

Patient-Perpetrated Violence Against General Practitioners in the Workplace: An International Review of Prevalence, Influencing Factors, and Intervention Strategies (Postprint)

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Abstract

General practitioners are highly comprehensive medical professionals who serve as ‘gatekeepers’ of community health. Workplace violence incidents not only severely jeopardize the physical and psychological well-being of general practitioners, but also compromise the quality and standards of primary healthcare services, thereby intensifying the attrition of general practitioner talent and imposing additional economic burdens on the healthcare system. Studies indicate that over half of general practitioners have encountered workplace violence, with verbal abuse and threats being the most prevalent forms, followed by physical assault and sexual harassment or assault; patients and their relatives constitute the primary perpetrators. Key contributing factors to workplace violence include inadequate healthcare service quality to meet patient demands, perpetrator alcohol intoxication, substance abuse, psychiatric disorders, and deficient physician-patient communication. Recommendations include refining policies, regulations, and procedural standards concerning workplace violence against healthcare workers, establishing robust mechanisms for violence reporting and sanctioning; enhancing the capabilities of healthcare professionals and institutions in delivering medical services and preventing workplace violence; and appropriately harnessing media influence to advance the implementation of a ‘zero-tolerance for violence’ framework.

Full Text

Research Progress of Workplace Violence among General Practitioners at Home and Abroad: Prevalence, Influencing Factors, and Intervention Strategies

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Abstract

General practitioners are highly integrated medical personnel who serve as “gatekeepers” of residents’ health. Violent incidents affecting healthcare not only seriously harm the physical and psychological health of general practitioners, but also compromise the quality and level of basic medical services, exacerbating general practitioner turnover and imposing economic burdens on the healthcare system. Studies have shown that more than half of general practitioners have experienced workplace violence, with verbal violence and threats being the most common forms, followed by physical violence, sexual harassment, and sexual assault. Patients and their family members constitute the primary perpetrators. Key contributing factors include medical service quality failing to meet patient demands, perpetrator alcohol abuse, drug misuse, mental disorders, and poor physician-patient communication. Recommendations include improving policies, regulations, and handling protocols for workplace violence against healthcare workers; establishing and strengthening violence reporting and punishment mechanisms; enhancing the capacity of healthcare workers and institutions to deliver medical services and prevent workplace violence; and appropriately leveraging media to promote the establishment of a “zero-tolerance” system for violence.

Keywords: General practitioner; Workplace violence; Influencing factors; Intervention strategies

Healthcare workers suffering occupational violence represents a global problem. Healthcare personnel are the primary targets or victims of workplace violence (WPV), with the healthcare industry being more vulnerable to violence than other sectors [1]. Since the COVID-19 pandemic began in 2019, healthcare workers—as pillars of the health system—have faced unprecedented pressures. According to International Committee of the Red Cross records, during the first six months of the pandemic, 67% of 611 documented incidents of stigmatization, violence, or harassment targeted healthcare workers, with over 20% involving physical attacks, 15% classified as fear-based discrimination, and 15% constituting verbal assaults [2]. WHO Director-General Tedros Adhanom Ghebreyesus emphasized: “The COVID-19 pandemic has reminded everyone that health workers play a vital role in alleviating suffering and saving lives. No country, hospital, or clinic can keep its patients safe unless it keeps its health workers safe.”

General practitioners are highly integrated medical professionals who primarily provide comprehensive services at the grassroots level, including preventive

care, diagnosis and treatment of common diseases, referrals, patient rehabilitation, chronic disease management, and health management [3]. Establishing a general practitioner system is crucial for 完善国家医疗网络、提供基础医疗保障、打破城乡医疗壁垒、发展个性化医疗及提升居民社会健康水平. However, WPV seriously endangers general practitioners' occupational safety and physical and mental health, leading to negative psychological outcomes such as hypervigilance [4] and anxiety [5], exacerbating burnout, reducing job satisfaction, and increasing turnover intention [6], while also intensifying physician-patient tensions [7-8]. Additionally, WPV affects the quality and equity of medical services provided by general practitioners; those who have experienced violence report that to prevent recurrence, they only provide home medical services to familiar or seemingly friendly patients and inform colleagues or family members of patient addresses [9]. Finally, WPV causes productivity losses and increased organizational economic burdens, including absenteeism, disability, death, staff turnover, and medical compensation. In 2016, the national cost of violence against hospital staff in U.S. medical institutions totaled \$428.5 million [10]. Therefore, systematically reviewing the global prevalence, influencing factors, and intervention strategies for WPV is essential for prevention.

This study searched Ovid Medline and PubMed databases using keywords including "workplace violence," "violence," "aggression," "bullying," "general practitioner," "township hospital," "family physician," and "healthcare professional," ultimately including 33 articles in the review.

1. Concept and Definition of Workplace Violence

WHO defines WPV as incidents where staff are abused, threatened, or assaulted in circumstances related to their work [11]. Current research on WPV in healthcare settings commonly includes verbal violence, threats, sexual harassment, sexual assault, and physical attacks [12], along with economic violence [6], property damage or theft [13], bullying, and racial discrimination [14]. However, definitions vary across studies. For example, "stalking" has been defined as patients intentionally following doctors to their residences or workplaces [13], or alternatively, as events causing fear that persist for over two weeks (with shorter-duration events classified as harassment) [14]. No unified international standard exists for WPV classification. Based on behavioral characteristics, WPV can be categorized as physical violence (assault, homicide, physical or sexual violation, abuse) and psychological violence (threats, sexual harassment, verbal abuse, intimidation, stalking) [11]. Based on perpetrator identity, WPV can be divided into four types: violence by criminals unrelated to the workplace; violence by service recipients such as patients or customers; violence by current or former colleagues or supervisors; and violence by non-employees with personal relationships to staff occurring in the workplace [15]. This study focuses on patient-perpetrated WPV against general practitioners.

2. Global Prevalence of WPV among General Practitioners

Multiple studies demonstrate high WPV prevalence among general practitioners both domestically and internationally, with verbal violence being the most common form. JOA et al. [16] surveyed 536 staff members across 20 Norwegian primary care centers, finding that 78% had experienced verbal violence, 44% had been threatened, 13% had suffered physical abuse, and 9% had experienced sexual harassment. AYDIN et al. [6] surveyed 522 general practitioners across 48 Turkish cities, revealing that 82.8% had experienced workplace violence, with 332 (61.69%) reporting multiple incidents. The most common form was verbal violence (89.3%), followed by physical assault, sex-related violence, and economic violence. FORREST et al. [17] conducted a nationwide survey of 3,090 Australian general practitioners representing urban, rural, and remote areas, finding that 58% had experienced verbal abuse, 18% property damage or theft, while smaller numbers had experienced physical injury (6%), stalking (4%), sexual harassment (6%), or sexual assault (0.1%). FENG et al. [18] randomly surveyed 4,376 general practitioners across five provincial-level regions in eastern, central, and western China, reporting a WPV incidence of 14.26%, with verbal violence being most common (13.44%), followed by threats (9.23%), sexual harassment (4.68%), physical assault (4.59%), and sexual assault (2.29%). GAN et al. [12] surveyed 1,015 general practitioners in Hubei Province (response rate 85.6%), finding that 62.2% had experienced WPV in the past year, with physical violence at 18.9% and non-physical violence at 61.4%. LI et al. [19] conducted a retrospective survey of general practitioners and nurses in Heilongjiang Province, finding that 153 of 422 general practitioners (34.62%) had experienced psychological violence in the past year, most commonly verbal violence (28.05%), followed by “medical disturbance” (14.93%), threats (13.80%), verbal sexual harassment (10.18%), and sexual harassment (6.11%). TIAN et al. [20] performed a meta-analysis estimating that 63.1% of general practitioners globally have experienced WPV, with the highest prevalence in Europe [69.3%, 95%CI (54.9%, 83.7%)], followed by Asia [(66.2%, 95%CI (55.6%, 70.6%))], and lowest in Oceania [57.3%, 95%CI (49.9%, 64.7%)]. Specifically, 33.8% [95%CI (25.3%, 42.3%)] experienced non-physical violence, while 8.5% [(95%CI (5.7%, 11.4%))] experienced physical violence.

3. Influencing Factors of Workplace Violence against General Practitioners

An Australian study in rural eastern regions showed that perpetrators primarily consisted of patients, with influencing factors including dissatisfaction with medical services, long waiting times, staff shortages, acute psychiatric episodes in patients, personality disorders, and drug and alcohol abuse [9]. FORREST et al. [17] found that general practitioners with less experience, those working full-time, or those in large practices were more susceptible to verbal violence, while full-time practitioners or those in metropolitan areas were more prone to property damage or theft, and female or less experienced general practitioners

reported significantly more sexual harassment. FENG et al. [18] revealed that perpetrators were primarily male patients, with incidents most commonly occurring in doctors' offices during morning shifts. The top three causes of WPV were unmet patient needs, long waiting times, and dissatisfaction with general practitioner services. AYDIN et al. [6] investigated work scenarios during violent incidents, finding that violence most frequently occurred during information consultation (44.0%) and physical examination (26.5%), with the primary cause being refusal of perpetrators' unreasonable demands (50.5%). GAN et al. [12] explored WPV risk factors, showing that male general practitioners with higher professional titles but lower monthly incomes were more vulnerable to physical violence, while males, those lacking experience, and those with administrative duties were more likely to experience non-physical violence. One study found that foreign-born general practitioners were more susceptible to verbal or physical violence than their native counterparts, possibly due to insufficient language proficiency, communication difficulties, and misunderstanding patients, which provoked aggression [21]. PINA et al. [22] used focus groups to survey 80 users of primary care services in Murcia about violence-inducing factors and prevention measures, identifying appointment difficulties, inappropriate attitudes from staff and patients, healthcare deficits, and COVID-19-related clinic closures as key conflict triggers.

Reviewing domestic and international research reveals that patient-perpetrated WPV against general practitioners primarily originates from patients and their families [6,9,23], as well as colleagues and managers [6,9]. Verbal and physical violence most commonly comes from patients [9,18] or their relatives [19,24], while economic violence and sexual violence more often originate from colleagues and supervisors [6]. Demographic factors show inconsistent findings regarding gender and work duration effects. A survey of Bulgarian primary care professionals found no significant differences in patient violence by gender or service duration [25]. However, other research suggests gender differences in violence types: female general practitioners predominantly experience sexual harassment [17] and sexual assault [13], while males experience physical assault [16] and economic violence [6]. Older age and greater work experience correlate with lower risk of sexual harassment and other violence types [16-17]. Workplace characteristics also matter: some studies find no difference in violence probability between urban and rural family doctors [26], while MARGIN et al. [27] found higher WPV prevalence in rural areas. Violence-related factors vary by setting: in health centers, most incidents stem from refusing perpetrators' unreasonable demands, whereas in public hospitals and emergency centers, they more often relate to perpetrator misconduct such as drug abuse and alcoholism [6].

4. Intervention Strategies for Workplace Violence against General Practitioners

4.1 Improve Healthcare Worker Guidelines for WPV and Establish Sound Handling Protocols The International Labour Office (ILO), Interna-

tional Council of Nurses (ICN), WHO, and Public Services International (PSI) have released the *Framework Guidelines for Addressing Workplace Violence in the Health Sector*, combining years of research and practical experience in WPV prevention. The guidelines comprehensively detail action guides for individuals, institutions, and society to prevent and respond to WPV, covering healthcare workers' awareness and identification of WPV and its influencing factors, adverse consequences of violence, workers' rights and responsibilities, tertiary prevention of WPV, and responsibilities and measures for healthcare institutions, governments, and society [28]. WHO issued the *Health Worker Safety Charter* on July 19, 2020, proposing five steps to protect health workers from WPV: implementing policy mechanisms, fostering a "zero-tolerance" culture toward violence against health workers, reviewing and improving relevant laws and regulations, establishing enforcement mechanisms such as ombudsmen and helplines, and particularly creating clear WPV reporting mechanisms. Research indicates that major factors affecting reporting include incident severity, patient condition, and clarity of reporting mechanisms [29]. Organizations should classify WPV severity levels and specify corresponding handling measures to reduce WPV incidence and negative impacts. To prevent WPV incidents and respond effectively, countries and regions need laws, regulations, and policy mechanisms to establish social consensus on "zero tolerance" for violence against health workers. China's *Basic Medical and Health Promotion Law*, passed by the Standing Committee of the National People's Congress on December 28, 2019, incorporates protection of healthcare personnel's personal safety and dignity into law and standardizes improvements to medical practitioners' work environments. Medical institutions and relevant departments should establish specialized departments and measures to provide general practitioners with professional assistance including WPV-related counseling, incident handling guidance, and post-incident psychological support.

4.2 Establish WPV Reporting Mechanisms, Improve Punishment Systems, and Implement Relevant Regulations Establishing robust reporting systems is critical for preventing WPV in healthcare settings, yet current conditions remain unsatisfactory. General practitioners receive limited organizational support after WPV exposure, with support primarily coming from individuals, colleagues, or close associates [35]. A survey of 448 general practitioners in Heilongjiang found that after experiencing psychological or physical violence, support was mostly at the individual level—including relying on oneself, talking with colleagues, and receiving family support—while at the organizational level, the most common support was completing accident injury reports or reporting to supervisors [30]. Additionally, a U.S. survey of healthcare workers revealed that only 17.7% of all violent incidents were investigated, perpetrators faced no penalties in 52.4% of cases, and only 30.1% of victims formally reported their experiences [31]. Thus, despite high WPV prevalence, formal reporting remains low and punitive measures insufficient, necessitating more scientific punishment mechanisms and improved tracking and management of violent in-

cidents. SUN et al. [32] developed an externality, identifiability, and preventability (EIP) analytical framework that distinguishes healthcare workplaces from general workplaces and constructs an economic model for optimal WPV punishment in healthcare, aiming to prevent external perpetrators through appropriate penalties. Enhancing punishment mechanisms and increasing perpetrator costs can effectively deter violence.

4.3 Enhance Capabilities of General Practitioners and Healthcare Institutions General practitioners must improve their professional competence, communication skills, and capacity to prevent and respond to WPV, while healthcare institutions must strengthen interdepartmental and inter-organizational collaboration to narrow gaps between service quality and public expectations. Insufficient individual capacity—such as lacking communication skills or understanding of medical settings and equipment before initiating care—constitutes a major WPV risk factor [33]. Strong professional competence is essential for violence prevention. Additionally, poor physician-patient communication is a key factor in WPV [34], with harsh or unfriendly communication styles from healthcare workers serving as triggers for serious conflicts [33]. Good communication skills can keep patients calm, build trust, and foster hopeful relationships, thereby reducing WPV. Furthermore, general practitioners' adequate understanding, early recognition, and proper response to WPV can effectively mitigate its harm and danger. Assessing patient risk through review of prior attack histories, avoiding solo work, and ensuring traceable whereabouts are effective WPV measures [11]. Capacity building requires collaboration among individuals, schools, medical institutions, and communities. Therefore, ensuring quality knowledge acquisition during medical education, offering interpersonal violence prevention courses, and improving WPV recognition among community healthcare workers are crucial [6]. Strengthening information sharing, resource connectivity, and organizational coordination across medical institutions and health systems can meet patient needs; optimizing health resource allocation and shortening emergency response times to provide timely services also effectively prevent WPV.

4.4 Appropriately Leverage Media to Achieve “Zero Tolerance” for Violence Violence against healthcare workers is increasing, and proper medical publicity is key to reducing such incidents [34]. Media must play a positive role in emphasizing that the public should trust doctors more [6]. A survey of 560 Israeli citizens (non-healthcare workers) showed that simultaneous action is needed at both health worker and general public levels. At the healthcare level, working conditions must be improved, staff trained in violence response, and security personnel and cameras increased as deterrents. At the public level, education is needed to increase tolerance toward healthcare workers, raise zero-tolerance awareness, and punish perpetrators [35]. To curb violence against healthcare workers, society must shift public hostility toward medical staff, strengthen the “physician-patient community” concept, and improve public awareness of laws

against violence in medical settings, clarifying that violence in healthcare facilities is unacceptable.

Limitations

Current research on general practitioner WPV is increasingly rich but requires deeper development in standard definitions, content, and direction. First, most studies define WPV from perpetrator and behavioral characteristics perspectives, but descriptions vary—some broadly distinguish verbal, physical, and sexual violence, while others detail specific behaviors like fist-waving [25]. Additionally, domestic and international conceptualizations of “violence” differ, with foreign research using more generalized definitions that inevitably affect prevalence findings. Future research should adopt more consistent standards. Second, nearly all studies adopt general practitioners’ perspectives, lacking research from the viewpoints of GP-affiliated organizations, patients receiving GP services, or other professionals working with GPs—research perspectives should be broadened. Third, violence perception and exposure measurement could utilize questionnaires developed in the *Framework Guidelines For Addressing Workplace Violence in the Health Sector* training manual [19,24] or the *ILO/ICN/WHO/PSI Working Violence in the Health Sector Country Case Studies Research Instruments Survey Questionnaire* [1,30]. Existing questionnaires focus on demographic characteristics and violence occurrence, rarely covering incident reporting, organizational support, or training. Moreover, influencing factor research primarily examines doctor or perpetrator characteristics, lacking attention to organizational and situational features. Fourth, current research designs are predominantly cross-sectional, lacking longitudinal or experimental studies to identify predictors and establish causality. Fifth, qualitative and case studies on WPV incidents should be advanced to provide more attribution- and policy-relevant findings for top-level policy design.

This article has limitations. First, only English literature was included, which may introduce selection bias. Second, searches were limited to Ovid Medline and PubMed databases, potentially yielding incomplete retrieval.

Conclusion

Globally, WPV against general practitioners occurs at high rates, with verbal violence and threats being the most common forms. Perpetrators are primarily patients and their relatives. Poor physician-patient communication, patient alcohol abuse, drug misuse, long waiting times, and low medical service quality increase WPV incidence. Relevant departments should accelerate establishment of laws and regulations, improve WPV reporting and punishment mechanisms, develop violence handling guidelines, and guide media roles. Additionally, continuous improvement of general practitioners’ and their organizations’ capacity to prevent, identify, and handle WPV is needed to enhance physician-patient trust and provide strong guarantees for the stability and high-quality development of the general practice workforce.

Author Contributions

LI Xinyan conceptualized the article and drafted the manuscript. LI Xinyan, FENG Jing, and LEI Zihui collected and organized literature. QU Ge proofread content. GAN Yong revised English, reviewed and verified quality, and provided overall supervision.

Conflict of Interest

The authors declare no conflict of interest.

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