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RESEARCH ARTICLE OPEN ACCESS

Violence towards health workers in the workplace: exploratory findings in secondary healthcare facilities in Kaduna metropolis, Northern Nigeria

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Abstract
Objective: To determine the prevalence of workplace violence and associated factors in secondary health facilities in Kaduna Metropolis.
Methods: This was a cross-sectional study where a semi-structured questionnaire was used to obtain data from 177 health workers who were selected by multistage sampling. The Data was analyzed using SPSS version 23 and results were presented using frequency tables. The Chi-square test was used to test for association between independent and dependent variables. Fisher's Exact Test was used where more than 20% of the cells had a value less than 5. The level of statistical significance was set at a p-value of <0.05.
Results: The results showed that 114 (64.4%) of the respondents had experienced workplace violence; the form which was experienced by most of the respondents was verbal abuse 100 (87.7%). Most (92; 80.7%) of the respondents did nothing following the incident. Most of the respondents believed that lack of bed space 89 (50.3%) and long waiting time 119 (67.3%) are largely responsible for violent situations. There was a statistically significant relationship between the experience of workplace violence and respondents' age (p=0.001); sex (p=0.00146); cadre (p=0.0012) and work experience (p=0.00483).
Conclusion: Most of the respondents had experienced violence in the workplace but did not pursue further action. Training health workers on the means to identify volatile situations and address workplace violence is crucial to ensuring the reduction in the prevalence of harmful incidents. The safety and protection of health workers are integral to the adequate functioning of health systems.

Keywords: Workplace violence, health workers, health facilities, Kaduna Metropolis

Plain English summary

Violence in the workplace is still an issue all over the world and could result in several undesirable effects. Healthcare settings (especially in developing countries) contribute majorly to the burden of workplace violence. There are many forms but verbal and physical are the most commonly occurring type. This study was conducted to determine the prevalence of workplace violence and its associated factors in Kaduna Metropolis. The commonest type of violence experienced by workers was verbal. Violence was found to be associated with respondents' age, sex, cadre, and work experience. Training health workers in preventing and mitigating violent situations is essential to providing a safe work environment.

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Background

Workers all over the world are exposed to hazards in their workplace; with outcomes ranging from mild injuries and acute illnesses to severe complications and even death (1). Healthcare settings contribute 25% to the global burden of workplace violence incidents (2). Healthcare workers are, by the sensitive nature of their jobs, exposed to several environmental hazards as well as hazards arising from violent interactions with patients, patients' relatives, and other colleagues (3, 4). Workplace violence is defined as the act or threat of violence, ranging from verbal abuse to physical assaults directed toward persons at work or on duty (5). Violence involving clients (patients, their relatives, and visitors) is the most prevalent; it is referred to as client-on-worker violence (6). An estimated 8% to 38% of health care workers experience physical violence at some point in the course of their work, however, the prevalence of verbal abuse is much higher (7). Workplace violence affects psychological health, and physiological well-being and in some cases leads to death. Absenteeism and diminished productivity are some indirect effects with far-reaching consequences of suboptimal patient management and a negative impact on socioeconomic status (8, 9).

Factors that increase the likelihood of a client becoming violent include mental health disorders, substance abuse, stressful situations especially involving vulnerable populations (children, pregnant women, and the elderly), patients who are under the influence of certain medication, patients with chronic liver or kidney diseases which cause altered behavior (10). The likelihood of a health worker experiencing workplace violence is determined by some factors such as cadre, the department where staff works, gender, and time of the day. Nurses have been found to have a four-fold increased risk of experiencing violence at work (11). Research also shows that health workers in psychiatric wards and those working in emergency rooms are at an increased risk of experiencing at least one form of violence. Female health workers and those who work late are at an increased risk of violence (12).

There are well outlined preventive measures for healthcare workers in developed countries in the form of zero-tolerance policies for violence and Workplace Violence Prevention Programs in health facilities (13). Despite the concerted efforts of the World Health Organisation (WHO), International Labour Organisation (ILO), and other organizations to stop workplace violence, especially in healthcare settings, many health workers in low and middle-income countries are still largely unprotected (7, 12). Cases of violence in health care settings in many developing nations are grossly under-reported. This is a result of a complex interplay of socio-cultural, organizational; economic, and health system-related factors (8, 12, 14). Against this backdrop, findings from these nations are seen as conservative estimates. Human resources for health in developing many sub-Saharan nations such as Nigeria are inadequate to provide services for their target population. Additionally, they are inequitably distributed with urban areas having a higher concentration of health workers (12, 15). The insufficient health worker-to-client ratio causes longer waiting times and reduced overall client satisfaction. These factors create a stressful environment which increases the probability of violent outbursts (12).

This study was carried out in secondary healthcare facilities in Kaduna state, Nigeria to determine the prevalence of workplace violence towards health workers and the factors associated with it.

Methods

Study Area

Kaduna Metropolis is made up of two main local government areas (LGA), the Kaduna North and the Kaduna South. Other adjoining local government areas that make up the entire metropolis are Igabi and Chikun. The population of Kaduna North LGA as at the 2006 census was 364,575, Kaduna South 402,731, Igabi 430,753 and Chikun LGA 372,272. With a growth rate of 3%, the projected populations of these LGAs as of 2019 are; Kaduna North 538,470, Kaduna South 594,826, Igabi 636,214, and Chikun 549,838. The metropolis is surrounded by a rural countryside of scattered farmsteads with a gentle slope which gives it room for expansion.

Kaduna North LGA is made up of 21 public healthcare centers (15 primary, five secondary, and one tertiary healthcare center) and over 165 private healthcare facilities. Kaduna South LGA is made up of 29 public healthcare centers (26 primary, two secondary, and one tertiary healthcare center) and over 112 private healthcare facilities. Igabi LGA is made up of 11 public healthcare centers (nine primary, one secondary, and one tertiary healthcare center) and over 68 private healthcare facilities. Chikun LGA is made up of 8 public healthcare facilities

(seven primary and one secondary healthcare center) with over 119 private healthcare facilities. These secondary healthcare facilities are made up of a total of 1,635 healthcare workers (each facility having 27.7%, 27.5%, 17.6%, 16.7%, and 10.5% of the total number of workers).

Study Design
This was a descriptive cross-sectional study conducted in April 2021.

Study Population
The study population were health workers in secondary health facilities in Kaduna Metropolis who had worked for at least one year.

Sample Size Determination
The required sample size (n) is calculated using the formula

$$n = \frac{z^2 pq}{d^2} \quad (16)$$

Where n = the minimum sample size,
z = the percentage point of the standard normal distribution curve, in which the curve defines a 95% confidence interval as 1.96.
p = the prevalence rate from a previous study
q = complimentary probability i.e. 1-p
d = maximum sampling error allowed (precision) at 95% confidence limit i.e. 0.05
The prevalence rate (p) of 88.1% was obtained from a study conducted in a Nigerian tertiary hospital (17).

$$n = \frac{(1.96)^2 \times 0.881 \times 0.119}{0.05^2}$$
$$= 161$$

To correct for non-response, 10% added as non-response rate
N= n + 10% of n
= 161 + 10/100x161
= 161 + 16
= 177
The sample size is 177 healthcare workers in general hospitals in the Kaduna metropolis.

Sampling Technique
A multi-stage sampling technique was used in this study.
Stage 1 (Selection of Hospitals): Kaduna metropolis has five general hospitals of which four were selected (one each from each of the four LGAs which make up Kaduna Metropolis. In the LGA with two secondary health facilities, one was selected using simple random sampling by balloting).
Stage 2 (Selection of Departments): Five departments were selected from each of the four general hospitals using simple random sampling by balloting, making a total of twenty departments.
Stage 3 (Selection of the respondents): The total number of respondents to be selected from each hospital was determined by proportionate allocation. The number of respondents per department was also determined by proportionate allocation. The respondents who met the criteria were selected by simple random sampling using the balloting method.

Data Collection Instrument
The data was collected using a structured interviewer-administered questionnaire, which was adapted from the framework against workplace violence in the health sector developed by ILO/ICN/WHO/PSI (2). The questionnaire consisted of sections on (a) sociodemographic; (b) knowledge of workplace violence; (c) prevalence of the various types of workplace hazards; (d) preventive measures; (e) perceived factors responsible for workplace violence.

Data Analysis
Data collected was analyzed using Statistical Package for Social Sciences (SPSS) version 23. The results were presented in frequency tables. The chi-square test of significance was used to test the association between predictor (age, sex, cadre, work experience) and outcome (experience of workplace violence) variables. Fisher's Exact Test was used where more than 20% of the cells had a value less than 5. The level of statistical significance was set at a p-value of <0.05.

Results
Table 1 showed that the greatest proportion of residents was in the age group 30 to 39 years. The majority of them were female (67.2%) and married (76.8%). Nurses constituted 59.3% of the respondents making them the majority.

Table 1: Sociodemographic Profile of the Respondents (n=177)

Variable	Frequency	Percentage
Age		
20-29	30	16.9

30-39	64	36.1
40-49	49	27.7
≥50	34	19.2
Gender		
Male	58	32.8
Female	119	67.2
Marital Status		
Single	36	20.3
Married	136	76.8
Divorced	1	0.6
Widow/widower	4	2.3
Cadre		
Doctor	48	27.1
Nurse	105	59.3
Pharmacist	8	4.5
Lab Scientist/Technician	16	9.1
Work experience (years)		
≤10	93	52.5
>10	84	47.5

Table 2 showed that 64.4% of the respondents had experienced workplace violence; the form which was experienced by most of the respondents was verbal abuse (87.7%). The majority (80.7%) of the respondents did nothing following the incident. Most of the perpetrators were male (80.7%) and relatives of patients (59.6%). None of the respondents had received any training on handling violent situations in the workplace. Most of the respondents (53.5%) did not know if the hospital they worked in had a policy addressing workplace violence.

Table 2: Distribution of the occurrence of workplace violence

Variable	Frequency	Percentage
Ever experienced workplace violence (n=177)		
Yes	114	64.4
No	63	35.6
Type of workplace violence (n=114)*		
Verbal	100	87.7
Physical	15	13.2
Sexual	2	1.8
Steps that were taken after experiencing workplace violence (n=114)		
Reported to my superior	9	7.9
Did nothing	92	80.7
Sought help from professional association	2	1.8
Fought back physically	13	11.4
Filed a police report	11	9.6
Reason for not reporting (n=92)		
It was not serious enough	84	91.3
The perpetrator apologized	6	6.5
Afraid of repercussions	2	2.2
Did not know where to report	2	2.2
The perpetrator of workplace violence (n=114)		
Patient	41	36.8
Patient's Relative	69	59.6
Colleague	2	1.8
Management staff	2	1.8
Gender of Perpetrator (n=114)		
Male	92	80.7

Female	22	19.3
Received Training on handling workplace violence (n=177)		
No	177	100
Hospital has a laid down policy against workplace violence (n=114)		
No	53	46.5
Don't know	61	53.5

**Multiple options are possible*

According to Table 3, most of the respondents believed that lack of bed space (50.3%) and long waiting time (67.3%) were largely responsible for violent situations.

Table 3: Distribution of respondents' perceived reasons for workplace violence (n=177)*

Variable	Frequency	Percentage
Long waiting time	119	67.2
Healthcare worker's attitude	83	46.9
Lack of bed space	89	50.3
Lack of drugs or commodities	28	15.8
Absence of health workers from their duty post during the night shift or call hours	49	27.7

**Multiple options are possible*

Table 4 shows that there was a statistically significant relationship between respondents' experience of workplace violence and respondents' age (p=0.001); sex (p=0.00146); cadre (p=0.0012) and work experience (p=0.00483).

Table 4: Relationship between socio-demographic characteristics and experience of workplace violence

	Experienced workplace violence		
Variables	**Yes**	**No**	**p-value**
Age			
20-29	24	6	
30-39	58	6	p=0.001
40-49	20	29	
≥50	12	22	
Sex			
Male	26	32	
Female	88	31	p=0.00146
Marital Status			
Single	23	13	
Married	89	47	p=0.874
Divorced	0	1	
Widow/widower	2	2	
Cadre			
Doctor	16	32	
Nurse	87	18	p=0.0012*
Pharmacist	4	4	
Lab Scientist/Technician	7	9	
Work experience (years)			
≤10	71	22	p=0.00483
>10	43	41	

**Fishers exact test*

Discussion

It is disconcerting to note that workplace violence is becoming increasingly prevalent in healthcare settings. This is disproportionately higher in resource-poor countries with most cases going unreported (12). Nearly two-thirds of the respondents from this study had experienced at least one form of workplace violence in the course of their work life. Similar findings (69.4%, 60.1%, and 62.1%) were obtained from studies carried out in Gambia and Osogbo (south-west Nigeria) respectively (11, 18). However, the finding from this study is in contrast to a study carried out in the United States, where 15.5% of the respondents had experienced workplace violence (19). The differences are likely because most of the health care facilities included in the study conducted in the United States had organizational safety and protective measures in place for the workers. The fact that the majority of the respondents have been exposed to violence at the workplace highlights the deplorable state of the health system in that area. Research shows that health workers who are exposed to violence have markedly lower productivity leading to sub-optimal patient management (8).

Verbal abuse was the commonest form of workplace violence experienced by the respondents in this study which is similar to findings from previous studies (17, 18, 20, 21). Over a tenth of the respondents had experienced physical violence in the workplace; which was similar to findings from studies carried out in the Gambia (17.2%), Egypt (15.7%), and China (13.7%) (11, 20, 22). Sexual abuse was the least prevalent as was the case in studies carried out in Enugu (1.9%), China (6.3%), and Taiwan (4.5%) (14, 22, 23). Health care workers have been recognized as one of the most valuable resources in health due to the crucial role they play (3). Against this backdrop, they must be provided with a safe and healthy environment to carry out their duties.

The majority of the respondents did not report the episode of workplace violence to their superiors or filed a complaint; with the greatest proportion of them stating that the incident was not that serious to warrant reporting it. This is similar to findings in Enugu, where only 1% of the respondents filed a complaint (24). In contrast, studies carried out in the United States and China found that the majority of the respondents reported incidents of violence (10, 22). This is likely because health care settings in these countries have well-outlined policies against workplace violence and the workers are trained in handling violent situations (10). Many healthcare facilities in Nigeria do not have policies addressing workplace violence. As a corollary, despite the increasing prevalence of violence in the workplace, workers are unaware of their rights to be protected at work and the procedure for reporting the various forms of abuse.

The perpetrators were found to be mainly patients and their relatives who were mostly male. A study conducted among health workers in the Gambia had similar findings (11). This is unsurprising because patients and their relatives place a lot of expectations on health workers, and when they perceive their needs are not being met they may resort to acts of violence (19). This has the potential to lead to volatile situations where the healthcare workers who are generally seen as caregivers are now the victims (25). The most frequent reason given by respondents as the cause of workplace violence includes long waiting time and poor attitude of health workers. This is similar to findings in studies carried out in Gambia, Egypt, and Osogbo (11, 12, 18). Poor client satisfaction with health services is not an uncommon finding among patients who access care in resource-poor settings (26). This could lead to a violent confrontation between workers and clients which do not help with health care providers' morale. Invariably this leads to a negative feedback effect with diminished productivity and a worsening health system.

This study found that age, sex, cadre, and years of work experience had a statistically significant relationship with the experience of workplace violence. Studies in the USA and a systematic review of studies addressing workplace violence in Africa and China also reported similar findings (10, 12, 21). Younger workers with less working experience are less likely to be equipped to handle stressful work situations when compared to older colleagues with longer work experience (27). Females are more often victims of workplace violence than males (28). This is likely due to inequality, and social and gender-based discrimination which is especially prevalent in patriarchal societies (29). Nurses are more commonly victims of workplace violence. This could be attributed to the fact that they are mostly female, and work near patients for several hours especially those in the wards (18). Health facilities in Nigeria are notoriously understaffed which adds to the pressure of dealing with acute and chronic cases; life and

death situations (26). Against this backdrop, nurses' being the most common victims of workplace violence is not unexpected.

Conclusion

The safety of all workers should be a priority for health facilities as it plays an integral role in maintaining and improving worker productivity; ultimately contributing to the strengthening of the health system. Health facilities should mandate training of all health workers on workplace violence; how to deescalate it, and the right procedure for reporting incidents. They should also have a zero-tolerance policy for workplace violence with grave penalties to discourage the occurrence. Further studies need to be carried out to explore violence from the patients' and their relatives' perspectives.

List of abbreviations

ICN: International Council of Nurses
ILO: International Labour Organisation
LGA: Local Government Area
PSI: Public Services International
USA: United States of America
WHO: World Health Organisation

Declarations

Ethical consideration and consent to participate

Ethical approval was granted by the Ethics and Scientific Committee of Barau Dikko Teaching Hospital, Kaduna (HREC Reference Number: 20-0066). Permission was granted by the Medical Director's office of the various general hospitals in the Kaduna metropolis. Informed verbal consent was obtained from the respondents and the nature of the research was duly explained to them. Respondents were assured of strict confidentiality of the responses provided. They were also informed of the voluntary nature of their participation and that they could withdraw at any point during the research.

Consent for publication

The authors consented to the publication of the work under the creative commons CC Attribution. Non-commercial 4.0 license.

Availability of data and materials

The data are available in the manuscript. The data sets used and analyzed during the current study are available from the corresponding author on a reasonable request.

Competing interests

The authors have reported no conflicts of interest.

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Authors' contributions

UNO and DBO conceived the original idea. UNO wrote the preliminary draft. NB, NAG, and ONV revised the original draft. UNO, UOA, and DBO performed an extensive literature search. All authors were involved in the entire revision process and final approval.

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References

1. International Labour Organisation (ILO). WHO/ILO: Almost 2 million people die from work-related causes each year. Available at https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_819705/lang--en/index.htm. (Accessed 14 February 2022).
2. International Labour Organisation (ILO). Framework guidelines for addressing workplace violence in the health sector: The training manual. Available at: https://www.ilo.org/global/topics/safety-and-health-at-work/resources-library/training/WCMS_108542/lang--en/index.htm. (Accessed 14 February 2022).
3. Joseph B and Joseph M. The health of the healthcare workers. The Indian Journal of Occupational and Environmental Medicine. 2016; 20(2): 71-72. https://dx.doi.org/10.4103%2F0019-5278.197518
4. European Commission. Occupational health and safety risks in the healthcare sector. Available at: https://data.europa.eu/doi/10.2767/27263. (Accessed 14 February 2022).
5. Centres for Disease Control and Prevention (CDC). Occupational Violence. Available at: https://www.cdc.gov/niosh/topics/violence/default.html#:~:text=Workplace%20violence%20is%20the%20act,physical%20injury%2C%20or%20even%20death. (Accessed 14 February 2022)
6. Centres for Disease Control and Prevention (CDC). Types of Workplace Violence. Available at: https://wwwn.cdc.gov/WPVHC/Nurses/Cours

e/Slide/Unit1_5. (Accessed 14 February 2022)
7. World Health Organisation (WHO). Preventing Violence against Workers. Available at: https://www.who.int/activities/preventing-violence-against-health-workers#. (Accessed February 2022)
8. Semordzie D, Asamani L, Fia SD and Amponsah MO. Workplace Violence: The Ripple Ecological Effects, British Journal of Psychology Research. 2017; 5(1): 1-20'
9. Pekar BC, Gillespie GL. Workplace violence: A call for action. Journal of Hospital Administration. 2013;3(1):34-37. https://doi.org/10.5430/jha.v3n1p34
10. Gillespie GL, Gates DM, Miller M, Howard PK. Workplace violence in healthcare settings: Risk factors and protective strategies, Rehabilitative Nursing. 2010;35(5): 29-34. https://doi.org/10.1002/j.2048-7940.2010.tb00045.x
11. Sisawo EJ, Ouédraogo SYYA, Huang SL. Workplace violence against nurses in the Gambia: mixed methods design, BMC Health Services Research. 2017; 17(2): 311-320. https://doi.org/10.1186/s12913-017-2258-4
12. Njaka S, Edeogu OC, Oko CC, Goni MD, Nkadi N. Work place violence (WPV) against healthcare workers in Africa: A systematic review. Heliyon. 2020; 6(9). DOI: https://dx.doi.org/10.1016%2Fj.heliyon.2020.e04800
13. Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers. Available at: www.osha.govwww.osha.gov. (Accessed 15 February 2022)
14. Stanley HO, Nwosu OP. Assessment of Workplace Violence among Primary Healthcare Workers in Enugu Metropolis. Journal of Complementary and Alternative Medical Research. 2020; 6(2):21–30. https://doi.org/10.9734/jocamr/2020/v9i230138
15. World Health Organisation (WHO). Nigeria. Available at: https://www.who.int/workforcealliance/countries/nga/en (Accessed 15 February 2022)
16. Ibrahim T. Sample size determination. Research methodology and dissertation writing for health and allied health professionals. Abuja, Nigeria: Cress Global Link Limited. 2019: 75.
17. Ogbonnaya GU, Ukegbu AU, Aguwa EN, et al.A study on workplace violence against health workers in a Nigerian tertiary hospital, Nigerian Journal of Medicine. 2012; 21(2):174 - 179.
18. Abodunrin L, Adeoye A, Adeomi A, Akande M. Prevalence and forms of violence against health care professionals in a South-Western city, Nigeria. Sky Jornal of Medicine and Medical Sciences. 2014;2(8):67–72.
19. Phillips JP. Workplace Violence against Health Care Workers in the United States. New England Journal of Medicine. 2016; 374(17):1661–1669. https://doi.org/10.1056/NEJMra1501998
20. Abdellah RF, Salama KM. Prevalence and risk factors of workplace violence against health care workers in emergency department in Ismailia, Egypt. Pan African Medical Journal. 2017;26(1):1–8. https://doi.org/10.11604/pamj.2017.26.21.10837
21. Sun P, Zhang X, Sun Y, Ma H, Jiao M, Xing K, et al. Workplace Violence against Health Care Workers in North Chinese Hospitals: A Cross-Sectional Survey. International Journal of Environmental Research and Public Health. 2017; 14(1): 96-99. https://doi.org/10.3390/ijerph14010096
22. Lu L, Dong M, Wang S Bin, Zhang L, Ng CH, Ungvari GS, et al. Prevalence of Workplace Violence Against Health-Care Professionals in China: A Comprehensive Meta-Analysis of Observational Surveys. Trauma, Violence, Abuse. 2020; 21(3):498–509. https://doi.org/10.1177/1524838018774429
23. Chen WC, Hwu HG, Kung SM, Chiu HJ, Wang J Der. Prevalence and Determinants of Workplace Violence of Health Care Workers in a Psychiatric Hospital in Taiwan. Journal of Occupational Health. 2008;50(3):288–293. https://doi.org/10.1539/joh.L7132
24. Chinawa AT, Ndu AC, Arinze-Onyia SU, Ogugua IJ et al. Prevalence of psychological workplace violence among employees of a public tertiary health facility in Enugu, Southeast Nigeria, Nigerian Journal of Clinical Practice. 2020; 23(1): 103-109.
25. Di Martino V. Workplace violence in the health sector Relationship between work stress and workplace violence in the health sector.; Available at: http://www.ilo.org/public. (Accessed 15 February 2022)
26. Akunne MO, Okonta MJ, Ukwe C V., Heise TL, Ekwunife OI. Satisfaction of Nigerian patients with health services: A protocol for a

systematic review. Systematic Review. 2019; 8(1):1–6. https://doi.org/10.1186/s13643-019-1160-z

27. Brown B, Myers D, Casteel C, Rauscher K. Exploring differences in the workplace violence experiences of young workers in middle and late adolescence in the United States. Journal of Safety Research. 2020;74:263–9. https://doi.org/10.1016/j.jsr.2020.06.008
28. Maran DA, Cortese CG, Pavanelli P, Fornero G, Gianino MM. Gender differences in reporting workplace violence: a qualitative analysis of administrative records of violent episodes experienced by healthcare workers in a large public Italian hospital. BMJ Open. 2019; 9(11). DOI: https://dx.doi.org/10.1136%2Fbmjopen-2019-031546
29. Public Services International (PSI). Women are most likely to be affected by violence in the workplace, but we are all victims. Available from: https://www.world-psi.org/en/women-are-most-likely-be-affected-violence-workplace-we-are-all-victims. (Accessed 19 February 2022).