

The Ergonomics of Conflict in Healthcare: An HRM Framework for Understanding and Preventing Workplace Violence against Medical Professionals.

Abstract:

The increasing incidence of attacks on medical professionals, including doctors, by patients and their relatives has emerged as a serious concern in healthcare workplaces, with consequences for employee safety, psychological well-being, job satisfaction, performance, retention, and organisational effectiveness. Beyond these immediate effects, persistent exposure to violence and fear may erode the **intellectual capital of the nation**, represented by the specialised knowledge, professional competence, experience, judgement, skills, and human potential embodied in healthcare professionals. Although such incidents are commonly addressed through legal, disciplinary, and security mechanisms, comparatively limited attention has been given to the workplace conditions and human–environment interactions that may contribute to their occurrence and escalation. This study therefore applies an **ergonomics perspective within a Human Resource Management (HRM) framework** to examine violence against healthcare professionals as a workplace human-factor issue.

Traditionally, ergonomics focuses on designing work systems, environments, processes, and interactions in accordance with human capabilities and limitations. In healthcare, this perspective can extend beyond physical ergonomics to include cognitive, psychological, social, organisational, and environmental dimensions. Factors such as excessive workload, prolonged waiting time, communication barriers, emotional stress, inadequate information, overcrowding, role ambiguity, perceived neglect, resource constraints, night-duty pressures, security deficiencies, and inappropriate workplace design may influence interactions between healthcare professionals and patients or their relatives and create conditions conducive to conflict escalation.

The study examines how these workplace and human factors may be associated with attacks on medical professionals and addresses the gap between conventional post-incident approaches and preventive workplace analysis. Rather than treating violence solely as isolated acts of individual aggression, the study conceptualises it within the broader interaction between people, work processes, organisational systems, and the healthcare environment. From an HRM perspective, this approach provides a basis for strengthening workload management, communication, conflict prevention, employee support, training, security, and workplace design.

The study further positions the protection of healthcare professionals within a broader human-capital perspective. Healthcare professionals represent substantial societal investment in specialised education, clinical expertise, professional knowledge, and decision-making capability. Violence, psychological distress, burnout, and consequent professional attrition

may therefore affect not only individual employees but also organisational capacity and the continuity and quality of healthcare services. The study consequently advocates a shift from predominantly reactive responses towards **proactive risk identification, prevention, protection, support, recovery, and organisational learning.**

The study contributes to the emerging application of ergonomics to HRM and healthcare workplace safety by proposing an integrated framework linking **workplace conditions, human factors, conflict escalation, violence, employee well-being, and patient safety.** The framework may assist healthcare organisations and policymakers in developing preventive strategies that promote a safer and more supportive healthcare work environment.

“When we protect the healthcare professional, we protect not only a person, but the knowledge, experience and capability that person represents.”

Keywords: Healthcare Workplace Violence; Ergonomics; Human Resource Management; Workplace Safety; Occupational Stress; Cognitive Load; Psychological Well-being; Conflict Escalation; Organisational Support; Preventive Mechanisms; Patient Safety; Human Capital

Introduction

Healthcare institutions play a vital role in safeguarding the health, dignity, and social well-being of citizens. Irrespective of whether they are government, semi-government, or privately managed, healthcare institutions are expected to provide accessible, reliable, and safe medical care. The effectiveness of this system, however, depends not only on infrastructure, technology, and organisational resources, but also on the physical and psychological well-being of the healthcare professionals who deliver care. Doctors, nurses, and other healthcare

personnel work in environments where professional decisions may directly determine the survival, recovery, or quality of life of patients. Their role therefore carries an exceptional level of responsibility and social expectation.

The increasing prevalence of lifestyle-related diseases, chronic illnesses, emergencies, accidents, and other health conditions has further intensified the demand placed on healthcare professionals. Long working hours, night shifts, emergency duties, high patient loads, emotional pressure, sleep deprivation, and the need to make critical decisions within limited time can collectively create substantial occupational stress. While healthcare professionals are expected to remain attentive, compassionate, and professionally competent under such circumstances, their own safety and psychological well-being may receive comparatively less attention.

Background and Rationale of the Study

Healthcare institutions have a very important role to play in every country in ensuring the social well-being of its citizens. Irrespective of ownership—private, semi-government or government—the healthcare system must remain strong, and the professionals working within it must be protected and cared for with the highest priority. Medical professionals are often regarded as the “second God” of human life because of their responsibility for saving and protecting lives.

The increasing prevalence of lifestyle diseases and other illnesses further highlights the importance of keeping healthcare professionals physically and mentally healthy so that they can continue to care for others effectively. Unfortunately, these professionals are subjected to threats, abuse and violence on many occasions and for various reasons. Doctors working in casualty and emergency departments, particularly during night duty, may face serious threats from patients and their relatives arising from dissatisfaction, grief, misunderstanding or perceived failures in treatment.

Such insecurity can demoralise healthcare professionals and adversely affect their sense of safety and psychological well-being. Although the number of reported incidents of violence against healthcare professionals has become a matter of increasing concern, institutional responses often become prominent only **after an incident has occurred**, through police complaints, legal procedures and judicial proceedings. Comparatively less attention appears to be given to **preventive mechanisms designed to reduce the possibility of recurrence**.

The absence or inadequacy of sufficient ground-level security, particularly during night duty, can make healthcare professionals feel vulnerable in their own workplace. This situation raises an important Human Resource Management question: ***How does workplace violence and perceived insecurity affect the psychological well-being, morale, job performance and professional functioning of healthcare workers?***

The present study therefore seeks to examine the experiences and trauma of healthcare professionals through the **lens of Human Resource Management and employee psychology at the workplace**, with particular attention to workplace violence, safety, security, and emotional well-being, grievance redressal and preventive mechanisms.

Safety and Security of Medical Professionals: An HR Grievance Perspective

One of the most remarkable aspects of the medical profession is the extraordinary level of intellectual ability, hard work, concentration and perseverance required to enter and progress through it. After securing admission through one of the country's highly competitive entrance examinations, a medical student undergoes years of rigorous academic and professional training. NEET-PG and subsequent super-specialty selections add further levels of intense competition and filtering. Altogether, it may take nearly three decades of continuous education, training and professional development to become a highly specialised medical professional.

After such a long and demanding journey, it is unfortunate that doctors and other healthcare professionals may still face threats to their personal safety while performing their professional responsibilities. Incidents involving physical attacks, verbal abuse, intimidation, threats, vandalism and obstruction of duty by patients or their relatives are serious **workplace human-resource grievances**, not merely isolated incidents of conflict.

The increasing occurrence of such incidents raises an important question from an HR perspective: **Is the workplace providing adequate safety, security and psychological assurance to employees who are expected to make critical decisions, particularly during long and night duties?**

When every incident is dealt with only through the normal legal procedure after it occurs, the **response remains largely reactive rather than preventive**. Legal action is necessary, but it alone may not constitute an adequate workplace safety mechanism. Healthcare institutions require effective preventive systems, including risk assessment, adequate security arrangements, rapid-response mechanisms, incident reporting and grievance-redressal systems, protection during high-risk duties, and institutional support for employees facing threats or obstruction.

A doctor working under constant fear of attack, intimidation or interference may experience reduced confidence, concentration and attentiveness, particularly during prolonged or night-duty hours. Therefore, workplace safety is not merely an employee-welfare issue; it can also have implications for professional performance, patient safety and the quality of healthcare delivery.

From an HR perspective, protecting medical professionals should therefore be viewed as part of the institution's duty of care towards its employees. A safe working environment enables healthcare professionals to discharge their responsibilities without fear, while appropriate

grievance-redressal mechanisms ensure that threats, attacks and obstruction of duty are addressed promptly, systematically and fairly.

The issue therefore deserves to be addressed not merely as a series of individual legal cases, but as a systemic workplace-safety and human-resource management concern requiring preventive mechanisms, institutional accountability and continuous monitoring.

Conceptual Pathway



Protection of Healthcare Professionals as National Intellectual Capital

The study advances the proposition that healthcare professionals should be viewed not merely as employees or service providers, but as an important component of the **intellectual capital of the nation**. Years of professional education, clinical training, specialised knowledge, practical experience, judgement, decision-making ability, and accumulated expertise

represent a substantial investment by individuals, institutions, and society. When healthcare professionals experience workplace violence, persistent fear, psychological stress, burnout, reduced performance, or withdrawal from demanding clinical environments, the resulting loss extends beyond the individual and the organisation.

Consequently, workplace violence in healthcare should also be understood as a potential **erosion of national intellectual capital**. A doctor or medical professional who becomes psychologically distressed, leaves a high-risk specialty, reduces professional engagement, migrates, or exits the profession represents not merely an employee lost by an institution, but a portion of accumulated professional knowledge and expertise that becomes unavailable or underutilised for society.

From this perspective, prevention of healthcare workplace violence acquires a broader significance. **Protecting medical professionals is protecting knowledge, experience, skill and professional capability accumulated over years.** Therefore, HRM policies, ergonomic workplace design, adequate staffing, workload management, communication mechanisms, psychological support, security systems, and effective administrative intervention should be regarded not merely as employee-welfare measures but as mechanisms for conserving the nation's intellectual capital.

The study therefore advocates a shift from a predominantly **post-incident, legal and reactive approach** towards a **preventive, human-centred and organisational approach**, in which the healthcare workplace is designed to minimise avoidable stressors and conflict before they escalate into violence. The ultimate objective is to create a **fear-free, supportive and professionally sustainable healthcare ecosystem** in which both employee well-being and patient safety are protected.

Workplace Violence, HR Grievance, Psychological Impact, Night-Duty Risk, Preventive Mechanisms, and Institutional Responsibility.

Among the most vulnerable situations are casualty and emergency departments, particularly during night duty. Healthcare professionals may encounter highly distressed patients and anxious or emotionally charged family members, sometimes resulting in verbal abuse, threats, intimidation, physical assaults, or other forms of workplace violence. Such incidents can create a profound sense of insecurity among professionals whose primary responsibility is to provide care. The consequences may extend beyond the immediate incident, affecting morale, job satisfaction, psychological well-being, professional commitment, attentiveness, and the perceived safety of the workplace.

Workplace violence against healthcare professionals is therefore not merely a law-and-order concern or an isolated interpersonal problem. It can also be viewed as an important **Human Resource Management (HRM) and employee-well-being issue**. When employees repeatedly experience threats or insecurity in the course of their duties, the psychological contract between the employee and the organisation may be affected. Fear, stress, reduced

confidence, emotional exhaustion, and diminished organisational commitment may emerge as potential consequences. In occupations where concentration, judgement, communication, and rapid decision-making are critical, deterioration in employee well-being may also have implications for the quality and safety of patient care.

Institutional responses to such incidents frequently become visible after an attack has occurred, through police intervention, legal action, administrative procedures, or judicial proceedings. While these responses are necessary, an equally important question concerns the extent to which healthcare institutions have effective **preventive mechanisms** to reduce the likelihood of recurrence and to create a secure working environment. Adequate security arrangements, appropriate staffing, clear protocols for managing aggressive behaviour, rapid response mechanisms, organisational support, counselling, incident reporting systems, and effective communication with patients and their families may form important components of a comprehensive workplace-safety strategy.

Night-duty professionals deserve particular attention because the perceived vulnerability associated with reduced staffing, limited institutional activity, and emergency situations may intensify their sense of insecurity. The problem becomes especially significant when professionals feel that they are expected to manage difficult and potentially threatening situations without adequate organisational protection. Such circumstances may influence not only their immediate emotional state but also their long-term relationship with the profession and workplace.

Against this background, the present study examines the workplace trauma and psychological consequences experienced by healthcare professionals in the context of workplace insecurity and violence, with particular attention to emergency and night-duty situations. The study approaches the issue through the lenses of Human Resource Management and employee psychology, focusing on occupational stress, perceived safety, emotional well-being, professional morale, organisational support, and work performance. Rather than viewing healthcare professionals solely as service providers, the study recognises them as employees whose own physical and psychological security is an essential component of a sustainable healthcare system.

The study ultimately seeks to highlight the need for a shift from a predominantly **post-incident response approach to a preventive and employee-centred approach** to healthcare workplace safety. Protecting those who protect and care for society is not only an organisational responsibility but also an essential condition for maintaining the quality, continuity, and humanity of healthcare delivery.

Defocusing and Underperformance Due to 24-Hour Duty in the Medical Sector

Doctors, nurses and other healthcare professionals often work demanding 24-hour, day-and-night duty schedules. Prolonged working hours, sleep deprivation and continuous exposure to

critical situations can lead to physical and mental exhaustion. As exhaustion increases, the sharpness of attention, decision-making ability, emotional control and overall performance may gradually decline.

Night duty can be particularly challenging because many **critical, trauma and emergency cases** reach hospitals during the night. In many situations, families initially attempt first aid or treatment at home and wait for improvement until evening. When the patient's condition deteriorates, they finally decide to shift the patient to a hospital. Consequently, patients arriving at night may already be in a highly critical condition.

For the doctor and healthcare team on duty, such cases demand immediate and sustained life-saving interventions. There may be virtually no opportunity to sit, rest or mentally recover between cases. Every patient requires attention, and even a momentary loss of concentration can have serious consequences.

Workload, Prioritisation and Performance

The situation becomes more complicated when several emergency cases arrive simultaneously. Doctors must assess, prioritise and treat patients according to the severity of their conditions while also following medical ethics and professional protocols.

Conceptual relationship: as exhaustion (E) increases, performance sharpness (P) may decrease. This is an illustrative model, not a clinical measurement.

For a doctor, **every patient is important**, but when multiple patients require urgent attention simultaneously, prioritisation becomes unavoidable. This reality may not always be understood by accompanying family members. For a family, their patient is naturally everything, whereas the healthcare professional has a responsibility toward all patients under their care.

This difference in perception can create tension between doctors and patients' relatives.

Persistent Enquiries and Emotional Pressure

Another challenge is the continuous questioning from relatives about the patient's condition, treatment and expected recovery. While such enquiries are understandable from the family's perspective, repeated interruptions during emergency procedures can place additional psychological pressure on healthcare workers.

When relatives perceive a delay in response, they may interpret it as negligence or lack of concern, even when the medical team is working under intense pressure and following the appropriate clinical priorities. Such misunderstandings can sometimes escalate into verbal confrontation or even violence against healthcare personnel.

Behavioural Challenges and Night-Time Security

The problem can become more serious when some people accompanying patients are under the influence of alcohol or behave irresponsibly within the hospital environment. Lack of social discipline, aggressive behaviour and emotional instability can create an unsafe atmosphere for doctors, nurses and other healthcare workers.

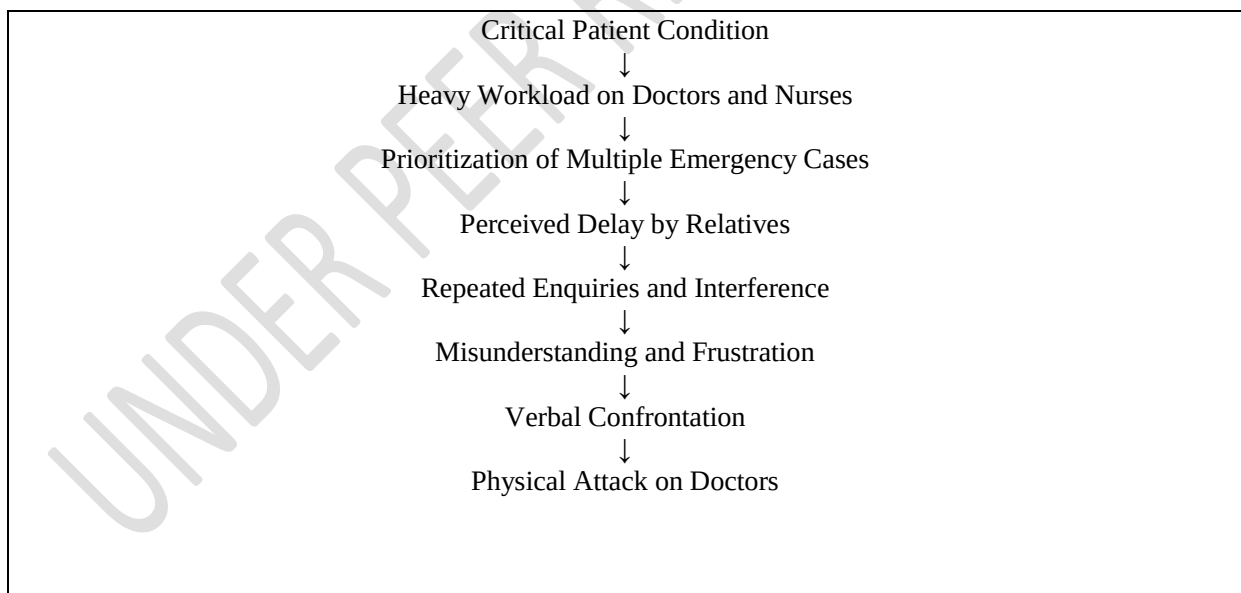
At night, the situation may be aggravated by shortages of security personnel and supporting staff. A healthcare professional who is already physically and mentally exhausted may therefore have to work in an environment where personal safety itself is uncertain.

Progression from Emergency Pressure to Attacks on Doctors :Conceptual Overview

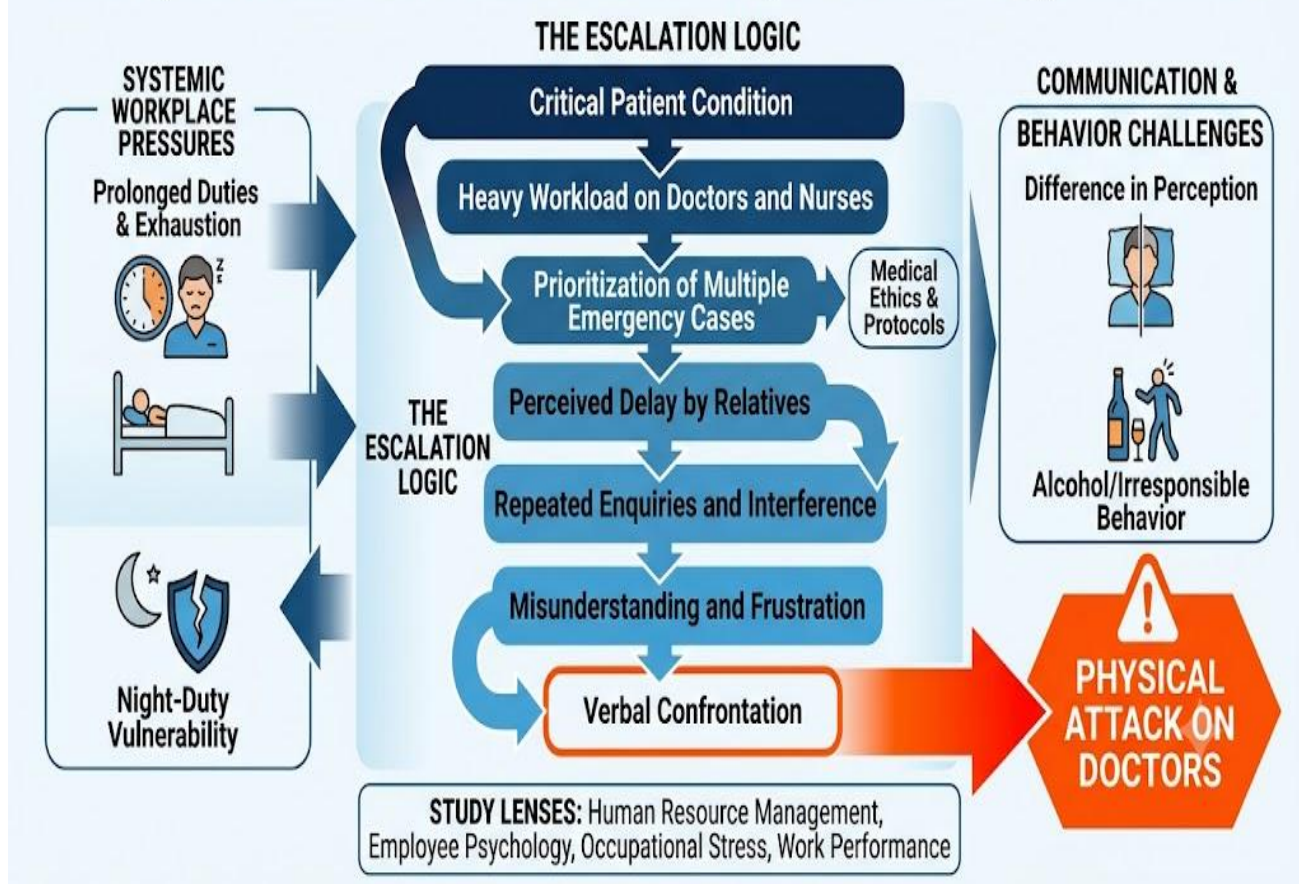
This conceptual model illustrates how emergency workloads, communication pressures, and misaligned expectations can escalate into conflict and, ultimately, violence against healthcare professionals. This framework serves as a theoretical basis for the study rather than empirical incident data.

The Escalation Logic

The chronological sequence of factors outlined below demonstrates how systemic pressures culminate in violence. Because the final outcome being examined is explicitly physical violence—rather than general workplace conflict—the preceding conditions serve as critical, compounding escalation factors:

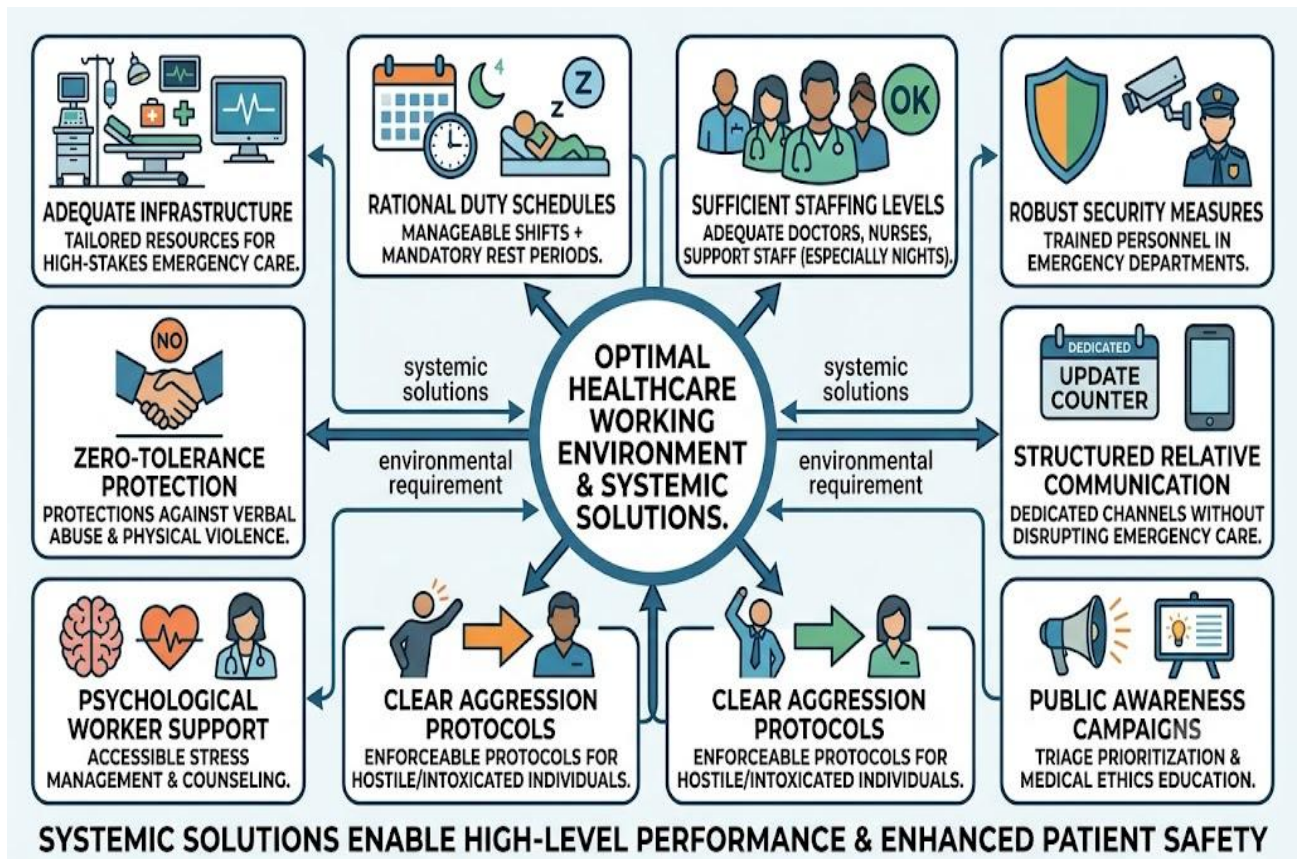


Conceptual Framework: Escalation to Workplace Violence Against Doctors



Systemic Solutions & Environmental Requirements

Solutions must extend beyond simply demanding that doctors and nurses "work harder." The healthcare system must actively cultivate an optimal working environment that enables professionals to perform at their highest level. Achieving this requires:



- 337• **Rational duty schedules** paired with mandatory, adequate rest periods following prolonged shifts.
- 339• **Sufficient staffing levels** of doctors, nurses, and support personnel, particularly during high-vulnerability night hours.
- 341• **Robust security measures** and trained personnel stationed within emergency departments.
- 342• **Structured communication channels** for updating relatives on patient status without disrupting active emergency procedures.
- 344• **Public awareness campaigns** regarding emergency triage prioritization and medical ethics.
- 345• **Clear, enforceable protocols** for managing aggressive, hostile, or intoxicated individuals.
- 346• **Psychological support** and accessible stress-management mechanisms for healthcare workers.
- 348• **Zero-tolerance protections** against both verbal abuse and physical violence.
- 349• **Adequate infrastructure** and clinical resources tailored for high-stakes emergency care.

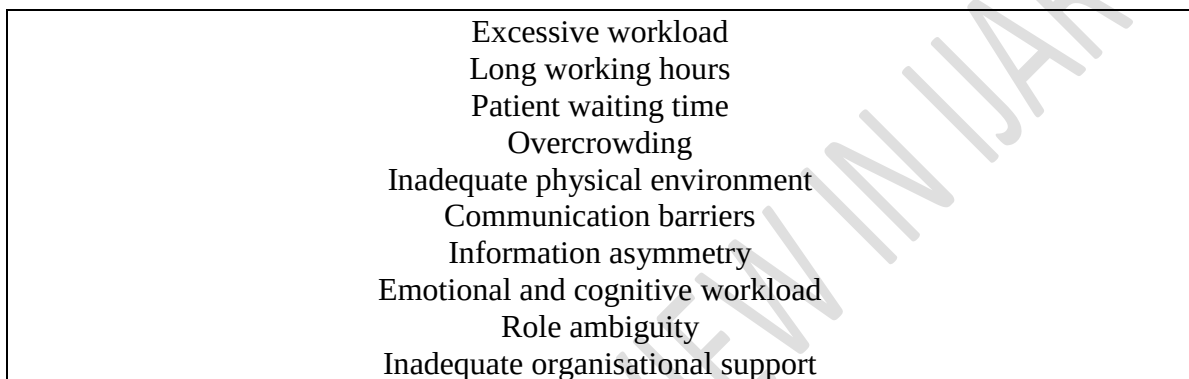
352 The Critical Distinction of Healthcare

353 Unlike many other service industries where a temporary interruption or delay can be rectified
 354 later, healthcare is fundamentally different because it directly involves human life. A minor
 355 error, a momentary lapse in concentration, or brief mental fatigue can result in irreversible
 356 tragedy.

Consequently, ensuring that healthcare workers remain physically alert, mentally focused and emotionally stable is not a luxury or a privilege—it is a functional necessity. Keeping healthcare workers safe, rested, and focused is a direct investment in patient safety. Ultimately, protecting the dignity of medical professionals is the only way to protect the lives of the patients they treat.

Research Framework

Workplace Ergonomic Factors



Employee Stress & Patient–Provider Friction



Conflict Escalation



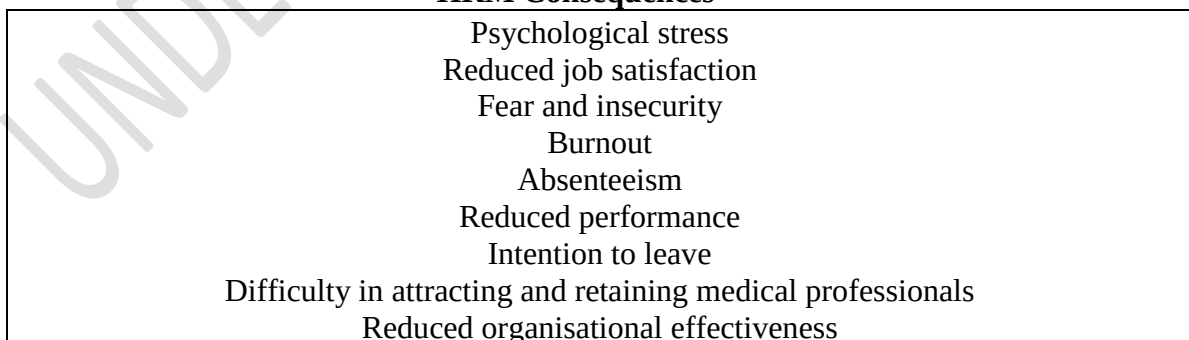
Aggressive Behaviour / Workplace Violence



Attack on Doctors



HRM Consequences



HRM Intervention Variables

HRM can potentially moderate or reduce the progression from workplace factors to violence through:

Workload management + Communication training + Conflict-resolution mechanisms + Employee counselling + Safety systems + Grievance redressal + Adequate staffing + Leadership support + Workplace redesign

Need and Scope of Study

The important gap is not simply that “attacks on doctors are increasing.” The stronger academic argument is: *Existing responses to violence against doctors predominantly emphasise legal action, security arrangements and disciplinary measures. However, insufficient empirical attention has been given to the possibility that certain ergonomic, organisational, psychological and human factors within the healthcare work system may contribute to conflict escalation. In particular, the application of ergonomics as an HRM framework for understanding the interaction between doctors, patients, relatives, work processes and the healthcare environment remains inadequately explored.*

Research Objectives

1. **To identify** the ergonomic and organisational factors associated with conflict between doctors and patients or their relatives.
2. **To examine** the relationship between these factors and the occurrence or escalation of aggressive behaviour against doctors.
3. **To assess** the psychological and HRM consequences of workplace violence on doctors.
4. **To develop** an ergonomics-based HRM framework for preventing workplace violence in healthcare organisations.
5. **To recommend** proactive HRM interventions for creating safer and more sustainable healthcare workplaces.

Research Questions

- What ergonomic and organisational factors contribute to conflict involving doctors?
- Does workload and work pressure influence the likelihood of conflict escalation?
- Does communication failure mediate the relationship between workplace conditions and aggression?
- How does perceived organisational support influence doctors' responses to workplace violence?

- What HRM interventions can reduce the risk of attacks on medical professionals including doctors?

Research Proposition

The paper does advance a distinctive proposition: “Violence against doctors/medical professional should not be understood exclusively as an external behavioural problem; in certain circumstances, it may also reflect a mismatch between the human being, the work system, the organisational environment and the expectations surrounding healthcare delivery.”

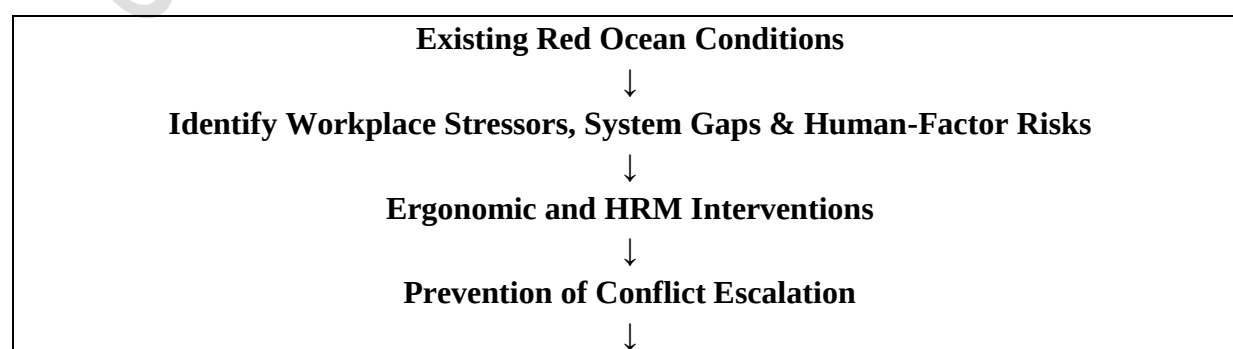
The researcher feels that the *ibid* paper could give a clear HRM identity and makes *ergonomics* the theoretical lens rather than merely adding the word *ergonomics* to a study of hospital violence.

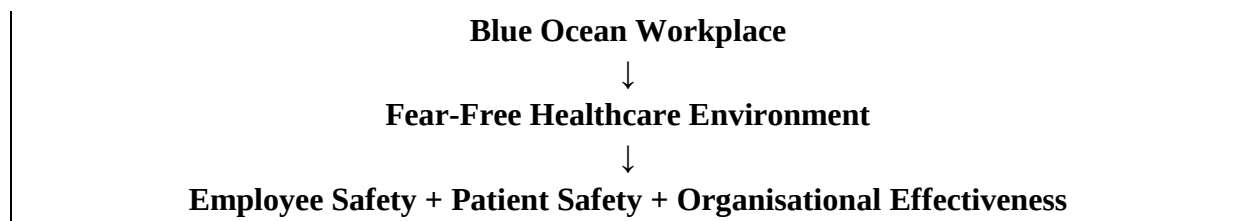
Blue Ocean and Red Ocean Strategic Perspective

The study further proposes a **Blue Ocean–Red Ocean strategic perspective** for addressing healthcare workplace violence. The **Blue Ocean approach** represents the creation of a new workplace environment that is **fear-free, stress-sensitive, safe, supportive, and human-centred**, where healthcare professionals can perform their duties without fear of aggression, intimidation, or avoidable conflict. Rather than merely responding to violence after an incident, healthcare organisations should redesign workplace processes, communication systems, staffing arrangements, security mechanisms, and administrative support to prevent situations from reaching the stage of confrontation.

At the same time, the present healthcare workplace may contain a “**Red Ocean**” of **competing pressures**, characterised by workload, overcrowding, waiting-time frustration, communication gaps, resource constraints, inadequate support, perceived negligence, and weaknesses in statutory and institutional mechanisms. From an HRM perspective, these conditions require systematic identification and correction rather than allowing negativity, frustration, and conflict to accumulate.

Thus, the proposed framework moves from reactive conflict management towards proactive workplace transformation:





The objective is not simply to counter aggression after it occurs, but to redesign the healthcare work ecosystem so that the conditions capable of generating fear, frustration and confrontation are reduced at their source. In this sense, the study extends the application of ergonomics from the design of physical workspaces to the design of human, organisational and social work systems.

Methodology

1 Research Design

This study adopted an exploratory qualitative multiple-case study design based on secondary data, primarily media-reported accounts of workplace violence against doctors and other medical professionals. No primary data were collected from doctors, patients, relatives, healthcare institutions, or other participants. The study examined reported incidents to identify recurring physical, cognitive, psychosocial, human, and organisational factors associated with the escalation of workplace conflict.

The study was guided by an integrated ergonomics–Human Resource Management (HRM) perspective. Rather than examining workplace violence solely as an individual behavioural or legal problem, the analysis considered the interaction between the healthcare worker, work processes, workplace conditions, patients and relatives, organisational systems, and the broader work environment.

The analytical sequence was conceptualised as:

Work Environment → Human Factors → Interaction → Conflict → Escalation → Workplace Violence → HRM Consequences

The purpose was not to establish criminal culpability or definitive causal relationships, but to identify reported patterns and possible organisational and ergonomic conditions that may contribute to conflict escalation.

2 Data Sources

The empirical material consisted of publicly available reports published by established national and regional newspapers, recognised news agencies, and other credible digital media

499 sources. Reports concerning assaults, attacks, and fatal incidents involving doctors and other
500 healthcare professionals were examined when sufficient contextual information was
501 available.

502 The analysis focused not only on the reported violent incident itself but also, where
503 information was available, on the circumstances preceding the incident. Particular attention
504 was given to:

- 505 • workload and staffing;
- 506 • emergency-care conditions;
- 507 • waiting time and service delays;
- 508 • patient and relative expectations;
- 509 • communication and information gaps;
- 510 • overcrowding and work pressure;
- 511 • emotional and cognitive stress;
- 512 • physical workplace conditions;
- 513 • security arrangements;
- 514 • organisational preparedness; and
- 515 • institutional responses to the incident.

516 (Media reports were treated as **secondary documentary evidence** rather than as complete or
517 independently verified accounts of the incidents.)

518 **3 Case Selection**

519 Cases were selected purposively from reported incidents of workplace violence involving
520 doctors and healthcare professionals. Selection was guided by the availability of sufficient
521 information to examine the circumstances surrounding the incident and by the relevance of
522 the case to the study's ergonomics–HRM framework.

523 The cases were selected to provide variation in the nature and context of workplace violence,
524 including violence occurring in emergency settings, violence following adverse or
525 unexpected patient outcomes, incidents involving workload and service pressure, and
526 incidents involving collective aggression or organisational vulnerability.

527 The killing of Dr.Vandana Das at Kottarakkara Taluk Hospital, Kerala, was examined as a
528 major illustrative case, supplemented by selected incidents from Kerala and other parts of
529 India.

530 **4 Analytical Framework**

531 The cases were examined using an expanded ergonomics framework incorporating four
532 interrelated dimensions:

1. **Physical ergonomics** – workplace layout, accessibility, physical safety, security arrangements, and exposure to potentially dangerous objects or situations.
2. **Cognitive ergonomics** – decision-making under pressure, information availability, communication, uncertainty, time pressure, and cognitive workload.
3. **Psychosocial ergonomics** – emotional stress, grief, anxiety, frustration, fear, interpersonal interaction, and perceived threat.
4. **Organisational ergonomics** – staffing, workload allocation, work scheduling, service processes, communication systems, organisational support, security protocols, and management response.

The framework was integrated with HRM concepts relating to workforce planning, work design, employee well-being, conflict management, workplace safety, organisational support, and employee retention.

The analytical distinction between different stages of conflict was particularly important:

Immediate Trigger → Underlying Contributing Factors → Escalation Factors → Violent Incident → Organisational Consequences

This distinction enabled the study to move beyond the immediate event reported in the media and examine the wider work-system conditions surrounding the incident.

5 Content and Thematic Analysis

The selected reports were subjected to qualitative content and thematic analysis. Relevant statements and contextual information were examined and grouped according to recurring categories related to workplace conditions, workload, waiting time, communication, expectations, emotional and cognitive pressure, staffing, security, organisational support, conflict escalation, violence, and post-incident consequences.

The analysis proceeded through three broad stages:

First, each case was examined individually to establish the reported sequence of events and identify relevant contextual factors.

Second, recurring factors were coded and organised according to the four ergonomics dimensions—physical, cognitive, psychosocial, and organisational.

Third, the coded factors were compared across cases to identify recurring patterns and their potential implications for HRM and workplace-violence prevention.

Because the evidence was derived from media reports, the analysis distinguished between **reported circumstances** and **researcher interpretation**. Where accounts differed, contradictory information was not treated as established fact.

566 6 Cross-Case Analysis

567 Following individual case analysis, a cross-case comparison was undertaken to identify
568 common patterns across the selected incidents.

569 The principal analytical dimensions were:

Dimension	Analytical Question
Physical environment	Did the workplace provide adequate physical protection and control access to potentially hazardous areas or objects?
Workload	Was excessive workload, patient overload, or inadequate staffing reported?
Time pressure	Did emergency conditions or service demands place healthcare workers under substantial time pressure?
Waiting time	Were delays or prolonged waiting reported as possible contributors to frustration?
Communication	Was adequate information provided to patients and relatives?
Cognitive load	Were healthcare professionals required to make complex decisions under pressure or uncertainty?
Emotional environment	Were grief, fear, anxiety, anger, or frustration evident in the interaction?
Staffing	Was sufficient manpower available to manage the clinical and interpersonal demands?
Organisational support	Were preventive systems, protocols, and management support available?
Security	Were mechanisms available to identify, prevent, and respond to aggressive behaviour?
HRM consequences	Did the incident have implications for employee stress, morale, confidence, retention, or psychological well-being?

570 This cross-case framework enabled the study to examine workplace violence as a **work-**
571 **system phenomenon** rather than as a series of unrelated individual incidents.

7 Reliability and Triangulation

To strengthen the credibility of the analysis, significant incidents were examined, wherever possible, through more than one independent media report. Information concerning the circumstances of an incident was cross-checked across available reports, particularly where important contextual details were involved.

Where media accounts differed, the differences were explicitly acknowledged. The study did not treat a single media report as conclusive evidence where independent confirmation was unavailable.

This approach provides a limited form of documentary triangulation; however, it does not substitute for primary data collection or independent verification of all reported events.

8 Ethical Considerations and Methodological Limitations

The study relied exclusively on publicly accessible information and did not involve direct interaction with patients, relatives, healthcare workers, or accused persons. Accordingly, the study did not attempt to determine criminal responsibility or establish definitive causal relationships.

Media reports may contain incomplete information, differing interpretations, editorial framing, or subsequent corrections. Consequently, the findings are interpreted as **reported patterns and possible contributing factors**, rather than as definitive explanations of individual incidents.

The methodological limitation is particularly important because the study seeks to interpret workplace conditions from documentary accounts rather than direct observation or interviews. The findings therefore provide an exploratory framework that requires further examination through primary empirical research involving healthcare professionals and healthcare organisations.

9 Methodological Position

The methodological position of the study can therefore be described as:

A media-report-based exploratory multiple-case study of workplace violence against doctors from an integrated ergonomics and Human Resource Management perspective.

This approach allows workplace violence to be examined within its broader work-system context while avoiding interference with ongoing legal proceedings and without requiring direct access to victims, accused persons, or healthcare institutions.

Case Analysis and Findings

Case Analysis Approach

The selected cases were analysed not merely to document violent incidents but to examine the **human–work–environment interaction** surrounding workplace conflict.

For each case, attention was given to:

Work Conditions → Human Factors → Interaction → Conflict → Escalation → Violence → Organisational Implications

This approach permits the analysis to distinguish between an immediate trigger and the wider circumstances within which the conflict developed.

Case 1: The Killing of Dr.Vandana Das

The killing of Dr.Vandana Das at Kottarakkara Taluk Hospital, Kerala, on 10 May 2023, represents a significant case of violence against a medical professional within a healthcare workplace. According to media reports, Dr. Das, a house surgeon on duty, was fatally attacked by a patient who had been brought to the hospital following an earlier altercation. The incident involved the use of a surgical instrument and resulted in her death. Subsequent legal proceedings resulted in the conviction of the accused in 2026.

From an ergonomics–HRM perspective, the significance of the case extends beyond the individual criminal act. The incident raises questions concerning workplace risk identification, physical safety, access to potentially dangerous instruments, emergency-response mechanisms, security arrangements, and protection of healthcare personnel working in high-pressure environments.

The case also illustrates the importance of recognising behavioural risk within the healthcare work system. Where aggressive behaviour is already apparent, the capacity of the organisation to identify and respond to the threat becomes an important component of workplace safety.

Interpretation

The case highlights several potential areas of preventive intervention, including:

- early identification of behavioural risk;
- workplace security and controlled access;
- emergency alert and response mechanisms;
- de-escalation training;
- protection of vulnerable staff;

- safe workplace design; and
- organisational preparedness for unpredictable aggression.

The case should not, however, be interpreted as establishing that any particular ergonomic factor caused the fatal attack. Rather, it illustrates how physical and organisational safety systems may become relevant when unpredictable or escalating aggression occurs within a healthcare environment.

Ref : Case of Dr.Vandana Das:*(Onmanorama, 2023; Kerala Kaumudi, 2026).*

Case 2: Attack Following Patient Death in Kozhikode

A reported 2025 incident in Kozhikode involved the assault of a doctor following the death of a child. Media reports indicated that the doctor who was attacked was not directly responsible for the child's treatment.

From an organisational and psychosocial ergonomics perspective, the case illustrates the possibility of **displaced attribution of blame** following an adverse outcome. Grief and helplessness may generate a search for an explanation, which can develop into perceived attribution of responsibility and confrontation with available healthcare personnel.

The reported interaction can therefore be conceptually represented as:

Patient Death/Loss → Grief and Helplessness → Search for Explanation → Attribution of Responsibility → Displaced Anger → Confrontation

This case highlights the importance of communication and emotional management following adverse outcomes. Relative counselling, trained liaison personnel, structured communication protocols, and rapid security response may therefore form part of a broader workplace-violence prevention system.

Importantly, these interpretations represent an ergonomic and HRM analysis of the reported circumstances and should not be regarded as a definitive causal explanation of the incident.

Ref : Kozhikode/Thamarassery case:*(Indian Express, 2025; J Kumar, 2025).*

Case 3: Patient Overload, Waiting Time and Workload

Evidence from a tertiary-care hospital study reported that 54.6% of participating doctors had experienced workplace violence during the preceding six months, with greater exposure among doctors working in emergency services and during night duty. Patient overload, prolonged duty hours or excessive workload, and long waiting periods were identified as important perceived contributors.

These findings provide a direct connection between workplace ergonomics and HRM. Patient overload represents a work-design and workforce-planning issue; prolonged working hours are associated with workload and fatigue management; and waiting time represents both a service-process and expectation-management issue.

The reported relationship can be conceptualised as:

Staffing/Workload → Waiting Time → Frustration → Interactional Conflict → Escalation → Violence

The evidence therefore suggests that workplace-violence prevention cannot be separated from the design and management of healthcare work processes.

Ref: 54.6% workplace-violence study:(*Balamurugan et al., 2020*). The study specifically reported 54.6% exposure, with emergency services, night duty, patient overload, excessive workload and waiting time emerging as important factors.

Case 4: Resident Doctors in Delhi

A study among 169 resident doctors in a tertiary-care hospital in Delhi reported that 40.8% had experienced workplace violence during the preceding 12 months. Emergency services were reported as the most common location, while verbal abuse was the predominant form of violence among those exposed. Only 44.2% reported the incidents to authorities.

The study also identified poor communication and conflict-resolution skills among the physician-related factors associated with workplace violence.

From an ergonomics–HRM perspective, communication should not be viewed solely as an individual competency. In high-pressure healthcare environments, communication is a component of the interaction between the employee, patient, family, work process, and organisation.

Consequently, communication training, structured information-sharing systems, conflict-resolution mechanisms, and institutional communication protocols may constitute important preventive HRM interventions.

Ref: Delhi resident-doctor study:(*Anand et al., 2016*). It reported 40.8% exposure among 169 doctors, with emergency services as the most common location and only 44.2% reporting incidents.

Case 5: Kalyan–Dombivli and Organisational Power

The reported Kalyan–Dombivli incidents provide a further dimension to the analysis because they involved assaults on doctors and healthcare staff and subsequently entered formal criminal proceedings.

These incidents illustrate that workplace violence may extend beyond a conventional doctor–patient interaction. In some circumstances, collective aggression, social influence, political status, or power differences may alter the relationship between healthcare workers and aggressors.

The possible escalation sequence can be represented as:

Individual Dissatisfaction → Group Mobilisation → Power Imbalance → Intimidation → Assault

From an HRM perspective, this raises issues concerning employee protection, institutional authority, management response, security escalation, legal support, and employees' confidence in organisational leadership.

The legal progression of such cases is relevant to understanding post-incident response; however, the present study remains focused on the organisational and ergonomic conditions surrounding workplace violence rather than on the adjudication of criminal responsibility.

Ref: Kalyan–Dombivli case:*(Indian Express, 2026; Times of India, 2026).*

Cross-Case Findings

The cross-case analysis indicates that workplace violence against healthcare professionals cannot be adequately understood through a single-factor explanation. Across the cases and supporting studies, several recurring dimensions emerge.

1 Emergency-Care Pressure

Emergency and casualty environments repeatedly appear as high-risk settings. Urgency, patient overload, limited time, emotional distress, waiting, and the need for rapid decision-making create a complex work environment in which interactional conflict may intensify.

2 Workload and Staffing

Patient overload, excessive working hours, night duty, and staffing pressures indicate that workforce planning is directly relevant to workplace safety. Inadequate staffing may increase waiting time and cognitive and emotional pressure on healthcare professionals.

3 Communication and Information Gaps

727 Communication problems may increase uncertainty and contribute to mismatched
728 expectations. The findings therefore support viewing communication as an organisational
729 work-system factor rather than simply an individual skill.

730 **4 Emotional and Psychosocial Conditions**

731 Healthcare professionals frequently work with patients and relatives experiencing fear, grief,
732 anxiety, uncertainty, and anger. These emotional conditions form part of the psychosocial
733 work environment and may influence the escalation of interpersonal conflict.

734 **5 Physical and Security Vulnerability**

735 The physical configuration of healthcare workplaces, accessibility of potentially dangerous
736 objects, availability of security personnel, emergency alerts, and mechanisms for rapid
737 intervention are important components of physical and organisational ergonomics.

738 **6 Organisational Preparedness**

739 Across the cases, the ability of the organisation to anticipate risk, manage conflict, protect
740 employees, communicate effectively, and respond rapidly emerges as a central HRM
741 concern.

742 **7 Consequences for Healthcare Human Capital**

743 Workplace violence may have consequences extending beyond the immediate incident. Fear,
744 psychological stress, reduced morale, diminished organisational trust, and reluctance to work
745 in high-risk settings may affect employee well-being and retention.

746 This is particularly important in healthcare because professional competence, clinical
747 experience, and specialised knowledge represent accumulated human and intellectual capital.
748 Protecting healthcare professionals is therefore not only a safety obligation but also an HRM
749 responsibility associated with the preservation of organisational capability.

750 **Integrated Ergonomics–HRM Framework**

751 The cross-case findings support an integrated framework in which workplace violence is
752 understood as the outcome of interactions among people, work processes, physical
753 environments, psychosocial conditions, and organisational systems.

754 The framework can be represented as: *Person → Work → Environment → Interaction →*
755 *Conflict → Escalation → Workplace Violence*

756 Within HRM, this can be extended to: *Workforce Planning → Work Design → Employee*
757 *Well-being → Communication → Conflict Management → Workplace Safety → Employee*
758 *Retention*

759 The integrated preventive pathway is: *Risk Identification → Ergonomic Assessment → HRM*
760 *Intervention → Communication and Workload Management → Security and Organisational*
761 *Support → Conflict Prevention → Safer Healthcare Workplace*

762 The framework therefore shifts attention from a predominantly reactive question—

763 “What legal action should follow an attack?”—to a preventive organisational question:

764 “What risks can the organisation identify, redesign, communicate, and manage before conflict
765 escalates into violence?” This preventive orientation represents the principal contribution of
766 the study.

767 **Research Gap and Contribution**

768 Existing research has established the prevalence of workplace violence against healthcare
769 professionals and has identified several reported contributing factors, including emergency-
770 care exposure, patient overload, waiting time, workload, and communication difficulties.

771 However, comparatively limited attention has been given to systematically examining these
772 factors through an integrated ergonomics–HRM perspective. In particular, there is scope for
773 greater attention to the interaction among physical, cognitive, psychosocial, and
774 organisational characteristics of healthcare work systems and their implications for conflict
775 escalation.

776 Accordingly, the study addresses the following research gap: **Although existing studies have**
777 **established the prevalence and several reported causes of violence against healthcare**
778 **professionals, limited research has systematically integrated ergonomics and HRM to**
779 **examine how physical, cognitive, psychosocial, and organisational characteristics of**
780 **healthcare work systems interact with human factors and workplace conditions during**
781 **conflict escalation.**

782 The contribution of the study therefore lies not in claiming that workplace violence against
783 doctors has previously been unexamined, but in proposing an integrated **ergonomics–HRM–**
784 **prevention framework** through which reported incidents can be interpreted.

785 **Cross-Case Summary Matrix**

Case/Evidence	Reported Trigger	Work Condition	Human Factor	Ergonomic Dimension	HRM Implication

Dr.Vandana Das	Aggressive behaviour	Emergency clinical environment	Perceived threat	Physical and organisational safety	Risk assessment, security and emergency response
Kozhikode incident	Patient death/adverse outcome	Emotionally charged environment	Grief, anger and blame attribution	Psychosocial and communication ergonomics	Relative counselling, communication and conflict management
Tertiary-care hospital evidence	Delay and perceived service pressure	Patient overload and excessive workload	Stress and frustration	Cognitive and organisational ergonomics	Staffing and workload management
Delhi resident-doctor evidence	Interactional conflict	Emergency-service environment	Communication difficulties	Cognitive and psychosocial ergonomics	Communication and conflict-resolution training
Kalyan–Dombivli incidents	Collective aggression	Organisationally vulnerable setting	Power imbalance and intimidation	Organisational ergonomics	Employee protection, institutional authority and legal support

786 Methodological Limitation

787 The study's reliance on media-reported secondary data and personal observations limits the
788 depth and reliability of contextual information available for each incident. Media accounts
789 may emphasise dramatic aspects of an event while omitting organisational, interpersonal, or
790 clinical details. Differences between reports may also arise because information develops
791 over time.

792 Therefore, the findings should be interpreted as exploratory rather than definitive. The study
793 identifies **reported patterns and possible ergonomic and organisational factors** rather
794 than statistically demonstrating causal relationships.

795 Future empirical research should test the proposed framework using primary data from
796 doctors, nurses, other healthcare professionals, patients, relatives, and healthcare
797 organisations. Such studies could employ structured surveys, interviews, observational
798 methods, or mixed-method designs to examine the relationships proposed in the present
799 framework.

Conclusion of the Analytical Framework

The analysis indicates that workplace violence against medical professionals should not be viewed exclusively as an isolated behavioural event or a post-incident law-and-order problem. It occurs within a complex healthcare work system involving workload, time pressure, communication, emotional conditions, physical workplace design, staffing, security, organisational support, and employee vulnerability.

An ergonomics–HRM perspective consequently shifts the emphasis from reaction after violence **to** risk identification and prevention before escalation.

The central proposition of the study is therefore: Healthcare workplace violence is not only a security or legal problem; it is also a human-factors, work-design, organisational, and HRM problem requiring preventive intervention.

Protecting healthcare professionals should consequently be understood not only as protecting employees from physical harm but also as protecting their psychological well-being, professional confidence, organisational commitment, and accumulated human and intellectual capital.

Research Gap

The literature reviewed indicates that workplace violence against doctors is no longer an isolated or occasional phenomenon; nevertheless, the existing studies appear to address the problem largely from individual perspectives such as prevalence, type of violence, immediate causes, perpetrators, psychological consequences, or legal and security responses. What appears to be insufficiently explored is a comprehensive, integrated examination of the entire cycle of violence against doctors, beginning with the conditions that precede an incident and extending through the incident itself, its consequences for the doctor and organisation, and the subsequent legal process. In particular, there is a need to understand the underlying reasons that lead patients or their relatives to retaliate against doctors, including perceived treatment failure, death or deterioration of a patient, delay in treatment, waiting time, communication gaps, unmet expectations, emotional distress and attribution of blame. Equally important is the need to examine whether such incidents are facilitated or aggravated by ergonomic and organisational vulnerabilities, including inadequate security, unrestricted access to clinical areas, deficiencies in workplace design, inadequate staffing, overcrowding, insufficient surveillance, absence of emergency-alert mechanisms, inadequate triage and insufficiently trained personnel to deal with aggressive or emotionally distressed individuals.

Another relatively underexplored dimension concerns the human consequences of repeated exposure to workplace violence. The effects of an incident may not end when the immediate threat is removed. Doctors may experience fear, psychological trauma, anxiety, loss of

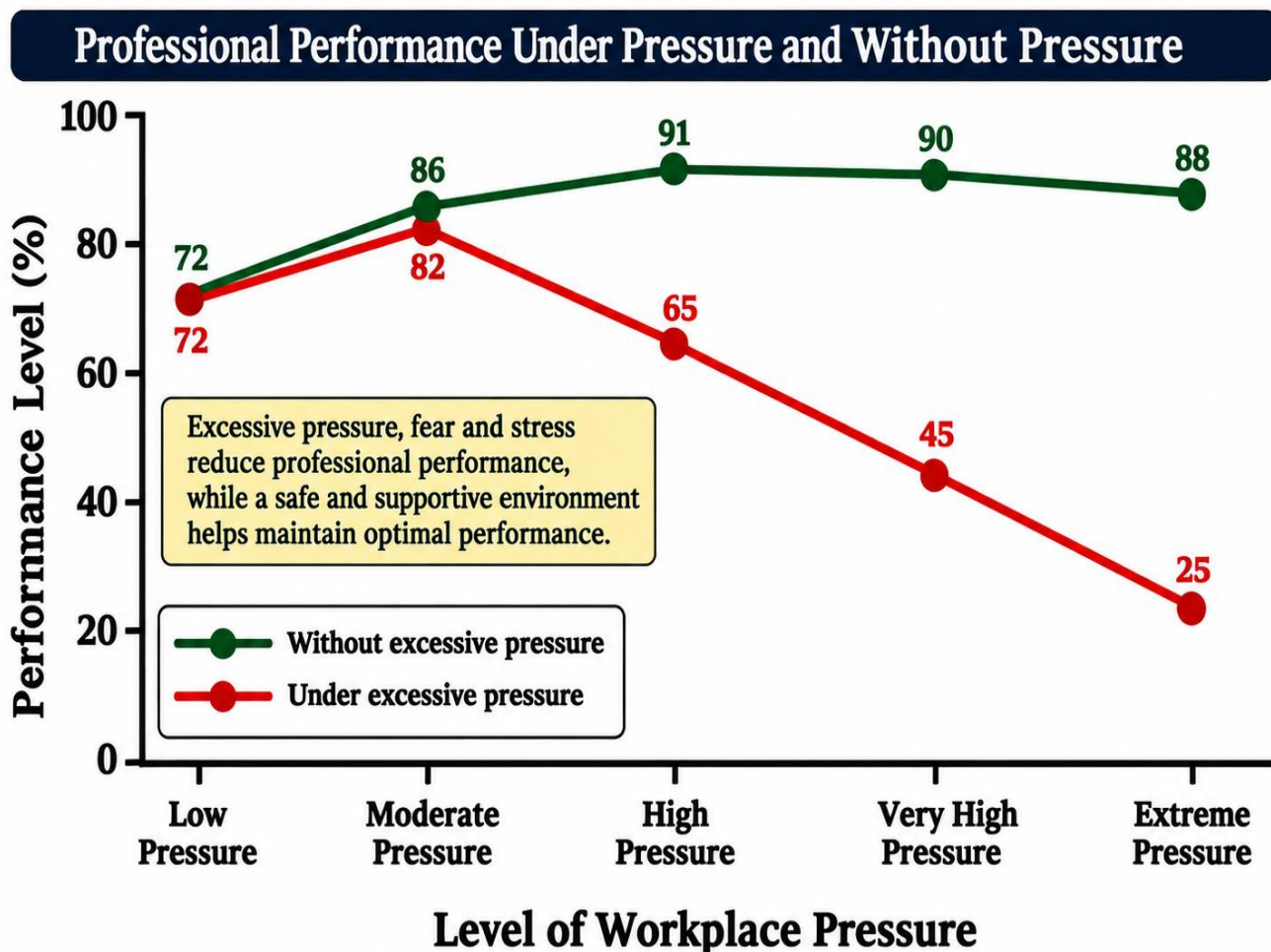
professional confidence, emotional exhaustion, burnout, absenteeism and reluctance to work in high-risk environments. Where incidents are repeatedly reported within the same or similar healthcare settings, the cumulative effect on employee well-being, job satisfaction, organisational commitment and retention becomes an important HRM concern. The adequacy of facilities and provisions available to protect healthcare professionals before, during and after an incident also requires systematic examination. These may include security personnel, surveillance systems, panic alarms, restricted access, safe workplace layouts, counselling and psychological support, grievance mechanisms, conflict-resolution systems, institutional protocols, compensation and rehabilitation measures. Furthermore, the legal dimension of workplace violence deserves examination not merely in terms of whether an offender is prosecuted, but also in relation to reporting, police intervention, investigation, institutional responsibility, prosecution, court proceedings, protection of healthcare employees and the extent to which legal outcomes contribute to future prevention.

Thus, the principal research gap identified is the absence of a sufficiently integrated ergonomics-HRM framework capable of connecting the causes of retaliation, workplace and security vulnerabilities, escalation of conflict, occurrence of violence, immediate organisational response, pre- and post-traumatic consequences for doctors, institutional support mechanisms, and subsequent legal proceedings within a single analytical framework. The present study therefore proposes to examine media-reported cases of violence against doctors through this integrated perspective. Rather than treating each incident merely as an act of individual aggression requiring legal action, the study seeks to understand the interaction between **person, work, environment, organisation and legal system** across the complete incident cycle. Such an approach may help identify preventable vulnerabilities and contribute to the development of evidence-based HRM and ergonomic interventions aimed at protecting healthcare professionals and creating safer, more resilient healthcare workplaces.

When these cases are compared, a much stronger pattern emerges.

Dimension	Case evidence	Interpretation
Trigger	Death, deterioration, perceived failure, delay, dissatisfaction	Emotional expectation gap
Retaliation	Anger directed at doctors/staff	Blame attribution
Workload	Emergency pressure, excessive duty	HRM/workforce problem
Waiting	Long waiting periods	Service-design problem
Communication	Inadequate explanation/expectation management	Cognitive/social ergonomic problem
Security	Inadequate protection or delayed intervention	Organisational safety failure
Workplace design	Open access, treatment environment, instruments	Physical ergonomics issue
Psychological impact	Fear, anxiety, loss of confidence	Psychosocial HRM consequence
Repeated	Multiple attacks in different locations	Systemic rather than isolated

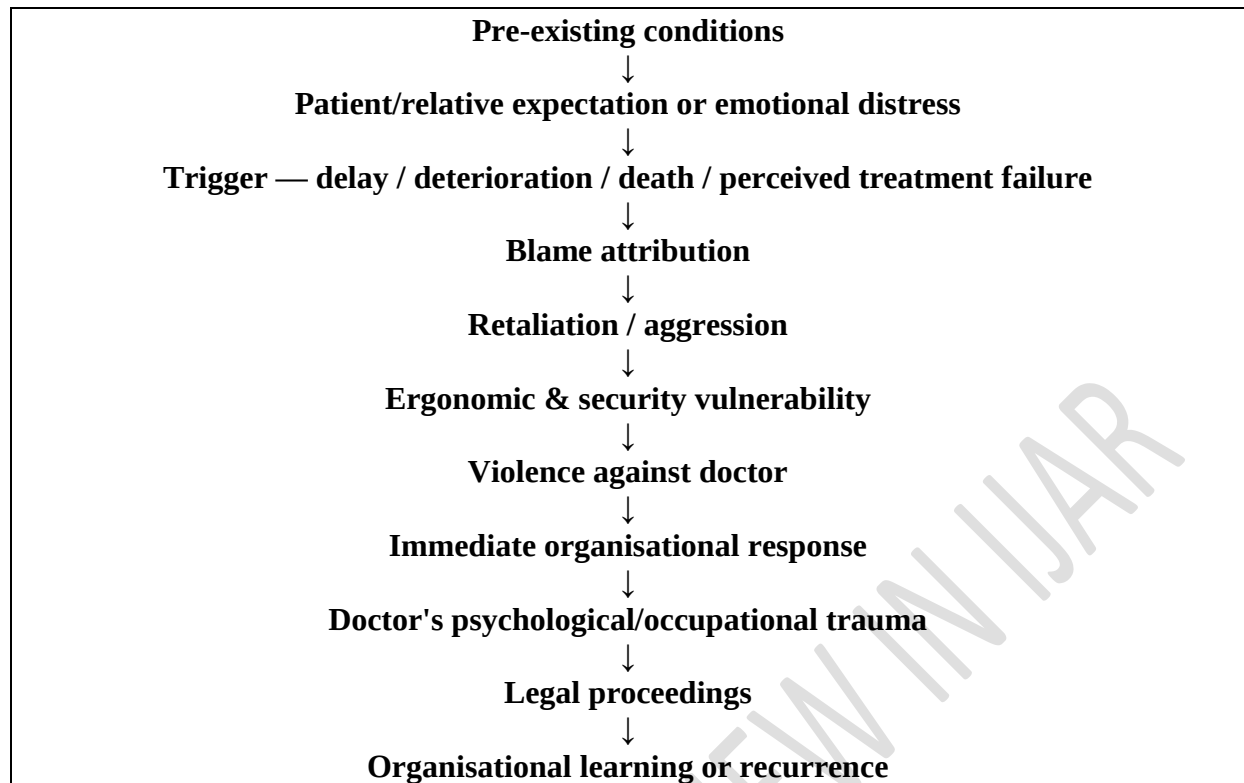
Dimension	Case evidence	Interpretation
incidents		problem
Legal response	FIR, investigation, charge sheet, trial, conviction	Post-incident institutional/legal response
Prevention	Security, staffing, communication, protocols	HRM + ergonomics intervention



Key Insight: Performance remains higher and stable in a safe, stress-free environment, while excessive pressure leads to a significant decline in professional performance.

The finding emerging from the cases

The cases collectively suggest that violence against doctors should not be analysed merely as an act committed by a violent individual. The incidents appear to arise from an interaction among patient/relative emotions, treatment expectations, communication, and workload, waiting time, workplace design, security arrangements, organisational preparedness and social/legal conditions.



This is potentially the most important contribution of your paper: the cases allow you to argue that healthcare violence is a whole-system HRM and ergonomics problem, rather than simply a law-and-order problem. Existing literature already establishes that workload, waiting, communication and patient/relative dissatisfaction are associated with violence; your case analysis can extend this by connecting those factors to security vulnerability, retaliation, trauma, organisational response and the subsequent legal process.

Cross-Case Analysis

The analysis of media-reported cases indicates that violence against doctors cannot be adequately understood as isolated acts of individual aggression. Across the cases examined, violence appears to emerge from an interaction between patient/relative expectations, emotional distress, treatment outcomes, communication, workload, waiting time, workplace conditions, security arrangements and organisational preparedness. The cases therefore provide evidence for interpreting healthcare violence as a multidimensional **ergonomics and HRM problem**.

1 Retaliation as an Outcome of Expectation–Outcome Mismatch

A recurring pattern across the cases is the presence of a gap between what patients or their relatives expect and what the healthcare system is able to deliver. Treatment delay, deterioration, death, perceived treatment failure and inadequate understanding of medical circumstances may create frustration and anger. In such circumstances, the doctor may

910 become the most visible representative of the healthcare system and consequently the target
911 of retaliation.

912 **Finding:Retaliation against doctors appears to be influenced not only by the actual**
913 **quality of treatment but also by the perceived gap between expected and experienced**
914 **outcomes.**

915 **2 The Doctor as the Visible Target of Systemic Failure**

916 The cases indicate that doctors may become targets even when the underlying cause of
917 dissatisfaction involves several components of the healthcare system. Waiting time, shortage
918 of staff, inadequate facilities, administrative delays and communication failures may
919 collectively contribute to dissatisfaction, but the doctor remains the most visible point of
920 contact.

921 **Finding:Violence may represent a displacement of dissatisfaction with the healthcare**
922 **system onto an individual doctor.**

923 This finding is important from an HRM perspective because employee protection cannot
924 depend exclusively on the individual doctor's ability to manage confrontation.

925 **3 Workload and Waiting Time as Ergonomic Risk Factors**

926 The reviewed studies and cases indicate that emergency departments, casualty areas and
927 overcrowded healthcare facilities constitute high-risk environments. Heavy workload,
928 prolonged duty, inadequate staffing and waiting time increase pressure on both healthcare
929 workers and patients.

930 The relationship may be represented as:**Patient overload → workload pressure → waiting**
931 **time → frustration → communication difficulty → conflict → escalation → violence**

932 **Finding:Workload and service congestion should be regarded as potential violence-risk**
933 **factors and not merely as operational problems.**

934 This establishes a direct connection between **workforce planning in HRM and violence**
935 **prevention in ergonomics.**

936 **4 Security Failure as an Organisational Vulnerability**

937 The cases demonstrate that even when aggressive behaviour is foreseeable, the healthcare
938 environment may not always possess sufficient mechanisms for preventing escalation.
939 Inadequate security personnel, unrestricted access, insufficient surveillance, absence of panic-
940 alert systems, inappropriate workplace layout and delayed intervention can increase
941 employee vulnerability.

Finding: The occurrence of violence is influenced not only by the aggressor's behaviour but also by the capacity of the organisation to detect, contain and respond to risk.

Thus, security should be treated as part of the **work system**, rather than as an external function separate from healthcare management.

5 Emotional and Cognitive Ergonomics

The cases reveal an important dimension beyond conventional physical ergonomics. Doctors interact with people experiencing fear, grief, pain, uncertainty and emotional distress. Such circumstances create a psychologically demanding work environment.

A relative who has lost a patient may experience:

Loss → grief → helplessness → search for explanation → blame → anger → retaliation

The doctor, meanwhile, must simultaneously perform clinical decision-making under pressure.

Finding: Healthcare violence has a significant cognitive and psychosocial ergonomic dimension because both the healthcare worker and the patient/relative operate under conditions of emotional and cognitive stress.

6 Pre-Incident Vulnerability

The cases suggest that violence does not necessarily begin at the moment of physical assault. Vulnerability may accumulate before the incident through: *inadequate staffing; excessive workload; long waiting periods; poor communication; overcrowding; inadequate security; unrestricted access; absence of early warning mechanisms; previous aggressive behaviour; unrealistic expectations.*

7 Post-Incident Trauma and Repeated Exposure

The consequences of violence do not necessarily end when the incident is over. Doctors who experience or repeatedly witness violence may develop fear, anxiety, emotional exhaustion, reduced professional confidence and reluctance to work in high-risk environments. Repeated incidents can produce a cumulative effect: **Incident → psychological impact → reduced confidence → occupational stress → burnout → reduced organisational commitment → intention to leave**

Finding : Workplace violence should be treated as both a safety problem and an employee-well-being and retention problem.

This brings the issue directly within the domain of HRM.

8 Organisational Response as a Determinant of Future Risk

An important issue emerging from the cases is what happens **after** an attack. If the organisation merely reports the incident to the police and resumes normal operations, the underlying vulnerabilities may remain unchanged.

An effective response should include:

Immediate protection → medical care → psychological support → incident investigation → root-cause analysis → legal assistance → corrective action → organisational learning

Finding :The quality of post-incident organisational response may determine whether an incident becomes an isolated event or a recurring organisational risk.

9 Legal Proceedings: Necessary but Not Sufficient

The cases demonstrate the importance of FIRs, police investigation, prosecution and judicial proceedings. Conviction and punishment provide legal accountability and may strengthen deterrence.

However, a purely legal response addresses the **offender after the incident**. Ergonomics and HRM seek to address the **conditions that allow the incident to occur and the consequences experienced by employees afterwards**.

Therefore:**Legal response = accountability**

Whereas, **Ergonomics + HRM = prevention + protection + recovery + organisational learning**

Finding :Legal action is essential for accountability, but it cannot by itself eliminate the organisational and ergonomic conditions that contribute to workplace violence.

The cross-case analysis therefore supports a broader interpretation:Violence against doctors is not merely an external behavioural threat imposed upon healthcare organisations; it can also be understood as a failure of alignment between people, work processes, organisational systems, physical environments and emotional conditions.

This leads to the central proposition of the study:**Person → Work → Environment → Organisation → Conflict → Violence → Trauma → Legal Response → Organisational Learning.**

The **ergonomics-HRM perspective** therefore shifts the focus from:“**Who attacked the doctor?**”to the broader research questions:-

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“Why did retaliation occur?”
“What conditions allowed escalation?”
“What organisational safeguards were available?”
“What safeguards were missing?”
“What happened to the doctor afterwards?”
“How did the organisation respond?”
“What did the legal process achieve?”
“What changed to prevent recurrence?”

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Recommendations from an HRM Perspective

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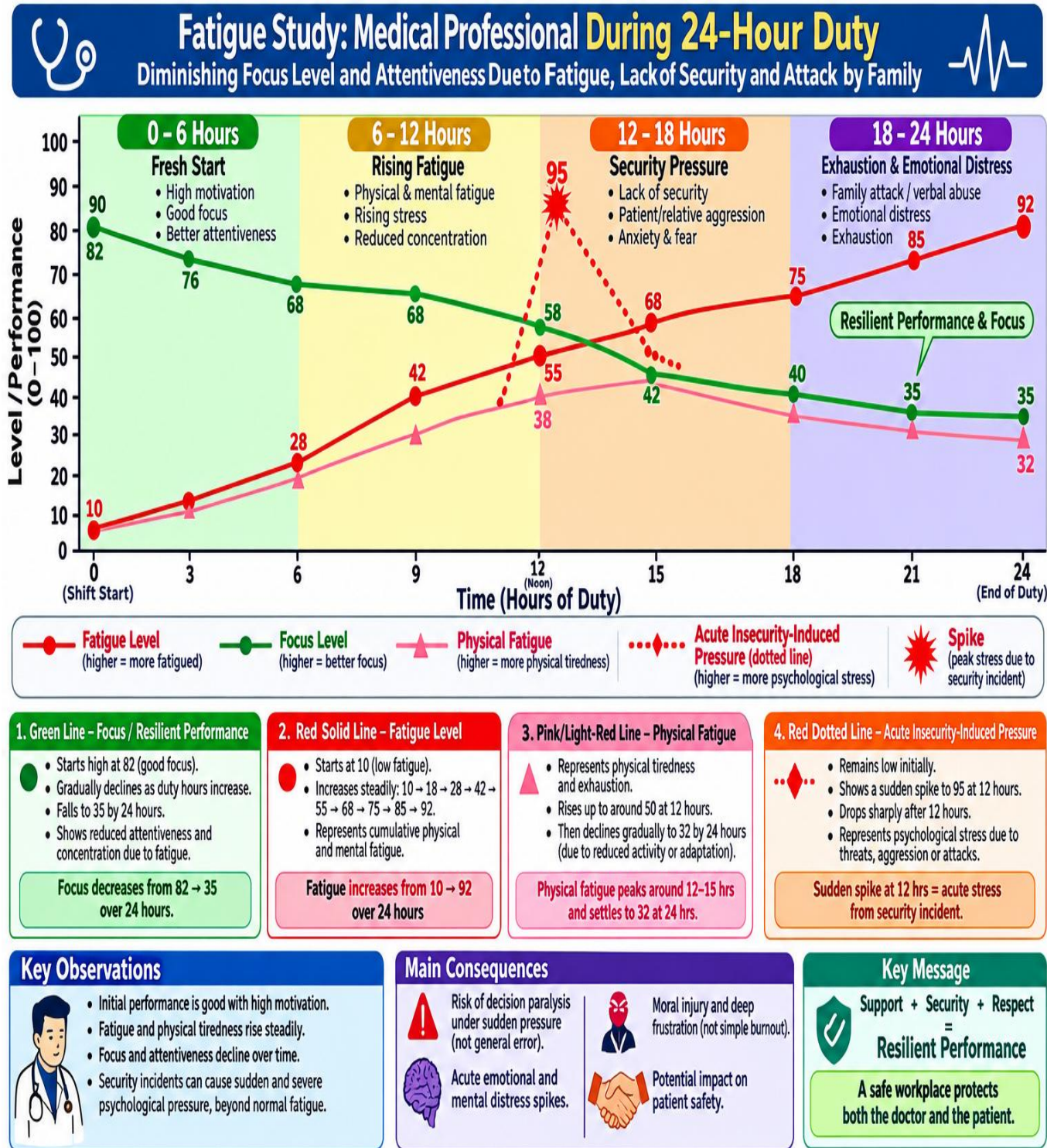
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1. Workplace Violence Risk Assessment : Regularly assess violence risks in emergency, casualty, ICU and other high-pressure areas based on patient load, waiting time, workload, previous incidents, emotional vulnerability and security risks.
2. Strengthen Manpower Planning : Adequate staffing should be viewed as a violence-prevention strategy. HRM should monitor doctor–patient ratios, duty hours, night shifts, workload, leave replacements and departmental workload distribution.
3. Violence-Prevention Training : Provide periodic training in communication, de-escalation, conflict management, emotional self-regulation, negotiation and emergency response as part of employee development.
4. Dedicated Patient/Relative Communication : Establish trained personnel for information, counselling, expectation management and grievance handling, reducing the emotional burden placed entirely on doctors.
5. Strengthen Security and Workplace Design : Improve CCTV, controlled access, panic alarms, security staffing, safe room design, emergency exits and rapid-response mechanisms.
6. Code Grey / Violence-Response Protocol : Every employee should know who to call, how to alert, where to move, who intervenes and how the incident is documented. Periodic drills should be conducted.
7. Post-Incident Support and Trauma Care : Provide medical care, psychological support, recovery leave, legal assistance and workplace reintegration after violence. Recovery should be prioritised over merely returning the employee to duty.

- 1039 **8. Assess Trauma and Performance Impact : *Monitor the pathway:*** Violence → Trauma →
1040 Fear/Anxiety → Reduced Concentration → Reduced Confidence → Work Stress →
1041 Performance Impact
1042 This may affect decision-making, communication, job satisfaction, absenteeism, burnout,
1043 retention and ultimately patient safety. : Address Cumulative Trauma
1044 Repeated exposure to threats, abuse or violence should be recognised as an occupational
1045 risk: Repeated Exposure → Cumulative Stress → Exhaustion → Burnout →
1046 Disengagement → Absenteeism/Turnover.
- 1047 **9. Safe Return-to-Work Programme :** Use psychological assessment, employee consultation,
1048 workload adjustment, supportive supervision, gradual reintegration and follow-up.
1049 Temporary reassignment may be considered where necessary.
- 1050 **10. Institutional Legal Support :** Organisations should assist employees with FIR registration,
1051 police investigation, evidence documentation, legal consultation and court
1052 proceedings following workplace violence.
- 1053 **11. Convert Incidents into Organisational Learning :** Every serious incident should
1054 undergo Root Cause Analysis: What happened? → Why? → What failed? → What
1055 allowed escalation? → What could have prevented it? → What should change?
- 1056 **12. Violence Incident Database :** HR should systematically record incident type, location,
1057 time, trigger, workload, waiting time, security response, injury, psychological impact,
1058 legal action and corrective measures to support evidence-based HR decisions.
- 1059 **13. Recognise Organisational Consequences :** Violence can create a cycle: Employee Trauma
1060 → Absenteeism → Manpower Shortage → Increased Workload → Stress → Reduced
1061 Service Quality → Further Conflict.
1062 Trauma management is therefore an investment in retention, productivity, patient safety,
1063 service quality and organisational resilience.
- 1064 **14. Integrate Employee Safety into HRM :** Employee safety should become an integral part
1065 of recruitment, staffing, training, employee welfare, performance management, retention
1066 and organisational development, with clear managerial accountability.
- 1067 **15. Make Employee Safety an Integral Part of HRM Performance :** Healthcare organisations
1068 should consider employee safety as an HRM responsibility alongside: *recruitment; staffing;*
1069 *training; performance management; employee welfare; retention; organisational*
1070 *development.* Employee safety should be incorporated into institutional policies, managerial
1071 accountability and HRM planning.

The graph below illustrates the impact of long shifts, fatigue, and workplace insecurity on highly trained medical professionals during a **24-hour duty cycle**. Unlike standard models that show a sharp collapse in performance, this graph highlights how professional resilience alters that trajectory while identifying the real danger: acute external stress.



(The numerical values in this chart should be treated as conceptual/illustrative).

1078 The chart shows how fatigue and psychological pressure can change during a 24-hour
1079 medical duty.

1080 **Green line — Focus / Resilient Performance**

- 1081 • Starts at **82**.
- 1082 • Gradually falls to **35** by 24 hours.
- 1083 • Indicates declining **focus, concentration and attentiveness** as duty hours increase.
- 1084 • The professional may remain functional, but the reserve for sustained attention
1085 decreases.

1086 **Red solid line — Overall Fatigue**

- 1087 • Starts at **10**.
- 1088 • Continuously increases: **10 → 18 → 28 → 42 → 55 → 68 → 75 → 85 → 92**.
- 1089 • Represents the cumulative effect of prolonged physical and mental fatigue.
- 1090 • By 24 hours, fatigue is very high.

1091 **Pink line — Physical Fatigue**

- 1092 • Represents physical tiredness and exhaustion.
- 1093 • It rises during the duty period and remains elevated toward the end.
- 1094 • It is different from the overall fatigue line because it specifically emphasizes the
1095 physical component.

1096 **Dotted line — Acute Insecurity-Induced Pressure**

- 1097 • This is deliberately different from the gradual fatigue lines.
- 1098 • It shows a sudden increase in psychological pressure caused by:
 - 1099 ○ threats,
 - 1100 ○ aggression,
 - 1101 ○ verbal abuse,
 - 1102 ○ attacks by patients' relatives,
 - 1103 ○ fear and insecurity.

1104 **The sharp spike — 95** : This is the most important feature. At around **12 hours**, the dotted
1105 line suddenly reaches **95**. It represents an acute security incident occurring during an already
1106 prolonged duty period. So the message is: Normal fatigue → gradual increase. But Security
1107 incident/attack → sudden psychological stress spike.

1108 **Interpretation**

1109 *Long duty → increasing fatigue → declining focus, and, if a security incident*
1110 *occurs: Fatigue + insecurity/attack → acute stress spike → possible difficulty in*
1111 *concentration, emotional control and decision-making.*

1112 **HRM message:** Support + Security + Respect → Resilient Performance. The chart
1113 therefore argues that protecting medical professionals from workplace violence and insecurity
1114 is also important for maintaining safe and effective patient care.

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Recommendations

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1118 The study recommends that healthcare organisations move beyond a predominantly reactive
1119 model of “**Attack → Police Case → Legal Action**” towards a proactive HRM framework:

1120 **Identify → Prevent → Protect → Respond → Care → Recover → Reintegrate → Learn**

1121 Workplace violence should therefore be treated as an organisational and occupational-safety
1122 risk rather than solely as a law-and-order problem. The objective should not be limited to
1123 punishing an aggressor after an incident. It should encompass the systematic identification of
1124 risk, prevention of escalation, protection of healthcare personnel, timely emergency response,
1125 medical and psychological care, recovery, safe return to work and organisational learning.

1126 This approach is consistent with international occupational-health guidance, which
1127 emphasises risk identification, appropriate staffing and work organisation, minimisation of
1128 waiting time, security measures, conflict-management training, incident reporting and
1129 continuous monitoring.

1130 Healthcare organisations should therefore strengthen:

- 1131 • behavioural-risk identification and early-warning mechanisms;
- 1132 • adequate staffing and workload management, particularly in emergency
1133 departments;
- 1134 • fatigue and off-hours duty management;
- 1135 • controlled access and appropriate security arrangements;
- 1136 • emergency communication and staff-alert systems;
- 1137 • de-escalation and conflict-resolution training;
- 1138 • structured communication with patients and relatives;
- 1139 • confidential incident-reporting and grievance mechanisms;
- 1140 • institutional legal and administrative support;
- 1141 • psychological first aid and post-incident trauma care;
- 1142 • structured return-to-work and reintegration programmes; and
- 1143 • systematic review of incidents for organisational learning.

1144 These measures should be integrated into mainstream HRM and occupational-safety systems
1145 rather than treated as separate security or welfare activities. WHO similarly emphasises that

1146 health-worker safety and patient safety are interconnected components of a functioning and
1147 resilient healthcare system.

1148 **6.1 Protecting Healthcare Professionals as National Intellectual Capital**

1149 A healthcare professional represents a substantial accumulation of knowledge, skills, clinical
1150 experience and professional judgement developed through many years of education and
1151 training. Medical education involves competitive selection, prolonged academic preparation,
1152 clinical training, postgraduate specialisation and, in many cases, further super-specialisation.
1153 The resulting expertise constitutes a form of **human and intellectual capital that serves**
1154 **both the individual and society.**

1155 Violence against healthcare professionals therefore has consequences extending beyond the
1156 immediate victim. Physical injury, psychological trauma, loss of professional confidence,
1157 absenteeism, burnout and withdrawal from high-risk clinical roles may affect both individual
1158 careers and organisational capacity. Repeated exposure to violence may also influence
1159 recruitment, retention and willingness to work in demanding clinical environments. WHO
1160 recognises that violence against health workers can adversely affect their psychological well-
1161 being, motivation and the quality and continuity of healthcare provision.

1162 Protecting healthcare professionals should consequently be understood as an investment in
1163 the resilience and continuity of the healthcare system. Government and healthcare institutions
1164 have a responsibility to create conditions in which specialised knowledge can be exercised
1165 without avoidable fear, intimidation, coercion or disruption.

1166 Healthcare is inherently complex and high-risk. Professionals frequently make time-critical
1167 decisions under uncertainty and incomplete information. Therefore, the workplace should be
1168 designed to minimise **avoidable distractions, intimidation, uncontrolled interference,**
1169 **excessive workload and preventable safety risks** that may compromise professional
1170 judgement and patient care.

1171 Thus, protecting healthcare professionals is simultaneously a matter of **employee safety,**
1172 **preservation of human capital, patient safety and organisational effectiveness.**

1173 **6.2 The Emergency Department as a High-Risk Work Ecosystem**

1174 The emergency department represents one of the clearest examples of the interaction between
1175 human factors, workload, organisational systems and workplace safety. Emergency personnel
1176 encounter patients with widely varying conditions and levels of urgency, often without
1177 advance notice. Emergency-room personnel are also among the healthcare workers identified
1178 as being particularly exposed to workplace violence.

1179 Several characteristics contribute to the complexity of this environment:

1180 **Extreme case variety and cognitive load:**

1181 Healthcare professionals must continuously shift between different clinical conditions and
1182 make rapid decisions under pressure.

1183 **Zero or minimal lead time:**

1184 Critical patients cannot wait for complete information or lengthy diagnostic processes.
1185 Decisions frequently have to be made using incomplete and rapidly changing information.

1186 **Cumulative psychological exposure:**

1187 Repeated exposure to trauma, suffering and death may impose substantial psychological
1188 demands, particularly when adequate recovery and organisational support are unavailable.

1189 **High-intensity public interaction:**

1190 Doctors and nurses must simultaneously manage clinical responsibilities and interactions
1191 with anxious, distressed or frustrated relatives.

1192 **Security vulnerability:**

1193 Emergency departments may become focal points for confrontation because patients and
1194 relatives encounter urgent clinical decisions, waiting periods and uncertainty in these settings.

1195 **Off-hours vulnerability:**

1196 During nights, weekends and holidays, staffing patterns, administrative availability and
1197 support services may be relatively reduced, even though emergency demand continues
1198 without interruption.

1199 The emergency department can therefore be conceptualised as an interconnected work
1200 system:

1201 **Patient Condition → Clinical Workload → Staff Availability → Waiting Time →**
1202 **Relative Expectations → Communication → Security → Administrative Support →**
1203 **Employee Well-being → Quality of Care**

1204 This illustrates that clinical performance cannot be separated from the organisational
1205 conditions under which healthcare professionals work. Work organisation, staffing, waiting
1206 time, security and communication are therefore legitimate components of healthcare
1207 workplace-safety management.

1208 **6.3 From Reactive Protection to Preventive HRM**

1209 The central implication of this study is the need to shift from **post-incident reaction to pre-**
1210 **incident risk management.**

1211 Police intervention, criminal prosecution and judicial remedies remain essential when
1212 violence occurs. However, they represent the later stages of a safety response. An effective
1213 HRM strategy must begin before confrontation reaches the point of physical violence.

1214 Workplace-violence risk assessment should therefore become part of routine healthcare
1215 management. High-risk units should periodically assess staffing levels, workload, waiting
1216 times, physical layout, access control, communication systems, security coverage, previous
1217 incidents and employees' perceptions of safety.

1218 The objective is not to suggest that every violent incident can be predicted or prevented.
1219 Rather, it is to reduce identifiable organisational vulnerabilities and strengthen the capacity of
1220 the institution to recognise and manage risk at an early stage.

1221 The preventive cycle may therefore be represented as:

1222 **Risk Identification → Early Intervention → Prevention → Protection → Crisis**
1223 **Response → Trauma Care → Recovery → Return to Work → Organisational Learning**

1224 This approach places the healthcare worker within a coordinated organisational safety system
1225 rather than leaving individual professionals to manage workplace risks alone.

1226 **6.4 Broader Societal Implications**

1227 Violence against healthcare professionals has implications beyond the immediate workplace.
1228 Repeated attacks can weaken trust between healthcare workers, patients and communities.
1229 Fear of violence may influence professional behaviour, increase psychological stress,
1230 contribute to burnout and reduce willingness to work in high-risk clinical environments.

1231 The problem therefore requires coordinated action by healthcare institutions, government
1232 authorities, professional bodies, law-enforcement agencies and the wider community. Legal
1233 protection is necessary, but legislation alone cannot create a safe healthcare workplace.
1234 Effective prevention requires the integration of **work design, staffing, communication,**
1235 **security, employee support, reporting mechanisms, legal protection and organisational**
1236 **accountability.**

1237 Public awareness is equally important. Patients and relatives must have accessible
1238 mechanisms through which dissatisfaction, complaints and concerns can be communicated
1239 and addressed without intimidation or violence. At the institutional level, grievance redressal
1240 and communication systems should function as preventive mechanisms rather than merely as
1241 responses after conflict has escalated.

1242 **The Catch-22 Effect: A Human-Factor Perspective on Emergency** 1243 **Department Violence**

1244 A Catch-22-like situation may arise when a critically ill patient reaches the emergency
1245 department late at night after home remedies or informal treatments have failed. The
1246 emergency physician must concentrate on immediate life-saving interventions, while anxious
1247 family members demand explanations and access to the treatment area. Delayed
1248 communication may be perceived as neglect, whereas repeated enquiries and forced entry

1249 may interrupt critical care, intensifying frustration and potentially escalating into verbal or
1250 physical attacks.

1251 The dilemma lies in balancing immediate life-saving treatment with the family's expectation
1252 of immediate communication. This escalation is not inevitable; designated family liaison
1253 personnel, timely updates, clear access protocols, adequate security, and effective staff
1254 coordination can help prevent a clinical emergency from becoming a workplace safety crisis.

1255

1256

The escalation sequence: The Catch-22 Effect

1257

Delayed hospital presentation

1258

Critical patient condition

1259

Immediate life-saving intervention

1260

Family anxiety and demand for information

1261

Restricted access and delayed communication

1262

Misinterpretation and frustration

1263

Verbal confrontation

1264

Potential physical assault on healthcare staff

1265 (Conceptual escalation pathway for analysis in healthcare workplace violence research)

1266

1267

1268

Conclusion

1269 This study concludes that workplace violence against healthcare professionals should be
1270 understood as a **multidimensional occupational, organisational and Human Resource**
1271 **Management problem rather than merely a law-and-order issue.**

1272 The cases and empirical evidence reviewed indicate that violence may emerge from complex
1273 interactions among patient condition, emotional distress, perceived treatment failure, waiting
1274 time, workload, communication gaps, environmental conditions, security vulnerabilities and
1275 organisational preparedness. No single factor adequately explains the phenomenon.

1276 The central proposition of the study is therefore that **the most effective response to**
1277 **workplace violence begins before the attack occurs.** Criminal prosecution and judicial

1278 action remain necessary when violence takes place, but they cannot substitute for preventive
1279 organisational systems.

1280 The required transition is from: *Attack* → *Police Case* → *Legal Action* **TO** *Identify* →
1281 *Prevent* → *Protect* → *Respond* → *Care* → *Recover* → *Reintegrate* → *Learn*

1282 Such a framework recognises healthcare professionals as valuable human and intellectual
1283 capital whose expertise is developed through substantial individual, institutional and societal
1284 investment. Protecting this expertise is therefore not simply an employee-welfare
1285 responsibility; it is essential to maintaining the capacity, resilience and continuity of the
1286 healthcare system.

1287 The emergency department particularly demonstrates this interdependence. Clinical urgency,
1288 cognitive load, workload, waiting time, emotional distress, communication, staffing and
1289 security operate simultaneously within the same work environment. Consequently, **employee**
1290 **safety and patient safety cannot be treated as competing priorities.** A safe healthcare
1291 worker is better positioned to provide safe and effective care.

1292 The study therefore advocates a shift from a narrow **post-incident security response** towards
1293 an integrated **preventive HRM and occupational-safety model.** Workplace design,
1294 adequate staffing, fatigue management, effective communication, behavioural-risk
1295 recognition, security preparedness, psychological support, legal protection, incident reporting
1296 and organisational learning should function as interconnected elements of one system.

1297 Ultimately, **a healthcare system cannot fully protect patients if the professionals**
1298 **responsible for protecting them are themselves working under persistent fear of**
1299 **violence.** The protection of healthcare professionals is consequently not merely a matter of
1300 individual security; it is a prerequisite for professional performance, patient safety, workforce
1301 sustainability and public confidence in healthcare.

1302 The principle of **“prevention is better than cure”** acquires particular significance in this
1303 context. The goal should not simply be to respond effectively after a healthcare professional
1304 has been attacked, but to build a workplace in which risks are identified early, escalation is
1305 prevented wherever possible, professionals are protected during crises, affected employees
1306 receive appropriate care and organisations learn systematically from every incident.

1307 **“ Protecting healthcare professionals is ultimately protecting healthcare itself.”**

1308 Although this study focuses on violence against medical professionals, its underlying
1309 ergonomics–HRM perspective may have wider relevance across occupational settings. A
1310 workplace that is physically safe, psychologically supportive and appropriately aligned with
1311 employees' physical, cognitive and psychosocial capabilities may contribute to better
1312 utilisation of their knowledge, skills, judgement and experience. From an HRM perspective,
1313 workplace safety may therefore be considered not merely a protective or compliance
1314 function, but also a factor that can support employee well-being, effective performance,

retention and organisational resilience. In healthcare, this relationship is particularly important because the quality of professional judgement and performance may have implications for patient care. More broadly, the study suggests that designing work environments around human capabilities and limitations, while supported by appropriate HRM practices, may contribute to safer and more sustainable organisational performance.

References

1. Anand, T., Grover, S., Kumar, R., Kumar, M., & Ingle, G. K. (2016). Workplace violence against resident doctors in a tertiary care hospital in Delhi. *The National Medical Journal of India*, 29(6), 344–348.
2. Balamurugan, G., et al. (2020). Workplace violence against doctors in a tertiary care hospital. *Industrial Psychiatry Journal*. https://doi.org/10.4103/ipj.ipj_79_20
3. Indian Express. (2025, October 8). *2 months after he lost daughter to brain infection, man attacks Kerala doctor with hatchet*.
4. J Kumar, A. (2025, October 8). *'My child was denied justice': Attack on Kerala doctor out of rage, say cops*. Onmanorama.
5. New Indian Express. (2025, October 8). *Grieving dad hacks doctor with machete at Thamarassery hospital*.
6. Onmanorama. (2023, May 10). *Woman doctor stabbed to death by teacher at Kottarakkara hospital*.
7. Kerala Kaumudi. (2026, March 21). *Court awards life imprisonment to Sandeep, accused in Dr Vandana Das murder case*.
8. Indian Express. (2026, July 7). *Shiv Senacorporator, supporters assault doctors at Mumbai hospital, staff stop work*.
9. Times of India. (2026, September 11). *Dombivli doctors' assault case: Court frames charges against Shiv Senacorporator Ramesh Mhatre, 4 others*.
10. Indian Express. (2026, September 28). *Supreme Court cancels Senacorporator's bail in Thane doctors' assault case*.