

Original Research Article

Factors and characteristics of physical violence among healthcare workers of a tertiary hospital in Enugu, Nigeria

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ABSTRACT

Background: Healthcare workers (HCWs) especially those involved in patients' care are at high risk of violence. The study is aimed at determining factors and characteristics of physical violence among HCWs in a tertiary hospital in Nigeria.

Methods: The descriptive cross-sectional study was carried out among 412 HCWs from March to July, 2018. Data entry and analysis were done using Epi InfoTM 3.5.4 and Chi square and Fischer's exact test where applicable were used to ascertain factors associated with physical workplace violence.

Results: Respondents included 111 (26.9%) doctors and 301 (73.1%) nurses. Prevalence of physical violence was 12.6%. Of those who experienced workplace violence, the perpetrators were mainly patients' relatives 37 (71.2%) and patients 8 (15.4%). In majority of cases, 28 (53.8%), no action was taken against the assailant. Prevalence of physical violence was significantly higher among nurses (15.3%) than doctors (5.4%) $p=0.007$. It is also higher among females (14.2%) than males (7.8%), although not significantly. Furthermore, HCWs who work in newborn units were most likely to experience physical violence.

Conclusions: The study revealed that physical violence is prevalent among HCWs and violence prevention programs should be instituted to address it.

Keywords: Healthcare workers, Nigeria, Physical violence, Workplace

INTRODUCTION

The National Institute for Occupational Safety and Health (NIOSH) defines workplace violence as "violent acts, including physical assaults and threats of assaults, directed toward persons at work or on duty."¹ According to World Health Organization, Healthcare workers (HCWs) especially those involved in patient care are at high risk of violence all over the world and between 8% to 38% of health workers suffer physical violence at some point in

their careers and most of the violence is perpetrated by patients and visitors.²

Workplace violence negatively affects the performance and efficiency of an organization and this usually occurs through increase in sick leave and absenteeism; lowered motivation and productivity as well as professional dissatisfaction. These factors aside from increasing burnout and reducing the self-worth of workers also lead to a reduction in the quality of care given to patients and

brings down the image of the health institution.^{2,3} Violence at work is rapidly becoming a distressing occurrence worldwide. While the real size of the problem is largely unknown, recent information shows that the current knowledge is only a tip of the iceberg since as much as 80% of HCWs who were victims of workplace violence did not report it.^{3,4} Some of the reasons for not reporting include fear of lack of support from the hospital management and/or unavailability of hospital reporting protocol.⁴

According to Occupational Safety and Health Administration (OSHA), approximately 75% of nearly 25,000 workplace assaults reported annually occurred in health care and social service settings and workers in health care settings are four times more likely to be victimized than workers in private industries.⁵ Literature and studies from various countries have shown the occurrence of physical violence among HCWs in their workplace. A study in Iran revealed that 23.5% of health care workers were exposed to physical violence in the 12 months prior to the study and majority of the victims were Nurses (78%). It was also found that patients' families were the main perpetrators of this violence (56%).⁶ In the United States, between 2011 and 2013, the average annual number of workplace assaults was 24000 and almost 75% of these assaults occurred in health care settings. In China, 12.6% of respondents reported being physically attacked in their workplace in the previous 12 months and in Nigeria as high as 25.1% of HCWs had been physically assaulted at their workplace.^{7,8}

Within the healthcare industry, various job locations have varying risks for workplace violence. Healthcare workers at emergency departments are reportedly at a higher risk of violence than other hospital personnel. This could be related to their frontline nature of work and 24 hour accessibility to patients and their relatives.^{4,9} Also at high risk for workplace violence are HCWs who attend to mentally challenged patients in psychiatric wards and units mostly as a result of the nature of illness of their patients.⁹ When compared to doctors, nurses are at a greater risk for workplace violence. This might be from their longer contact period with patients. A study in Macau reported that nurses (18.1%) were at a significantly higher risk of physical assault as against physicians (3.7%).

Due to the rising prevalence of physical assaults in healthcare settings, it is important to explore this issue further. The aim of this study is to determine the factors and characteristics of physical workplace violence among HCWs in a tertiary health institution in Enugu state, Nigeria and thereby provide a basis for appropriate intervention.

METHODS

The study was a descriptive cross-sectional study carried out among doctors and nurses in a public tertiary hospital

in Enugu state from March to July 2018. A sample size of 400 was obtained using the sample size determination formula for cross-sectional descriptive studies.¹⁰ University of Nigeria Teaching Hospital (UNTH) was selected as the study site out of the 4 public tertiary health institutions within the State using a simple random sampling technique. Subsequently, a list of doctors and nurses in each department was obtained from the Personnel department from which respondents were systematically selected using a sampling interval of 3 for doctors and 4 for nurses. Ethical permission was obtained from the University of Nigeria Teaching Hospital Enugu Ethics Committee and informed consent was obtained from the participants.

The data collection tool was a semi-structured questionnaire adapted from the workplace violence in the health sector country case studies research instruments by International Labour Organisation, International Council of Nurses, World Health Organisation and Public Services International.¹¹ The questionnaire was pre-tested among doctors and nurses working at Enugu State University Teaching Hospital.

Physical workplace violence in this study is defined as the use of physical force against another person or group that results in physical or psychological harm. It includes beating, kicking, slapping, stabbing, shooting, pushing, biting, punching, among others.¹¹

Data entry and analysis was done using Epi Info™ 3.5.4 and demographic variables are presented as frequencies. Chi square and Fischer's exact test where applicable were used to ascertain the factors associated with physical workplace violence. For all analysis done, p values less than 0.05% were regarded as significant.

RESULTS

A total of 412 healthcare workers participated in the study of which 111 (26.9%) were doctors and 301 (73.1%) were nurses. The prevalence of physical violence was 12.6%. On respondents' perception of violence, 173 (42.0%) were very worried about violence in their workplace, 34 (8.3%) were moderately worried, 77 (18.7%) reported indifference, 56 (13.6%) were slightly worried and 72 (17.5%) were not worried at all.

Out of 52 (12.6%) respondents who have experienced physical violence, the perpetrators were mainly patients' relatives 37 (71.2%), followed by patients, 8 (15.4%) and for a majority of the victims, 45 (86.5%), the attack was with a weapon and often in the morning hours 23 (44.2%). Most 30 (57.7%) did nothing in self-defense while 14 (26.9%) reported the incident to a senior colleague. Investigation was conducted in only 21 (40.4%) of the cases. In majority of the cases, nothing was done to the assailant 28 (53.8%), however, 17 (32.7%) received verbal warning and only 2 (3.8%) were actually prosecuted (Table 1).

Table 1: Respondents description of physical violence.

Variable	Frequency (n=52)	%
Violence with a weapon	45	86.5
Violence without a weapon	7	13.5
Perpetuator of violence		
Patient relative	37	71.2
Patient	8	15.4
Staff member	5	9.6
Supervisor or management	1	1.9
Others	1	1.9
Time of incident		
Morning	23	44.2
Afternoon	16	30.8
Night	7	13.5
Evening	6	11.5
Action taken by respondent		
No action	30	57.7
Reported to a senior	14	26.9
Sought help from union	4	7.7
Sought counselling	2	3.8
Completed incident or accident form	2	3.8
Any action taken to investigate the incident by senior/employer		
No	27	51.9
Yes	21	40.4
Don't know	4	8.7
Consequences for the perpetrator		
None	28	53.8
Verbal warning issued	17	32.7
Reported to the police	5	9.6
Aggressor prosecuted	2	3.8
Care discontinued	0	0.0
Action provided by supervisor or employer		
No action	24	46.2
Opportunity to talk about it	16	30.8
Counselling	12	23.1

Table 2: Respondents' witness of physical violence in the past 12 months.

Variable	Frequency (n=412)	%
Respondents witness of incidents of physical violence		
No	302	73.3
Yes	110	26.7
Frequency of occurrence		
2-4 times	70	63.6
Once	40	36.4
Report of an incident (witnessed or experienced)		
No	71	64.5
Yes	39	35.5

Table 3: Associations between socio-demographic variables and physical violence.

Variable	Physical violence		χ^2	P value
	No N (%)	Yes N (%)		
Age				
>35	227 (86.6)	35 (13.4)	0.355	0.551
<35	133 (88.7)	17 (11.3)		
Sex				
Female	266 (85.8)	44 (14.2)	2.806	0.094
Male	94 (92.2)	8 (7.8)		
Occupation				
Nurse	255 (84.7)	46 (15.3)	7.173	0.007*
Doctor	105 (94.6)	6 (5.4)		
Years of practice				
<10	210 (87.5)	30 (12.5)	0.008	0.930
>10	150 (87.2)	22 (12.8)		

*Statistically significant.

Table 4: Associations between respondents' workplace characteristics and physical violence.

Variable	Physical violence		χ^2	P value
	No N (%)	Yes N (%)		
Work in shifts				
Yes	257 (86.0)	42 (14.0)	2.009	0.156
No	103 (91.2)	10 (8.8)		
Interaction with patients/clients at work				
Yes	338 (87.3)	49 (12.7)	F _{1.000}	
No	22 (88.0)	3 (12.0)		
Routine direct contact with patients				
Yes	316 (86.8)	48 (13.2)	F _{0.487}	
No	44 (91.7)	4 (8.3)		
Patients most frequently worked with				
Adults	288 (91.1)	28 (8.9)	18.066	0.000*
Children	50 (76.9)	15 (23.1)		
Newborns	22 (71.0)	9 (29.0)		
Sex of patients frequently worked with				
Male and female	278 (86.9)	42 (13.1)	F _{0.477}	
Female	68 (90.6)	7 (9.3)		
Male	14 (82.4)	3 (17.6)		
Present duty post				
Ward	277 (86.8)	42 (13.2)	0.380	0.537
clinic	83 (89.2)	10 (10.8)		

*Statistically significant; F=Fishers exact test.

In the 12 months prior to the study, 110 (26.7%) of the respondents had witnessed acts of physical violence and 70 (63.6%) of them claimed they had witnessed the attack 2-4 times. However, only 39 (35.5%) reported the incident (Table 2). Prevalence of physical violence was significantly higher among nurses (15.3%) when compared with doctors (5.4%), p=0.007. It is also higher among females (14.2%) than males (7.8%), although not

significantly, $p=0.094$ (Table 3). Workplace characteristics associated with physical violence were routine direct contact with patients, frequently working with newborns and male patients (Table 4).

DISCUSSION

It has been previously noted that violence at workplace against health personnel is an existing and widespread problem in both developed and developing countries and all health facilities are at risk, particularly large hospitals in suburban, densely populated or high crime areas, as well as those located in isolated areas.³ A prevalence of 12.6% of HCWs in this study had experienced physical violence at their workplace and most of these attacks were done with a weapon. This level of physical violence among HCWs is slightly higher than a previous report in another southeastern state in Nigeria where 9.9% of HCWs had experienced physical assault at their workplace but differed from a Jordanian study where 52.8% of the HCWs reported that they were physically attacked, and 26.5% of them reported a physical violence with a weapon.^{9,10} The higher prevalence in the previous study could have occurred because only nurses were the study population unlike the present study that had the participation of both doctors and nurses. It could also be seen from our study that physical violence was experienced more by females and nurses. Similarly, an Italian study reported that nurses (67%) had the highest prevalence of violence.¹²

It is worrisome to note that majority of the attacks on healthcare workers occurred with a weapon as these may lead to injuries or deaths of victims of the attacks and could impair emotional well-being of HCWs.¹³ Patients' relatives were most likely to be the perpetrators of violence, followed by the patients themselves and this finding is common in previous similar studies. Reasons for this could partly be because of lack of communication between HCWs and patients' relatives who usually spend their time and money in the hospital. It could also be because the disease condition of their loved ones is worsening which is frustrating and may make them easily aggressive.^{6,12} In addition, a similar study found that waiting time, lack of prevention measures, and unmet expectations of patients and their families were reasons for workplace violence perpetuated by patient relatives.¹⁴

Physical violence from a staff member or colleague was found to be low (9.6%) in this study and this is likely because workers are aware that such acts carry fierce punishments and could lead to queries or dismissals. Present finding is less than 25.3% of physical violence from a member of staff reported in a previous study.¹² However, further strategies should be put in place to completely eliminate this form of violence from the workplace. Most of the incidents experienced by respondents in the present study occurred in the morning and afternoon hours and this may be so, as the hospital security are more alert at night owing to the fact that most

crimes take place at night. This is similar to a previous study which reported that although violence occurred in all shifts, the highest frequency (43%) occurred in the morning.¹⁵

Only few of the respondents reported the incident to a senior colleague and most of them revealed that no action was taken on reporting. In the few instances where action was taken, it was merely in the form of a verbal warning issued to the assailant. The administrative laxity in handling critical issues like this could be as a result of absence of laid down protocols in managing workplace violence. This situation will not only endanger the lives of HCWs but may subsequently lead to underreporting of such issues in the workplace as noted in other studies.^{7,16}

Routine direct contact with patients has been found to be a factor associated with physical WPV among HCWs and this was not different in our findings.¹⁶ Another factor which was significant in our findings was that HCWs who worked mainly with newborns were the most likely to experience physical violence. This is likely to be because of the intensity of emotions experienced by parents' relatives especially mothers concerning their newborns and worried parents may become violent while waiting to talk to a physician, waiting for test results, or after finding out that their child has a serious disease.¹⁷ Although not statistically significant, female HCWs who have worked for less than 10 years were more likely to experience physical WPV. Similarly, it has been previously reported that inexperienced female medical staff who have worked for a few years were more likely to suffer violence.^{6,7,18}

CONCLUSION

The findings from this study revealed that physical violence occurs among health care workers in this environment. Therefore, violence prevention programs should be put in place to address this. HCWs should be trained to identify warning signs that may indicate an increased risk of violence in patients and their relatives and take steps to avoid situations that may lead to violence. Due to the increased risk in HCWs working with new-borns and those who have continuous contact with patients, the hospital management is to ensure that these workers are fully protected and educated on reporting procedures. Furthermore, incidents of violence should be investigated and perpetrators punished appropriately. Periodic surveys should also be conducted to help identify new risk factors which expose health care workers to violence.

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