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Workplace Violence against Registered Doctors in Nepal

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ABSTRACT

Background: Workplace violence against health workers is rising globally. This study aimed to assess the nationwide prevalence and associated factors of workplace violence against Nepal Medical Council-registered Nepali doctors.

Methods: A nationwide web-based study was conducted among 420 Nepal Medical Council-registered Nepali doctors using a Google form. Data was cleaned and coded in Ms Excel 2021 and then analyzed using IBM SPSS version 21.0. Frequencies and proportions were calculated for categorical variables. Chi-square test was used to assess the associations between different independent variables with presence of workplace violence, taking p-value of less than 0.05 as statistically significant. Significant variables from bivariate analysis were fitted in binomial logistic regression model to determine strength of association at 95% confidence interval.

Results: Overall, 196 (46.67%) doctors experienced some form of workplace violence, with verbal abuse being the commonest (194; 46.19%). No action was taken against perpetrators in 11 (42.31%) physical violence, 125 (64.43%) verbal abuse and 15 (71.43%) racial harassment cases. Doctors working in more than two clinics/hospitals (AOR 4.09, p-value 0.007, 95% CI 1.50-11.48) and having zero vacations in the last six months (AOR 3.08, p-value 0.036, 95% CI 1.07-8.82) were found to be at higher risk of physical violence. Verbal abuse was more likely among those working in government hospitals (AOR 0.55, p-value 0.004, 95% CI 0.37-0.83) and working over 48 hours a week (AOR 1.89, p-value 0.003, 95% CI 1.25-2.86).

Conclusions: The burden of workplace violence was notably high in Nepal (46.67%), mainly verbal abuse (46.19%). Long working hours, lack of rest and working in multiple clinics/hospitals were the contributing factors.

Keywords: Doctors; Nepal; workplace violence.

INTRODUCTION

Workplace violence (WPV) refers to any incident where staff are abused, threatened or assaulted in connection with their work, including during commutes, posing a risk to their safety, well-being or health. It includes physical assault (e.g. beating, kicking, slapping, pushing), psychological violence (e.g. verbal abuse, bullying, threat) and sexual assault.[1]

A systematic review done in 2023 found that globally 45.60 to 90.00% of health workers globally experienced WPV, with verbal abuse being the most common.[2] Violence against doctors is also on the rise in Nepal, with a recent study conducted in a tertiary hospital of Kathmandu reporting that 45.50% of the doctors had faced some type of WPV.[3]

WPV negatively impacts health workers' physical and mental health, job satisfaction and professional performance, while degrading quality and increasing health care cost.[4,5] This study was conducted to determine the national prevalence and associated factors of WPV against Nepal Medical Council (NMC)-registered Nepali doctors.

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METHODS

A nationwide web-based cross-sectional study was conducted among doctors registered in NMC. Following ethical approval from Ethical Review Board (ERB) of Nepal Health Research Council (NHRC) (Approval reference number 1004), a validated questionnaire was disseminated as online Google Form through online platforms like Doctors' Society of Nepal (DSON), Doctors' View of Nepal (DVON) and Nepalese Doctors' Lounge (NEDOL). Participation was voluntary and self-administered. The first page of the Google Form contained a participant information sheet, consent form and a field to enter the NMC number. Submission of the form after entering NMC number and clicking on the "I Agree" button was considered as providing consent for the study. Incomplete forms or those without NMC numbers were excluded from the study.

The questionnaire had two parts: the first contained semi-structured questions regarding socio-demographical and work-related details of the participants, while the second focused on WPV, adapted from a tool developed and validated by International Labour Office (ILO), International Council of Nurses (ICN), World Health Organization (WHO) and Public Services International (PSI).[1]

Based on a prior study showing 45.50% WPV prevalence among doctors in a tertiary hospital of Kathmandu,[3] the required sample size was calculated to be 420, using a 5% margin of error, 95% confidence interval, and accounting for a 10% non-response rate. Data collection was started from 24th January 2024 and continued till the required sample size was reached, after which responses were not accepted.

Data from Google Forms was cleaned and coded in Microsoft Excel 2021, then analyzed using Statistical Package for Social Sciences (SPSS) version 21.0. Frequencies and percentages were calculated for categorical variables. Normality of the data was assessed using Shapiro-Wilk and Kolmogorov-Smirnov tests. Median and interquartile range were calculated for non-parametric continuous data. Chi-square test was used to assess the association between independent variables and different types of WPV (physical violence (PV), verbal abuse (VA), sexual harassment (SH) and racial harassment (RH)), taking p-value less than 0.05 as statistically significant. Statistically significant variables from bivariate analysis were included in binomial logistic regression to determine the association with different WPV at 95% confidence interval and p-value of 0.05.

RESULTS

The median age of the participants was 31 years (Interquartile Range: 8), ranging from 24 to 65 years. Most were from Bagmati (135/420, 32.14%) and Gandaki (132/420, 31.43%) provinces. Fourty participants (9.52%) worked in more than two clinics/hospitals, while the rest worked in one or two clinics/hospitals. Fifty-one (12.14%) worked over eight night shifts per month. While 110 (26.19%) participants took no holidays in a month, 47 (11.19%) took more than four. The personal and work-related details of the participants are given in Table 1.

Table 1. Personal and work-related details of the participants (n=420).

Variables	Categories	Frequency	Percentage
Gender	Male	269	64.05
	Female	151	35.95
Marital status	Currently married	224	53.33
	Never married	192	45.72
	Divorced/Separated/Widowed	4	0.95
Highest qualification	Graduates (MBBS, BDS)	238	56.67
	Masters (MD, MS, MDS, MPH)	178	42.38
	Super-specialization (DM, MCh)	4	0.95
Current position	Medical Officer	139	33.10
	Resident	115	27.38
	Consultant (non-teaching)	74	17.62
	Lecturer & Assistant Professor	73	17.38
	Associate Professor & Professor	19	4.52

Table 1. Personal and work-related details of the participants (n=420).

Variables	Categories	Frequency	Percentage
Primary workplace	Government hospital	221	52.62
	Private clinic/hospital	189	45.00
	Others*	10	2.38
Department	Medical departments	169	40.24
	Emergency, Trauma and critical care	106	25.24
	Surgical departments	79	18.81
	Others†	66	15.71
Work experience (years)	≤5	223	53.10
	>5	197	46.90
Working hours per week	≤48 hours	210	50.00
	>48 hours	210	50.00
Vacations in last 6 months	Zero	168	40.00
	At least one	139	33.09
	More than one	113	26.91

*I/NGO, Health directorate, Province Public Health laboratory

†Pre-clinical Sciences, Laboratory sciences and diagnostics, Forensic medicine, Non-hospital settings (Policy-making, I/NGO)

Out of 420 participants, 46.67% reported experiencing at least one type of WPV, with the highest rates among doctors working in Gandaki and Bagmati provinces (Table 2).

Table 2. Prevalence of workplace violence in different provinces of Nepal (n=420).

Province	Physical violence		Verbal abuse		Sexual harassment		Racial harassment	
	N	%	N	%	N	%	N	%
Koshi	2	7.69	9	4.64	-	-	2	9.52
Madhesh	1	3.85	11	5.67	-	-	2	9.52
Bagmati	9	34.62	61	31.44	2	40.00	5	23.81
Gandaki	10	38.46	88	45.36	3	60.00	9	42.86
Lumbini	4	15.38	20	10.31	-	-	3	14.29
Karnali	-	-	2	1.03	-	-	-	-
Sudurpaschim	-	-	3	1.55	-	-	-	-
National	**26**	**6.19**	**194**	**46.19**	**5**	**1.19**	**21**	**5.00**

In 21 out of 26 cases (80.77%) of PV and 132 out of 194 cases (68.04%) of VA, relatives of patients/clients were the main perpetrators, while manager/supervisor and external colleagues were the main perpetrators (two out of four cases, 40.00%) for SH (Table 3).

Table 3. Perpetrators in different types of workplace violence (n=420).

Perpetrators	Physical violence		Verbal abuse		Sexual harassment		Racial harassment	
	N	%	N	%	N	%	N	%
Patient/Client	3	11.53	32	16.49	-	-	4	19.05
Relative of patient/client	21	80.77	132	68.04	-	-	8	38.10
Staff member	-	-	12	6.19	-	-	4	19.05
Manager/Supervisor	-	-	11	5.67	2	40.00	4	19.05
External colleague/worker	-	-	4	2.06	2	40.00	-	-
General public	2	7.69	1	0.52	1	20.00	1	4.76
Seniors	-	-	2	1.03	-	-	-	-

Only six (23.08%) victims of PV and 13 (6.70%) victims of VA reported any action was taken to investigate their incidences, while no action was taken for SH and RH cases. Perpetrators faced no consequences in 11 cases of PV (42.31%), 125 cases of VA (64.43%), five cases of SH (100.00%) and 15 cases of RH (71.43%) (Table 4).

Table 4. Consequences for the perpetrators of workplace violence (n=420).

Consequences	Physical violence		Verbal abuse		Sexual harassment		Racial harassment	
	N	%	N	%	N	%	N	%
None	11	42.31	125	64.43	5	100.00	15	71.43
Verbal warning issued	8	30.77	41	21.13	-	-	2	9.52
Discontinued care	2	7.69	5	2.58	-	-	1	4.76
Report to police	-	-	4	2.06	-	-	-	-
Prosecuted	2	7.69	3	1.55	-	-	-	-
Written agreement, public apology	1	3.85	-	-	-	-	-	-
Don't know	2	7.69	17	8.76	-	-	3	14.29

Most PV cases (20/26, 76.92%) of PV were not reported, mainly due to beliefs that reporting was useless (8/20, 40.00%), fear of negative consequences (4/20, 20.00%), or lack of knowledge on where to report (4/20, 20.00%). Among VA victims, 69 (44.23%) reasoned that reporting was useless, 27 (17.31%) said it was not important and 21 (13.46%) feared negative consequences. Likewise, 10 (52.63%) victims of RH and three (75.00%) victims of SH didn't report as they believed it would be useless, while seven (36.84%) victims of RH and one (25.00%) victim of SH feared negative consequences.

Bivariate analysis showed statistically significant association of PV with number of workplaces (p-value 0.028) and vacations in the last six months (p-value 0.005). VA showed statistically significant association with primary workplace (p-value 0.004), weekly working hours (p-value<0.001), number of holidays per month (p-value 0.003) and number of vacations taken in the last six months (p-value 0.002). RH was significantly associated with gender (p-value 0.034), marital status (p-value 0.005), qualification (p-value 0.006) and total work experience (p-value<0.001) (Table 5).

Table 5. Association between different independent variables and workplace violence (n=420).

Variables	Categories	PV	VA	SH	RH
		N (%)	N (%)	N (%)	N (%)
Gender	Male	19 (7.06)	123 (45.72)	1 (0.37)	18 (6.69)
	Female	7 (4.64)	71 (47.02)	4 (2.65)	3 (1.98)
	p-value	0.322	0.798	0.058	**0.034**
Marital status	Currently single	14 (7.14)	93 (47.45)	3 (1.53)	16 (8.16)
	Currently married	12 (5.36)	101 (45.09)	2 (0.89)	5 (2.23)
	p-value	0.449	0.628	0.668	**0.005**
Qualification	Graduates	16 (6.72)	113 (47.48)	1 (0.42)	18 (7.56)
	Specialization and super-specialization	10 (5.49)	81 (44.51)	4 (2.19)	3 (1.65)
	p-value	0.605	0.545	0.171	**0.006**
Work experience (in years)	≤5	16 (7.17)	105 (47.09)	2 (0.89)	19 (8.52)
	>5	10 (5.08)	89 (45.18)	3 (1.52)	2 (1.02)
	p-value	0.373	0.696	0.669	**<0.001**
Primary workplace	Government hospital	13 (5.88)	118 (53.39)	2 (0.90)	12 (5.43)
	Private clinic/hospital	12 (6.35)	74 (39.15)	3 (1.59)	9 (4.76)
	Others†	1 (10.00)	2 (20.00)	0 (0.00)	0 (0.00)
	p-value	0.581	**0.004**	0.704	0.896
No. of workplace	≤2	20 (5.26)	175 (46.05)	4 (1.05)	20 (5.26)
	>2	6 (15.00)	19 (47.50)	1 (2.50)	1 (2.50)
	p-value	**0.028**	0.861	0.395	0.708

Table 5. Association between different independent variables and workplace violence (n=420).

Variables	Categories	PV	VA	SH	RH
		N (%)	N (%)	N (%)	N (%)
Working hours per week	≤48	9 (4.29)	79 (37.62)	3 (1.43)	9 (4.28)
	>48	17 (8.09)	115 (54. 76)	2 (0.95)	12 (5.71)
	p-value	0.105	**<0.001**	0.653	0.502
No. of holidays per month	Zero	11 (10.00)	64 (58.18)	2 (1.81)	10 (9.09)
	1-4	14 (5.32)	116 (44.11)	3 (1.14)	10 (3.80)
	>4	1 (2.13)	14 (29.79)	0 (0.00)	1 (2.12)
	p-value	0.124	**0.003**	0.798	0.079
No. of vacations in last six months	Zero	18 (10.71)	95 (56.55)	3 (1.78)	10 (5.95)
	At least one	3 (2.16)	56 (40.29)	2 (1.44)	9 (6.47)
	More than one	5 (4.42)	43 (38.05)	0 (0.00)	2 (1.77)
	p-value	**0.005**	**0.002**	0.452	0.179

PV: Physical Violence, VA: Verbal Abuse, SH: Sexual Harassment, RH: Racial Harassment

*Pre-clinical sciences, Laboratory sciences and diagnostics, Forensic sciences, Non-hospital settings

†I/NGO, Health directorate, Province Public Health laboratory

Binomial logistic regression showed doctors working in more than two hospitals/clinics had 4.09 times higher risk of PV (95% CI 1.5-11.48), while those working over 48 hours per week had 1.89 times higher risk of VA (95% CI 1.25-2.86) (Table 6).

Table 6. Binomial logistic regression to find factors determining workplace violence (n=420).

Variables	Physical Violence	Verbal Abuse	Racial Harassment
	AOR (95% CI)	AOR (95% CI)	AOR (95% CI)
Work experience (in years)			
≤5			**6.94 (1.09-44.17)**
>5			Ref.
Primary workplace			
Government hospital		Ref.	
Private clinic/hospital		**0.55 (0.37-0.83)**	
Others		0.32 (0.06-1.62)	
No. of workplace			
≤2	Ref.		
>2	**4.09 (1.5-11.48)**		
Working hours per week			
≤48 hours		Ref.	
>48 hours		**1.89 (1.25-2.86)**	
No. of vacations in last six months			
Zero	**3.08 (1.07-8.82)**	1.71 (0.99-2.93)	
At least one	0.51 (0.12-2.19)	0.98 (0.57-1.66)	
More than one	Ref.	Ref.	

AOR: Adjusted Odds Ratio, CI: Confidence Interval

DISCUSSION

In our study, 46.67% of the doctors faced WPV, mainly verbal abuse, aligning with previous findings of Nepal (45.00-70.00%).[3,6,7] Relatives of patients were predominantly involved in physical violence and verbal abuse in our study, which also corroborates with other studies.[3,6,8-10] Such incidences take a serious toll on health workers, leading them to stress, burnout and reduced job satisfaction, while also negatively affecting the quality of health care.[11-13]

Our findings show that incidences of WPV remain significantly underreported. This trend is consistent with studies conducted in different parts of the world, which also highlight widespread underreporting.[6,8,14-16] Such underreporting may be the result of unclear reporting procedures, fear of retaliation, normalization of such incidents, and a perception that reporting will not result in meaningful action. Enhancing reporting of WPV requires strong institutional support, implementation of clear policies, establishment of standardized and confidential reporting systems and continuous education and training of health workers on recognizing and addressing WPV.[14]

This study also highlights a concerning lack of action taken against perpetrators, even in reported cases - 42.31% of PV, 64.43% VA, 100.00% SH and 71.43% RH cases saw no response. Patterns of inaction have been observed in studies from Bangladesh[8,17] and Kenya[18] also. When perpetrators of such violence face no consequences, it makes the health workers feel unsupported and unsafe, damaging their morale and trust in the very system designed to protect them; moreover, it may embolden the offenders.[16,19] Absence of even minimum consequences for the offenders, especially in cases of sexual harassment, is particularly concerning.

Our study found that doctors with less professional experience, who worked longer weekly hours and had not taken any vacation in the past six months were at greater risk of experiencing WPV. Additionally, doctors working in government hospitals had 45% higher odds of encountering VA compared to those working in private settings, consistent with findings from previous studies.[8,10,15,17] Overcrowding of patients in public hospitals with increased doctor-patient ratio, longer waiting times and poor infrastructures, among other factors, could be the responsible factors for more cases of WPV in government settings.[2,15,20,21]

In our study, doctors with five or less years of professional experience were found to be at a higher risk of WPV, a finding consistent with previous studies.[9,22-24] One possible contributing factor is that young doctors may lack well-developed communication and counselling skills, often placing emphasis only on clinical management.[21] It is essential to recognize that, regardless of level of experience, all doctors should demonstrate empathy towards their patients as a fundamental aspect of medical practice.

Furthermore, our study found that doctors working more than 48 hours a week were more at risk of VA, which is similar to the findings of studies conducted in Nepal,[3,6] China[25] and Myanmar.[9] Prolonged working hours can lead to physical and mental exhaustion among health workers, contributing to decreased work performance and burnout. These may impair effective communication with patients and their families, who may develop a sense of inadequate patient care, increasing the likelihood of WPV.[6,26]

This study has several limitations. As the survey was self-administered via Google Forms, it may not have adequately captured the perspectives of those without regular internet access or those who opted not to disclose their experiences. Consequently, the findings may not be fully representative of the experiences of all registered doctors in Nepal. Nevertheless, the results underscore a critical issue that warrants serious attention and further investigation.

CONCLUSIONS

Long working hours with inadequate rest, unclear reporting mechanisms, weak legal enforcement and limited institutional support have played significant roles in increased incidences of WPV in Nepal. Thus, there is an urgent need for establishment of clear work policies, robust reporting and response systems, and a workplace culture that prioritizes safety and respect for healthcare workers to effectively address WPV in healthcare settings.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

REFERENCES

1. International Labour Office, International Council of Nurses, World Health Organization, Public Services International. Workplace violence in the health sector: country case study - questionnaire

[Internet]. Geneva:ILO/ICN/WHO/PSI. 2003. [cited 2023 Jul 27]. [Article]

2. Yusoff HM, Ahmad H, Ismail H, Reffin N, Chan D, Kusnin F, et al. Contemporary evidence of workplace violence against the primary healthcare workforce worldwide: a systematic review. Hum Resour Health [Internet]. 2023 Oct 13 [cited 2023 Oct 31];21(1):82. [DOI]

3. Bhusal A, Adhikari A, Pradhan PMS. Workplace violence and its associated factors among health care workers of a tertiary hospital in Kathmandu, Nepal. PLOS ONE [Internet]. 2023 Jul 27 [cited 2023 Jul 30];18(7):e0288680. [DOI]

4. Kingma M. Workplace violence in the health sector: a problem of epidemic proportion. Int Nurs Rev [Internet]. 2001 Sep [cited 2023 Oct 31];48(3):129-30. [DOI]

5. Vento S, Cainelli F, Vallone A. Violence against healthcare workers: A worldwide phenomenon with serious consequences. Front Public Health [Internet]. 2020 [cited 2023 Oct 31];8. [DOI]

6. Adhikari B, Subedi R, Thakur RK, Thapa M, Karki SS, Dhungana B, et al. Prevalence, associated factors, and impact of workplace violence among physicians. J Nepal Health Res Counc [Internet]. 2022 [cited 2025 May 13];20(3):636-44. [Article]

7. Dhamala B, Bhattarai P, Sharma C, Thapa S. Workplace violence experienced by nursing staff at a tertiary hospital in urban Nepal. The Columbia University Journal of Global Health [Internet]. 2021;10(2). [DOI]

8. Shahjalal M, Gow J, Alam MM, Ahmed T, Chakma SK, Mohsin FM, et al. Workplace violence among health care professionals in public and private health facilities in Bangladesh. Int J Public Health [Internet]. 2021 Dec 31 [cited 2025 May 13];66:1604396. [DOI]

9. Yadanar, Thein KMM, Thandar M, Win HH. Workplace violence among nurses at a tertiary hospital in Myanmar: a cross-sectional study. WHO South-East Asia J Public Health [Internet]. 2023 Dec [cited 2025 May 13];12(2):93. [Article]

10. Banga A, Mautong H, Alamoudi R, Faisal UH, Bhatt G, Amal T, et al. ViSHWaS: Violence Study of Healthcare Workers and Systems—a global survey. BMJ Glob Health [Internet]. 2023 Sep 11 [cited 2025 May 13];8(9). [Article]

11. Shah S, Paudel K, Kashyap A. Violence against doctors in Nepal: a growing crisis demanding urgent actions. Lancet Reg Health - Southeast Asia [Internet]. 2024 Jul 1 [cited 2025 May 13];26. [Article]

12. Havaei F. Does the type of exposure to workplace violence matter to nurses' mental health? Healthcare [Internet]. 2021 Jan 5 [cited 2023 Nov 5];9(1):41. [DOI] [PMID]

13. Hobbs FDR. Fear of aggression at work among general practitioners who have suffered a previous episode of aggression. Br J Gen Pract. 1994 Sep;44(386):390-4. [PMCID]

14. Lim MC, Jeffree MS, Saupin SS, Giloi N, Lukman KA. Workplace violence in healthcare settings: the risk factors, implications and collaborative preventive measures. Ann Med Surg [Internet]. 2022 May 13 [cited 2022 Dec 21];78:103727. [DOI]

15. Zafar W, Siddiqui E, Ejaz K, Shehzad MU, Khan UR, Jamali S, et al. Health care personnel and workplace violence in the emergency departments of a volatile metropolis: results from Karachi, Pakistan. J Emerg Med [Internet]. 2013 Nov [cited 2025 May 13];45(5):761-72. [PMCID]

16. Kvas A, Seljak J. Unreported workplace violence in nursing. Int Nurs Rev [Internet]. 2014 Sep [cited 2025 May 13];61(3):344-51. [DOI]

17. Shahjalal Md, Alam MM, Khan MdNA, Sultana A, Zaman S, Hossain A, et al. Prevalence and determinants of physical violence against doctors in Bangladeshi tertiary care hospitals. Hum Resour Health [Internet]. 2023 Mar 28 [cited 2023 Jul 31];21(1):26. [Article]

18. Kibunja BK, Musembi HM, Kimani RW, Gatimu SM. Prevalence and effect of workplace violence against emergency nurses at a tertiary hospital in Kenya: a cross-sectional study. Saf Health Work [Internet]. 2021 Jun [cited 2023 Jul 30];12(2):249-54. [DOI]

19. Adhikari B, Subedi R, Thakur RK, Shakya P. The wounded healer during COVID-19: unraveling the violence against healthcare workers in Nepal. J

Glob Health Econ Policy [Internet]. 2021 Jul 29 [cited 2025 May 14];1:e2021003. [DOI]

20. Kumari A, Kaur T, Ranjan P, Chopra S, Sarkar S, Baitha U. Workplace violence against doctors: characteristics, risk factors, and mitigation strategies. J Postgrad Med [Internet]. 2020 [cited 2022 Dec 19];66(3):149–54. [DOI] [PMCID]

21. Ambesh P. Violence against doctors in the Indian subcontinent: A rising bane. Indian Heart J [Internet]. 2016 [cited 2023 Nov 1];68(5):749–50. [DOI] [PMCID]

22. Liu J, Gan Y, Jiang H, Li L, Dwyer R, Lu K, et al. Prevalence of workplace violence against healthcare workers: a systematic review and meta-analysis. Occup Environ Med [Internet]. 2019 Dec [cited 2023 Oct 31];76(12):927–37. [DOI]

23. Sharma S, Lal Gautam P, Sharma S, Kaur A, Bhatia N, Singh G, et al. Questionnaire-based evaluation of factors leading to patient-physician distrust and violence against healthcare workers. Indian J Crit Care Med Peer-Rev Off Publ Indian Soc Crit Care Med [Internet]. 2019 Jul [cited 2022 Nov 25];23(7):302–9. [DOI] [PMCID]

24. Hossain MM, Sharma R, Tasnim S, Al Kibria GM, Sultana A, Saxena T. Prevalence, characteristics, and associated factors of workplace violence against healthcare professionals in India: a systematic review and meta-analysis [Internet]. Public and Global Health; 2020 Jan [cited 2023 Nov 5]. [Article]

25. Tian Y, Yue Y, Wang J, Luo T, Li Y, Zhou J. Workplace violence against hospital healthcare workers in China: a national WeChat-based survey. BMC Public Health [Internet]. 2020 Apr 29 [cited 2022 Dec 19];20(1):582. [Article]

26. Giménez Lozano JM, Martínez Ramón JP, Morales Rodríguez FM. Doctors and Nurses: A systematic review of the risk and protective factors in workplace violence and burnout. Int J Environ Res Public Health [Internet]. 2021 Jan [cited 2025 May 16];18(6):3280. [DOI] [PMCID]