# Workplace violence against healthcare professionals in Morocco

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## Abstract

**Background:** Violence in hospitals is a significant problem and it has a negative impact on healthcare professionals.

**Aims:** We sought to identify the occurrence, characteristics and consequences of violence against healthcare professional in Morocco and propose preventive measures.

**Methods:** This descriptive cross-sectional study was conducted in 2020 among medical and paramedical healthcare professionals at a 1548-bed Moroccan university hospital that comprises 5 hospitals. Interviews were conducted using an anonymous, structured and self-administered questionnaire. The data were analysed using SPSS version 10.0.

**Results:** Our study included 480 health workers, 61% were women and 61% were paramedics. Their mean age was 29.6 ±5 years and the median professional experience was 3 years. The average frequency of violence was 76% (95% CI: 72–79); verbal violence was 99%, psychological violence 34%, and physical violence 21%. More women (62%) experienced violence than men and more paramedics (83%) than medics. The perpetrators of this violence were mostly (77%) family members of the patients. The workers estimated underreporting of violence at 38%.

**Conclusion:** Healthcare professionals are frequently exposed to violence. Reporting of such violence should be encouraged to enhance prevention and proper management by health workers and the responsible authorities.

Keywords: healthcare professionals, health workers, workplace violence, verbal violence, physical violence, tertiary hospital, Morocco

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## Introduction

Workplace violence is a serious and common problem in the healthcare setting, and it impacts negatively on the health, safety and wellbeing of health workers (*1*). It negatively impacts productivity, retention and the quality of patient care (*2-5*). Economically, nonfatal workplace violence costs substantial amounts for treatment and indemnity (*6*).

The International Labor Organization (ILO) 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 challenge to their safety, well-being or health" (*7*). This broad definition includes physical, verbal, psychological, and sexual violence.

Workplace violence has increased significantly recently, with millions of victims worldwide (*7*). It affects all sectors and categories of workers (*7,8*). The health sector is not spared, and the hospital is the epicentre of tensions due to some complex factors related to the individual, the work environment and work culture (*9*).

Workplace violence is underreported and therefore underestimated, and this limits its management and the implementation of preventive measures (*10*). In 2002, a joint report on violence at work in the health sector by ILO, the International Nurses Council (ICN), WHO, and the International Programs and Services Office (IPSO), showed that almost 25% of all workplace violence incidents occur in the health sector. More than 50% of healthcare professionals globally have experienced workplace violence (*7*). A 2018 analysis of intentional injuries caused by another person to workers in the private healthcare and social assistance industry by the US Bureau of Labor Statistics shows that healthcare professionals represented almost three-quarters of all nonfatal violence-related injuries and illnesses (*11*).

In the Moroccan healthcare system, workplace violence is an emerging and substantial problem still unexplored. A first survey-based study conducted at the Ibn Sina University Hospital, Rabat, in 2010, among 60 physicians who provided services in emergency departments found that 70% of the physicians had been victims of violence (*12*). The second study conducted at Meknes County Hospital revealed that 66.4% of the staff had been victims of violence (*13*). Every day, we witness violence against healthcare professionals mainly in emergency rooms, and in the wards. The first study explored only healthcare professionals in emergency rooms in a north-western university hospital and the second study was conducted in a north-western county hospital. Our study was in a south-central university hospital and the objective was to evaluate the occurrence, characteristics and consequences of workplace violence in this setting and propose preventive measures for healthcare professionals.

## Methods

### Study design, setting and participants

We performed a cross-sectional observational study among volunteer healthcare professionals at a 1548-bed Moroccan university hospital, Mohammed VI University Hospital, which comprises 5 hospitals: Arrazi Hospital, Mother-Child Hospital, Ibn Nafis Hospital, Ibn Tofail Hospital, and Onco-Hematology Centre. We included all 700 medical and paramedical healthcare professionals working in the hospital: medics (specialists, residents, interns) and paramedics (nurses, technicians, physiotherapists). We excluded the administrative staff because they have limited contact with patients.

### Definition and data collection

The World Health Organization defines violence (14) as the intentional use of physical force or power, threatened or actual, against oneself, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation. It defines verbal violence as the raising of voices (screaming), the calling of the name out loud or the raising of fists, and attempts at physical violence (aggressor does not touch the victim) and physical violence as slapping, kicking, throwing any item or object, biting, hitting, slapping, pulling, pushing, pinching, grabbing, scratching, or punching. It further defines moral (psychological) violence as words, gestures, behaviour, or attitudes by way of humiliation, blackmail, constant criticism without valid reason, devaluation, undermining, contradiction, judgments and criticisms, accusations and reproaches, false jokes, blocking and distraction, forgetfulness, restraint, denial, discrediting, and silence. Sexual harassment is still being evaluated.

The anonymous, structured and self-administered questionnaire for this study was developed after a review of the literature. It was divided into 4 sections with 23 questions. The first section included characteristics related to the victim, the second section was associated with the characteristics of violence, the third section explored the consequences, and the fourth section assessed the preventive propositions. The questionnaire was pretested among 15 nurses to assess comprehension and the time required to complete it, but we did not establish validity and reliability.

Data collection was conducted from February to August 2020. Each respondent was informed about the objectives of the study and were informed about the types of violence recorded during the last 12 months. The investigators individually distributed hard copies of the questionnaire to 700 participants and explained that information provided was anonymous and would be kept confidential. Consent was obtained orally and in writing to complete the questionnaire. The Ethics Committee approved the study under the number 637 of 29 January 2020.

### Statistical analysis

We used SPSS version 10.0 to analyse the data and presented them as frequencies and percentages for categorical variables and compared them with the $\chi^2$ test. Continuous variables with a normal distribution were presented as the mean ± standard deviation. Variables with skewed distributions were presented as the median and interquartile ranges (first and third quartile) and compared with the student t-test or the Mann Whitney test. The frequency of violence was calculated by dividing the number of people who answered 'yes' to the question 'Did you have any kind of workplace violence during the last 12 months?" by the total number of health workers who responded to the questionnaire.

## Results

Of the 480 (68.5%) participants who completed the questionnaire, the mean age was 29.6±5 years, 61% were women, 60.4% were single, and 61% were medics. Thirty-four percent of them worked in the in the medical wards, 21% in surgical wards, 14% in emergency or intensive care unit, 9% in radiology, 6% in psychiatry, 5% in gynaecology, and 11% in paediatrics. The median professional experience was 3 years (first and third quartiles 1–6); 71% had worked for 1–5 years.

### Prevalence of violence

Seventy-six percent (364) of the participants had experienced violence (95% CI: 72-79), of which 62% were women, 59% were single, and 57.4% were physicians. The perpetrators were a patient's family member in 77% of cases, a patient in 56% of cases, and coworkers in 33% of cases. Among the 364 who had suffered violence, 99% experienced verbal violence, 21% suffered physical violence, and 34% were exposed to moral (psychological) violence.

### Context of violence

The victims were medical personnel in 71% and paramedics in 83% of cases. The incident location was the patient's room or the patient's ward in 81% of cases and elsewhere in the hospital in 19%. Violence occurred 72% during the day shift, 52% during night shift and 38% during weekends or holidays. Predictive factors for violence were long waiting time (52%), dissatisfaction with care (45%), increased workload (41%), anxiety or stress of family members or fear of losing their patient (35%), aggressor psychiatric status (28%), and communication concerns (27%).

### Attributes of victims and violence

We found a predominance of violence among women in all types of violence compared to men, with no statistically significant differences. For the healthcare professional categories, nurses were more exposed to physical violence than physicians (30% versus 17%; $P$ = 0.04).

### *Reaction and declaration*

Reactions were verbal self-defence (52%), no reaction (47%) and physical self-defence (4%). Of all the victims, 38% reported the incident to the administration and 10% at the police station. Those who did not report said it was uselessness reporting (37%), it was a nonsignificant incident (23%), were ignorant of the reporting procedure (12%), were time-constrained (10%), and were afraid of the negative consequences (3%). In 42% of cases no action was taken, the abusers apologised (28%), there was settlement between the administration and the abusers (20%), and legal proceedings were taken (11%). The consequence was a temporary interruption of work in 13% of cases and interruptions of 1–10 days in 86% of cases: 70% interruption of 1–5, 15% 6–10, 13% 11–20 days, and 2% more than 21 days.

### *Preventive measures proposed by healthcare workers*

The healthcare professionals proposed preventive measures such as reorganization of work (75%), the presence of a security guard in the hospital (68%), conflict management training (56%), and improved communication (48%).

## Discussion

This study has shown that more than three-quarters of healthcare workers are victims of violence, especially verbal violence, regardless of their sex, marital status, or profession. In more than half of the incidents, the abuser was the patient or a family member. The most commonly associated factors were long waiting times, dissatisfaction with care and a critical workload.

The prevalence of violence was 76% in our study, 70% in Rabat Hospital (*12*) and 66.4% in Meknes Hospital (*13*). This was among the highest rates in the world: 32% in the UK (*15*), 40.8% in India (Delhi) (*16*), 58.2% in Egypt (Ismaïlia) (*17*), 75% in Algeria (*18*), and 76% in the State of Palestine (*19*) and Hong Kong (*20*). These rates vary by country, definition of violence, healthcare professional category, and location of hospital incident. Compared to other studies, verbal violence was more frequent than the physical violence (*7,14,21,22*). More than three-quarters of the aggressors were a patient's family member, similar to other studies (*13,18,19*), however, in other reports, the aggressor was the patient (*22,23*).

The gender risk was divergent between studies; a preponderance of females was reported by Brik et al (*25*) in El Bayadh County in Algeria, while males were predominant in the Boukort et al (*18*) in the capital of Algeria and Asri et al (*13*) (Morocco) surveys. In a meta-analysis and systematic review of 14 studies, Edward et al (*26*) reported a higher risk of verbal abuse among women and physical abuse among men.

The physicians were mostly the victims in 57.4% of the cases in our study. On the contrary, nurses were the prevalent victims in most surveys in Egypt (50%) (*17*), Germany (75%) (*27*) and Cameron (76.5%) (*24*). This may be due to the nature of the nurses' work, the regularity of contact with patients and their families, and work overload (*28*). Incidents that occurred during the day shift were associated with reception and orientation, appointment management, admission, and care delivery (*13,25*) and during the night shift they were associated with discontinuation of certain activities at night, anxiety in patients, limited medical resources, a narrower or undefined margin of autonomy, and limited medical team (*17,29*).

The most frequently associated factors were long waiting time, dissatisfaction with care, increased workload, and anxiety, stress, or fear among family members (*18,23*). Asri et al (*13*) reported some local predictors, including stressful working conditions; reception or guidance concerns for hospital users; extended work schedules and one-to-one assignments; job or profile mismatch; inappropriate work environment such as poor lighting, high noise level, inappropriate temperature, etc. which can negatively influence moods; inconducive waiting rooms; and difficulties in accessing care.

Despite the alarming data, Arnetz et al noted that only 12% of healthcare professionals officially documented their violent events (*30*). In our hospital, 38% of the victims reported the violent incidents. This rate was higher than 2% in Germany (*21*), 4.3% in France (Clermont) (*22*), and 4.1% in Tunisia (*31*). Healthcare professional gave the following reasons for underreporting (*30*): patients were under the influence of drugs or alcohol or had mental illness or cognitive impairment; reporting can take time and be challenging for healthcare professionals who are under stressful conditions; fear of reprisals from managers or colleagues, which may negatively impact the workplace; the incident did not result in injury or loss of time, or the violence was not physical; different definitions of "violence"; feeling that reporting never results in enhancements or changes; and the common belief that violence is part of the job (*32*).

To better manage workplace violence, emphasis should be placed on reporting, safety protocols, education, and training (*33*). Training should be on nonviolent patient de-escalation skills (*34,35*).

## Conclusions

Violence against healthcare professionals is a serious and common problem in our hospital. The study found that all healthcare professionals had been exposed to various forms of violence and the factors predicting violence are related to the individual, the organization or work environment. Action plans to combat violence against healthcare professionals must meet the expectations of hospital staff and hospital users to ensure their safety and comfort as well as preserve and improve the quality of care. Further studies are needed to explore the causes of violence among users of healthcare facilities in Morocco.

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**Competing interests:** None declared.

## La violence sur le lieu de travail à l'encontre des professionnels de soins de santé au Maroc

## Résumé

**Contexte :** La violence en milieu hospitalier représente un problème important qui a un impact négatif sur les professionnels de soins de santé.

**Objectifs :** Identifier l'occurrence, les caractéristiques et les conséquences des violences exercées contre les professionnels de la santé au Maroc et proposer des mesures préventives.

**Méthodes :** La présente étude transversale descriptive a été menée en 2020 auprès de professionnels de soins de santé médicaux et paramédicaux travaillant dans un centre hospitalo-universitaire marocain de 1548 lits regroupant cinq hôpitaux. Les entretiens ont été menés par le biais d'un questionnaire anonyme, structuré et auto-administré. Les données ont été analysées à l'aide du logiciel SPSS version 10.0.

**Résultats :** Notre étude a été réalisée auprès de 480 agents de santé, parmi lesquels 61 % étaient des femmes et 61 % étaient des professionnels paramédicaux. L'âge moyen des participants était de 29,6 ans avec une variation de plus ou moins cinq ans et la durée médiane de leur expérience professionnelle était de trois ans. La fréquence moyenne de la violence était de 76 % (IC à 95 % : 72-79), celle de la violence verbale était de 99 %, celle de la violence psychologique de 34 % et celle de la violence physique de 21 %. Les femmes ont été plus souvent victimes de violences (62 %) par rapport aux hommes, et les professionnels paramédicaux (83 %) l'ont été plus souvent que les professionnels médicaux. La majorité des auteurs de ces agressions (77 %) étaient des membres de la famille des patients. Les professionnels ont estimé à 38 % le taux de sous-déclaration de la violence.

**Conclusion :** Les professionnels de soins de santé font régulièrement l'objet de violences. Le signalement de ces actes devrait être encouragé afin de renforcer la prévention et la bonne gestion par les agents de santé et les autorités responsables.

## العنف في أماكن العمل ضد المهنيِّين الصحيِّين في المغرب

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## الخلاصة

**الخلفية:** العنف في المستشفيات مشكلة جسيمة لها أثر سلبي في المهنيين الصحيين.

**الأهداف:** هدفت هذه الدراسة إلى تحديد معدل حدوث العنف ضد المهنيين الصحيين في المغرب وخصائصه وتداعياته، واقتراح التدابير الوقائية.

**طرق البحث:** أُجريت هذه الدراسة الوصفية المقطعية في عام 2020 بين المهنيين الصحيين من العاملين الطبيين والمساعدين الطبيين في مستشفى جامعي مغربي يضم 5 مستشفيات ويسع 1548 سريرًا. وأُجريت المقابلات من خلال استبيان مُنظَّم يملؤه المستجيبون بأنفسهم دون الكشف عن هويتهم. وخضعت البيانات للتحليل باستخدام النسخة 10.0 من برنامج SPSS.

**النتائج:** شملت دراستنا 480 عاملًا صحيًّا، كان 61٪ منهم من النساء، وكذلك 61٪ من المساعدين الطبيين. كما بلغ متوسط عمرهم 29.6 عامًا في نطاق 5 أعوام أكبر أو أصغر، بينما بلغت خبرتهم المهنية الوسيطة 3 أعوام. وبلغ متوسط تواتر العنف 76٪ (بفاصل ثقة 95٪: 72–79)؛ وكانت نسبة العنف اللفظي 99٪، والعنف النفسي 34٪، والعنف البدني 21٪. وكانت نسبة التعرض للعنف أكبر لدى النساء (بنسبة 62٪) مقارنة بالرجال، وأكبر لدى المساعدين الطبيين (83٪) مقارنة بالأطباء. وكان معظم مرتكبي هذا العنف (77٪) من أفراد أسرة المرضى. وتشير تقديرات العاملين إلى أن نسبة عدم الإبلاغ عن العنف بلغت 38٪.

**الاستنتاجات:** يتعرض المهنيون الصحيون للعنف على نحو متكرر. وينبغي التشجيع على الإبلاغ عن هذا العنف لتعزيز جهود الوقاية والإدارة السليمة التي يبذلها العاملون الصحيون والسلطات المسؤولة.

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