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INCIDENCE OF VIOLENCE WITH HEALTH CARE PROFESSIONALS BY ATTENDANTS IN TRAUMA CENTRE DURING TREATMENT IN PUBLIC HOSPITALS

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Abstract

Introduction: In the evolving landscape of healthcare, violence against healthcare professionals poses a significant challenge, particularly in high-stress environments such as trauma centres. This study aims to provide a comprehensive understanding of the prevalence, types, and influencing factors of violence against healthcare professionals in trauma centres within selected public hospitals of Pakistan.

Methodology: An observational research design was adopted, involving a diverse group of 43 healthcare professionals, including physicians, nurses, and support staff. The study incorporated quantitative data from incident reports and surveys, complemented by qualitative insights gathered through in-depth interviews. Correlation analyses, inferential statistical tests, and thematic analysis were employed to explore relationships, differences, and emergent themes.

Results: The findings reveal that verbal abuse is the most prevalent form of violence, constituting 67% of reported incidents. Physical violence and psychological violence are reported at 22% and 11%, respectively. Correlation analyses highlight associations between the time of day, length of professional experience, and the frequency of violent incidents. Qualitative insights underscore the role of prolonged wait times, communication challenges, and high-stress situations as contributing factors. Addressing prolonged wait times through improved efficiency, implementing communication training, and developing stress management programs are identified as key strategies. The integration of quantitative and qualitative data enhances the depth of understanding, guiding the formulation of effective interventions.

Conclusion: Our study contributes valuable insights into the multifaceted issue of violence against healthcare professionals in trauma centres. The findings have implications for policymakers, healthcare administrators, and professionals, emphasizing the urgency of creating safer working environments. Implementing targeted interventions based on the identified factors is crucial for fostering a culture of safety and ensuring the well-being of healthcare professionals in trauma centres.

Keywords: Healthcare professionals, violence, trauma centres, interviews, prevalence

Introduction

Health reports offer a comprehensive overview of a nation's populace health and its associated factors. Through international comparisons, they deliver a concise evaluation of attained progress and potential areas for enhancement. An interesting facet of this comparative analysis arises when individual hospitals are assigned rank orders. While these rankings serve as helpful summary indicators, it is crucial to approach them with caution, as ranks can be deceptive. Particularly when gauging trends, reliance on ranks might obscure substantial changes occurring within a specific hospital [1,2].

Within healthcare environments, a spectrum of emotions is encountered, ranging from the elation of welcoming new life to the grief of losing a cherished individual. However, the transforming landscape has ushered in heightened commercialization within hospitals. This shift strains the doctor-patient relationship, primarily due to escalating out-of-pocket expenses. According to the National Health Policy draft of 2015, there is a discernible increase in households grappling with catastrophic health expenditures, reaching 18% in 2011-12 as opposed to 15% in 2004-05 [3].

Violence is characterized as any occurrence posing a threat to a healthcare worker, encompassing verbal abuse, menacing conduct, and assaults by patients, family members, friends, or the public [4]. The existing literature delves into diverse manifestations of violence, including acts like shouting, derogatory comments, information withholding, and disrespectful or demeaning behaviours within hierarchical structures [5–10]. The World Health Organization categorizes workplace violence into physical, psychological, sexual, and racial forms, with psychological violence emerging as predominant. Hospitals are recognized as focal points for workplace violence, significantly impacting healthcare professionals, who are identified as particularly susceptible [9–12].

Global studies expose a concerning pattern of recurrent aggressive conduct directed at physicians and reported instances of violence merely represent the visible aspect of the issue [12]. Instances of assaults targeting healthcare professionals, leading to severe injuries and, in some cases, fatalities, have seen an upswing in recent years, presenting a notable hazard to doctors and healthcare aides in hospital environments [10,13–15]. The proportion of assaults on healthcare aides worldwide has witnessed a notable increase over the past two decades, with variations in the frequency of workplace violence (WPV) observed across various medical departments. Medical specialties such as emergency medicine and psychiatry, dealing with patients confronting substance abuse or mental health challenges, report significantly elevated rates of WPV targeting physicians [10,16–18].

Recent research has revealed that individuals exposed to psychological violence face a sevenfold increased likelihood of becoming targets of physical violence. A study investigating hospital violence in China demonstrated alarmingly high incidence rates, reaching up to 95%, underscoring the prevalence of physical and verbal abuse directed at medical staff [19]. The issue of violence against healthcare professionals is equally significant in Turkey, with a study indicating that 44.7% of healthcare personnel encounter violence annually. While globally, nurses often face the highest risk of violence, physicians and dentists emerge as the most vulnerable groups to workplace violence within the Turkish healthcare sector [20].

Research conducted in the United States in 2004 and 2015 has indicated that verbal abuse is the most prevalent form of violence reported by physicians and nurses, ranging from 39% to 99% in frequency. Similarly, a study in Pakistan revealed that over two-thirds of respondents (n = 121/164, 73.8%) experienced violence in the past 12 months, with verbal abuse (n = 104/121, 86%) being the primary form of aggression. In Jordan, the prevalence of verbal abuse from patients and visitors was around 63.9%, with 7.2% attributed to patients and 3.1% to visitors for physical abuse [19]. Hong Kong, in both private and public sectors, demonstrated a higher occurrence of non-physical violence compared to physical violence. Furthermore, there is reported inadequacy in the preparedness of many organizations to address incidents of violence [19].

This study investigated violence against healthcare professionals, with a specific focus on attendants in trauma centres within public hospitals. The objectives included assessing the frequency and nature of such violence, examining contributing factors, and proposing strategies to enhance the safety and well-being of healthcare professionals while improving the overall quality of patient care.

Methodology

This research adopted an observational research design to delve into the intricacies surrounding the incidence and characteristics of violence directed at healthcare professionals, with a specific focus on attendants in trauma centres. The study encompassed a carefully determined sample size of 43 healthcare professionals and the investigation took place within the confines of carefully selected public hospitals of Pakistan. This observational approach allowed for a nuanced exploration of real-world occurrences, offering a holistic understanding of the dynamics of violence within these healthcare settings.

The healthcare professionals included physicians, nurses, and support staff who played pivotal roles in the intricate web of patient care, frequently interacting with both patients and attendants during the treatment process. The inclusion criteria were meticulously designed to encompass professionals with a minimum of one year of practical experience in their respective roles, ensuring a level of expertise and familiarity with the challenges inherent in their healthcare responsibilities.

Data collection was a multifaceted process incorporating incident reports, surveys, and in-depth interviews. Incident reports, meticulously gathered from hospital records at the identified trauma centres in Islamabad, provided a factual account of documented violent occurrences. Surveys were thoughtfully constructed and distributed among healthcare professionals within the trauma centres to capture self-reported experiences and nuanced perceptions of violence. Moreover, structured interviews were conducted with a purposefully selected subset of participants. In conducting interviews, a semi-structured approach was employed to explore the perspectives of both healthcare providers and attendants on factors contributing to violent incidents. Purposive sampling ensured a diverse representation of participants. Open-ended questions facilitated an in-depth exploration, covering aspects such as specific incidents of violence, contributing factors, communication challenges, and patient frustrations.

The study meticulously considered various variables to construct a comprehensive understanding of violence within the healthcare context. These variables encompassed the frequency and types of violence (ranging from physical and verbal), demographic information of healthcare professionals, as well as patient and attendant demographics. Additionally, the study scrutinized the temporal and spatial aspects of incidents, contributing factors identified by participants, and the contextual nuances surrounding these occurrences.

Ethical Considerations

Ethical considerations were paramount in the research process. Informed consent procedures were stringently followed, ensuring that all participating healthcare professionals were adequately informed and voluntarily agreed to contribute to the study. Confidentiality and anonymity

safeguards were rigorously upheld to protect the privacy and identity of the participants throughout the research endeavor.

Statistical Analysis

The statistical analysis was performed by SPSS (version 27). The analysis of data followed a rigorous process encompassing both quantitative and qualitative methodologies. Correlation analyses, such as Pearson correlation coefficients, were employed to explore potential relationships between variables related to violence. Additionally, inferential statistical tests, such as t-test, ANOVA and Chi square test, were utilized to assess significant differences among various factors contributing to violent occurrences.

Results

The 43 participants included physicians, nurses, and support staff, each playing crucial roles in patient care within these high-pressure environments. The demographic breakdown revealed a mix of gender representation, with a distribution of male and female healthcare professionals, presented in (Table 1). Moreover, professionals from different roles, such as physicians, nurses, and support staff, contributed to the study, ensuring a comprehensive understanding of violence across various job functions. The participants' varying years of experience in their respective roles added a dimension to the analysis, shedding light on the potential influence of professional tenure on the incidence and types of violence encountered.

Table 1: Demographic Profile of Healthcare Professionals

	Gender	Professional Role	Years of Experience	Frequency (%)
Physicians	Male	15	Less than 5 years	35
Nurses	Female	20	5-10 years	8
Support Staff	Not Specified	8	More than 10 years	12

The examination of descriptive statistics provides significant insights into prevalent types of violence experienced by healthcare professionals in trauma centres, offering a nuanced understanding of challenges within these high-stress environments. Verbal abuse emerges as the most dominant form, constituting 67% (29 out of 43) of reported incidents. This prevalence aligns with broader trends in healthcare settings and indicates a pronounced challenge in the emotionally charged atmosphere of trauma centres. Physical violence, present in 22% (9 out of 43) of incidents, underscores a tangible risk influenced by heightened emotions and patient frustration. Additionally, psychological violence, though less frequent at 11% (5 out of 43), remains a significant concern due to its potential to cause psychological distress through threats and intimidation, as shown in (Table 2) below. The Chi-Square test is used, where p-values indicate the statistical significance of the observed frequencies. The breakdown of violence types highlights the multifaceted nature of challenges faced by healthcare professionals, emphasizing the urgent need for targeted interventions.

The reliance on both incident reports and survey data enhances the comprehensive understanding of the issue, capturing both documented and self-reported instances of violence and guiding the development of impactful interventions tailored to the specific needs of healthcare professionals in trauma centres. Overall, these findings stress the urgency of creating a safer and more supportive working environment in trauma centres through comprehensive and targeted interventions.

Table 2: Frequency of Different Types of Violence

Type of Violence	Frequency	Percentage	p-value
Verbal Abuse	29	67%	< 0.05
Physical Violence	9	22%	
Psychological Violence	5	11%	

Correlation analyses, utilizing Pearson correlation coefficients, were conducted to investigate potential relationships between various factors and the occurrence of violence among healthcare professionals in trauma centres. The initial findings revealed a significant positive correlation (coefficient = 0.38, $p < 0.05$) between the time of day and the frequency of violent incidents, with a notable peak during evening shifts, indicating heightened vulnerability during these hours. Additionally, a substantial negative correlation (coefficient = -0.45, $p < 0.01$) emerged between the length of professional experience and the likelihood of encountering violence, suggesting that healthcare professionals with fewer years of service exhibit a higher vulnerability to violent incidents.

Inferential statistical tests, including independent t-tests and ANOVA, were then applied to assess differences in the incidence of violence across various demographics and work-related variables. The results, summarized in (Table 3) below, underscore the influence of specific factors on variations in violence rates.

Table 3: Correlation between Factors and Violence Incidents

Factors	Correlation Coefficient	p-value
Time of Day	0.38	< 0.05
Length of Professional Experience	-0.45	< 0.01
Gender	0.25	< 0.05
Professional Role (Physicians)	-0.3	< 0.01
Professional Role (Nurses)	-0.15	0.1
Professional Role (Support Staff)	0.1	0.2
Trauma Center Location (Islamabad)	0.2	< 0.05

Participant Responses and Emergent Themes

Participants shared instances where prolonged wait times contributed to patient frustration, escalating tensions and, at times, leading to violent outbursts. This emergent theme underscores the need for enhanced efficiency in healthcare service delivery to alleviate patient frustration and reduce the risk of violence.

Inadequate Communication between Healthcare Providers and Attendants

Many participants highlighted challenges in communication between healthcare providers and attendants, citing misunderstandings and a lack of clear information as potential triggers for violence. Inadequate communication emerged as a prominent theme, emphasizing the importance of fostering clearer and more effective communication strategies in healthcare settings.

Several participants recounted instances where high-stress situations in trauma centres heightened emotions and contributed to a tense atmosphere, potentially leading to violent incidents. The overview is highlighted in (Table 4), as following.

Table 4: Emergent Themes from Qualitative Interviews

Themes	Key Findings
Patient Frustration Due to Wait Times	Prolonged wait times contribute to patient frustration and pose a risk for violent incidents.
Inadequate Communication	Challenges in communication, including misunderstandings, contribute to violence risks.
High-Stress Situations in Trauma Centres	High-stress situations amplify tensions, necessitating tailored approaches for trauma center settings.

Participants highlighted the need for improved security measures and the implementation of de-escalation training for healthcare professionals to navigate potentially volatile situations effectively. The qualitative findings underscored the complexity of factors contributing to violence,

emphasizing the importance of addressing both systemic issues within the healthcare setting and enhancing interpersonal skills among professionals.

Integration of Quantitative and Qualitative Insights

The synthesis of quantitative and qualitative data offered a holistic understanding of violence against healthcare professionals in trauma centres. The quantitative findings, derived from incident reports and surveys, provided a quantitative lens into the prevalence and types of violence. The quantitative data indicated that verbal abuse was the most prevalent form of violence (67%), followed by physical violence (22%) and psychological violence (11%). The significance of these statistics lies in their ability to quantify the occurrence of violence, allowing for a clear assessment of its extent within the studied population.

Complementing this, the qualitative insights from interviews delved into the contextual intricacies surrounding violent incidents. Themes such as patient frustration due to prolonged wait times, inadequate communication, and the impact of high-stress situations emerged, shedding light on the nuanced factors contributing to violence, details are presented in (Table 5). For instance, the qualitative data brought forth the understanding that prolonged wait times could be a trigger for patient frustration, providing a qualitative context to the quantitative observation of high rates of verbal abuse.

Table 5: Integration of Quantitative and Qualitative Insights

Types of Violence	Quantitative Prevalence (%)	Qualitative Contextual Insight	Key Implications
Verbal Abuse	67	Qualitative data suggests that prolonged wait times contribute to patient frustration, potentially leading to verbal abuse.	Addressing wait times may mitigate verbal abuse risks.
Physical Violence	22	The qualitative understanding complements the quantitative data, offering insights into potential triggers and contextual dynamics.	Tailored interventions needed for specific triggers.
Psychological Violence	11	Insights from interviews highlight the impact of high-stress situations, providing a qualitative perspective on the quantitative data.	Strategies to manage stress crucial for violence prevention.

Discussion

The results of our study provide valuable insights into the prevalence, types, and influencing factors of violence against healthcare professionals in trauma centres within selected public hospitals. The discussion will delve into the key findings, their implications, and potential strategies for addressing the identified challenges.

The findings reveal that verbal abuse is the most prevalent form of violence experienced by healthcare professionals in trauma centres, constituting 67% of reported incidents. This aligns with existing literature, highlighting the high occurrence of verbal abuse in healthcare settings. The study's findings resonate with existing literature on workplace violence (WPV) against healthcare professionals, corroborating the prevalence of verbal abuse as a major concern. The study reports a 67% incidence of verbal abuse among healthcare professionals in trauma centres, aligning with the broader literature on the high occurrence of verbal violence in healthcare settings [21,22]

In terms of physical violence, the study's identification of a 22% prevalence parallels existing research indicating that physical violence is a substantial issue faced by healthcare workers [23]. The emphasis on tangible risks associated with heightened emotions and patient frustration adds

nuance to the understanding of physical violence, emphasizing the need for effective de-escalation measures. The study's recognition of psychological violence in 11% of incidents contributes valuable insights, highlighting the need to address both overt and subtle forms of violence. This finding is consistent with existing literature acknowledging the broader spectrum of workplace violence and its psychological impact on healthcare professionals [24–26]

The correlation analyses shed light on the temporal aspects of violence incidents. The positive correlation between the time of day and violent incidents, with a peak during evening shifts, highlights a potential vulnerability during these hours. This finding suggests the need for heightened security measures and awareness during evening shifts. Our findings align with existing literature on workplace violence [27]. Studies have suggested that violent events in healthcare settings are more likely to occur during specific hours, emphasizing the importance of heightened security measures during these vulnerable periods [27].

Contrastingly, the negative correlation observed between the length of professional experience and the likelihood of encountering violence is an intriguing finding. While this study implies that less experienced healthcare professionals may face higher vulnerability, the broader literature indicates mixed results. Some studies have identified an increased risk for new healthcare workers due to a learning curve, while others emphasize that experienced professionals may face burnout-related challenges leading to heightened stress and potential violence [22,28].

The demographic breakdown in the current study, showcasing a mix of gender representation and diverse years of professional experience across roles, aligns with existing literature on workplace violence in healthcare settings [22,29]. These studies often highlight the multifactorial nature of violence, influenced by various demographic factors. Contrastingly, the observation that gender and professional role did not exhibit strong correlations with violence incidents diverges from some prior research findings [30]. While existing literature has identified gender-based differences in exposure to workplace violence, the current study suggests a more nuanced relationship.

The recognition of varying violence rates among different professional roles in the current study echoes findings in the literature emphasizing the need for tailored interventions [31]. Physicians, nurses, and support staff may indeed encounter distinct challenges, and understanding these nuances is crucial for designing effective role-specific strategies to mitigate the risk of violence.

The qualitative investigation into violence in trauma centres brings nuanced insights. Prolonged wait times surfaced as a significant contributor to patient frustration, aligning with existing literature on the relationship between wait times and increased violence [21]. This correlation emphasizes the need for targeted interventions to enhance healthcare service efficiency, thereby mitigating patient frustration and reducing verbal abuse. Inadequate communication emerged as a prominent theme, resonating with broader studies emphasizing the role of communication breakdowns in workplace violence [32]. This finding underscores the critical need for improved communication strategies, including training programs and enhanced information-sharing practices, aligning with recommendations from previous research [33].

High-stress situations in trauma centres were identified as a key contributor to violence. This aligns with the broader understanding of stress as a precursor to violent incidents. Tailored approaches, such as stress management strategies and de-escalation training, echo interventions suggested in existing literature to foster a safer working environment in high-stress healthcare settings [34].

The incorporation of both quantitative and qualitative data enriches the understanding of violence in healthcare settings. Qualitative themes offer a nuanced perspective, revealing that prolonged wait times serve as more than statistical indicators, they act as genuine triggers for patient frustration, leading to verbal abuse. This aligns with existing literature emphasizing the need for contextual understanding in violence research [35].

Existing literature supports the efficacy of improving healthcare service efficiency to reduce patient frustration and verbal abuse incidents [24]. The call for implementing training programs to enhance communication aligns with recommendations in literature, emphasizing effective communication as a preventive measure against violence [36]. Recognition of high-stress situations and the recommendation of stress management programs resonate with broader studies highlighting the role of stress in contributing to violence incidents in healthcare settings. Tailoring interventions based on healthcare professionals' roles is a well-supported strategy, acknowledging the diverse challenges faced by different roles in healthcare [37]. Existing literature supports the need for enhanced security measures during evening shifts, aligning with the recommendation for strengthening security during vulnerable periods [38].

Limitations

It is essential to acknowledge certain limitations of the study. The cross-sectional nature of the research design provides a snapshot of the prevalence and factors influencing violence at a specific point in time. Longitudinal studies could offer insights into the temporal trends and the effectiveness of interventions over time.

Conclusion

In conclusion, this study provides a comprehensive understanding of violence against healthcare professionals in trauma centres. The integration of quantitative and qualitative data enhances the depth of the findings, guiding the development of targeted interventions. Addressing the root causes of violence, including prolonged wait times, communication challenges, and high-stress situations, is crucial for creating safer working environments. The study contributes valuable insights that can inform policies and practices aimed at ensuring the well-being of healthcare professionals and fostering a culture of safety in trauma centres.

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