

THE RISK FACTORS FOR WORKPLACE VIOLENCE AGAINST NURSES AND THE PREVENTION STRATEGIES IN PUBLIC HEALTH FACILITIES IN ANAMBRA STATE

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ABSTRACT: *Aim: This study determined the risk factors of* workplace violence against nurses and the prevention strategies in public health facilities in Anambra State. Method: A cross-sectional descriptive design was adopted in conducting the study among nurses working at public secondary and tertiary levels of care facilities in Anambra State. The multi-stage sampling technique was employed to select 5 facilities and a sample size of two hundred and ninety-two nurses. The research instrument was adapted from the WHO standardized questionnaire on workplace violence and the Statistical Software Package version 16.0 was employed for the data analysis. Results: The results revealed that the highest risk factor for the nurses' experience of workplace violence was staff shortage followed by prolonged waiting time and reporting workplace violence is the highest preventive strategy for workplace violence. *Conclusion:* The menace of workplace violence against nurses will be curtailed by mitigating the risk factors and implementing preventive strategies.

KEYWORDS: Risk Factors, Workplace Violence, Nurses, Prevention Strategies, Public Health, WHO



INTRODUCTION

The prevalence of workplace violence among nurses continues to be high despite the obvious negative effect on nurse productivity and quality care delivery (Omotade et al., 2023; Douglas & Enikanoselu, 2019; Abdullahi et al., 2018). Without a doubt, nurses constitute the largest and most easily available workforce within the healthcare industry (Njaka et al., 2020). However, despite their crucial role in the healthcare system, clinical nurses' security for optimal service delivery is being threatened if not denied by workplace violence in hospitals and health systems as they are not provided with sufficient security against workplace violence. This has by extension contributed to the poor health indices in Nigeria resulting in a growing prevalence of workplace violence directed towards nurses (Teymourzadeh, Rashidian, Arab, Akbari-Sari, & Hakimzadeh, 2014). Violence against nurses in their workplace is a major challenge that has attracted increased attention in recent years (Piche, 2020).

BACKGROUND (LITERATURE/THEORETICAL UNDERPINNING)

Violence could be defined as "incidents where employees are abused, threatened, assaulted or subjected to other offensive behavior in circumstances related to their work" (Di martino, 2003).

The World Health Organization (2002) defines violence as "The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation."

The International Labour Office (ILO), International Council of Nurses (ICN), World Health Organization (WHO) and Public Services International (PSI) in a Joint Program on Workplace Violence in the Health Sector (2002), defined a workplace as "Any health care facility, whatever the size, location (urban or rural) and the type of service(s) provided, including major referral hospitals of large cities, regional and district hospitals, health care centres, clinics, community health posts, rehabilitation centres, long-term care facilities, general practitioners' offices, other independent health care professionals. In the case of services performed outside the health care facility, such as ambulance services or home care, any place where such services are performed will be considered a workplace."

According to the International Labour Office (ILO), International Council of Nurses (ICN), World Health Organization(WHO), and Public Services International (PSI) in a Joint Programme on Workplace Violence (WPV) in the Health Sector in 2002, they adapted European commission definition of workplace violence as "incidents where staff are abused, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit or implicit challenge to their safety, well-being or health."

According to the National Institute for Occupational Safety and Health (NIOSH, 2004), workplace violence can be classified into four categories viz-a-viz:

Type I (Criminal Intent): Here, the perpetrator has no rightful relationship to the business or its employee, and the individual commits a crime along with the violence. These crimes can



include thievery, shoplifting, trespassing, and terrorism. The vast majority of workplace homicides (85%) fall into this category, e.g., in healthcare

Type II (*Customer/Client*): The perpetrator has a legal relationship with the business and becomes violent while being attended to. This type involves customers, clients, patients, students, parolees, and any other set of people for which the business offers services. This is the type that occurs in health facilities where the victims are substantially patient caregivers. Other job holders that may suffer this type of violence includes the Police officers, prison staff, flight assistants, and educators and this type accounts for approximately 3% of all workplace homicides.

Type III (Worker on Worker): This can be known as workplace bullying. In this case, the perpetrator is a worker or previous worker in the business who attacks or threatens a fellow staff or former staff member in the workplace. This accounts for approximately 7% of all workplace homicides. e.g., in healthcare.

Type IV (Personal Relationship): The perpetrator has an individual relationship with the intended victim but none with the business. This involves victims of domestic violence assaulted or threatened while at work, and responsible for about 5% of all workplace homicides.

According to the National Institute for Occupational Safety and Health (NIOSH, 2020), 13.2 and 38.8 per 100 nurses per year suffer physical assaults and non-physical assaults respectively. There is an increased prevalence of workplace violence among health workers (Ogbonnaya[•] Ukegbu, Aguwa,& Emma-Ukaegbu, 2012).

Several risk factors have been implicated in the experience of workplace violence such as the age of the participants, department, years of working experience, and length of time with patients (Shi et al., 2016). Workplace violence can have grave physical impacts on the nurse causing mild or serious body injuries. It can affect the victims emotionally leading to low morale for work, poor performance at work, and can even lead to death. It also affects service delivery and even the facility as a whole (NIOSH, 2020). The psychological effect of workplace violence can be very devastating, leading to post-traumatic stress disorder, recurrent memories of the incidence, poor job satisfaction, and decreased quality of healthcare services (Shahjalal et al., 2021). It was also noted that victims of workplace violence can also suffer depression, and loss of self-esteem, and may find it difficult to concentrate due to the trauma (Lim et al., 2022). Actually, violence against nurses in the workplace constitutes a huge problem to the healthcare system, particularly the nursing profession, and should trigger a concern in every well-meaning individual. This necessitated this study to assess the risk factors to workplace violence against nurses and the prevention strategies in public health facilities in Anambra State.



METHODOLOGY

Study design

A cross-sectional descriptive design was adopted in conducting the study among nurses working at public health facilities in Anambra State. This study was carried out among nurses working at public secondary and tertiary levels of care in Anambra State.

Study Population

The study population included 850 nurses working at tertiary (597 nurses) and secondary (253 nurses) facilities in Anambra State.

Sampling Techniques and Sample Size

The study sample size was 292 which was determined using the Cochran formula for crosssectional studies for sample size estimation with the sample size adjusted further using the formula for finite population. The multistage sampling technique was used to select the facilities and respondents for the study. The two tertiary facilities in the state were selected through purposive sampling and cluster sampling was also employed to assemble the secondary facilities according to their senatorial zones. Thereafter, 3 secondary facilities were selected using simple random sampling while proportionate to size sampling was finally adopted to select the respondents from all the sampled facilities.

ANALYSIS AND RESULTS

A total of 292 questionnaires were distributed and 283 were retrieved, making it a 97% return rate. Statistical Software Package version 16.0 (Stata Corp LLC, California, U.S.A., 2019) was used to analyse the data generated from this study. The data presentation was done with the aid of tables and charts.

Variable	Frequency (n=283)	Percentage %	
Age group: 31-40 years	125	44.17	
41-50 years	89	31.45	
51-60 years	32	11.31	
Less than 30 years	37	13.07	
Gender : Female	268	94.70	
Male	15	5.30	
Marital status : Divorced	1	0.35	
Married	244	86.22	
Separated	1	0.35	
Single	37	13.07	

Table 1: Socio-Demographic Data of Respondent Characteristics

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Level of Education : Diploma	86	30.39
Graduate	154	54.42
Postgraduate	43	15.19
Years of experience : 1-5 years	56	19.79
6-10 years	117	41.34
11-15 years	41	14.49
16-20 years	34	12.01
21 years	35	12.37
Respondents Ranks: Assistant Chief Nursing Officer	16	5.65
Assistant Director of Nursing Services	7	2.47
Chief Nursing Officer	32	11.31
Deputy Director of Nursing Services	9	3.18
Nursing Officer I	43	15.19
Nursing Officer II	40	14.13
Principal Nursing Officer	54	19.08
Senior Nursing Officer	82	28.97

The results on the table above portray that the modal age of the respondents that participated in the study was 31-40 years which constituted 44.17% of the respondents, whereas the respondents between 51-60 years (11.31%) were the least.

The results also show that most of the respondents were of female gender 94.70% (268) and 5.30% (15) were males. This clearly shows that there were more female nurses than male nurses that participated in the study.

The marital status of the respondents is also shown in the results. The results portray that 86.22% (244) of the respondents were married, 13.07% (37) were single, then 0.35% (1) each were separated and divorced respectively.

The educational level of the respondents clearly showed that most of the respondents were graduates 54.42% (154) followed by diploma holders 30.39% (86) and lastly postgraduates 15.19% (43).

The results on the table also showed the years of experience of the respondents. The results showed that the majority of the respondents had a working experience between 6-10 years 41.34% (117), followed by 1-5 years 19.79% (56) and those with working experience between 16-20 years (12.1%, 34) were the least.



The results also portray the different ranks or positions of the respondents at the time of data collection. Most of the respondents were senior nursing officers 82 (28.97%) followed by principal nursing officers 54 (19.08%), and assistant director of nursing services 7 (2.47%) were the least of the respondents.

Number of nurses	Frequency	Percentage (%)
1-2 nurses	100	35.34
3-4 nurses	145	51.24
5-6 nurses	16	5.65
Over 6 nurses	17	6.01
Alone	5	1.77
Total	283	100.00

The results show that most of the respondents 51% (145) usually worked with 3-4 nurses in a shift except a very few 2% (5) who usually worked alone in a shift.

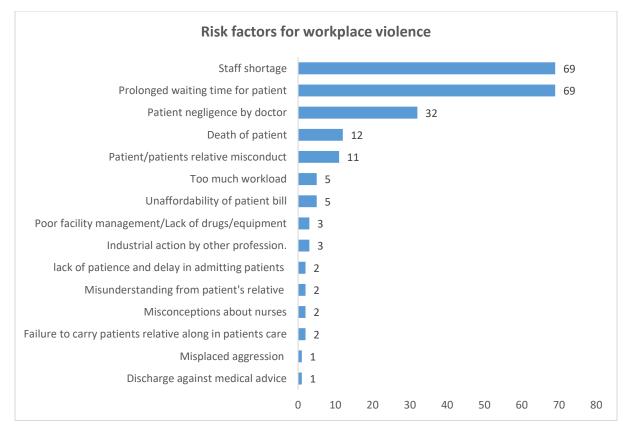


Figure 1: Risk factors for Workplace Violence



From the chart above, it is clear from this study that the highest risk factor for workplace violence is staff shortage (24.38%) and prolonged waiting time for patients (24.38%) followed by patient negligence by doctors (11.3%), death of patient (4.2%) and patient/patient's relative misconduct (3.88%), whereas misplaced aggression and discharge against medical advice (0.35%) respectively were the least risk factors.

Table 3: Chi-square Cross-Tabulation Analysis between Years of Experience and Risk
Factors for Workplace Violence among Nurses

Risk factors for workplace violence	Years of ex	X²- value	P-value				
	1-5 yrs	-5 yrs 6-10 yrs 11-15 yrs 16-20 yrs 21 yrs above		21 yrs and above			
Death of patient	3 (2.50)	5(4.42)	3(7.69)	1(2.94)	-		
Discharge against medical advice	-	1(0.88)	-	-	-		
Failure to carry patients relative along in patients care	-	1(0.88)	1(2.56)	-	-		
Unaffordability of patient bill	1 (0.83)	4(3.54)	0(0.00)	-	-		
Industrial action by other profession.	2 (1.67)	1(0.88)	-	-			
Misconceptions about nurses	2 (1.67)	-	-	-	-		
Misplaced aggression	1 (0.83)		1(2.56)			13.65	0.001*
Misunderstanding from patient's relative	2(1.67)	2(1.77)	-	-	-		
Patient negligence by doctor	2(1.67)	20(17.69)	8(20.51)	2(5.88)	4(9.52)		
Patient/patients relative misconduct	1(0.83)	5(4.42)	4(10.26)	1(2.94)			
Poor facility management/Lack of drugs/equipment	3(2.50)						
Prolonged waiting time for patient	12(10)	30(26.54)	9(23.08)	10(29.41)	8(19.04)		
Staff shortage	22(18.33)	20(17.69)	5(12.82)	10(29.41)	15(35.71)		

*=significant p-value<0.05.

There is a statistically significant relationship between the risk factors and nurses' years of working experience (p=0.001). The most significant risk factor for nurses with 1-5 years of working experience is staff shortage (18.33%) followed by prolonged waiting time for patients (10%) whereas for nurses with 6-10 years of working experience is prolonged waiting time for patients (26.54%), then staff shortage and patient negligence by doctor (17.69% each). Then



nurses with 11-15 years of working experience have prolonged waiting time (23.08%) and patient negligence by doctors (20.51%) as the major risk factors. Then nurses with 16-20 years of working experience have prolonged waiting time and staff shortage as the major risk factors. Lastly, nurses with working experience of >20 years have staff shortage (35.71%) and prolonged waiting time for patients (19.04%) as the major risk factors to workplace violence.

Table4:	Chi-square	Cross-Tabulation	Analysis	between	Years	of	Experience	and
Number o	of Nurses on I	Duty for Workplac	e Violence	among N	lurses			

Risk factors for Workplace Number of nurses on duty violence						X ² - value	P-value
	Alone	2 nurses	3 nurses	4 nurses	5 nurses		
Death of patient	3(2.50)	5(3.94)	3(7.89)	1(3.70)	-		
Discharge against medical advice	-	1(0.79)	-	-	-		
Failure to carry patients relative along in patients care	-	1(0.79)	1(2.63)	-	-		
Unaffordability of patient bill	1(0.83)	4(3.15)	0(0.00)	-	-		
Industrial action by other professions.	2(1.67)	1(0.79)	-	-			
Misconceptions about nurses	2(1.67)	-	-	-	-		
Misplaced aggression	1(0.83)		1(2.63)			51.54	0.001*
Misunderstanding from patient's relative	2(1.67)	2(1.57)	-	-	-		
Patient negligence by doctor	2(1.67)	26(20.47)	2(5.26)	2(7.46)	4(8.69)		
Patient/patients relative misconduct	1(0.83)	5(3.94)	4(10.53)	1(3.70)			
Poor facility management/Lack of drugs/equipment	3(2.50)						
Prolonged waiting time for patient	12(10.00)	29(22.83)	14(36.84)	10(37.03)	12(26.09)		
Staff shortage	22(18.32)	27(21.26)	5(13.16)	3(11.11)	15(32.61)		
Too much workload	5(4.17)	2(1.57)	3(7.89)	-	-		
lack of patience and delay in admitting patients	2(1.67)	2(1.57)	-	-	-		
	62(51.67)	20(15.75)	5(13.16)	10(37.03)	15(32.61)		

*=significant p-value<0.05

There is a statistically significant relationship between the risk factors and the number of nurses usually on duty in a shift (p=0-001). The major risk factor of workplace violence for nurses working alone in a shift is staff shortage (18.32%) whereas prolonged waiting time for patients (22.83%) is the major risk factor for nurses usually 2 on duty as well as for those that were 3



nurses on duty (36.84%) and also for those that were 4 nurses on duty (37.03%). Finally, staff shortage (32.61%) was also noted as the major risk factor of workplace violence for nurses usually 5 on duty.

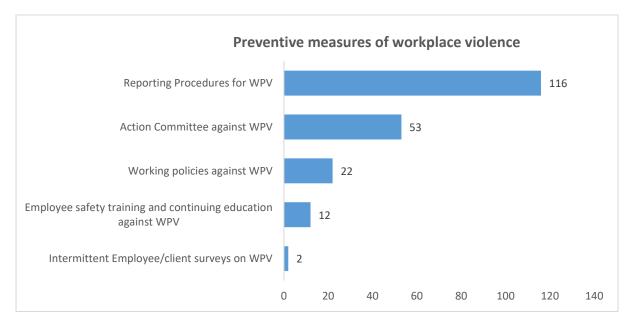


Figure 2: The possible preventive measures of workplace violence

The chart shows that reporting of workplace violence (40.99%) is the first and most existent prevention of workplace violence, then action committee against workplace violence (18.73%) followed by working policies (7.77%), employee safety training and continuing education (4.24%) and lastly, intermittent employee/client surveys on workplace violence (0.71%).

Variable	Frequency (n=283)	Percentage %
Presence of preventive measures of violence at	the facility	
No	59	20.85
Yes	209	73.85
No Response	15	5.30
Have you applied any of the measures?		
No	78	27.56
Yes	144	50.88
No response	61	21.56



The results in the table show that 73.85% of the respondents agreed that there are preventive measures for the workplace in their facilities. They also show that only 50.88% of the respondents have applied the preventive measures in the case of workplace violence occurrence.

DISCUSSION OF FINDINGS

The Risk Factors to Workplace Violence

The study result revealed two major risk factors for workplace violence. The most prevalent risk factors to workplace violence among nurses are staff shortage and prolonged waiting time by patients. The findings agree with that of Ahmad et al. (2015), in their systematic review of literature on workplace violence against nurses in Jordan, where they observed that lengthy waiting times by patients and visitors were one of the risk factors implicated in workplace violence. Our finding is also congruent with that of Abdellah and Salama (2017), which revealed that most of the violence occurred due to patient waiting time. Another study by Chaiwuth et al. (2020) confirmed the findings of this study; theirs showed that high patient workload per nurse among others was part of the risk factors to workplace violence. However, the study findings contrast that of Ayamolowo et al. (2020) in their study to investigate the experience and coping strategies of workplace violence among nurses in Federal Teaching Hospital Ido-Ekiti, Ekiti State, Nigeria, wherein they discovered communication gap between patients and healthcare providers (94%), delay in diagnosis (94%) and patient's death (90%) as the major and commonest causes of workplace violence. Also Kwok et al. (2006) are of a different view as they noted working in male wards and other specialty wards like emergency as the risk factors to workplace violence. This contrast could be possibly due to contextual differences of the study.

Patient negligence by doctors was also a major risk factor found in this study. Nurses who are always with the patients are often victimized by patients or their relatives when doctors fail to attend to patients, especially those admitted to the wards.

The study results show that death of patients was part of the risk factors implicated in workplace violence and this is similar to that of Buowari et al. (2022).

Patients' relatives misconduct was highlighted from the study results as one of the risk factors to workplace violence against nurses. This is congruent with Fida et al. (2018) wherein they also realized that misconduct can precipitate workplace violence.

The Healthcare Facility Measures on Preventing Workplace Violence

From the study, 73.85% of the respondents acknowledged the existence of preventive measures in their workplace but only 50.88% of the nurses have applied the existing preventive measures. The findings of the study show that most of the respondents (40.99%) agreed that reporting of workplace violence is an existing preventive measure against workplace violence, then action committee against workplace violence (18.73%), followed by working policies (7.77%), employee safety training and continuing education (4.24%) and lastly, intermittent



employee/client surveys on workplace violence (0.71%). This finding aligns with that of Askarzai and Mohan (2019), who noted in their study that creating awareness, implementing prevention policies, having a reporting system, and educating employees, among others, are part of the ideas necessary to stop workplace violence.

Utilization of Existing Preventive Strategies against Workplace Violence

The study findings show that 20.85% have not applied any existing preventive measure in their facility whereas 50.88% of the respondents have applied the preventive measures of workplace violence, although the study did not include the particular preventive measures applied by nurses against violence. However, this finding is similar to that of Weldehawaryat et al. (2020) which revealed that 57.4% of the respondents who experienced physical violence did not apply any measure against workplace violence whereas 42.6% of the respondents applied some measures. This variation could be due to nurses not knowing how to apply preventive measures or that they have taken violence as the norm.

Implication to Research and Practice

There are risk factors to workplace violence and preventive measures existing in different health facilities; thus, there is a need for health facility managers at all levels to identify the risks of workplace violence peculiar to their facility and ameliorate it while enacting strong policies to tackle this challenge. Health facilities ought to be made safe for nurses to provide adequate and effective care to their clients.

CONCLUSION

The menace of workplace violence is such that can be predicted and as well prevented as there are risk factors to workplace violence such as staff shortage, long waiting time for patients, patient negligence by doctor, death of patients, etc. and preventive measures of workplace violence such as reporting procedures for workplace violence, etc. Thus, zero tolerance for workplace violence must be the watchword in our various health facilities by addressing these risk factors and implementing the preventive measures.

Future Research

The researcher hereby suggests the following:

- An in-depth qualitative interview with nurses and administrators of healthcare should be carried out on workplace violence to their perspectives and experiences on the prevention strategies of workplace violence and their effectiveness. This will give further insight into the strategies that are effective and why.
- A study should be carried out on the impact of workplace violence on quality of patient care in Anambra State public health facilities. This will give insight into the relationship between workplace violence and patient satisfaction.

Conflict of Interest Statement

There is no conflict of interest of any sort regarding this study.



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