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Survey analysis of workplace violence among public healthcare workers in Yogyakarta, Indonesia

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Abstract

Background Workplace violence in the healthcare sector has become a global issue that poses a threat to the safety and well-being of healthcare staff. This study aims to understand and analyze workplace violence experienced by public healthcare workers in Yogyakarta, Indonesia.

Results This is an observational analytical descriptive study using a cross-sectional design across 482 healthcare workers from 7 general public hospitals taken through stratified random sampling with a standardized questionnaire. The surveys found that 65 from 482 healthcare workers (13.6%) admitted to experiencing physical violence, verbal abuse, bullying, and/or sexual harassment. It is most prevalent among nurses, with the majority occurring in the emergency department ward. Verbal abuse is the most common type, mainly perpetrated by patients' relatives. Most workers who experience violence take no action. In the bivariate analysis, there was a significant relationship between professions ($p = 0.045$) and their workplace ($p < 0.001$) with workers experiencing violence. No significant relationships were found regarding age, gender, marital status, duration of work, and years of service.

Conclusions A low prevalence of workplace violence was noted in public hospitals in Yogyakarta, suggesting that underreporting might be a major concern. Nurses and the emergency department are the most vulnerable and thus need more urgent interventions. Further research should focus on private hospitals and more effective preventive and responsive measures.

Keywords Workplace violence, Healthcare workers, Yogyakarta, Indonesia, Survey

Background

The World Health Organization (WHO) states that workplace violence (WPV) is a condition in which staff members are harassed, threatened, or attacked in connection with their work and while going to and from the workplace. This poses an explicit or implicit challenge to the safety, well-being, or health of the staff. Such violence affects all job categories and occurs in various sectors (ILO & ICN, 2003). About 25% of workplace violence occurs in the health sector, and over 50% of healthcare workers have experienced violence (Hahn et al. 2012). As with occupational injuries, workplace violence (WPV) is a significant concern worldwide that requires more focused attention on its correlation with workers' sociodemographic characteristics (Malta et al. 2024).

Workplace violence in the healthcare sector has become a global issue in various hospitals in the twenty-first century (Banda, et al. 2016). It can be categorized into physical violence, psychological violence, sexual harassment, and racial violence, with dominance across all hospital sectors (Kadir et al. 2019). The

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incidence of workplace violence in healthcare is quite high, especially in Asian and North American countries. Violence is often directed by patients and visitors towards healthcare workers, particularly in psychiatric departments and emergency units (ERs). Globally, more experienced workers, those of white ethnicity, urban-based workers, and those with longer working hours tend to experience nonphysical violence. Meanwhile, male workers, unmarried individuals, and those with longer working hours are more likely to experience physical violence (Liu et al. 2019). Perpetrators of violence in healthcare services are not limited to patients, patients' families, and hospital visitors but can also include hospital employees such as nurses, doctors, supervisors, and healthcare students (Christlevica et al. 2016). Medical students may experience fears of inadequacy and potential harm to patients or themselves that were exacerbated by feelings of unpreparedness, lack of welcome on hospital wards, and disrespectful treatment from some staff (Smithson, et al. 2010).

Perpetrators of workplace violence can come from both internal and external sources. Everyone in the workplace is highly vulnerable to various forms of violence and harassment. Such incidents can significantly worsen performance, suppress productivity, and impact the well-being of employees and their families (Wahyuni 2022). Research conducted in Sulawesi, Indonesia, found a significant relationship between all forms of workplace violence (including physical violence, verbal abuse, bullying, harassment, sexual harassment, threats/intimidation) and job stress among nurses in several emergency departments and intensive care units (ICU) in hospitals in the cities of Bitung and North Minahasa (Damopoli et al. 2019). Therefore, if a company, particularly in the healthcare sector, aims to enhance productivity, it is essential to create a workplace where employees feel safe and respected. This includes ensuring physical safety and safeguarding the well-being, dignity, and mental health of employees. Intimidation or harassment often poses a threat to the well-being and security of employees in the workplace (ILO, 2022).

Indonesia, as a legal country that upholds human rights, protects workers from violence in the workplace as stated in the 1945 Constitution of Indonesia Article 28D paragraph (2). This article ensures protection against violence or harassment in the work environment, asserting that every person has the right to work and to receive fair and just compensation and treatment in the employed place. Additionally, Article 28G of the Constitution states that individuals should not engage in violent actions. Everyone has the right to personal protection, family, honor, dignity, and property under their control. Individuals also have the right to feel safe and be protected from threats or fears to exercise or not exercise their rights. There are legal consequences, including a 9-month prison sentence, if someone intentionally attacks the honor or reputation of an employee, as stipulated in Article 310 paragraph (1) of the Indonesian Criminal Code (KUHP).

In the Indonesian Labor Law Number 13 Article 86 of 2003 concerning employment, it is emphasized that every worker, including those in the healthcare sector, has the right to opportunities for working and occupational health, moral and ethics, and treatment in accordance with human dignity and religious values. Therefore, every hospital must ensure the health and safety of its employees, which is in line with the Ministry of Health Regulation Number 66 of 2016 concerning the health and safety of hospital workers (K3RS).

The Special Region of Yogyakarta (DIY) is one of the 38 provinces in Indonesia, which consists of four regencies and 1 municipality. It had a total of 81 hospitals in 2020, including 55 general hospitals, 23 specialty hospitals, and 13 maternity hospitals (Badan Pusat Statistik Propinsi DIY, 2020). While there have been studies on healthcare WPV in other regions of Indonesia, none has specifically examined hospitals within Yogyakarta. These studies have also primarily focused on nurses, leaving a gap in knowledge regarding the experiences of doctors and other healthcare workers. This includes a description of the perpetrators of the violence, the preventive methods, nor responsive measures taken when healthcare staff face violence.

As no previous research has been conducted, this study aims to provide an overview of the violence experienced by healthcare workers in hospitals in Yogyakarta. The findings of this research can serve as an initial data on workplace violence in healthcare and ultimately help to identify risk factors, formulate preventive or responsive measures, and support workers' rights and wellbeing.

Methods

This research is a descriptive analytical observational study, utilizing a cross-sectional design. It was conducted after obtaining permission or ethical clearance from the research ethics commission of the Faculty of Medicine, Public Health, and Nursing at Universitas Gadjah Mada. The research sample includes all medical personnel, healthcare professionals (nurses/midwives), and other healthcare workers at seven general public hospitals in Yogyakarta: RSUP Dr. Sardjito, RSUD Sleman, RSA UGM, RSUD Kota Yogyakarta, RSUD Panembahan Senopati, RSUD Wates, and RSUD Wonosari. The inclusion criteria are the willingness to participate in the study by providing an informed consent. The exclusion criteria are healthcare workers on leave and/or sick. The sample is obtained through stratified random sampling with a

minimum sample size of 384 respondents, counted with the proportion estimation formula in an infinite population with 95% confidence level.

A standardized questionnaire, the Workplace Violence in the Health Sector Country Case Study — Questionnaire, was used in this study to collect the data. This questionnaire is made by WHO's Social Determinants of Health (SDH) team and is part of the Joint Programme on Workplace Violence in the Health Sector initiated by the International Labour Office (ILO), International Council of Nurses (ICN), World Health Organization (WHO), and Public Services International (PSI). The questionnaire has been modified accordingly to the local culture and translated into Bahasa Indonesia while keeping its official format as much as possible to retain its validity. There is a total of 112 questions divided in 5 sections: Personal and workplace data (25 questions), physical workplace violence (23 questions), psychological workplace violence (56 questions), health sector employer (5 questions), and opinions on workplace violence (3 questions). The psychological workplace violence section is further divided into 4 additional subsections: verbal abuse (14 questions), bullying/mobbing (14 questions), sexual harassment (14 questions), and racial harassment (14 questions). A lot of these questions were skippable if the respondent answered "no" in a preceding question (e.g., if a worker did not experience verbal abuse, then the verbal abuse section was skipped). There is no pretesting conducted for this questionnaire. This survey has also been provided in the supplementary material.

The authors reached out to the ethics committee and the education committee of the aforementioned hospitals to obtain a consent and help giving out the survey across the workers. The survey was then conducted anonymously with the online tool KoboToolbox from May 2023 to October 2023. Additionally, in-depth interviews were also conducted anonymously to a few workers of each healthcare sector (doctors, nurses, and other workers) from every hospital. The results are confidential and can only be accessed by the authors. It also has been cross-checked for duplicate data to prevent multiple participations.

The dependent variable in this study is the workplace violence experienced by medical personnel, healthcare professionals (nurses/midwives), and other healthcare workers. This is further categorized into physical violence, verbal abuse, bullying, and sexual harassment. Meanwhile, the independent variables include the sociodemographic characteristics of medical personnel, healthcare professionals (nurses/midwives), and other healthcare workers, encompassing age, gender, marital status, profession, department of work, duration of work (full time or part-time), and length of service. Age is further classified into 20–49 years old (adults) and 50 years and above (elderly). Length of service is also classified into below 10 years, 10 to 20 years, and above 20 years of service.

The data was checked for missing data and then analyzed through univariate and bivariate analyses in Stata 17. Univariate descriptive analysis of frequency, percentage, mean, and standard deviation was done to the number of respondents, characteristics, and workplace violence counts. Bivariate analysis was then conducted to examine the relationship between independent and dependent variables using the chi-square (if the expected value is 5 or more in any cell) or Fisher's exact test (if the expected value is less than 5 in any cell) with statistical significance set at $\alpha < 0.05$.

Results

The total number of respondents from the 7 hospitals participating in the study is 482 healthcare workers. The largest number of respondents comes from RSUP Dr. Sardjito totaling 150 workers, followed by RSUD Wates with 95 workers, RSUD Panembahan Senopati in Bantul with 53 workers, RSUD Sleman with 50 workers, RSA UGM with 49 workers, RSUD Wonosari with 48 workers, and RSUD Kota Yogyakarta with 37 workers.

Table 1 shows the characteristics of the respondents. The average age is 39 years, ranging from 21 to 60 years. The adult age group (20–49 years) comprises most of the respondents (82.8%; 399 workers) compared to the elderly age group (17.2%; 83 workers). Most of them are women (78.3%; 376 workers) compared to men (21.7%; 104 workers). The majority is married (90.7%; 437 workers) compared to unmarried (9.3%; 45 workers). The most common profession is nursing (58.0%; 279 workers), followed by other healthcare workers (21.4%; 103 workers) and doctors (10.4%; 50 workers). The most common department of work is the inpatient care (34.0%; 164 workers), followed by the emergency unit (21.8%; 105 workers) and outpatient care (12.7%; 61 workers). Most workers also work full time (94.0%; 451 workers) compared to part-time (6.0%; 29 workers). The length of service in the hospital is mostly below 10 years (39.2%; 189 workers) compared to the 10–20 years group (36.5%; 176 workers) and above 20 years (24.3%; 117 workers). Out of all respondents, 65 workers (13.6%) admitted to experiencing physical violence, verbal abuse, bullying, or sexual harassment.

The most common type of violence is verbal abuse (11.4% of all respondents; 55 workers), followed by bullying (4.8%; 23 workers). Physical violence (0.6%; 3 workers) and sexual harassment (0.4%; 2 workers) have smaller numbers of respondents.

Table 1 Respondent characteristics ($n=482$)

Characteristics	Frequency	Percentage (%)
Age (years)		
20–49	399	82.8
≥ 50	83	17.2
Mean (SD)	39.0 (9.0)	
Range	21–60	
Sex		
Male	104	21.7
Female	376	78.3
Marital status		
Unmarried	45	9.3
Married	437	90.7
Profession		
Doctor	50	10.4
Nurse	279	58.0
Midwife	28	5.8
Pharmacist	3	0.6
Nutritionist	6	1.2
Rehab staff	12	2.5
Others	103	21.4
Department of work		
Outpatient	61	12.7
Emergency	105	21.8
Intensive care	32	6.6
Operating room	9	1.9
Inpatient	164	34.0
Management	4	0.8
Special unit	29	6.0
Technical services	19	3.9
Support services	5	1.0
Others	54	11.2
Duration of work		
Full time	451	94.0
Part-time	29	6.0
Length of service (years)		
< 10	189	39.2
10–20	176	36.5
> 20	117	24.3
Mean (SD)	13.5 (9.3)	
Range	1–36	
Violence		
Experienced	65	13.6
Not experienced	414	86.4

Based on the data, physical violence only occurred among nurses, medical rehabilitation staff, and professions under "others." Verbal violence occurred in all professions except for nutritionists, with the highest number of victims among nurses, totaling 24 individuals (8.6%) of all nurse respondents. Bullying also mostly occurred among nurses, with eight individuals (2.9%). Meanwhile, sexual harassment only occurred among doctors and nurses, each with one respondent.

The perpetrators also vary depending on the type of the violence. Percentages are based on all perpetrators involved in the violence. In physical violence, the perpetrators are patients/clients (66.7% of all physical violence perpetrators; 2 workers) and members/staff (33.3%; 1 worker). Verbal abuse is mostly committed by patients (35.2%; 19 workers) and their relatives (37.0%; 20 workers) followed by colleagues/peers (31.5%; 17 workers). Meanwhile, bullying is mostly carried out by colleagues/peers (63.6%; 14 workers). Sexual harassment is also carried out by internal perpetrators, including members/staff and colleagues/peers, each with one respondent.

Most of the victims reportedly did not take any action or pretend that nothing happened (60.2% of all victims). Otherwise, efforts made most commonly include informing family/friends, reporting the case to a senior staff, or even asking the perpetrator directly to stop their actions.

Table 2 shows the results of the bivariate analysis between respondents' sociodemographic characteristics with the violence experienced by healthcare workers done using the chi-square and Fisher's exact test. There is a significant relationship between the profession ($p=0.045$) and the workplace department ($p<0.001$) with healthcare workers experiencing violence. Nurses comprise most of the staff experiencing violence, followed by other professions and doctors. Meanwhile, the emergency department sees the most WPV reports, followed by the outpatient and the inpatient departments. However, no significant relationships were found regarding age, gender, marital status, duration of work, and years of working in the hospital.

Bivariate analyses were also conducted between the characteristics of respondents and each type of violence. There were no significant relationships found between workers' sociodemographic status with physical violence, bullying, and sexual harassment. Meanwhile, a significant relationship was found in the workplace department with the occurrence of verbal abuse ($p=0.003$), with emergency department being the most prevalent followed by the outpatient and the inpatient departments. However, no meaningful correlations were detected in other characteristics as shown in Table 3.

Discussion

In this study, the prevalence of violence experienced by healthcare workers in 7 hospitals in Yogyakarta is 13.6% or 65 healthcare workers out of 482 who participated as respondents in this research. This percentage is different from other studies conducted in Indonesia. A study conducted on 433 nurses in Aceh, Indonesia, found

Table 2 Bivariate analysis between sociodemographic status with experience of workplace violence

		Workplace violence (%)		*p*-value
		Experienced	Not experienced	
Age (years)	20–49	57 (14.4%)	339 (85.6%)	0.250[a]
	≥ 50	8 (9.6%)	75 (90.4%)	
Sex	Male	14 (13.5%)	90 (86.5%)	0.956[a]
	Female	51 (13.7%)	322 (86.3%)	
Marital status	Unmarried	4 (9.1%)	40 (90.9%)	0.490[b]
	Married	61 (14.0%)	374 (86.0%)	
Profession	Doctor	10 (20.0%)	40 (80.0%)	**0.045**[b]
	Nurse	27 (9.8%)	249 (90.2%)	
	Midwife	4 (14.3%)	24 (85.7%)	
	Pharmacist	1 (33.3%)	2 (66.7%)	
	Nutritionist	0 (0.0%)	6 (100.0%)	
	Rehab staff	3 (25.0%)	9 (75.0%)	
	Others	20 (19.4%)	83 (80.6%)	
Department of work	Outpatient	14 (23.0%)	47 (77.0%)	**< 0.001**[b]
	Emergency	24 (22.9%)	81 (77.1%)	
	Intensive care	0 (0.0%)	30 (100.0%)	
	Operating room	0 (0.0%)	9 (100.0%)	
	Inpatient	13 (7.9%)	151 (92.1%)	
	Management	2 (50.0%)	2 (50.0%)	
	Special unit	5 (17.2%)	24 (82.8%)	
	Technical services	1 (5.3%)	18 (94.7%)	
	Support services	0 (0.0%)	5 (100.0%)	
	Others	6 (11.3%)	47 (88.7%)	
Duration of work	Full time	62 (13.4%)	386 (86.2%)	0.783[b]
	Part-time	3 (10.3%)	26 (89.7%)	
Length of service (years)	< 10	29 (15.4%)	159 (84.6%)	0.200[a]
	10–20	26 (14.9%)	149 (85.1%)	
	> 20	10 (8.6%)	106 (91.4%)	

The superscript a denotes that the *p*-value is calculated using the chi-square test, whereas the superscript b denotes that the *p*-value is calculated using the Fisher's exact test when the cell counts are smaller than 20 or a cell has expected value of 5 or less. *p*-value in bold indicates a statistical significance with a 95% confidence interval

WPV incidence as high as 64.4% with emotional abuse (Putra et al. 2024). Another study done in Jakarta and Bekasi, Indonesia, also found that 54.6% of emergency department nurses experienced nonphysical violence (Zahra et al. 2018). While these studies focused only on nurses, they are still considerably higher than the results in this study (only 9.8% of all 276 nurses experienced violence).

This finding also differs from a meta-analysis that reported an average prevalence of 61.9% of WPV worldwide (Liu et al. 2019). Another meta-analysis in Eastern Mediterranean Region from 22 countries found that 63% of workers have experienced verbal violence and 17% experienced physical violence (Önal et al. 2023). A study conducted in public hospitals in a neighboring country, Malaysia, found the prevalence to be 71.3%, with 97 individuals out of 136 respondents (Zainal et al. 2018). This indicates that the total cases of violence in this study are relatively low compared to other literatures.

Curiously, most victims in this study also did not take any action or pretend that nothing happened. Conflict resolution (especially in internal relationships) is often achieved by avoiding the issue or reaching a compromise (Delak & Širok 2022). Some studies also indicated that most victims take no action after experiencing violence, while some report their cases to supervisors or legal authorities. Additionally, they use informal channels to share their experiences with friends and colleagues (Yusoff et al. 2023). This finding, alongside with the low prevalence of reported violence in this study, may indicate that underreporting is a major factor that needs to be urgently addressed.

While it might be possible that the low number of WPV in this study is caused by an already effective

Table 3 Bivariate analysis between sociodemographic status with experience of verbal abuse

		Verbal abuse (%)		*p*-value
		Experienced	Not experienced	
Age (years)	20–49	48 (12.1%)	350 (87.9%)	0.449[b]
	≥ 50	7 (8.4%)	76 (91.6%)	
Sex	Male	11 (10.6%)	93 (89.4%)	0.743[a]
	Female	44 (11.7%)	331 (88.3%)	
Marital status	Unmarried	4 (8.9%)	41 (91.1%)	0.805[b]
	Married	51 (11.7%)	385 (88.3%)	
Profession	Doctor	6 (12.0%)	44 (88.0%)	0.102[b]
	Nurse	24 (8.6%)	254 (91.4%)	
	Midwife	3 (10.7%)	25 (89.3%)	
	Pharmacist	1 (33.3%)	2 (66.7%)	
	Nutritionist	0 (0.0%)	6 (100.0%)	
	Rehab staff	2 (16.7%)	10 (83.3%)	
	Others	19 (18.4%)	84 (81.6%)	
Department of work	Outpatient	13 (21.3%)	48 (78.7%)	**< 0.003**[b]
	Emergency	18 (17.1%)	87 (82.9%)	
	Intensive care	0 (0.0%)	31 (100.0%)	
	Operating room	0 (0.0%)	9 (100.0%)	
	Inpatient	11 (6.7%)	153 (93.3%)	
	Management	2 (50.0%)	2 (50.0%)	
	Special unit	4 (13.8%)	25 (86.2%)	
	Technical services	1 (5.3%)	18 (94.7%)	
	Support services	0 (0.0%)	5 (100.0%)	
	Others	6 (11.1%)	48 (88.9%)	
Duration of work	Full time	53 (11.8%)	397 (88.2%)	0.560[b]
	Part-time	2 (6.9%)	27 (93.1%)	
Length of service (years)	< 10	24 (12.7%)	165 (87.3%)	0.198[a]
	10–20	23 (13.1%)	152 (86.9%)	
	> 20	8 (6.8%)	109 (93.2%)	

The superscript a denotes that the *p*-value is calculated using the chi-square test, whereas the superscript b denotes that the *p*-value is calculated using the Fisher's exact test when the cell counts are smaller than 20 or a cell has expected value of 5 or less. *p*-value in bold indicates a statistical significance with a 95% confidence interval

preventive measures, it is important to consider that most of these cases went unreported instead. A lot of workers think that it is not important to report such incidents and consider them as unavoidable and just part of their duties (Gressia et al. 2022). Other common reasons include subjectivity on the definition of violence, unclear reporting procedures, a lack of management support, the absence of significant injuries, and fear of potential consequences to themselves or the hospital (Spencer et al. 2023). Similarly, the low number of respondents admitting to experiencing sexual harassment could influence the nonsignificant relationship in this study, where it is possible that many women did not report such incidents due to feelings of shame, fear of humiliation, or a lack of trust (Arnetz & Arnetz 2001). The local culture should also be put into consideration, as Javanese people in Yogyakarta have a high sense of collectivism and a tendency to "save face" (avoiding shame).

From the in-depth interviews, it is known that some healthcare workers, especially nurses, have experienced verbal abuse from patients and their families in RSUP Dr. Sardjito, RSA UGM, RSUD Wates, and RSUD Wonosari. There have been no reports of physical violence in these locations. It was also stated that there have been awareness campaigns related to violence prevention or promoting good behavior in the hospitals. However, in RSUD Sleman, RSUD Kota Yogyakarta, and RSUD Panembahan Senopati Bantul, not only verbal abuse was reported, but there are also statements from healthcare workers who have experienced physical violence.

Verbal abuse is the most common type of violence in this study, followed by bullying, physical violence, and sexual harassment. This prevalence order aligns with a systematic

review stating that violence in 16 countries in Asia, Europe, and America has an incidence of verbal abuse ranging from 46.9 to 90.3%, making it the most common type, followed by bullying (19–27%), physical violence (15.9–20.6%), and sexual harassment (2–17%) (Yusoff et al. 2023). This is also consistent with the findings of a systematic review where Asian and North American countries have verbal abuse as the most frequently experienced type of violence by healthcare workers (Liu et al. 2019).

Additionally, several studies have indicated that verbal abuse constitutes a significant portion of violence in hospitals. Some of these studies report verbal abuse as the majority in several countries: 33% verbal abuse in Belgium (De Jager et al. 2019), verbal abuse in India with 94% and 70% respectively (Sharma et al. 2019; Singh et al. 2019), 38.3% verbal abuse in China (Cheung et al. 2017), and 72% verbal abuse observed in Turkey (Çevik et al. 2020).

Most perpetrators of violence in this study originated externally (patients and their relatives), followed by internal colleagues. This aligns with the findings of a research stating that acts of violence are mostly perpetrated by patients, patient families, and fellow employees (Schablon et al. 2018). Negative factors such as lack of information, insufficient personnel and equipment, and communication disruptions increase the risk of violent behavior in healthcare settings (Mento et al. 2020). Another systematic review also asserts that patients and their relatives are responsible for most violence in hospitals, often influenced by medication or psychiatric conditions (Yusoff et al. 2023).

Several sociodemographic factors have indeed been identified as triggers for violence, including profession and workplace. Nurses comprise the majority of respondents who experienced violence in this study, followed by other professions and doctors. Nurses are more likely to experience violence compared to other professions due to their direct and continuous contact with patients for 24 h (Gates et al. 2002). On average, nurses are three times more at risk than other occupational groups to experience violence in the workplace (Kadir et al. 2019; Fasanya et al. 2015). Many other studies also state that nurses are the profession most prone to experiencing violence in hospitals (Bayram et al. 2017; Joa & Morken 2012; Sturbelle et al. 2020). While other healthcare staff (both medical and non-medical) are also at risk of violence (López-García et al. 2018), we are unable to find a single study where nurses are not the majority. This finding is curiously not in line with a study in China, which did not find a significant association with profession (Zhu et al. 2022).

Most of the violence was found in the emergency department and outpatient care. This finding is supported by studies stating that the emergency department has the highest risk of violence (Kowalenko et al. 2013). It is specifically found in the triage section of the emergency department and in clinic or outpatient departments with poor healthcare systems (Yusoff et al. 2023). Several factors contributing to this include ineffective reservation/waiting systems, lack of comprehensive services, and staff shortages. However, aside from these areas, violence is also often found in psychiatric wards, pediatric departments, operating rooms, and intensive care units in some studies (Liu et al. 2019; Ferri et al. 2016), while in this study, no violence was found in these departments.

Additionally, a significant relationship was found between the workplace and the occurrence of verbal abuse. No significant relationship was found with other types of violence. This is consistent with a study conducted in Nepal, where a significant relationship was found between working in the emergency department and verbal abuse (Bhusal et al. 2023).

Generally, many studies do not align with this nonsignificant finding between sociodemographic characteristics and violence. A systematic review found that violence more frequently occurs in younger individuals, those with less experience, and in the workforce working in shifts (especially evening and night shifts) (Yusoff et al. 2023). This was also found in a review study which emphasized that risk factors for violence can include younger age, gender, long working duration, and relatively short working tenure in hospitals (Pagnucci et al. 2022). A study in China also identified age, gender, and marital status as risk factors (Zhu et al. 2022).

It is crucial to have policies and methods addressing these factors, such as training courses that focus on building healthcare professionals' relationships with patients, enhancing employees' communication skills, ensuring accurate reporting of every violent incident, and fostering management commitment and employee involvement in WPV prevention programs (Ettore et al. 2018). Support is also required for workers experiencing psychological impacts from workplace violence in hospitals to prevent disruptions to their performance and patient care (Kadir et al. 2019; Kholis et al. 2019). Management should also strive to eliminate the misconception that WPV is always part of the job and nurture that culture (Spencer et al. 2023).

Conclusions

This study reveals a notably low prevalence of workplace violence among healthcare workers in Yogyakarta's hospitals. A significant number of victims chose not to take any action following incidents of violence, which indicate the local culture of underreporting as one of the main concerns. The study also highlights nurses and the emergency department staff being most vulnerable to experiencing violence that underscore the need for targeted interventions in these high-risk departments.

It is important to consider that these findings are limited to an overview of WPV occurring in public hospitals. Thus, it should be followed up with surveys from private hospitals in Yogyakarta to obtain a more comprehensive picture of the violence experienced by all healthcare workers in the area. Further research should also be conducted regarding interventions that can effectively reduce unreported cases in Indonesian hospitals, which ranges from preventive measures, reporting procedures, and changes to policy or management.

Abbreviations

DIY	*Daerah Istimewa Yogyakarta* (Special Region of Yogyakarta)
KUHP	*KitabUndang-Undang Hukum Pidana* (Indonesian Criminal Code)
K3RS	*Keselamatan dan Kesehatan Kerja Rumah Sakit* (Hospital occupational health and safety training)
ICN	International Council of Nurses
ICU	Intensive care unit
ILO	International Labour Office
PSI	Public Services International
RSA	*Rumah Sakit Akademik* (Academic hospital)
RSUD	*Rumah Sakit Umum Daerah* (Regional general hospital)
RSUP	*Rumah Sakit Umum Provinsi* (Provincial general hospital)
WHO	World Health Organization
WPV	Workplace violence

Supplementary Information

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Supplementary Material 1.

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Authors' contributions
All authors are contributing and responsible for the collection, analysis, and interpretation of the data, including the writing and the decision to publish the study.

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Availability of data and materials
The data supporting the findings of this study are available within this article and its supplementary material. Raw data that support the findings of this study are available from the corresponding author, upon reasonable request.

Declarations

Ethics approval and consent to participate
The study has been approved by the Medical and Health Research Ethics Committee (MHREC) of Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, with the reference number KE/FK/0502/EC/2023.

Consent for publication
Informed consent was obtained from all participants prior to their involvement in the study and was put before they filled in the questionnaire. Participants were provided with detailed information regarding the study objectives, procedures, potential risks, and benefits, and their voluntary participation was emphasized. Confidentiality and anonymity of participants were strictly maintained throughout the study.

Competing interests
The authors declare that they have no competing interests.

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