Table-2: Association of gender and age with exposure to violence (n=792).

Variable	Group	Age		p-value	Gender		p-value
		<30 year	>30 year		Male	Female	
Job description	Rotators	258 (94.5%)	15 (5.5%)	<0.001	84 (30.0%)	196 (70.0%)	<0.001
	Permanent	63 (36.2%)	111 (63.8%)		97 (54.8%)	80 (45.2%)	
	Board Students	94 (28.9%)	231 (71.1%)		190 (58.3%)	136 (41.7%)	
Experience	< one year	199 (95.7%)	9 (4.3%)	<0.001	67 (31.3%)	147 (68.7%)	<0.001
	1-3 year	113 (90.4%)	12 (9.6%)		48 (38.1%)	78 (61.9%)	
	4-10 year	86 (24.7%)	262 (75.3%)		202 (57.5%)	149 (42.5%)	
	>10 Year	1 (1.5%)	66 (98.5%)		67 (31.3%)	147 (68.7%)	
Displaced	Yes	92 (43.8%)	118 (56.2%)	0.008	127 (59.1%)	88 (40.9%)	<0.001
Type of violence	Verbal	369 (79.9%)	302 (73.8%)	0.054	301 (68.7%)	369 (84.2%)	<0.001
	Physical	43 (9.3%)	49 (12.0%)		67 (15.3%)	26 (5.9%)	
	Threatening	48 (10.4%)	55 (13.4%)		52 (11.9%)	42 (9.6%)	
Department	Emergency Room	341 (85.5%)	244 (79.7%)	0.176	304 (85.4%)	336 (84.8%)	0.834
	Hospital wards	58 (14.5%)	62 (20.3%)		52 (14.6%)	60 (15.2%)	
Source of Violence	Patient	112 (29.3%)	84 (22.0%)	0.71	84 (18.0%)	115 (24.7%)	0.66
	Patient relatives	340 (89.0%)	276 (72.3%)		258 (55.4%)	328 (70.4%)	
	Military or police	13 (3.4%)	20 (5.2%)		23 (4.9%)	14 (3.0%)	
	Others	9 (2.4%)	2 (0.5%)		1 (0.2%)	9 (1.9%)	
Time of day	Day	197 (46.9%)	184 (51.1%)	0.368	144 (38.4%)	242 (58.0%)	<0.001
	Afternoon	155 (36.9%)	68 (18.9%)	<.001	87 (23.2%)	141 (33.8%)	<0.001
	Night	211 (50.2%)	169 (46.9%)	0.003	223 (59.5%)	167 (40.1%)	<0.001

Table-3: Impact of violence by gender and age (n=792).

Variable	Group	Age		p-value	Gender		p-value
		<30 year	>30 year or more		Male	Female	
Thinking of changing workplace due to violence	Yes	153 (30.2%)	117 (24.1%)	0.029	144 (30.4%)	132 (24.5%)	0.034
Thinking of changing job due to violence	Yes	154 (30.3%)	120 (24.6%)	0.045	136 (28.5%)	145 (26.9%)	0.555
Thinking of leaving the country because of violence	Yes	292 (57.4%)	225 (46.0%)	<0.001	258 (54.4%)	272 (50.2%)	0.177
Have any of your family members left Iraq to avoid violence	Yes	215 (42.7%)	161 (33.4%)	0.003	184 (39.0%)	202 (37.9%)	0.724
Heard about any of colleagues that left Iraq to avoid violence	Yes	405 (80.0%)	385 (80.2%)	0.947	386 (81.4%)	420 (78.9%)	0.324
Witnessed any act of violence against health workers	Yes	419 (76.5%)	414 (81.2%)	0.085	424 (82.8%)	429 (75.8%)	<0.001
Think that violence negatively reflects on your performance	Yes	419 (76.5%)	420 (82.4%)	0.256	410 (80.1%)	446 (78.8%)	0.036
Feel that local authorities (health, justice or police) are supporting you against violence	Yes	142 (28.3%)	103 (21.3%)	0.010	114 (24.2%)	135 (25.3%)	0.667
Feel safe in your workplace	Yes	107 (21.0%)	73 (14.9%)	0.361	77 (16.1%)	104 (19.3%)	0.180

for age and gender, all parameters were significantly different except for the department a subject was associated with, and the source of violence (Table 2).

There were 673(85%) of doctors with exposure to violence who expressed their intention to change their job, workplace, or leave the country because of violence (Table 3).

Discussion

The current findings that majority of the participants had faced WPV was comparable to global data.[6, 12] A recent study in 11 hospitals in Baghdad showed that the 6-month exposure to WPV was 87%,13 while lower rates among HCWs were reported in international reviews.[3,5]

The main group targeted by violence was the junior doctors (78%), with a significant inverse association with age. This association was reported in many national and international studies,[3,13] and this might be related to the improved communication skills with longer durations of work among senior doctors. Also, junior doctors are usually requested to serve for longer hours, especially in night shifts, and long working hours may have contributed to the phenomenon.

With respect to the type of violence, verbal assaults were the most common, as has been reported globally.[11,12,14,15]

The ER was the main site for WPV, which in line with other studies.[3,5] The diurnal distribution of violence in the

present study pointed to the large percentage of evening and night time incidents, with female predominance in the day, and males in the night shifts. This was also seen in a study in 2019.[3] Other factors, such as being single or displaced were also concluded by many systematic reviews.[11-13,16,17]

The negative role of social media was mentioned by the majority of participants, with wide national and international coverage of this fundamental provocative role of media in escalating WPV, as has been reported earlier.[4,10,16,17] The negative influence of the social media is important where doctors are usually portrayed negatively.

A general global male predominance was noticed in a study,10 while several publications suggested equal rates among males and females.[3,13] A systematic review in 2019 concluded a non-significant association between WPV and gender of HCWs.[5]

The volume of the problem might not portray the ground reality as most such incidents are not reported to the administration because of the belief, as stated by about three quarters of the respondents, among junior doctors that reporting will not lead to any satisfactory action against the perpetrators or in terms of improved safety measures.[3] In most cases, the control of violence potential predictors is generally manageable if effective protective rules and measures are sincerely applied.[2,3,11]

The main reason behind WPV was shortage of medicines, equipment and health personnel, resulting in low-quality services. Similar reasons were mentioned in 2 studies in Iraq,[10,13] and in other countries.[3] Another reason was relatives' attacks following death of the patient. In the current study, the fear of being attacked and working in unsafe conditions was a common feeling reported by 82.2% participants, and was also reported by many local and foreign studies.[4,12,13]

The majority of the participants (85.8%) stated that they had not been enrolled in any training courses about how to deal with WPV. Professional factors play a part in determining violent assaults. As part of the medical curriculum, all doctors are taught clinical behaviour, but few are taught communication skills.

Another interesting finding was the widespread willingness to change the job or workplace, or even leave the country due to WPV. This should be seen with due seriousness as the country is losing professionals as a result of violence, especially the junior doctors. This negative feedback is well-documented, and the international agencies should declare the 'epidemic' nature of WPV.[2,11,13,15]

Proper intervention programmes are crucial in de-escalating violence against doctors. It needs indepth assessment of risk factors, implementation of due interventions, and dealing with underreporting of violent episodes. These interventions largely depend on systematic strategies.[4,5,7] Such interventional programmes could include increasing public awareness about the negative impact of WPV on HCWs, and establishing new policies and legislations, such as encouraging HCWs to report violent acts, strict punishment to the perpetrators, and improving security measures.[3]

Doctors are becoming reluctant to take up serious medical and surgical cases due to the increasing WPV rates, compromising healthcare delivery. There is an urgent need to make healthcare facilities safer for doctors to help them work in a better environment. This needs to be done at various levels, and with the active participation of the government, health authorities and the media.[20]

Limitation: The current study has limitations as the sample size was not calculated, which could have affected the power of the study.

Conclusion

Violence against doctors was found to be prevalent, especially against junior doctors. The serious problem has negative effects on health personnel, and can affect the healthcare system. There is an urgent need for effective interventions to avoid severe irreversible consequences.

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