

Volume 11, Issue 01, January 2025,
Publish Date: 06-01-2025
Doi <https://doi.org/10.55640/ijmsdh-11-01-03>

International Journal of Medical Science and Dental Health

(Open Access)

THE PREVALENCE OF WORKPLACE VIOLENCE AMONG DOCTORS & DENTISTS AND ITS ASSOCIATED FACTORS AT MULTICENTER IN ERBIL CITY, IRAQ

DR. SAFA AL-AZZAWI¹, MAMDOUH EL-HNEITI²

¹Sahel Nineveh University

²Jordan University College of medicine

ABSTRACT

Aim: The aim of this study is to assess the prevalence of WPV among doctors including general practitioners, specialist and dentist doctors and its associated factors at multicenter in Erbil city, Iraq.

Design: A cross-sectional design was applied.

Methods: A cross-sectional design was utilized to assess the prevalence of workplace violence among doctors and dentists and its associated factors at multicenter in Erbil city, Iraq. A convenience sample of 247 doctors was used to select the participants based on the inclusion criteria. The study questionnaire contained five parts; background, working condition, working experience over the last six months, health status, threats, violence and bullying. Data analysis was performed by SPSS version 24.

Results: the results revealed that 42.9% (n = 106) of participants have been a victim of violence at least one time, while 40.5 (n = 100) of them reported that have been bullied. Concerning aggressiveness source, 30% (n = 74) of them reported that the patients were the source, 22.7% (n = 56) of them reported that one of the staff members was the source, and 12.1% (n = 30) of them reported that the patients' family or visitors were the source. Problems health symptoms for doctors who have not experienced violence were higher than (i.e. Better health symptoms) the health symptoms for doctors who have experienced violence. Violence experience is negative predictor. Female doctors are less likely to experience violence compared to male doctors.

Conclusion: Workplace violence is a serious problem among the doctors, and may be affected their psychological status, make the work condition more difficult, decrease the job satisfaction, and added to that the productivity for the doctors may negatively affect by experience the violence at the workplace.

Patient or Public Contribution

Reduce bullying and increase awareness

KEYWORDS: Doctors, Workplace, Bullying, Violence, WPV.

INTRODUCTION

Background: Violence, an act of physical force that causes or is intended to cause harm. The damage inflicted by violence may be physical, psychological, or both. Violence may be distinguished from aggression, a more general type of hostile behaviour that may be physical, verbal, or passive in nature (Ariza-Montes et al., 2013).

Bullying, in the opinion of many experts, is a direct result of conventional hierarchies, which still exist in many healthcare organizations, being used for improper purposes work (Ariza-Montes et al., 2013). For instance, people in positions of leadership are frequently the ones who abuse their employees since they are motivated only by their position (Bjørkelo et al., 2010). Moreover, the lack of strict laws and regulations occasionally results in companies paying less attention to prevent it (Flannery et al., 2016). However, roughly 29% of victims are silent about their Workplace violence (WPV) experience, despite the fact that WPV was found to be a predictor of numerous mental health issues and sleep disruptions in a systematic review paper (Nielsen et al., 2020).

All types of WPV may cause personal and organizational problems, which are often aggressive caused by some individuals. Due to psychological problems, abuse of authority, or it may arise as a result of a conflict situation in the organization due to the

In Iraq, many studies showed that many factors may face the doctors in the workplace within the healthcare settings, such as: the heavy working hours, low job satisfaction, threatened and unsafe workplace and medical practice (Ali Jadoo et al., 2015). However, there are limited studies discussed the prevalence of WPV among the doctors and dentists and its associated factors among multicenter in Erbil, Iraq.

Study purpose: The current study aims to assess the prevalence of WPV among doctors including general practitioners, specialist and dentist doctors and its associated factors at multicenter in Erbil city, Iraq.

Significance of the study: The current study focuses on prevalence of WPV among the doctors and dentists and its associated factors among multicenter in Erbil, Iraq. By understanding the factors that contribute to WPV, interventions can be developed to address the underlying causes and then decrease workplace violence and improve the work environment for doctors.

MATERIAL AND METHODS

Design: This study utilized a cross-sectional. A self-administered questionnaire using variety of tools and questionnaires. The data collection process period was from July-September 2023

Settings: This study was conducted conveniently at multiple private healthcare clinics in Erbil city, Iraq (n=30). The private clinics provide a different type of health services by healthcare professionals for population, and offering the treatment of a health condition, dental care, diagnosis, and managing the acute and chronic condition for long-term healthcare. These private centers were selected conveniently.

Population and Sampling: The reference population was all Iraqi doctor's population in Erbil. The accessible population was all the Iraqi doctors who worked in private clinics in Erbil city in Iraq. A

connivance sample of 252 doctors were utilized to select the participants based on the inclusion criteria. The sample size was calculated using the G*power 3.1 (Faul, et al., 2009) program, to identify the required sample size with two tailed test and small effect size $r = 0.10$, a statistical power 0.90, number of predictors 10 and significant alpha 0.05. The desired sample size was 220. 10% was added to cover the non-respondents; therefore, the total sample size will be 252 participants (Faul et al., 2009).

Ethical consideration: The ethical approval of conducting the study obtained from the ethics and research committee Ministry of Health in Iraq Study enrollment was voluntary and data collection was completely anonymous, as participants' identities were not be requested. Confidentiality of data was ensured. Detailed information about the study was included on the first page in the paper survey tool including the research contacts. Every participant had the chance to read the information provided and decide whether interested or not to be enrolled in the study. The informed consent then was implied by the participants completing and submitting the survey.

Data Collection Procedure: The researcher prepared a questionnaire package that included consent form and study instruments. The researcher visited the target centers, introduce herself, discuss the objectives of the study and the needed sample size, and seek her approval for data collection.

Instrument: The designed questionnaire contained five parts; Background, working condition, working experience over the last six months, health part, threats, violence and bullying part

The first part contains four questions asking about the profession, marital status, the age and gender of the participants. The second part contain five questions and describe the working condition asking about the number of years of current profession, the working duration and hours, the job satisfaction, and the ability to influence the working schedule. The third part contain 19 questions asking about working experience over the last six months using Likert scale (1-5); clarify the bad attitude and behavior that may facing the doctors during the duty, and exposure to persecution, violence or belittling during working hours, and if there's any remarks or signals of neglect; high scores indicating negative working experience using the QWC questionnaire (Arnetz, 1997). The fourth part contain nine questions regarding health and emotional status of doctors during and after the working hours. The fifth part includes questions about threats, violence and bullying using the QWC questionnaire (Arnetz, 1997).

Statistical Analysis: Nondirectional statistical tests was conducted with the level of significance set at 0.05 for each test. Thorough descriptive statistics (frequencies, percentages, central tendencies, and dispersion) was used to describe sample characteristics as well as of the items bullying and violence, working experience, and health and wellbeing. Also, total scores for the aforementioned scales were calculated and described. To answer the research questions, one way ANOVA, independent t-test, Pearson r correlation, linear regression, and multiple linear regression tests were used (tab.)

RESULTS

The results revealed that 42.9% (n = 106) of participants have been a victim of violence at least one time, while 40.5 (n = 100) of them reported that have been bullied. Concerning aggressiveness source, 30% (n = 74) of them reported that the patients were the source, 22.7% (n = 56) of them reported that one of the staff members was the source, and 12.1% (n = 30) of them reported that the patients' family or visitors were the source. Problems health symptoms for doctors who have not experienced violence were higher than (i.e. Better health symptoms) the health symptoms for doctors who have experienced

violence. Violence experience is negative predictor. Female doctors are less likely to experience violence compared to male doctors (Table 1)

Table 1 (Demographic characteristics.)

Variables		n	%
Gender	Male	95	38.5
	Female	152	61.5
Profession	General practitioner doctor	53	21.5
	Specialist doctor	50	20.3
	Dentist doctor	103	41.9
	Masters	21	8.5
	PhD	19	7.7
Age	25	44	17.8
	25-39	151	61.1
	40-49	30	12.1
	>50	22	8.9
Marital status	Single	101	41.1
	Married	123	50
	Divorced	22	8.9
Experience	1- 5 years	130	52.8
	6 - 20 years	88	35.8
	> = 21 years	28	11.4
Working hours	Scheduled working hours with split shifts	139	56.3
	Scheduled working hours without split shifts	58	23.5
	Currently on part-time sick leave	28	11.3
	Currently on full-time sick leave	15	6.1
	Currently on leave of absence	7	2.8
	No, not at all	17	6.9

Variables		n	%
Satisfaction about work	No, not especially	41	16.6
	Yes, somewhat	125	50.6
	Yes, absolutely	64	25.9
Influence own schedule	No, not at all	16	6.5
	No, not especially	50	20.2
	Yes, somewhat	106	42.9
	Yes, absolutely	75	30.4

Violence and bullying among Iraqi doctors: Analysis revealed that 34.8% (n = 86) of participants have been a victim of violence at least one time, while 48.2 (n = 119) of them reported that have been bullied. Concerning aggressiveness source, 30% (n = 74) of them reported that the patients were the source, 22.7% (n = 56) of them reported that one of the staff members was the source, and 12.1% (n = 30) of them reported that the patients' family or visitors were the source.

Table 2 (Violence and bullying among Iraqi doctors.)

Variables		N	%
Victim of violence	No	141	57.1
	Yes, one time	86	34.8
	Yes, several times	20	8.1
Aggressive source	Patients	74	30
	Staff	56	22.7
	Family member / visitors	30	12.1
	Other	87	35.2
Consider violence	Yes, definitely	136	55.1
	Yes, somewhat	60	24.3
	No, no at all	51	20.6
Bullying	No	128	51.8
	Yes	119	48.2
Been bullied	No	147	59.5

	Yes	100	40.5
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The results show that nearly one-third of the participants have been a victim of violence at least one time and reported that have been bullied. Concerning aggressiveness reported that the sources of bullying were the patients, staff members and the patients' family or visitors. The participants reported a high score of working experience, indicating good working experience among participants. Perception of health status indicated satisfactory to quid good perception of health status quality among participants. The participants had moderate to high score of health symptoms, indicating quid good to good health symptoms among participants. The study also indicated quid good to good wellbeing symptoms among participants. In which the health problem symptoms for doctors who have not experienced violence was higher than (ie. Better health symptoms) the health problem symptoms for doctors who have experienced violence. In which the well-being symptoms for doctors who have not experienced violence was higher than (ie. Better well-being symptoms) the well-being symptoms for doctors who have experienced violence. Female participants reported more bullying competed to male participants, while male participants reported more violence competed to female participants. Violence experience is negative predictor, which means that the higher violence experiences the lower health symptom level (ie. Worse health symptoms status). Violence experience is negative predictor, which means that the higher violence experiences the lower well-being symptom level (ie. Worse well-being symptoms status).

DISCUSSION

To the best of the author's knowledge, this is the first a cross-sectional correlational study in Iraq performed to study the prevalence of WPV among doctors. Many studies were done to explore the prevalence of WPV and its related factors in the Middle East and worldwide. This chapter showed results interpretation, including the prevalence of WPV among doctors in Iraq. Moreover, it presents the implications of findings, study limitations, and recommendations for future research.

Prevalence of WPV among Iraqi doctors: The current study aimed to assess the prevalence of WPV among doctors including general practitioners, specialists and dentists and its associated factors at multicenter in Erbil city, Iraq. It revealed that 42.9% (n = 106) of participants have been a victim of violence at least one time, while 40.5 (n = 100) of them reported that have been bullied. This finding is similar to a systematic review (Samsudin, et al., 2018) which included 18 articles with a total of 9597 doctors and found a wide range (30-95%) of bullying prevalence among doctors. However, other studies, for example in Jordan (Aldeabes et al., 2022), showed that 63% of healthcare professionals were exposed to verbal abuse in the workplace, 27.66% of them were exposed to threat and 9.3% of respondents were exposed to physical violence. It's worth noting that the healthcare professionals were doctors and nurses which can explain the high percentage of bullying. The possible explanations for bullying against doctors may be due to a number of factors, including: patients or their families may be unable to cope with the diagnosis of a disease or its potential treatments, which are often associated with pain and fatigue. Additionally, the negative and widespread media portrayal of doctors may lead some people to see them as crisis planners and opponents. And violence may be caused by social factors, such as the lack of adequate medical services and delays in treatment can be a major factor in the increase of violence against doctors.

Sources of WPV among Iraqi doctors: Regarding the source of WPV, the current study found that 30% (n = 74) of doctors reported that the patients were the source, 22.7% (n = 56) of them reported that one of the staff members was the source, and 12.1% (n = 30) of them reported that the patients' family or visitors were the source. Similarly, the Alrawashdeh, (2023) study found that the majority of violent incidents were caused by relatives of patients (67.6%). A possible explanation could be related to some patients may practice bullying against doctors as a way to justify their own behaviors, such as if they are demanding excessive medical care or refusing to follow treatment recommendations. Furthermore, long wait times for medical care can be very frustrating and stressful for patients. This can lead to increased anger and tension, which may make some patients more likely to lash out at doctors.

Consequences of WPV on Iraqi doctors: The current study found that the health symptoms for doctors who have not experienced violence was higher than (i.e., better health symptoms) the health symptoms for doctors who have experienced violence. In addition, the well-being symptoms for doctors who have not experienced violence was higher than (i.e., better well-being symptoms) the well-being symptoms for doctors who have experienced violence. Kaur et al (2020) conducted a cross-sectional study to assess workplace violence faced by doctors, its effect on the psycho-social wellbeing of the treating doctor and, subsequently, on patient management. The study revealed that more than half of the participants reported "loss of self-esteem", "feeling of shame" and "stress/depression/anxiety/ideas of persecution" after the incident. Management by surgical interventions (p-value<0.001) and handling of emergency/complicated cases (p-value<0.001) decreased significantly with an increase in severity of workplace violence; while the suggestion of investigations and referrals increased (p-value<0.001). The paper indicates that workplace violence has a significant effect on the psycho-social well-being of doctors, as well as on patient management.

Furthermore, Lever et al., (2019) conducted a systematic review and found that perceived bullying was associated with mental health problems including psychological distress, depression and burnout, and physical health problems including insomnia and headache. Bullied staff took more sick leave. It can be concluded that bullying occurs frequently amongst healthcare staff and is deleterious to health and occupational functionality. Some medical administrations also may not fully care for the well-being and psychological safety of doctors. which causes doctors to suffer from excessive psychological pressure due to the continuous work and its impact on their family and social life. This is consistent with the current study findings in which violence experience is negative predictor, which means that the higher violence experiences the lower health symptom level (i.e., Worse health symptoms status). Also, Violence experience is negative predictor, which means that the higher violence experiences the lower well-being symptom level (i.e., Worse well-being symptoms status).

Bullying in the workplace can have a range of negative effects on the health and professional performance of doctors, such as depression, anxiety, and feelings of helplessness, which can damage the mental health of doctors. This in turn affects performance of the doctors may find it difficult to work effectively if they are exposed to ongoing bullying, which can affect the quality of healthcare they provide. and bullying can prevent doctors from continuing their career paths or moving to other healthcare institutions. Additionally, bullying can impact the doctor's family relationships, as it can lead to frustration and excessive tension at home. To support this argument, for instance, Magnavita et al., (2019) in their systematic review across 119,361 participants from 15 different countries. They found that there was a direct relationship between occupational exposure to violence and sleep problems (OR = 2.55; 95% CI = 1.77–3.66).

Limitations: One of the study limitations was using self-reporting method (e.g., personal bias could also have affected the results of this study in some ways). In addition, participants might have answered in a way to portray themselves in a good light. Nevertheless, it was important to use this approach to report the doctors' perspectives in order to meet the study aim and objectives. In addition, using this approach allows doctors to complete the questionnaires in their own time, which encouraged participation. Bowling (2002) has suggested that the best way to select the method of data collection in research depends upon the type of populations, for example, healthcare professionals (e.g., doctors) are more likely to cooperate with self-report questionnaires because they are more likely to experience heavy workloads in clinical settings. A convenience sampling technique was used in the current study (non-random method). Although the study participants were recruited from one site (i.e., Erbil), this city consists of a high number of healthcare facilities because it serves many populations.

Implications: There are several things that can be done to prevent bullying among doctors in the workplace. Employers can create anti-bullying policies and procedures, and provide training to employees on how to identify and report bullying. Employees can also play a role in preventing bullying by speaking up if they see it happening and supporting their colleagues.

The implication of this study to medical field is to improve the workplace environment for the doctors and draw attention to the importance of applying strategies that protect doctors during their working hours.

Recommendations: It is important to remember that bullying is never acceptable, regardless of the reason. Doctors should not have to work in an environment where they are at risk of being bullied or attacked. There are many approaches which can assist to reduce the WPV among doctors, some of them related to the policies, education and research

Conclusion: Workplace violence is a serious problem among the doctors, and may affected their psychological status, make the work condition more difficult, decrease the job satisfaction, and added to that the productivity for the doctors may affect by experience the bullying at the workplace. This study aimed to assess the prevalence of workplace violence among the doctors and its associated factors among multicenter in Erbil, Iraq. This study found high prevalence of workplace violence among the doctors in Iraq and this add a new knowledge base. It is, therefore, crucial to improve the workplace environment for the doctors and draw attention to the importance of applying strategies that protect doctors during their working hours.

Declarations: Institutional Review Board Statement: Ethical approval was obtained from the Institutional Ethics Committee (REDACTED).

Informed consent statement: Informed consent was acquired from all subjects.

The authors report no conflict of interest in this work.

Data Availability Statement: The current study data will be available on request from the corresponding author. The data are not publicly available due to privacy restrictions.

REFERENCES

1. Abu Ahmadeh, W. (2020) Bullying Practice in the Jordanian Public Hospitals: An Exploratory Study. unpublished master's thesis. Yarmouk university, <http://search.mandumah.com/Record/1177248>.
2. Afolaranmi, T. O., Hassan, Z. I., Gokir, B. M., Kilani, A., Igboke, R., Ugwu, K. G., Amaike, C., & Ofakunrin, A. O. D. (2022) Workplace Bullying and Its Associated Factors Among Medical Doctors in Residency Training in a Tertiary Health Institution in Plateau State Nigeria. *Frontiers in public health*, 9, 812979. <https://doi.org/10.3389/fpubh.2021.812979>
3. Al khatib, O., Taha, H., Al Omari O., et al., (2023) Workplace Violence against Health Care Providers in Emergency Departments of Public Hospitals in Jordan: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*, 19;20(4):3675. <https://doi.org/10.3390/ijerph20043675>.
4. Aldeabes, I. (2019). The Phenomenon of Emerging Workplace Violence Crises in the Jordan Health Care Sector: Applied Study in the Royal Medical Services, unpublished master's thesis. Alhashmeayah university, <http://search.mandumah.com/Record/1025839>
5. Ali Jadoo, S. A., Aljunid, S. M., Dastan, I., Tawfeeq, R. S., Mustafa, M. A., Ganasegeran, K., & Radman AlDubai, S. A. (2015) Job satisfaction and turnover intention among Iraqi doctors - a descriptive cross-sectional multicentre study - *Human Resources for Health*. SpringerLink. <https://doi.org/10.1186/s12960-015-0014-6>
6. Al-Ghabeesh SH, Qattom H. (2019) Workplace bullying and its preventive measures and productivity among emergency department nurses. *BMC Health Services Research*.19(1):445. doi:10.1186/s12913-019- 4268-x
7. Al-Naffakh, M. (2016) Effect of Workplace Violence against Nurses in Al-Najaf Teaching Hospitals, un published Master Thesis. Alkoufa university, <http://search.mandumah.com/Record/1020499>
8. Al Omar M, Salam M, Al-Surimi K. (2019) Workplace bullying and its impact on the quality of healthcare and patient safety. *Human Resources Health*.17(1):89. doi:10.1186/s12960-019-0433-x
9. Alrawashdeh, A. (2023) Workplace Violence against Healthcare Professionals in Southern Jordan Public Hospitals, un published Master Thesis. Mutah University <http://search.mandumah.com/Record/1363478>.
10. Al-Sou'b, E. (2014) The Factors Leading to Crimes of Aggression against Medical Cadres in Jordan (A Survey in Karak Hospital Government), Mu'tah University, unpublished master's thesis. <http://search.mandumah.com/Record/787790>.
11. Al-Surimi, K., Al Omar, M., Alahmary, K., & Salam, M. (2020) Prevalence of Workplace Bullying and Its Associated Factors at a Multi-Regional Saudi Arabian Hospital: A Cross-Sectional Study. *Risk Management and Healthcare Policy*, 13, 1905–1914. <https://doi.org/10.2147/rmhp.s265127>
12. Asimi, N. (2022) Psychological violence at work and its relationship to professional compatibility and pressure A field study in the hospitals of Bouira state, un published PhD thesis. Mawloud Mamay university.

13. Ariza-Montes A, Muniz N, Montero-Simó M, Araque-Padilla R. (2013) Workplace bullying among healthcare workers. *International Journal of Environmental Research Public Health*.10(8):3121–3139. doi:10.3390/ijerph10083121
14. Askew, D. A., Schluter, P. J., Dick, M. L., Régo, P. M., Turner, C., & Wilkinson, D. (2012) Bullying in the Australian medical workforce: cross-sectional data from an Australian e-Cohort study. *Australian Health Review*, 36(2), 197. <https://doi.org/10.1071/ah11048>
15. Bjørkelo B, Einarsen S, Matthiesen SB. (2010) Predicting proactive behaviour at work: exploring the role of personality as an antecedent of whistleblowing behaviour. *Journal of Occupational Organizational Psychology*.83 (2):371–394. doi:10.1348/096317910X486385.
16. Cantone E, Piras AP, Vellante M, et al. (2015) Interventions on bullying and cyberbullying in schools: a systematic review. *Clinical Practice Epidemiology Mental Health*. 11:58. doi:10.2174/1745017901511010058.
17. Elamin, M. M., Hamza, S. B., Abbasher, K., Idris, K. E., Abdallah, Y. A., Abdalmaqsd Muhmmmed, K. A., Mustafa Alkabashi, T. H., Alhousseini, R. T., Sidieg Mohammed, S. E., & Mohammed Mustafa, A. A. (2021) Workplace Violence Against Doctors in Khartoum State, Sudan, *Sudan Journal of Medical Sciences*. <https://www.ajol.info/index.php/sjms/article/view/209834>
18. El-Sherbiny, N. (2019) The relationship of family climate to bullying behavior among middle school students, *Journal of the College of Education, Al-Azhar University*, 3(181).
19. Farrell, G. A., & Shafiei, T. (2012) Workplace aggression, including bullying in nursing and midwifery: A descriptive survey (the SWAB study). *International Journal of Nursing Studies*, 49, 1423–2143. 10.1016/j.ijnurstu.2012.06.007
20. Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009) Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/brm.41.4.1149>
21. Feijó FR, Gräf DD, Pearce N, Fassa AG. (2019) Risk factors for workplace bullying: a systematic review. *International Journal Environmental Research Public Health*.16(11):1945. doi:10.3390/ijerph16111945
22. Flannery, D. J., Todres, J., Bradshaw, C. P., Amar, A. F., Graham, S., Hatzenbuehler, M., Masiello, M., Moreno, M., Sullivan, R., Vaillancourt, T., Le Menestrel, S. M., & Rivara, F. (2016) Bullying Prevention: a Summary of the Report of the National Academies of Sciences, Engineering, and Medicine. *Prevention Science*, 17(8), 1044–1053. <https://doi.org/10.1007/s11121-016-0722-8>.
23. Gaffney, D. A., DeMarco, R. F., Hofmeyer, A., Vessey, J. A., & Budin, W. C. (2012) Making Things Right: Nurses' Experiences with Workplace Bullying—A Grounded Theory. *Nursing Research and Practice*, 2012, 1–10. <https://doi.org/10.1155/2012/243210>
24. Geoffrion S, Goncalves J, Marchand A, Boyer R, Marchand A, Corbière M, Guay S. (2018) Post-traumatic reactions and their predictors among workers who experienced serious violent acts: are there sex differences? *Annals of Work Exposures and Health*. ;62(4):465–474. doi: 10.1093/annweh/wxy011.
25. Hollis L.P. (2015) Bully university? The cost of workplace bullying and employee disengagement in American higher education. *Sage Open*. 5 (2): 2158244015589997.

26. Hogh A, Hoel H, Carneiro I.G. (2011) Bullying and employee turnover among healthcare workers: a three-wave prospective study. *Journal of Nursing Management*. 19(6):742–751. doi:10.1111/j.1365-2834.2011.01264.x
27. Hughes, C., Robert, L., Frady, K., Arroyos, A. (2019) *Middle-skill-level Employees and Technological Environments*, Emerald publishing limited. <https://doi.org/10.1108/978-1-78973-077-720191002>
28. Imran, N., Aftab, M. A., Haider, I. I., & Farhat, A. (2013) Educating tomorrow's doctors: A cross sectional survey of emotional intelligence and empathy in medical students of Lahore. *Pakistan Journal of Medical Sciences*, 29(3). <https://doi.org/10.12669/pjms.293.3642>
29. International Labour Organization. (2014) Improving working conditions and productivity in the garment industry: Practical ideas for owners and managers. http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_246021.pdf
30. Kaur A, Ahamed F, Sengupta P, Majhi J, Ghosh T. (2020) Pattern of workplace violence against doctors practising modern medicine and the subsequent impact on patient care, in India. *PLoS One*. 18;15(9): e0239193.
31. Kim, M. S., & Kim, H. J. (2021) Workplace bullying and job satisfaction: The moderating role of work experience. *Journal of Business and Psychology*, 36(2), 275-289.)
32. Kolb, D. A. (1984) *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
33. Krishnan, R.P., Ramani, P., Sukumaran, G., et al., (2021) Workplace violence among dental surgeons - A survey. *Indian Journal of Dental Research*, 32(3):276-279. doi: 10.4103/ijdr.IJDR_880_19.
34. Lahari, A., Shanthi, M., Sudhir, K., Fareed, N., & Kumar, R. (2012) Bullying perceptions among post-graduate dental students of Andhra Pradesh, India. *Journal of Education and Ethics in Dentistry*, 2(1), 20. <https://doi.org/10.4103/0974-7761.115143>
35. Lever I, Dyball D, Greenberg N, Stevelink SAM. (2019) Health consequences of bullying in the healthcare workplace: a systematic review. *Journal of Advanced Nursing*. ;75(12):3195–3209. doi: 10.1111/jan.13986
36. Magnavita N, Di Stasio E, Capitanelli I, Lops EA, Chirico F, Garbarino S. (2019) Sleep problems and workplace violence: a systematic review and meta-analysis. *Front Neuroscience*. Oct 1; 13:997
37. Mento C, Silvestri MC, Bruno A, Muscatello MRA, Cedro C, Pandolfo G, Zoccali RA. (2020) Workplace violence against healthcare professionals: a systematic review. *Aggress. Violent Behaviours*.51:101381.
38. Murray, C. J. L., & Frenk, J. (2010). A framework for assessing the performance of health systems. *Bulletin of the World Health Organization*, 78(6), 717-731.
39. Namie G, Namie R. (2009) US workplace bullying: some basic considerations and consultation interventions. *Consulting Psychology Journal: Practice and Research*.61(3):202. doi:10.1037/a0016670
40. Nielsen, J. L., & Einarsen, K. (2021) Workplace bullying and occupational stress: The role of work conditions. *Journal of Occupational Health Psychology*, 26(1), 1-12.)

41. Noe, R. A. (2010). Employee training and development (5th ed.).
42. Nielsen, M. B., Harris, A., Pallesen, S., & Einarsen, S. V. (2020) Workplace bullying and sleep – A systematic review and meta-analysis of the research literature. *Sleep Medicine Reviews*, 51, 101289. <https://doi.org/10.1016/j.smr.2020.101289>
43. O'Rourke M, Wrigley C, Hammond S. (2018) Violence within mental health services: how to enhance risk management. *Risk Management Health Policy*; 11:159. doi:10.2147/RMHP.S131834
44. Ofarrel, C., & Nordstrom, C.(2013) Workplace bullying: examining self-monitoring and organizational culture, *Journal of Psychological Issues in Organizational Culture*, 3(4), 6-13.
45. Pei KY, Hafler J, Alseidi A, Slade MD, Klingensmith M, Cochran A. (2020) National assessment of workplace bullying among academic surgeons in the US. *JAMA Surg*;;155(6):524. doi:10.1001/jamasurg.2020.02634.
46. Qatom, H. (2018) Violence in the workplace between Jordanian nurses and nurses working in emergency departments and its impact on productivity at work, un published master thesis. Alzaytonah University
47. Rahm, G., Rystedt, I., Wilde-Larsson, B., Nordström, G., & Strandmark K, M. (2019) Workplace bullying among healthcare professionals in Sweden: a descriptive study. *Scandinavian Journal of Caring Sciences*, 33(3), 582–591. <https://doi.org/10.1111/scs.12633>
48. Saleh LA, Niroumand S, Dehghani Z, Saleh TA, Mousavi SM, Zakeri H. (2020) Relationship between workplace violence and work stress in the emergency department. *Journal of Injury and Violence Research*. 12(2).
49. Samsudin, E. Z., Isahak, M., & Rampal, S. (2018) The prevalence, risk factors and outcomes of workplace bullying among junior doctors: a systematic review. *European Journal of Work and Organizational Psychology*, 1–19. <https://doi.org/10.1080/1359432x.2018.1502171>
50. Sansone, R. A., Sansone, L. A., & Wiederman, M. W. (2007) Patient Bullying: A Survey of Physicians in Primary Care. *The Primary Care Companion to the Journal of Clinical Psychiatry*, 09(01), 56–58. <https://doi.org/10.4088/pcc.v09n0110>
51. Setia M. S. (2016) Methodology Series Module 3: Cross-sectional Studies. *Indian Journal of Dermatology*, 61(3), 261–264. <https://doi.org/10.4103/0019-5154.182410>
52. Shakeel, S., Ali, M., Mustajtab, M., et al., (2022) Violence against dental surgeons an analytical cross-sectional study. *Pakistan Journal of Medical and Health Sciences*. 16(1), DOI: <https://doi.org/10.53350/pjmhs22161817>
53. Shi, L. , Zhang, D. , Zhou, C. , Yang, L. , Sun, T. , Hao, T. , ... Fan, L. (2017) A cross-sectional study on the prevalence and associated risk factors for workplace violence against Chinese nurses. *British Medical Journal*, 7, e013105 10.1136/bmjopen-2016-013105
54. 55.Srabstein, J. C., & Leventhal, B. L. (2010) Prevention of bullying-related morbidity and mortality: a call for public health policies. *Bulletin of the World Health Organization*, 88(6), 403–403. <https://doi.org/10.2471/blt.10.077123>
55. Tawalbeh, I.(2022) The Impact of Violence act towards the Medical Staff on Work place Environment (Applied Study on Medical Staff in Jordanian Hospitals), un published Master Thesis, al-isra university. <http://search.mandumah.com/Record/1360108>.

56. Tepper, B. L., Simon, T. L., & Park, C. M. (2020) Workplace bullying, age, and gender: A moderated mediation model. *Journal of Occupational Health Psychology*, 25(5), 327-337.)
57. Ullah, R., Siddiqui, F., Zafar, M. S., & Iqbal, K. (2018) Bullying experiences of dental interns working at four dental institutions of a developing country: A cross-sectional study. *Work*, 61(1), 91–100. <https://doi.org/10.3233/WOR-182784>
58. World Health Organization. (1948). Preamble to the Constitution of the World Health Organization. <http://www.who.int/about/who-we-are/constitution>
59. World Health Organization (2018) Violence and injury prevention. http://www.who.int/violence_injury_prevention/violence/workplace/en.
60. Webster's New World Medical Dictionary (2nd edition) (2003) *Reference Reviews*, 17(7), 53–54. <https://doi.org/10.1108/09504120310498167>.