Violence in the emergency department: a multicentre survey of nurses' perceptions in Nigeria

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ABSTRACT

Background Emergency department (ED) violence is common and widespread. ED staff receive both verbal and physical abuse, with ED nurses bearing the brunt of this violence. The violence is becoming increasingly common and lethal and many institutions are still improperly prepared to deal with it.

Methods A questionnaire based survey of the perception of violence among nurses working in six tertiary hospitals' EDs across five states in Nigeria was conducted.

Results 81 nurses were interviewed with a male to female ratio of 1:4. Most were right about the definition of violence. About 88.6% of respondents have witnessed ED violence while 65.0% had been direct victims before. Nurses followed by doctors were the usual victims. The acts were carried out mostly by visitors to the ED. Men were usually responsible for the violence, which usually occurred in the evenings. Weapons were not commonly utilised: only 15.8% of the nurses had been threatened with a weapon over a 1-year period. The main perceived reasons for violence were overcrowded emergency rooms, long waiting time and inadequate system of security. All the institutions were lacking in basic strategies for prevention. While most of the nurses were not satisfied with the EDs that were considered not safe, few would wish for redeployment to other departments/units.

Conclusions There is a need to make the EDs safer for all users. This can be achieved by a deliberate management policy of 'zero' tolerance to workplace violence, effective reporting systems, adequate security and staff training on prevention of violence.

INTRODUCTION

There is no doubt that we live in a violent society, with violence in our streets, in our schools, in our homes and in our hospitals. Emergency department (ED) violence is common and widespread.[1] The ED is a major portal of entry for patients into the hospital. It is said to be the barometer of how well the healthcare system is working.[2] EDs are high-stress areas where many patients may have conditions consequent on trauma, and they or their relations could have labile emotions that may predispose to violence against caregivers. Research suggests that staff in the ED receive the most amount of verbal and physical abuse compared to other departments.[3] Nurses bear the brunt of this violence.[4] Violence in our EDs is becoming increasingly common and lethal.[5] The available evidence still suggests that many institutions are improperly prepared to deal with it.[6] While studies on violence against workers in the psychiatry and dental services in our country have been performed,[7 8] we sought to determine the epidemiology of violence against nurses working in the ED, their perception of what constitutes violence, effects of such violence on productivity and potential preventive strategies.

MATERIALS AND METHODS

This study was conducted at six tertiary institutions spread across five states in Nigeria:

1. University Teaching Hospital, Ado-Ekiti, Ekiti State (UTH Ado)
2. Federal Medical Centre, Ido-Ekiti, Ekiti State (FMC Ido)
3. Federal Medical Centre, Owo, Ondo State (FMC Owo)
4. State Specialist Hospital, Yola, Adamawa State (SSH Yola)
5. Federal Medical Centre, Lokoja, Kogi State (FMC Lokoja)
6. University of Ilorin Teaching Hospital, Ilorin, Kwara State (UITH Ilorin)

The EDs in these hospitals are staffed 24 h a day by certified nurses, some of whom are certified emergency nurses. Ethical clearance was obtained from the participating hospitals' ethics and research committees. A semi-structured questionnaire was distributed to all certified nurses working in the EDs of the hospitals at the time of the study. The questionnaires probed the respondents' definitions of violence, their perception of the epidemiology, the number of violent encounters in the last 1 year, causes of violence and available strategic measures for prevention. The effect of violence on job performance, job satisfaction and career choice were also assessed. Finally, the attributes possessed by nurses in reducing, averting or preventing violence were probed. All the information was managed with strict confidentiality.

Nurses working in the children's, and gynaecology and obstetrics emergency services were excluded from the study.

Data collection in all the hospital was completed within 2 months—October and November 2009.

The data were entered into a Microsoft Excel 2007 spreadsheet and analysed using SPSS V.15. They were then summarised with medians for skewed continuous and ordinal data, means for normally distributed continuous data and proportions for categorical data.

Table 1 Hospital distribution of the respondents and gender

	Sex of respondents			
Centre of study	**Unspecified count**	**Male count**	**Female count**	**Total count**
UTH Ado	0	3	9	12
FMC Ido	3	0	12	15
FMC Owo	3	1	16	20
UITH Ilorin	3	1	11	15
FMC Lokoja	1	3	6	10
SSH Yola	0	6	3	9
Total	10	14	57	81

FMC Ido, Federal Medical Centre, Ido-Ekiti, Ekiti State; FMC Lokoja, Federal Medical Centre, Lokoja, Kogi State; FMC Owo, Federal Medical Centre, Owo, Ondo State; SSH Yola, State Specialist Hospital, Yola, Adamawa State; UITH Ilorin, University of Ilorin Teaching Hospital, Ilorin, Kwara State; UTH Ado, University Teaching Hospital, Ado-Ekiti, Ekiti State.

RESULTS

A total of 81 nurses with a male to female ratio of 1:4 from the six institutions completed the questionnaire, giving a response rate of about 90%. Ten of the respondents did not indicate their sex in the completed questionnaire. The geographical spread of the nurses is shown in table 1.

The age of the nurses ranged from 25–57 years with a mean age of 39.33 years (SD 9.58 years). The mean number of post-qualification years and number of years of work experience in the ED were 13.2 years (range 1–30 years, SD 8.86 years) and 5.3 years (range 1–28 years, SD:7.01 years), respectively. The majority of respondents were married (72.4%); others were either single (23.7%) or widowed (3.9%). Respondents were Christians (86.8%), Muslims (11.8%) or atheists (1.3%). Most were correct about the definition of violence (81.2%). While 88.6% of the nurses had witnessed ED violence, only 65.0% had been direct victims before. Nurses followed by doctors were the usual victims of the ED violence in all institutions. These acts were carried out mostly by visitors (patients' relatives or friends) to the ED. (figure 1A,B). Men, women and both sexes were responsible for the violence in 76.6%, 10.4% and 13.0% of cases, respectively. Even though most violence took place in the evening (38.0% of times), there was a statistically significant difference in the time of the day that violence was experienced among the various hospitals (table 2).

Only 15.8% of the nurses were ever threatened with a weapon over the preceding year. Table 3 illustrates the perceived reasons for violence in the various institutions.

All the institutions were lacking in basic strategies for prevention. Table 4 illustrates the mean rating of the various strategies commonly employed in the prevention of violence.

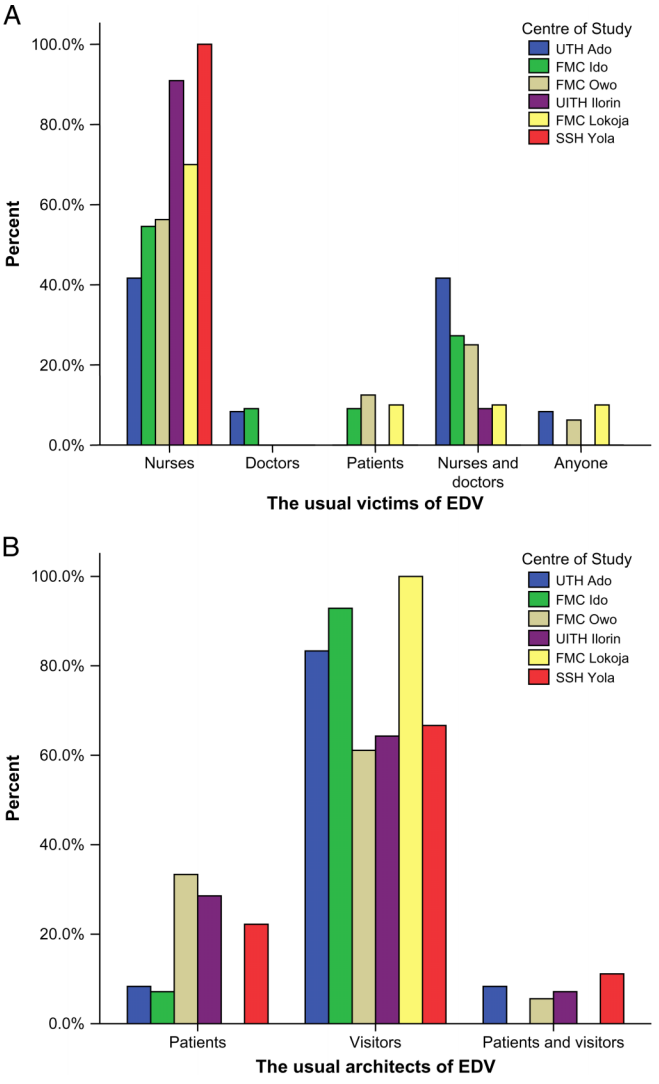

Figure 1 Perception of the nurses on the usual victims (A) and the usual architects (B) of emergency department violence (EDV). FMC Ido, Federal Medical Centre, Ido-Ekiti, Ekiti State; FMC Lokoja, Federal Medical Centre, Lokoja, Kogi State; FMC Owo, Federal Medical Centre, Owo, Ondo State; UTH Ado, University Teaching Hospital, Ado-Ekiti, Ekiti State; UITH Ilorin, University of Ilorin Teaching Hospital, Ilorin, Kwara State; SSH Yola, State Specialist Hospital, Yola, Adamawa State. Access the article online to view this figure in colour.

Despite these generally poor preventive strategies, 74.3% of the respondents have not had any form of training on recognising and/or managing violence. For those who had some form

Table 2 Frequency of time of occurrence of violence in the centres of study

	Centre of study						
Time of day that most episodes of violence are experienced	**UTH Ado N (%)**	**FMC Ido N (%)**	**FMC Owo N (%)**	**UITH Ilorin N (%)**	**FMC Lokoja N (%)**	**SSH Yola N (%)**	**Subtotal N (%)**
Morning	0.0	25.0	26.7	42.9	20.0	0.0	21.1
Afternoon	27.3	33.3	13.3	21.4	0.0	11.1	18.3
Evening	54.5	16.7	13.3	14.3	70.0	88.9	38.0
Night	9.1	16.7	0.0	14.3	10.0	0.0	8.5
Any time	9.1	8.3	46.7	7.1	0.0	0.0	14.1

FMC Ido, Federal Medical Centre, Ido-Ekiti, Ekiti State; FMC Owo, Federal Medical Centre, Owo, Ondo State; FMC Lokoja, Federal Medical Centre, Lokoja, Kogi State; SSH Yola, State Specialist Hospital, Yola, Adamawa State; UTH Ado, University Teaching Hospital, Ado-Ekiti, Ekiti State; UITH Ilorin, University of Ilorin Teaching Hospital, Ilorin, Kwara State.

Table 3 Average points for the rating on a scale of 0–5 for individual reasons for ED violence in the centres of study

	Centre of study						
Reasons given for ED violence	UTH Ado Mean	FMC Ido Mean	FMC Owo Mean	UITH Ilorin Mean	FMC Lokoja Mean	SSH Yola Mean	Subtotal Mean
Drug induced or related violence	3.09	2.15	2.23	1.75	**3.30**	**4.25**	2.67
Overcrowded ERs	**4.42**	4.00	4.00	3.08	**4.10**	3.78	3.91
Understaffed ED	**4.08**	3.53	4.06	2.62	2.90	**4.22**	3.57
Long waiting time and frustration of patients/relatives	3.55	**4.07**	**4.40**	3.54	3.70	3.78	3.88
Inadequate system of security	3.42	3.60	3.63	3.62	**4.20**	**3.89**	3.69
The culture of silence/poor communication with patients	**2.50**	2.31	1.87	2.25	**2.70**	2.33	2.30
Lack of institutional concern and systems	**3.30**	2.29	1.38	2.46	**3.60**	3.00	2.53
Lack of reporting of previous episodes of violence	2.33	2.21	2.20	**3.27**	**3.30**	2.88	2.63
Demand of triage	1.63	2.17	2.27	**2.62**	1.00	**2.75**	2.11
Domestic quarrels that are brought to the ED	1.50	2.36	2.00	**2.69**	2.67	**3.00**	2.32
Length of stay in the ER before transfer	2.50	2.93	**3.56**	**3.46**	2.00	2.44	2.92
Pain and anger experienced by ED users	**2.92**	2.79	2.86	2.38	**3.20**	2.56	2.78
Alcoholism	**4.17**	2.93	2.36	2.38	**4.20**	4.11	3.25
Spread of gangs/cultist/thugs	**3.92**	2.40	2.00	1.69	**4.10**	3.50	2.79
Keeping of psychiatric patients with others	**3.33**	**3.29**	2.87	1.33	2.40	1.50	2.55
Unrealistic expectations of patients	**3.58**	2.92	2.79	2.82	2.78	**3.00**	2.99
Transfer of child, elder, or spousal abuse to ED staff	**2.67**	2.14	**2.53**	2.18	1.63	**2.67**	2.33
Neglect of patients who require urgent attention	2.42	**2.64**	1.67	**2.64**	**2.67**	2.33	2.36

The highest and the next highest mean values of reasons of violence of individual centres are highlighted in bold.
ED, emergency department; ER, emergency room; FMC Ido, Federal Medical Centre, Ido-Ekiti, Ekiti State; FMC Lokoja, Federal Medical Centre, Lokoja, Kogi State; FMC Owo, Federal Medical Centre, Owo, Ondo State; UTH Ado, University Teaching Hospital, Ado-Ekiti, Ekiti State; UITH Ilorin, University of Ilorin Teaching Hospital, Ilorin, Kwara State; SSH Yola, State Specialist Hospital, Yola, Adamawa State.

of training, 89.5% was formal or seminar based. These trainings were given by non-government organisations, ministries of health, hospitals and training institutions. While most of the nurses were not satisfied with the EDs that are considered not safe, few wished for redeployment to other departments (table 5).

Most nurses were of the belief that the following attributes will mitigate ED violence towards staff: availability (85%), respectfulness (85%), supportive (53%) and responsiveness (68%).

DISCUSSION

The ED of any hospital attends to diverse clients with different medical conditions whose common denominator is the acuteness of the condition necessitating immediate or urgent attempts at remedy. Thus the emergency room offers a charged atmosphere with pressure on the system and caregivers to provide services which match the expectations of patients[2] and/or their relations. This interface can be stretched, leading to flaring of emotions, vituperations and physical assault on

Table 4 Average points for the rating on a scale of 0–5 for strategies for the prevention of ED violence in the centres of study

	Centre of study						
Strategies for the prevention of ED violence	UTH Ado Mean	FMC Ido Mean	FMC Owo Mean	UITH Ilorin Mean	FMC Lokoja Mean	SSH Yola Mean	Subtotal Mean
Appropriate building design	0.50	2.73	2.31	2.42	2.50	1.33	1.97
Adequate provision of security systems and personnel	1.83	3.23	2.00	2.55	1.67	1.22	2.14
Use of trained security officers in the emergency room	3.33	2.62	2.38	2.50	1.11	1.33	2.31
Visible security inside and outside	3.82	3.15	2.54	2.17	1.44	0.11	2.33
Undress patients to reveal concealed weapons and disarm if necessary	1.83	2.00	1.00	2.00	1.00	0.44	1.40
Engagement of staff and local police in security planning	0.58	1.92	0.64	2.17	1.33	1.50	1.33
Adequate training of staff in violence recognition and handling	0.58	2.31	1.75	2.92	1.00	1.00	1.70
Use of patients' liaisons in the waiting room	0.67	1.82	1.31	2.82	0.56	1.00	1.39
Flagging of violence-prone individuals	1.83	2.25	1.21	2.92	2.13	1.50	1.99
Adequate personnel that reduces the waiting time	0.36	3.08	2.40	3.80	2.00	2.00	2.30
Prompt reporting of cases to ensure review of policies	2.55	3.62	2.25	3.64	1.88	2.38	2.76
Prompt transfer of patients out of the ED	1.50	3.42	260	3.92	1.89	2.13	2.65
Blockage of unauthorised vehicle access to the ED	2.33	3.25	2.73	2.92	3.17	1.00	2.62
Minimised unguarded entrances; lock extraneous/exits at night	2.08	2.85	2.75	2.55	4.44	0.63	2.59
Secured sensitive areas with access control	2.25	2.85	1.81	2.82	2.89	0.57	2.26

0, not available or completely unsatisfactory; 5, readily available or very satisfactory.
ED, emergency department; FMC Ido, Federal Medical Centre, Ido-Ekiti, Ekiti State; FMC Lokoja, Federal Medical Centre, Lokoja, Kogi State; FMC Owo, Federal Medical Centre, Owo, Ondo State; UTH Ado, University Teaching Hospital, Ado-Ekiti, Ekiti State; UITH Ilorin, University of Ilorin Teaching Hospital, Ilorin, Kwara State; SSH Yola, State Specialist Hospital, Yola, Adamawa State.

Table 5 Effects of violence on nurses in the ED

	No. of people who have been direct victims of ED violence					
	Victim		Not victim		Subtotal	
	Count	N (%)	Count	N (%)	Count	N (%)
Decline in productivity as a result of violence witnessed						
Decline	17	25.4	5	7.5	22	32.8
No decline	26	38.8	19	28.4	45	67.2
Subtotal	43	64.2	24	35.8	67	100.0
Suffering from loss of confidence in oneself resulting from ED violence						
Suffered	10	15.2	0	0.0	10	15.2
Not suffered	32	48.5	24	36.4	56	84.8
Subtotal	42	63.6	24	36.4	66	100.0
Possibility of job satisfaction in the face of current state of violence in ED						
Yes	5	7.6	5	7.6	10	15.2
No	38	57.6	18	27.3	56	84.8
Subtotal	43	65.2	23	34.8	66	100.0
Satisfaction with the state of ED with respect to issues of violence						
Satisfied	2	3.2	3	4.8	5	7.9
Not satisfied	35	55.6	15	23.8	50	79.4
Indifferent	5	7.9	3	4.8	8	12.7
Subtotal	42	66.7	21	33.3	63	100.0
Thought of safety in the ED being guaranteed with the current state of the ED						
Yes	6	9.4	5	7.8	11	17.2
No	28	43.8	9	14.1	37	57.8
Not sure	8	12.5	8	12.5	16	25.0
Subtotal	42	65.6	22	34.4	64	100.0
The chance of the hospital management doing enough to prevent ED						
Yes	6	9.4	6	9.4	12	18.8
No	19	29.7	9	14.1	28	43.8
Not sure	17	26.6	7	10.9	24	37.5
Subtotal	42	65.6	22	34.4	64	100.0
Satisfaction with the way cases of violence witnessed were handled by the hospital management						
Satisfied	5	8.2	4	6.6	9	14.8
Not satisfied	35	57.4	16	26.2	51	83.6
Indifferent	1	1.6	0	0	1	1.6
Subtotal	41	67.2	20	32.8	61	100.0
Provision of appropriate support systems for staff who are victims of violent incidents						
Yes	4	6.7	9	15.0	13	21.7
No	36	60.0	11	18.3	47	78.3
Subtotal	40	66.7	20	33.3	60	100.0
Frequency of those who, given the state of the ED, would wish to be redeployed to another department if given the opportunity						
Yes	16	25.4	12	19.0	28	44.4
No	17	27.0	7	11.1	24	38.1
Not sure	9	14.3	2	3.2	11	17.5
Subtotal	42	66.7	21	33.3	63	100.0

ED, emergency department.

caregivers by patients or their relations. The true incidence of this violence is not known[9 10]; it is underreported in our environment as it is elsewhere.[11] Moreover, several definitions of the term exist,[12 13] which may contribute to low reporting. The National Institute for Occupational Safety defined workplace violence as 'an act of aggression directed towards persons at work or on duty from offensive or threatening language to homicide.[14] This includes physical assault, verbal abuse, threat, harassment or coercive behaviour causing physical or emotional harm'.[15] For this study five entities were highlighted in the definition of violence: witnessing verbal abuse on a colleague, witnessing physical threats or acts of intimidation against a colleague, personal experience of verbal abuse or physical threat and actual assault on the respondent. Respondents all agree that these entities constitute violence at their workplace.

The study spans three geopolitical zones in Nigeria, perhaps making it fairly representative of a national trend. All centres provide tertiary health services. None is officially designated a trauma centre, but all are state recognised for trauma care services. The majority of respondents are female as the nursing profession has female dominance in our environment. The young and middle aged groups are affected as the respondents are public servants whose retirement age has been statutorily pegged at 60 years, or 35 years in service, whichever comes first. Their work experience (mean professional experience and ED experience of 13.2 years and5.3 years, respectively) does not seem to confer any protection in experiencing workplace violence. We found that violence is targeted more towards nurses, collaborating previous work.[9–21] This may be due to more contact time, poor interpersonal and communication skills and nurse:patient ratio. Visitors (patients' friends and relatives) tend to perpetrate the violence, unlike studies elsewhere in which the patients were culpable.[17] The assailants are principally male visitors, which is in keeping with cultural male dominance and aggression. The majority of incidents occurred in the evening, as was noted in previous work where evening/night shifts alongside weekends ranked higher.[10 13 17] For the centres that experienced more violence in the mornings, it may be due to arrival of more relatives after an overnight admission. Several reasons have been given as probable causes of violence in the ED.[2 9–11 13 22] In our study we found the following common to all centres: alcohol intoxication, substance abuse, overcrowding in the ED, under-staffing, long waiting time, little or no security measures in place, long stay in the ED before transfer to appropriate wards or service, and spread of gang or cultist conflict to the ED. This again is in consonance with reports elsewhere.[17] Use of weapons was not common in our study (15.8%) and is comparable to findings by earlier investigators.[7 8 11] Not all institutions have adequate reporting mechanisms; and they have weak control measures for prevention or containment of violence. At a national level, the health industry has neither adopted nor implemented the policy of 'zero tolerance' to workplace violence. This contrasts with practice elsewhere.[10 11 13 17] Loss of job satisfaction, self esteem and decline in productivity were major effects of ED violence on respondents. In some studies absenteeism, post-traumatic stress disorder and even resignation were noted.[9 10 22] To the employer, loss of man-hours, damage of structure and equipment, insurance liability and workman compensation may provide a staggering loss of revenue.[21] The patient may suffer stigmatisation and treatment bias.[21] Preventive strategies have been suggested, including advocacy, leadership training, staff capacity building to recognise and avert potential stimulus for violence, ED structural design to include security personnel, and camera surveillance.[13 23–25] A management policy of zero tolerance to violence and adequate reporting mechanisms, and sanctions where necessary could be helpful. Our respondents recommend certain nurse attributes that may prevent occurrence of violence: availability, respectfulness, supportive care and responsiveness to duties. The extent to which these qualities will prevent violence could be a subject for further studies.

CONCLUSION

Violence towards ED staff is common and nurses bear the brunt. There is a need to make EDs safer for all users, or else we might have to start wishing that our ED staff 'come back home safe' when they leave for work: like soldiers going to war!

Contributors All authors were involved in the formulation of the questionnaires used and administered the questionnaires to the respondents in their respective hospitals. KOO and ACE collated and analysed the data received. All authors were involved in the preparation of the final draft of the manuscript.

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Competing interests None.

Ethics approval Ethical review committees of each institution where the study was conducted.

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