Full Length Research Paper

Prevalence and forms of violence against health care professionals in a South-Western city, Nigeria

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Workplace violence affects every professional group including the health sector. All categories of healthcare workers are at risk of violence though at different degrees with the nurses having up to three times higher than others. Workplace violence can be physical, sexual or psychological in nature and can be actual or threatened. This study investigated the prevalence and forms of violence among health professionals in two hospitals in Southwestern Nigeria. A cross-sectional survey design was adopted to collect data among 242 health care professionals in Osogbo using a self-administered semi-structured questionnaire. Data were analysed with SPSS version 16 and level of significance was set at p < 0.05.The mean age of the respondents was 39.2 ± years. The results revealed that the highest prevalence was among the nurses (77, 53.5%) followed by the doctors/dentists (31, 21.5%). However 31 out of 54 doctors (57.4%); 77 out of 130 nurses (59.2%) and 36 out of 58 other professionals have experienced violence in the last one year. The perpetrators were usually the patient (74, 46.1%) or their relatives (79,49.5%). The commonest forms of assault were verbal (93, 64.6%) and physical abuse (51, 35.4%). The violent acts mostly occurred at the accidents and emergency (44, 30.6%) and the outpatient clinics (29, 20.1%). There is a need for strict policies in hospitals to protect the workers from violence.

Key words: Prevalence, violence, health care professionals.

INTRODUCTION

Violence, aggression, and harassment exist in virtually all workplace and this not only affect the individual's health and morale, it negatively affects productivity due to reduced morale and motivation (Azodo et al., 2011, Vittorio, 2003). It has been shown that workplace violence affects every professional group in every country and sometimes to an 'epidemic' extent(Gates 2004; Mohamad and Motasem 2012). In the health care sector, all categories of healthcare workers are at risk of violence though at different degrees with the nurses having up to three times higher than others (Abbas et al., 2010; Azodo

Studies have reported violence against health care workers (VAHW) from patients in the Western world (Hartley et al., 2012) middle east (Khademloo et al., 2013) as well as sub-Saharan Africa (Ogbonnaya et al., 2012). Ogbonaya et al. (2012) reported high prevalence of violence in the health care sector up to 88%. Ogbonnaya et al. (2012), Aytac et al. (2009) in their study actually discovered that bullying, harassment, and violence is more prevalent in the health sector than any other sector, with 54.4% taking place in the hospital

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et al., 2011; El-Gilany et al., 2010; Magdalena et al., 2009; Magnavita and Fileni, 2012) Workplace violence can be physical, sexual or psychological in nature and can be actual or threatened (Mohamad and Motasem 2012; Magnavita and Fileni, 2012; Samir et al., 2012).

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Condition of work in Nigeria such as long bureaucracy in service delivery, lack of needed materials in the facility sometimes get patients impatient (Ogbonaya et al., 2012). Patients and clients themselves may have personality and behavioural issues such as alcoholism and drug abuse while some hospital members of staff have poor attitude and approach in relating with patients (Samir et al., 2012). Furthermore, patients are usually under stress and in pain or are financially handicapped and so they transfer their aggression to health workers. (Aytac et al., 2009). Aggression may be more serious at the accident and emergency unit (Magnavita and Heponiemi, 2012).

Policy and procedure addressing workplace violence in the healthcare setting has been documented in many developed countries (Magnavita and Heponiemi, 2012) but is almost non-existence in low income countries. Many violence and harassment against the health professionals go often unreported officially (Ferns, 2006; Pawlin, 2008).

This study aims to determine the prevalence and forms of violence among health workers in two hospitals in Southwestern Nigeria.

METHODOLOGY

Study design

It was a cross-sectional descriptive survey.

Study area

The study was carried out in Osogbo, the state capital of Osun state, south western Nigeria using the only tertiary hospital, the LAUTECH Teaching Hospital and the secondary hospital, Asubiaro General Hospital. Both hospitals have all categories of health workers from highly professionals to unskilled workers (ward aides, porters etc) and attend to various kinds of patients. The teaching hospital also accepts referral from the general hospital.

Study population

Participants were workers who have been in the establishment for at least one year. They included various cadres of healthcare professionals directly involved in patient management such as Medical doctors, pharmacists, nurses, laboratory scientists, and physiotherapists. However, other health workers who have contact with patients but are not directly involved in patient management were excluded. These are record officers, cashiers, security agents, porters and ward aides. Also, members of staff on any form of leave at the

time of study was excluded but those who are temporarily off duty were included.

Sample size determination

Leslie Fishers formula (Araoye, 2004) with a prevalence of health workers' violence from previous study, p, of 88.1 % (Ogbonaya et al., 2012) was used to give minimum sample size of 168. And with a response rate of 80%, sample size was 210; however 250 questionnaires were administered and 242 retrieved completely and adequately filled.

Sampling technique

Multi-stage sampling procedure was employed in the two hospitals although there were no dentists in LAUTECH Teaching Hospital (LTH) at time of data collection.

First stage: stratified by the five professional groups (doctors/dentists, nurses, pharmacists, physiotherapists, laboratory scientists including the technicians).

Second stage: stratified by seniority. Among the doctors, stratification was into two- consultants and residents/interns; among the nurses, stratification was into two – matrons and staff nurses; among the pharmacists, the stratification was into two – senior pharmacists and above and those below; among the physiotherapists, the stratification was into two – senior physiotherapists and above and those below; among the laboratory scientists, the stratification was into two – senior technologists and above and those below.

Third stage: simple random sampling from each substratum. The list of members was obtained from respective professional body. Selection was made by balloting from each of the stratum sampling frame. In order to make appropriate representation of units with small sampling frame such as the pharmacists, physiotherapists and laboratory scientists, allocation of sample size to each stratum was not done proportionately.

Instrument

A pre-tested semi-structured self-administered questionnaire was used. The instrument sought demographic data; their experience with violence and ill treatment from patients, the perceived causes of violence / assault, their response / reactions to violence and the hospital procedure of handling such and also the respondent suggestions to address the menace.

Data analysis

Data were manually sorted out, input into the computer

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Variable	Frequency (n = 242)	Percentage
Age		
20 – 29	62	25.6
30 – 39	62	25.6
40 – 49	63	26.0
<u>≥</u> 50	55	22.7
Sex		
Male	76	31.4
Female	166	68.6
Marital status		
Single	49	20.2
Married	189	78.1
Separated/widowed	4	1.7
Profession		
Doctor/Dentist	54	22.3
Nurse	130	53.7
Laboratory Scientist	26	10.7
Physiotherapist	20	8.3
Pharmacist	12	5.0
Duration in service		
< 10	122	50.4
> 10	120	49.6

Table 2. Reported violence against health workers as witnessed by respondents.

Variable	Frequency	Percentage
Ever witnessed a case before in this hospital (n= 242)		
Yes	160	66.1
No	82	33.9
The offender/perpetrator in the last case witnessed (n = 160)		
Patient	74	46.1
Patients' relatives/companion	79	49.5
Others	7	4.4
The assaulted in the last case witnessed (n = 160)		
Doctor/Dentist	78	49.0
Nurses	56	34.6
Others	26	16.3

system and cleaned. Data were analyzed with SPSS version 16 and the level of significance was set at p < 0.05 for bivariate analysis. Results were presented in form of frequency tables.

RESULTS

The response rate was 96.8% as 242 questionnaires were returned well filled and suitable for analysis. Table 1 shows the socio-demographic characteristics. The mean age of the respondents was 39.2 years (SD = 10.1). The

male:female ratio was about 0.46. There were more married respondents (189, 78.1%) than the singles and separated/widowed. The nurses were 130 (53.7%) and this constituted the highest professional group surveyed and the pharmacist were the lowest (12,5.0%). One hundred and twenty two (50.4%) and 120 (49.6%) of the respondents have spent less than 10 years and more than 10 years respectively in service.

As can be observed in Table 2, one hundred and sixty representing 66.1% reported ever witnessing at least a case of health workers' harassment in which case the perpetrator were usually the patient [74 (46.1%)] or their

Table 3. Respondents' experiences of assaults/violence.

Variable	Frequency	Percentage
Ever experienced violence at your work (n= 242)		
Yes	168	69.4
No	74	30.6
Experienced violence in the last one year (n=168)	144	59.5
Doctors /Dentists (n=144)	31	21.5
Nurses (n=144)	77	53.5
Others (n=144)	36	25.5
Number of attacks experienced in last one year (n = 144)		
One	29	
Two	31	
Three	28	20.1
> Three	56	21.5
		19.5
Mean number of attacks	2.7 ± 1.6	38.9
Type of assault suffered in the last experience (n = 144)		
Involves Physical	51	35.4
Verbal/psychological only	93	64.6
Assault outcome (n = 144)		
Medical attention required	36	25.0
Life threatening	0	0

relatives 79 (49.5%). The health worker affected in the last case witnessed was said to be a doctor or dentist in 49.0% (78) of cases, a nurse in 34.6% (56) of cases, while other health professionals represent the rest.

Among the respondents, 168 (69.4%) have experienced one form of violence or another but 144 (59.5%) were assaulted in the last year representing the prevalence of violence against the health workers in the hospitals. (Table 3). The highest prevalence was among the nurses [77(53.5%)] followed by the doctors/dentists [31 (21.5%)]. However 31 out of 54 doctors (57.4%); 77 out of 130 nurses (59.2%) and 36 out of 58 other professionals have experienced violence in the last one year. Most 56 (38.9%) of those that were assaulted have experienced more than 3 attacks within the previous one year of the data collection. The commonest form of assault was verbal / psychologically [93 (64.6%)] while physical abuse was 51 (35.4%) with 36 (25%) cases so serious to have warranted medical attention (bruises, cuts), but none of the cases was said to be life threatening. The physical assaults reported included such things as slaps, punches, kicking and cloth roughening. There were no reports of use of neither blunt objects nor sharp objects but there were cases of bites. Similarly there were no reports of sexual violence or assault.

Highest occurrence of the violence for the last incidence was in the accidents and emergency 44 (30.6%) followed closely by the out-patient clinics 29

(20.1%) and wards 21 (14.6%). Others were the labour ward 14 (9.7%), pharmacy unit 11 (7.6), laboratories 7 (4.8%) and the physiotherapy department 3 (2.1%).

Table 4 shows that the commonest perceived reason for attack on them could be connected to the feelings of in-patients of not being attended to on time as reported by 116 (80.6%) of the respondents followed by the feeling that the health workers approach to patients were insulting as reported by 89 (61.8%). Other reasons given were patients in pains or not improving 41 (28.5%); non availability of doctors, nurses etc on call/shift duty 62 (43.1%); aggressive personality of the people 53 (36.8%); non-availability of drugs, beds etc 28 (19.4%) and loss of patients 7 (4.9%).

Pertaining to the attacks, all the respondents condemned it describing it as barbaric and uncivilized. All the respondents also stated that the situation has not attracted due attention from either the hospital management or the government as none of them were aware of any policy or procedure to curtail the act.

Concerning usual actions taken by the respondents taken when attacked, only 14 representing 9.7% reported the assault to the management during the last assault on them while 56 (38.9%) called the attention of the hospital security and as many as 98 (68.1%) called for the intervention of their respective professional association. There was no report to police or any government agencies.

Table 4. Respondents' perceived reasons for assaults on health care workers.

Variable	Frequency	Percentage
In-patients not being attended to on time	116	80.6
Relatives feels their patients are in pains or not improving and the health workers are not doing enough	41	28.5
Loss of the patients	7	4.9
Feeling that the health workers approach to them were insulting	89	61.8
Non availability of equipment, drugs, beds	28	19.4
Personality of the perpetrator	53	36.8
Non availability of health workers to attend to them – doctors, nurses on duty / call / shift	62	43.1

Table 5. Relating socio-demographic characteristics of respondents with their assault experiences.

Variable	Ever experienced violence/assault		X ²	p value
	Yes (%) n = 168	No (%) n = 74		•
Age group (in years)			•	
20 – 29	45 (72.6)	17 (27.4)		
30 – 39	49 (79.0)	13 (21.0)		
40 – 49	50 (79.4)	13 (20.6)		
50 and above	24 (43.6)	31 (56.4)	23.1	<0.0001
Sex				
Male	52 (68.4)	24 (31.6)		
Female	116 (69.9)	50 (30.1)	0.052	0.819
Profession				
Doctor	31 (57.4)	23 (42.6)		
Nurse	77 (59.2)	53 (40.8)		
Others	36(62.1)	22 (37.9)	0.26	0.878
Duration of service (in years)				
≤ 10	77 (63.1)	45 (36.9)		
> 10	91 (75.8)	29 (24.2)	4.03	0.045

Table 5 showed that only the younger age groups are more likely to experience attack (p < 0.0001). The marital status, profession and duration of service were not statistically significant with respect to experiencing violence.

Discussion

This study has revealed a high prevalence of almost 60% of verbal, psychosocial and physical violence against healthcare professionals in hospitals in Osogbo. Violence against health professionals is reported to be rare in Egypt until 2011 but now frequent (Lancet, 2012). Violence and aggression against health workers is

unacceptable in any form and for whatever reason as it has consequences not only on the person affected but also on the entire health facility and the health system. The prevalence in this study is very similar to studies elsewhere (Eker et al., 2012; Magnavita and Heponiemi, 2012) much lower than 80% recorded in Palestine (Mohamad and Motasem, 2012) but just a little lower than that in Switzerland (Magdalena et al., 2009). However, it is not unlikely that some minor occurrences in our study were not reported as they were not counted as assault especially if they were resolved amicably and also because people's definition and interpretation of violence differ as also documented by Howerton Child & Mentes (2010) that most organizations lack standard definition. Tolerant threshold differ from person to person which

may also result in underreporting of violence. The higher prevalence in the younger age group could possibly be attributed to lower threshold for insult and pain and less maturity compare to the older age group.

Cashmore et al. (2012) in his study observed that reporting of incidents would assist the management to know the magnitude and gravity of the problem and in formulation of appropriate actions. With respect to non-reporting of cases, other factors such as fear of being blamed for the action leading to the violence; feeling that it is time consuming or discouragement that no action would be taken as reported previously (Mckoy and Smith, 2001; Distasio et al., 2005) were not expressed by the respondents in this study. Sometime patients and clients stand on the anecdotal belief that customers (patients) are always right. To improve reports of violence in the health care setting, the workers also need to know their rights (Cashmore et al., 2012).

Most studies (Abbas et al., 2010; Aytac et al., 2009; Mohamad & Motasem, 2012; Ogbonnaya et al., 2012; Samir et al., 2012) also reported verbal and psychological assault as the most common form of violence as the case in our study. Both physical and psychological workplace assaults can result in higher absenteeism, increased turnover, decreased job satisfaction, lower productivity, and a host of other negative outcomes.

The lack of procedure for reporting, investigation of assault to health workers in this study is of great concern although; this is common to previous studies.(Hartley et al., 2012; Khademloo, 2013).Standardized reporting procedure by managements would help to provide a more objective and the true picture of violence (Howerton Child & Mentes 2010). Reporting would also not be limited to physical or harmful violence but also verbal and threats of harms (Gates et al., 2011)

Our study shows that health care workers the study hospitals are exposed to violence from patients and/or their relatives. All categories of health professionals and of both sexes are affected equally (p > 0.05). The older respondents have experienced assault more which is also reflected in the length of time.

There is a need for policy to address the issue and formal health facility procedure in handling cases. There is a need for record keeping, reporting process and also a need for national survey - at primary, secondary and tertiary levels of care including private health facilities. Violence experienced from colleagues, superiors and management should be also researched Furthermore, attitude of the health workers in ethical relationship with patients and clients should addressed formally and via mentorship. The services in the healthcare facility should also be improved upon to minimize waiting time before patients are attended to.

REFERENCES

- Abbas M, Fiala L, Abdel Rahman A (2010). Epidemiology of workplace violence against nursing staff in Ismailia Governorate, Egypt. J. Egypt Public Health Ass., 85: 29-43.
- Araoye MO (2004). Research methodology with statistics for health and social sciences. Nathadex Publishers. pp.117-120
- Aytac S, Bozkurt V, Bayram N (2009). Violence Against Health Workers at a University Hospital in Turkey. J. of the World Universities Forum. 2(3): 35–52.
- Azodo CC, Ezeja EB, Ehikhamenor EE (2011). Occupational violence against dental professionals in southern Nigeria. African Health Sciences. 11(3): 486 492.
- Casmore AW, Indig D, Hampton SE (2012). Workplace violence in a large correctional health service in New South Wales, Australia: a retrospective review of incident management records. BMC Health Service Res., 12: 245-254.
- Distasio C, Hall K, Beachley M (2005). The Maryland Nurses Association workplace violence survey report. Maryland Nurse, 7 (1): 22-26.
- Eker HH, Özder A, Tokaç M (2012). Aggression and violence towards health care provider and effects thereof. Archives of Psychiatry and Psychotherapy. 4: 19–29.
- El-Gilany A, El-Wehady A, Amr M (2010). Violence against primary health care workers in Al-Hassa, Saudi Arabia.J. of Interpersonal Violence. 25: 716–734.
- Gates D (2004). The epidemic of violence against healthcare workers. Occupational and Environmental Medicine. 61: 649–650.
- Gates D, Kroeger D. (2002). Violence against nurses: the silent epidemic. ISNA Bulletin 29 (1): 25-30
- Ferns T (2006). Under-reporting of violent incidents against nursing staff . Nurse Stand, 20:41-45
- Hartley D, Ridenour M, Craine J (2012). Workplace violence prevention for healthcare workers-an online course. Rehabil. Nurse 37(4): 202–206
- Howerton Child R, Mentes J (2010). Violence against women: the phenomenon of workplace violence against nurses, Issues in mental health nursing 31(2): 89-95
- Khademloo M, Moonesi F, Gholizade H (2013). Health care violence and abuse towards nurses in hospitals in north of Iran. Global J. Health Sci., 5(4): 211–216.
- Lancet (2012). Violence against doctors in Egypt leads to strike action. World Report 2012 Available at: 380 www.thelancet.com. accessed 15/06/2014
- Magdalena G, Bruno S, Alexander H (2009). Aggressions by patients against medical doctors in Switzerland.
- Magnavita N, Fileni A (2012). Violence against radiologists. II: Psychosocial factors. Radiol Med., 117(6): 1034 1043.
- Magnavita N, Heponiemi T (2012). Violence towards health care workers in a Public Health Care Facility in Italy: a repeated cross-sectional study. BMC Health Services Research 12: 108.
- McKoy Y, Smith M (2001). Legal considerations of workplace violence in healthcare environments. Nursing Forum 36 (1): 5-14
- Mohamad K, Motasem H (2012). Workplace violence against physicians and nurses in Palestinian public hospitals: a cross-sectional study. BMC Health Services Res., 12: 469.
- Ogbonnaya GU, Ukegbu AU, Aguwa EN et al (2012). A study on workplace violence against health workers in a Nigerian tertiary hospital. Nig. J. of Med., 21(2):174 179.
- Pawlin S (2008). Reporting violence. Emerg. Nurse. 16: 16-21
- Samir N, Mohamed R, Moustafa E (2012). Nurses' attitudes and reactions to workplace violence in obstetrics and gynaecology departments in Cairo hospitals. East Mediterr. Health J. 18(3): 198-204.
- Vittorio di M (2003).Relationship between work stress and workplace violence in the health sector 'In' Workplace violence in the health sector. WHO: 1-33.