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Escuela de Doctorado

**TESIS DOCTORAL**



**WORKPLACE VIOLENCE EXPERIENCED  
BY NURSES IN HOSPITALS IN THE  
NORTHERN REGION OF MOROCCO**

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## ABSTRACT

**Background:** Workplace violence (WPV) perpetrated against health professionals is a major problem in health sector. It affects health and performance of workers. The aims of this study were: 1) to assess WPV facing nurses in the northern region of Morocco and 2) to identify the related factors.

**Methods:** We conducted a cross-sectional study in the northern region of Morocco from October to December 2021. In total, 391 volunteer nurses working in 13 hospitals were enrolled. A self-reported questionnaire, 'Violent Incident Form' (VIF), was distributed to the participants. It assesses verbal and physical violence.

**Results:** We obtained 98% response rate and 97% of the respondent nurses faced at least one WPV episode the last year. Verbal violence is the most common type of violence. Significant factors as age of the victims ( $\chi^2 = 15.34$ ;  $p = 0.038$ ) and the assaulters ( $\chi^2 = 27.66$ ;  $p < 0.001$ ), and mental condition of the assaulter ( $\chi^2 = 28.27$ ;  $p = 0.003$ ) were obtained. According to post hoc residual z test, nurses aged between 40 and 49 and over 60 y.o were more exposed to physical violence than other groups, while the aggressors were younger aggressors (19-30 y.o.) and over 60; whereas significant less frequent were cases of aggressors aged between 31 and 50 y.o.

**Conclusion:** A high exposure of nurses to WPV in northern Moroccan hospitals is noted. The significant factors of violence obtained must be considered for the control and prevention of WPV among nurses in Moroccan hospitals.

**Keywords:** Morocco, nurses; hospital; verbal violence; physical violence; workplace violence; questionnaire.

## RESUMEN

**Contexto:** La violencia en el lugar de trabajo (VLT) perpetrada contra profesionales de la salud es un problema importante en el sector sanitario. Afecta la salud y el rendimiento de los trabajadores. Los objetivos de este estudio fueron: 1) evaluar la VLT a la que se enfrentan las enfermeras en la región norte de Marruecos y 2) identificar los factores relacionados.

**Metodología:** Realizamos un estudio transversal en la región norte de Marruecos desde octubre hasta diciembre de 2021. Se reclutaron un total de 391 enfermeras voluntarias que trabajaban en 13 hospitales. Se les distribuyó un cuestionario autoinformado llamado 'Formulario de Incidentes Violentos' (FIV). Este cuestionario evalúa la violencia verbal y física.

**Resultados:** Obtenemos una tasa de respuesta del 98% y se encontró que el 97% de las enfermeras encuestadas enfrentaron al menos un episodio de VLT en el último año. La violencia verbal es el tipo de violencia más común. Se identificaron factores significativos, como la edad de las víctimas ( $\chi^2 = 15,34$ ;  $p = 0,038$ ) y los agresores ( $\chi^2 = 27,66$ ;  $p < 0,001$ ), así como la condición mental del agresor ( $\chi^2 = 28,27$ ;  $p = 0,003$ ). Según la prueba de residuos z post hoc, las enfermeras de entre 40 y 49 años y las mayores de 60 años estuvieron más expuestas a la violencia física que otros grupos, mientras que los agresores más jóvenes (19-30 años) y los mayores de 60 años fueron más frecuentes. Además, se observaron menos casos de agresores con edades entre 31 y 50 años.

**Conclusiones:** Se observa una alta exposición de las enfermeras a la VLT en los hospitales del norte de Marruecos. Los factores significativos de violencia identificados deben ser considerados para el control y la prevención de la VLT entre las enfermeras en los hospitales marroquíes.

**Palabras clave:** Marruecos, enfermeras; hospital; violencia verbal; violencia física; violencia en el lugar de trabajo; cuestionario.

## DEDICATORIAS

### *A mis queridos padres*

*Quienes han sido mi guía incondicional y mi apoyo constante a lo largo de cada paso de mi vida, quiero dedicarles estas palabras llenas de gratitud y amor. Vuestra presencia ha sido fundamental en mi camino académico y personal, y no puedo expresar con palabras cuánto valoro vuestro amor incondicional y sacrificio.*

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## INTRODUCTION

Violence, probably, has been linked to the human experience since its origins [1], and currently its manifestation is visible in various forms throughout the world. Each year, over a million people lose their lives or suffer non-fatal injuries as a result of self-inflicted, interpersonal, or collective violence [1]. Violence invades the lives of many individuals worldwide and affects us all in one way or another.

Violence is defined as the intentional use of force or physical power, either in a threatening or actual manner, against oneself, another person, or a group or community, which causes or has the potential to cause injury, death, psychological harm, developmental impairments, or deprivation [1]. It can take the form of physical aggression, homicide, verbal violence, bullying, sexual harassment, and mental distress [2-3].

On a global scale, violence is recognized as a major public health issue and one of the leading causes of death among individuals aged 15 to 44 years [4].

Workplace violence encompasses situations where employees are threatened, attacked, or physically assaulted while on the job. It is important to note that non-physical violence, such as verbal violence, bullying, and threatening behaviors, can also significantly impact health and well-being, as outlined in the 2002 Code of Practice on Mental Health [5]. Global data has shown that millions of people experience violence in their workplace, making it a true emerging problem [5, 6]. Workplace violence has become a terrifying phenomenon worldwide, affecting virtually all sectors of work and all categories of workers, but it holds particular relevance in the healthcare sector, where violence can account for nearly a quarter of all workplace violence incidents [7].

As mentioned earlier, workplace violence can affect anyone regardless of their occupation, but the literature highlights the prevalence of violence in the healthcare sector compared to non-healthcare settings [8-3].

Yenealem et al. (2019) showed that the prevalence of workplace violence was 58.2%, with verbal violence (53.1%), physical assaults (22.0%), and sexual harassment (7.2%) being the prominent forms. These findings are similar to those obtained by

Sisawo et al. (2017), who revealed a 62.1% exposure to workplace violence, with 59.8% experiencing verbal violence, 17.2% experiencing physical violence, and 10% experiencing sexual harassment. Somewhat more dispersed results were obtained by Alsmael et al. (2020), who showed a prevalence of workplace violence in the healthcare sector of 46.9%, but with rates of up to 90% for verbal violence, 34.3% for intimidation, and only 3% for physical violence [11].

Among the causal agents, Jaradat et al. (2016) revealed that patients and their relatives were the main sources of physical and verbal violence [12]. Similar results were obtained by Khademloo et al. (2013), who showed that patients themselves were responsible for physical violence in 44.3% of cases, while family members accounted for the remaining 55.6%. In 30.3% of cases, patients were responsible for verbal violence, in 53.4% of cases, it was family members, and in 16.1% of cases, it was colleagues [13].

The effects of violence can vary in intensity and include minor physical injuries, severe physical injuries, temporary or permanent physical disabilities, psychological trauma, and death, as noted by Mahoney et al., cited in [14].

The World Health Organization classifies workplace violence into physical and non-physical violence [1]. The notified incidence of violence in the health sector constitutes almost a quarter of all the incidents of WPV perpetrated in all the other sectors [15]. Consequently, WPV affects the work demand [16], the quality of healthcare, and the psychological state of the health workers [17]. In health facilities, 52.2% to 87.3% of health workers reported an experience of physical violence during their careers. Many more are threatened or exposed to verbal abuse. Patients and visitors are responsible for a great number of incidents [18]. Pich and Roche [18] confirmed that all the categories of health workers are concerned with WPV, but the highest rate of reported cases is observed among nurses and midwives in both public and private sectors and different geographic areas. In Morocco, the first study on WPV was published in 2010 [14]. Moroccan healthcare workers are at high risk of exposure to WPV [19]. A report on the Moroccan working environment showed a higher workload and higher stress levels in the workplace [20]. For a better control and prevention of this phenomenon, it is important to know the occurrence and the factors associated with WPV perpetrated against nurses in Moroccan hospitals. This interest is in line with policies issued by Moroccan Health authorities. Additionally, Moroccan high governmental authorities and



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health authorities adopted laws and procedures to be applied in the case of any kind of aggression facing health professionals in their workplace. The authorities adopted this strategy during the year 2021.

## OBJECTIVES

Through this study, we will explore the phenomenon of violence against healthcare professionals as one aspect of psychosocial risks in the workplace.

The choice of this topic and population is driven by a great interest and immense concern for the daily experience in Moroccan hospitals. Indeed, violence is observed every day, it is talked about, lived through, and above all, suffered from. The World Report on Violence and Health by the WHO (2002) [1] highlighted that violence specifically affects the healthcare sector, a phenomenon that needs to be addressed and prevented.

After studying the information currently available on the topic of our thesis, we can formulate the following objectives :

General Objective :

- The overall objective of this study is to understand and mitigate workplace violence among nurses in the northern region of Morocco by determining its prevalence and identifying associated risk factors, in order to develop effective prevention and intervention strategies.

Specific Objectives :

- Determine the prevalence of workplace violence among nurses in the northern region of Morocco.
- Identify the risk factors for workplace violence.

## DISCUSSION

In the first step, aiming to find out the best tool for analyzing the characteristics of WPV and monitoring this phenomenon in our context. we carried out a literature review.

As output of this review, 26 original articles about the WPV perpetrated against healthcare workers in Arab and African countries. These studies covered the period lasting from 2002 to 2021. According to this review, more than 50% of original articles about WPV in Arab and African countries were published between 2018 and 2021.

All forms of violence have been reported and all health workers have been affected. The prevalence was ranging from 43.1% in Ethiopia to 92.7% in Nigeria. These data show a high rate of WPV compared to the data of the authors [21]. Our results suggest the setting of a continuous assessment of the WPV against health workers in these countries based on the appropriate instruments.

ILO/ICN/WHO/PSI tool assesses all forms of violence with a detailed description of the circumstances, causes and consequences of WPV. This tool is the widely used in Arab and African countries. Nevertheless, this 81-item questionnaire and the 69-item tool proposed by Alsharari et al. [22], are difficult to use continuously for the WPV follow-up considering the workload, stress and constraints of the healthcare workers. The high number of their items is time-consuming.

The tool used by Maghraby et al. [23], reports sexual harassment in particular, while the instrument proposed by Al-Surimi et al. [24] is restricted to bullying. As a strengthening point, the method of its administration (by personnel email) respects the privacy of the participants and insured the confidentiality and the safety of the data that should lead to a massive participation.

The VAQ, based on 41 items, reports the circumstances of the incident, the emotional consequences and the reactions to WPV. But it is restricted to verbal violence; while, the NAQ-R, a 22 items tool, exclusively reports a description of the nature of bullying without indication of causes, consequences or reactions to WPV.

The QWC, containing 3 questions, reports the incidence of WPV, perpetrators and perception of violence as a problem at work. Nevertheless, it does not allow to

distinguish different forms of violence. The consequences and the reactions to WPV are not reported by this tool.

The questionnaire used by El Tantawi et al [25] focused specifically on the knowledge, attitudes and behaviors towards the reporting of WPV according to the participant perceptions. This is the unique tool focusing on the mandated person or organization for reporting WPV, knowledge on laws, and procedures of reporting the incidents of WPV. However, this tool does not assess forms, circumstances or consequences of WPV.

The tool used by Belayachi et al. [14], reported the circumstances and causes of verbal abuse, verbal threat and physical assault. It assessed the emotional state of the victims; but the reactions to WPV are not assessed.

Kennedy and Julie [26] used a qualitative approach to characterize physical and psychological violence and key aspects of WPV. Nevertheless, this method does not allow quantifying the magnitude of the WPV.

Sm et al. [27] proposed the only instrument that documented the witnessed WPV and the feelings about it.

The MNA tool [28], a 40-items questionnaire, assesses all forms of violence and their precipitating factors. However, it does not include items on the consequences and the reactions to WPV.

The VIF is the instrument we recommend for use in our context according to the aim of our research. In conclusion, the VIF reported all forms of violence and threats, causes, circumstances, consequences, perpetrators, reactions and reporting of the incident. Among the 20 items, 12 items are specific to the key aspects of the violence in 1-Page checklist. It can be completed in less than 10 minutes. It is the least time-consuming and covers all forms of violence, associated factors and consequences of WPV. It can be used continuously or periodically for the follow-up of WPV. For these reasons, VIF was adopted in the second step

In the second step, we have explored the occurrence of workplace violence among nurses and the associated factors in northern region hospitals of Morocco using VIF questionnaire. This research presents the first data on occupational violence facing

nurses in Morocco. We obtained a high exposure to WPV among nurses working in this area. This finding was similar to the data reported in these studies [16, 29, 30-31]. Moreover, comparing the WPV frequency between different studies is difficult [16, 32, 30]. This difficulty may be due to the different case definition of different categories of violence adopted by the authors, the use of different tools, and the application of different study designs. In addition, individual differences in perception of violence forms can lead to different results. Overall, verbal violence was more frequent than physical violence. In addition, Arnetz et al report that the violence pattern facing healthcare professionals is different between different health units providing different kind of healthcare [33].

### **Profile of the victims and the aggressors**

Focusing on the age of the victims, we observed that younger nurses, i.e., under 39 years old, faced more workplace violence than elderly nurses. This finding is consistent with the literature [34, 35,36]. We suggest the insertion of a training module on the management and prevention of WPV in the nursing academic course and the first years after employment in Moroccan health facilities.

Considering the gender of the aggressors, despite the fact that this factor was not statistically significant, but the proportion of male aggressors was very high (70%) compared to females (30%).

This item was reported as a factor of violence in these studies [37, 38, 39]. Regarding the assaulter's age, we found that it was a statistically significant factor of violence. This finding is consistent with the last cited studies.

The significantly most incriminated assaulters were the patients' relatives. This result is supported by these studies [40, 41, 31, 39-42]. This finding may be linked to the fact that patients and their relatives have high expectations of healthcare professionals, and when they perceive that their needs are not satisfied, they may adopt aggressive attitudes [43, 44]. According to post hoc residual z test, significant statistics showed that nurses aged between 40 and 49 and over 60 y.o were more exposed to physical violence than other age categories, while the aggressors aged between (19-30 y.o.) and over 60. In addition, significant less frequent were cases of aggressors aged between 31 and 50 y.o.

These victims and aggressors age categories must be considered by the healthcare professionals in the management and the control of WPV.

### **Circumstances and factors associated with WPV**

Despite the fact that our findings were not statistically significant, most of the incidents occurred during daily shifts. This finding is in accordance with these studies [45, 46]. Other authors obtained contradictory data [31, 39].

About WPV place, the most frequently signaled place was the corridors (35%). These data are consistent with these studies [35, 34]. The fact that the results on the circumstances were not statistically significant may be linked to the great number of the response options, the reduced number of the participants in each response option, and the limited sample size.

### **Prediction, reactions and management of workplace violence**

Considering the feeling in advance that an incident will occur, the majority of the incidents were not expected by the nurses. This result is in accordance with the data found in the literature on the predictive factors of WPV [47]. This finding expresses a need to sensitize and inform the nurses about workplace violence. Regarding the consequences of WPV, the most negative effect was psychological problems. This result is in line with the findings of the previously cited study.

Beside this result, we obtained a low reporting of the violent incidents. This finding is in accordance with the results obtained by these authors [48, 49]. It is probably due to the lack of a notification system of WPV, the lack of information on how to report the incident, the ignorance of labor laws and rights, and the victims may believe that the reporting is useless or the act of violence is not considered a crime.



## CONCLUSION

A high exposure of nurses to WPV in northern Moroccan hospitals is noted. Verbal violence is more predominant than physical violence. Considering the profile of the assaulters, the majority are male and the most incriminated are the patients' families. Significant risk factors such as age of the victims and the assaulters were obtained. The mental condition of the assaulter is significantly associated to violence perpetrated against nurses. These results should alert policymakers about the violent workplace incidents committed in Moroccan hospitals. We recommend the conduction of large-scale studies to inform policymakers about the exact magnitude and factors of WPV in other hospitals and non-hospital settings in all regions of the kingdom. Then the implementation of a program on the prevention and management of WPV for nurses and other categories of healthcare professionals. Another preventive aspect is the setting of a WPV notification system in hospitals to help operative managers on time to address the factors that lead to workplace violence.

## BIBLIOGRAPHY

1. Krug, E.G., Dahlberg, L.L., Mercy, J.A., Zwi A.B., & Lozano, R. (2002). World report on violence and health. World Health Organization Geneva
2. C. Cooper and N. Swanson, Workplace Violence in the Health Sector: State of the Art. Geneva: ILO/ICN/WHO/PSI Joint Programme on Workplace Violence in the Health Sector, World Health Organization, 2002.
3. M. S. Talas, S. Kocaoz, and S. Akguc, "A survey of violence against staff working in the emergency department in Ankara, Turkey," Asian Nursing Research, vol. 5, no. 4, pp. 197–203, 2011.
4. Abate.A., Abebaw.D., Birhanu.A., Zerihun.A., Assefa.D., Prevalence and Associated Factors of Violence against Hospital Staff at Amanuel Mental Specialized Hospital in Addis Ababa, Ethiopia, Psychiatry Journal, vol. 2019, Article ID 3642408, 11 pages, 2019. <https://doi.org/10.1155/2019/3642408>
5. "Occupational violence in nursing: an analysis of the phenomenon of code grey/black events in four Victorian hospitals, Melbourne, Victoria, Australia", 2005. [www.health.vic.gov.au/nursing](http://www.health.vic.gov.au/nursing)
6. W. P. Map and R. H. Facilities, "Caring for our caregivers preventing workplace violence: a road map for healthcare facilities," 2015.
7. Canbaz S, Dündar C, Dabak F, Sünter AT, Pekfien Y, Cetinoglu EÇ: Violence towards workers in hospital emergency services and in emergency medical care units in Samsun: an epidemiological study. Ulus Travma Acil Cerrahi Derg 2008, 14:239-44.
8. O. L. Abodunrin, A. O. Adeoye, A. A. Adeomi, and A. A. Akande, "Prevalence and forms of violence against health care professionals in a South-Western city, Nigeria," Sky Journal of Medicine and Medical Sciences, vol. 2, no. 8, pp. 67–72, 2014.
9. Yenealem, D.G., Woldegebriel, M.K., Olana, A.T. et al. Violence at work: determinants & prevalence among health care workers, northwest Ethiopia: an institutional based cross sectional study. Ann of Occup and Environ Med 31, 8 (2019). <https://doi.org/10.1186/s40557-019-0288-6>
10. Sisawo, E.J., Ouédraogo, S.Y.Y.A. & Huang, S.L. Workplace violence against nurses in the Gambia: mixed methods design. BMC Health Serv Res 17, 311

- (2017). DOI <https://doi.org/10.1186/s12913-017-2258-4>
11. Alsmael MM, Gorab AH, AlQahtani AM. Violence Against Healthcare Workers at Primary Care Centers in Dammam and Al Khobar, Eastern Province, Saudi Arabia, 2019. *Int J Gen Med.* 2020 Sep 22; 13:667-676. DOI <https://doi.org/10.2147/IJGM.S267446> PMID : 33061534 ; PMCID : PMC7519877.
  12. Jaradat Y, Nielsen MB, Kristensen P, Nijem K, Bjertness E, Stigum H, Bast-Pettersen R. Workplace aggression, psychological distress, and job satisfaction among Palestinian nurses: A cross-sectional study. *Appl Nurs Res.* 2016 Nov; 32:190-198. DOI: 10.1016/j.apnr.2016.07.014
  13. M. Khademloo, F. S. Moonesi, and H. Gholizade, "Health care violence and abuse towards nurses in hospitals in north of Iran, *Global Journal of Health Science*, vol. 5, no. 4, pp. 211–216, 2013.
  14. J. Belayachi, K. Berrechid, F. Amlaiky, A. Zekraoui, et R. Abouqal, « Violence toward physicians in emergency departments of Morocco: prevalence, predictive factors, and psychological impact », *J. Occup. Med. Toxicol.*, vol. 5, no 1, p. 27, sept. 2010, doi: 10.1186/1745-6673-5-27.
  15. Tuncel, E. K., Dundar, C., Sunter, A. T., Canbaz, S., & Peksen, Y. (2009). Violence towards primary healthcare workers in Samsun, Turkey. 18. Conference: 12th World Congress on Public Health World Health Organization
  16. Park, M., Cho, S.-H., & Hong, H.-J. (2015). Prevalence and Perpetrators of Workplace Violence by Nursing Unit and the Relationship Between Violence and the Perceived Work Environment: Workplace violence against nurses. *Journal of Nursing Scholarship*, 47(1), 87-95. <https://doi.org/10.1111/jnu.12112>.
  17. Khalil, M., & Alameddine, M. (2020). Recruitment and retention strategies, policies, and their barriers: A narrative review in the Eastern Mediterranean Region. *Health Science Reports*, 3(4). <https://doi.org/10.1002/hsr2.192>.
  18. Pich, J., & Roche, M. (2020). Violence on the Job: The Experiences of Nurses and Midwives with Violence from Patients and Their Friends and Relatives. *Healthcare*, 8(4). 522. <http://doi.org/10.3390/healthcare8040522>.
  19. Giurgiu DL., Jeoffrion C., Roland-Lévy C, Grasset B., Brigitte Dessomme BK., Moret L., Roquelaure Y., Caubet A., Verger C., El Houssine Laraqui C., Lombrai Pl., Geraut C, and Tripodi D. 2016. Wellbeing and occupational risk perception

- among health care workers: a multicenter study in Morocco and France. *J. Occup Med Toxicol.* 2016; 11: 20. <http://doi.org/10.1186/s12995-016-0110-0>.
20. Semlali H. (2010). The Morocco Country Case Study: Positive Practice Environments. Morocco Case Study: Health Care Environments in Morocco. Global Health Workforce Alliance, WHO, Geneva.
  21. R. K. Lafta et N. Falah, « Violence against health-care workers in a conflict affected city », *Med. Confl. Surviv.*, vol. 35, no 1, p. 65-79, janv. 2019, doi: 10.1080/13623699.2018.1540095.
  22. A. F. Alsharari et al., « Workplace violence towards emergency nurses: A cross-sectional multicenter study », *Australas. Emerg. Care*, févr. 2021, doi: 10.1016/j.auec.2021.01.004.
  23. R. A. Maghraby, O. Elgibaly, et A. F. El-Gazzar, « Workplace sexual harassment among nurses of a university hospital in Egypt », *Sex. Reprod. Healthc. Off. J. Swed. Assoc. Midwives*, vol. 25, p. 100519, oct. 2020, doi: 10.1016/j.srhc.2020.100519.
  24. K. Al-Surimi, M. A. Omar, K. Alahmary, et M. Salam, « Prevalence of Workplace Bullying and Its Associated Factors at a Multi-Regional Saudi Arabian Hospital: A Cross-Sectional Study », *Risk Manag. Healthc. Policy*, vol. 13, p. 1905-1914, oct. 2020, doi: 10.2147/RMHP.S265127.
  25. M. El Tantawi *et al.*, « Dentists' intention to report suspected violence: a cross-sectional study in eight Arab countries », *BMJ Open*, vol. 8, n° 3, p. e019786, mars 2018, doi: 10.1136/bmjopen-2017-019786.
  26. M. Kennedy et H. Julie, « Nurses' experiences and understanding of workplace violence in a trauma and emergency department in South Africa », *Health SA Gesondheid*, vol. 18, n° 1, Art. n° 1, juill. 2013, doi: 10.4102/hsag.v18i1.663.
  27. A. Sm, A.-S. Ak, K. S, E.-G. N, et A.-R. M, « Violence against nurses in healthcare facilities in Kuwait. », *Int. J. Nurs. Stud.*, vol. 39, n° 4, p. 469-478, mai 2002, doi: 10.1016/s0020-7489(01)00050-5.
  28. H. A. E. Alkorashy et F. B. Al Moalad, « Workplace violence against nursing staff in a Saudi university hospital », *Int. Nurs. Rev.*, vol. 63, n° 2, p. 226-232, juin 2016, doi: 10.1111/inr.12242.

29. Chapman R, Perry L, Styles I, Combs S. Predicting patient aggression against nurses in all hospital areas. *British Journal of Nursing*. 2009. 18(8): 476 – 483.
30. Ayranci, U., Yenilmez, C., Balci, Y., &Kaptanoglu, C. (2006). Identification of Violence in Turkish Health Care Settings. *Journal of Interpersonal Violence*, 21(2), 276-296. <https://doi.org/10.1177/0886260505282565>.
31. Zafar, W., Siddiqui, E., Ejaz, K., Shehzad, M. U., Khan, U. R., Jamali, S., &Razzak, J. A. (2013). Health Care Personnel and Workplace Violence in the Emergency Departments of a Volatile Metropolis: Results from Karachi, Pakistan. *The Journal of Emergency Medicine*, 45(5), 761-772. <https://doi.org/10.1016/j.jemermed.2013.04.049>.
32. Magnavita, N., &Heponiemi, T. (2012). Violence towards health care workers in a Public Health Care Facility in Italy: A repeated cross-sectional study. *BMC Health Services Research*, 12(1), 108. <https://doi.org/10.1186/1472-6963-12-108>.
33. Arnetz JE, Arnetz BB, Söderman E. Violence toward health care workers. Prevalence and incidence at a large, regional hospital in Sweden. *AAOHN J*. 1998 Mar ;46(3) :107-14. PMID : 9582726.
34. Kamchuchat, C., Chongsuvivatwong, V., Oncheunjit, S., Yip, T. W., &Sangthong, R. (2008). Workplace Violence Directed at Nursing Staff at a General Hospital in Southern Thailand. *Journal of Occupational Health*, 50(2), 201-207. <https://doi.org/10.1539/joh.O7001>.
35. Adib, S. M., Al-Shatti, A. K., Kamal, S., El-Gerges, N., & Al-Raqem, M. (2002). Violence against nurses in healthcare facilities in Kuwait. *International Journal of Nursing Studies*, 39(4), 469-478. [https://doi.org/10.1016/S0020-7489\(01\)00050-5](https://doi.org/10.1016/S0020-7489(01)00050-5).
36. Alameddine, M., Mourad, Y., &Dimassi, H. (2015). A National Study on Nurses' Exposure to Occupational Violence in Lebanon: Prevalence, Consequences and Associated Factors. *PLOS ONE*, 10(9), e0137105. <https://doi.org/10.1371/journal.pone.0137105>.
37. Ferri, P., Silvestri, M., Artoni, C., & Di Lorenzo, R. (2016). Workplace violence in different settings and among various health professionals in an Italian general hospital : A cross-sectional study. *Psychology Research and Behavior Management*, 9, 263-275. <https://doi.org/10.2147/PRBM.S114870>.

38. Gerberich, S. G. (2004). An epidemiological study of the magnitude and consequences of work-related violence: The Minnesota Nurses' Study. *Occupational and Environmental Medicine*, 61(6), 495-503. <https://doi.org/10.1136/oem.2003.007294>.
39. Lei, Z., Yan, S., Jiang, H., Feng, J., Han, S., Herath, C., Shen, X., Min, R., Lv, C., & Gan, Y. (2022). Prevalence and Risk Factors of Workplace Violence Against Emergency Department Nurses in China. *International Journal of Public Health*, 67, 1604912. <https://doi.org/10.3389/ijph.2022.1604912>.
40. Kitaneh, M., & Hamdan, M. (2012). Workplace violence against physicians and nurses in Palestinian public hospitals: A cross-sectional study. *BMC Health Services Research*, 12(1), 469. <https://doi.org/10.1186/1472-6963-12-469>.
41. Hamdan, M., & Abu Hamra, A. (2015). Workplace violence towards workers in the emergency departments of Palestinian hospitals : A cross-sectional study. *Human Resources for Health*, 13(1), 28. <https://doi.org/10.1186/s12960-015-0018-2>.
42. Sachdeva, S., Jamshed, N., Aggarwal, P., & Kashyap, S. (2019). Perception of workplace violence in the emergency department. *Journal of Emergencies, Trauma, and Shock*, 12(3), 179. [https://doi.org/10.4103/JETS.JETS\\_81\\_18](https://doi.org/10.4103/JETS.JETS_81_18).
43. Phillips, J. P. (2016). Workplace Violence against Health Care Workers in the United States. *New England Journal of Medicine*, 374(17), 1661-1669. <https://doi.org/10.1056/NEJMra1501998>.
44. Usman, N., Dominic, B., Nwankwo, B., Nmadu, A., Omole, N., & Usman, O. (2022). Violence towards health workers in the workplace: Exploratory findings in secondary healthcare facilities in Kaduna metropolis, Northern Nigeria. *Babcock University Medical Journal*, 5(1). <https://doi.org/10.38029/babcockunivmedj.v5i1.118>.
45. Albashtawy, M., Al-Azzam, M., Rawashda, A., Batiha, A.-M., Bashaireh, I., & Sulaiman, M. (2015). Workplace Violence Toward Emergency Department Staff in Jordanian Hospitals: A Cross-Sectional Study. *Journal of Nursing Research*, 23(1), 75-81. <https://doi.org/10.1097/jnr.0000000000000075>.
46. Fernandes, C. M. B., Raboud, J. M., Christenson, J. M., Bouthillette, F., Bullock, L., Ouellet, L., & Moore, C. F. (2002). The effect of an education program on violence in the emergency department. *Annals of Emergency Medicine*, 39(1), 47-55. <https://doi.org/10.1067/mem.2002.121202>.



47. Alshahrani, M., Alfaisal, R., Alshahrani, K., Alotaibi, L., Alghoraibi, H., Alghamdi, E., Almusallam, L., Saffarini, Z., Alessa, S., Alwayel, F., Saffarini, L., Alrawdhan, A., Mapusao, C., Asonto, L. P., Alsulaibikh, A., & Aljumaan, M. (2021). Incidence and prevalence of violence toward health care workers in emergency departments: A multicenter cross-sectional survey. *International Journal of Emergency Medicine*, 14(1), 71. <https://doi.org/10.1186/s12245-021-00394-1>.
48. Garg, R., Garg, N., Sharma, D.K., Gupta, S. (2019). Low reporting of violence against health-care workers in India in spite of high prevalence. *Medical Journal Armed Forces India*. 75. 211-215. doi: 10.1016/j.mjafi.2018.11.011.
49. Alfuhaha O., Albawati N., Alhiary S., Alhalaiqa F., Haha M., Musa S., Shunnar O and AL Thaher Y 5. (2022). Workplace Violence among Healthcare Providers during the COVID-19 Health Emergency: A Cross-Sectional Study. *Behav. Sci.* 2022, 12, 106. <https://doi.org/10.3390/bs12040106>.