# **ORIGINAL PAPERS**

# Violence against mental health staff: a survey in a Nigerian psychiatric hospital

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**Aims and method** A survey was conducted to investigate physical assaults against mental health staff of a Nigerian psychiatric hospital in a 12-month period and also during their working career in the hospital retrospectively using a questionnaire method.

**Results** In total, 101 out of 120 questionnaires were completed (response rate 84.2%). Within the period of their employment in the hospital 49.5% of staff had been physically assaulted at least once, and over the previous 12 months 33.7% had been physically assaulted. Nursing staff (82.3%) were more frequently assaulted than doctors, most often during routine assessment of patients (44.3%). In total, 88% of staff sustained injuries requiring medical attention. Vulnerability to assaults was not associated with attending a course on prevention and management of psychiatric patient violence.

**Clinical implications** Assaults by patients against mental health staff, especially nurses, are quite widespread in Nigeria. There is a need to formulate policies on prevention and management of violence in people with mental disorders in Nigerian psychiatric hospitals.

**Declaration of interest** None.

The practice of psychiatry can be rewarding both for the patient and the therapist, however, it is not without its hazards. There is now growing recognition of violence by people with mental illness against mental health workers, but because the reporting policies for these unwanted behaviours vary across different institutions, published prevalence rates may not reflect actual levels of such incidents.1 There is an abundant literature from Western countries describing violence against mental health workers, mostly psychiatrists and psychiatric trainees.<sup>1–5</sup> Reports indicate that 25-56% of them have been physically assaulted at their workplace. 1-6 There is, however, a paucity of research on violence by individuals with mental illness from Africa, even though Africa carries 25% of the world's disease burden, with only 3% of the world's health workforce and 1% of the world's economic resources to meet these challenges.<sup>7</sup> Sub-Saharan Africa, including Nigeria with fewer than one psychiatrist per million population, also suffers from a severe shortage of mental health personnel.7 There is no research on this subject based on Nigerian psychiatric hospitals. This study was therefore undertaken to determine the frequency and type of physical assault by individuals with mental illness against staff working in a mental hospital in Nigeria, and to garner the attitudes of these mental health workers towards such unpleasant experiences.

#### Method

This was a self-report retrospective questionnaire survey of physical assaults on doctors and nurses working at Federal Neuropsychiatry Hospital, Yaba, Lagos. The survey was carried out in July 2009. Federal Neuropsychiatry Hospital is a large government psychiatric hospital (476 beds) that serves as a major mental health facility for the city of Lagos, home to about 10 million people. Nigerian studies of people presenting at psychiatric facilities have shown schizophrenia to be the commonest diagnosis, followed by affective disorder, then psychoactive substance misuse.<sup>8,9</sup> Data analysis of 3531 new cases seen at the Neuropsychiatry Hospital in 2005 showed that 75% of individuals were below 40 years of age, with almost equal distribution of males and females. Schizophrenia and related psychosis accounted for 34% of cases seen, followed by affective disorder (25.7%), substance misuse (14.7%), organic disorder (4.5%) and others (21.1%) (details available from the author on request).

Permission to conduct the study was obtained from the ethics and research committee of the hospital. The employee register was used in the recruitment of participants. Going through the names in the register, every third employee (psychiatrist, psychiatric trainee and psychiatric nurse) was coded for inclusion in the study. The questionnaires were then distributed to those staff after

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having obtained their consent for participation in the study. The questionnaires were developed according to the method used by previous investigators. <sup>1,3</sup> Physical assaults were defined as actual physical attacks (e.g. hit, struck with an object, shaken, pushed, attempted strangling, attempted rape, kicking, biting) and not threats or verbal aggression. Demographic data such as gender, age, marital status and duration of employment were also obtained. Attitude of staff towards physical assaults by patients was investigated using the four attitude items from Dhumad *et al.* All replies were anonymous.

### Statistical analyses

The statistical package SPSS, version 11.0 for Windows, was used for the analysis. Descriptive statistics were used to examine demographic characteristics and prevalence results, whereas  $\chi^2$  statistics were used to compare categorical variables. The level of significance was set at P < 0.05.

#### **Results**

Of the 120 questionnaires distributed to staff, 101 were completed and returned (84.2%). There were 71 female participants (70.3%) and 30 male participants (29.7%). The numbers in each category were as follows: consultant psychiatrists 4 (3.9%); senior registrars 10 (9.9%); registrars 14 (13.9%); nurses 73 (72.3%). The mean duration of employment, in years, for all groups taken together was 7.1 (s.d. = 7.0). The mean age was 36.6 years (s.d. = 7.2, range 22–55).

#### **Assaults**

Of the 101 mental health workers that completed the questionnaires, 50 had been physically assaulted by psychiatric patients in the hospital within the period of their employment (49.5%), and 34 of them had been assaulted within the past year (33.7%). Of the 34 assaults, 28 were on the nursing staff (82.3%) and 6 were on psychiatric trainees of registrar grade (17.6%). No significant differences were found between male and female respondents, when those who were assaulted were compared with those who were not assaulted ( $\chi^2 = 0.26$ , P = 0.61). Table 1 describes the frequency and nature of these physical assaults. The commonest type of assault was being pushed or shaken (36, 44.4%). Table 2 describes the frequency distribution of the type of duty being carried out by the victims at the time of the assault. The majority of assaults (47, 44.3%) occurred during routine in-patient assessment and during routine admission of an out-patient (24, 22.6%). The frequency distribution of the location in which the physical assault on staff occurred is shown in Table 3. Members of staff were most likely to be targeted at the nurses station (46, 43%).

Most of the assaults (58, 57.4%) occurred in the presence of another mental health professional and for 38 incidents (76%) the assailants had a previous history of violence. Although 44 staff (43.6%) had attended at least one course aimed at the prevention and management of

<b>Table 1</b> Frequency and characteristics of physical assault $(N = 81)$					
Nature of assault	n (%)				
Shaken or pushed	36 (44)				
Hit or struck with an object	23 (28)				
Clothes torn	12 (15)				
Attempted strangling	8 (10)				
Attempted rape	2 (2)				

Table 2	Frequency and type of duty performed before assault (N = 106)					
Nature of	n (%)					
Routine assessment of an in-patient 47 (44)						
During ro	24 (23)					
During ur	21 (20)					
Urgent ac	10 (9)					
Urgent ou	ut-patient review	4 (4)				

Table 3 Frequency and location of ass	Frequency and location of assaults (N = 107)				
Location	n (%)				
Nursing station	46 (43)				
Emergency department	17 (16)				
Interview room	15 (14)				
Corridor	13 (12)				
Common room for patients	13 (12)				
Seclusion room	3 (3)				

patient violence, there was no difference in reported violence between those who had attended courses and those who had not. In total, 30 of those assaulted (88.2%) had received medical attention following the incident. We investigated the reaction of staff to patient violence and vulnerability to attacks using four attitude items from Dhumad  $et\ al.^1$  Table 4 shows their responses; there was no statistically significant difference when those who were assaulted were compared with those who were not assaulted.

## **Discussion**

This study has shown that mental health staff working in a psychiatric hospital in Nigeria are also exposed to patient assault and violence like their counterparts in Western countries. Almost one in two of the 101 respondents (49.5%) had been assaulted at least once since starting at the hospital, and more than one in three (33.7%) had been assaulted at least once within the previous year. Previous studies have reported rates of physical assaults of 12.4% against psychiatrists, 32.4% against senior house officers and 36% against psychiatric trainees. 16,10 Nurses were most frequently assaulted by individuals in this study (82.3%),

Table 4 Attitudes of participants towards assaults by patients								
	Assaulted, n (%)		Not assaulted, n (%)					
Attitude	Agree	Disagree	Agree	Disagree	Р			
Occasional assaults are an acceptable hazard of work	34 (66.7)	17 (33.3)	21 (53.8)	18 (46.2)	0.216			
Assaults can be predicted and hence avoided	28 (60.9)	18 (39.1)	30 (75.0)	10 (25.0)	0.163			
My manner with patients makes me vulnerable to assaults	10 (21.7)	36 (78.3)	10 (26.6)	29 (74.4)	0.673			
I take needless risks with potentially violent patients	9 (20.0)	36 (80.0)	6 (15.8)	32 (84.2)	0.619			

whereas doctors were victims in 17.7% of these assaults. In total, 30% of those assaulted had received treatment for injuries sustained; the assaults commonly occurred at the nurses' station (43%), usually during routine assessment of an in-patient.

The observation that nursing staff were more likely to be assaulted is consistent with findings from previous studies.  $^{5,10-12}$  In a study by Erdos & Hughes, 78% of assaults were committed against nursing staff, whereas only 4% were against a psychiatrist.<sup>5</sup> Even though nurses spend more time with patients than doctors and set limits on behaviour that is permissible on the ward, thereby exposing them to psychiatric patient violence as reported in previous studies, another reason for the high rates seen in our study could be the shortage of mental health staff experienced by many nations in low- and middle-income countries including Nigeria.<sup>7,13</sup> Mental health facilities in low- and middleincome countries are insufficient, therefore overcrowding in these institutions cannot be ruled out as a contributing factor. Staff may rationalise that occasional violence in a psychiatric setting is an occupational hazard, as observed in our study (Table 4). Negative affective changes such as anger and irritability, social repercussions such as fear of patients and changes in co-worker relationships are possible outcomes of patient violence, thus such incidents against mental health staff should be taken seriously.<sup>5,14</sup>

A lifetime experience of such violence by almost one in every two staff members and a 12-month experience of just over a third of the participants as seen in this study is high. It is noteworthy that female staff outnumbered males in this study, the majority of them nurses. The relationship between staff characteristics and violence may not always be clear, as shown in previous studies, however, some reports have documented a positive relationship between psychiatric patient violence and higher numbers of female staff in the unit.12 On the other hand, other factors such as younger age of staff (i.e. under 30 years of age) and staff with higher levels of psychiatric experience have been shown to be associated with lower levels of patient violence.<sup>12</sup> Even though our participants were experienced, since mean duration of employment was about 7 years, they were relatively old (mean age 36.7 years). One can speculate that more female staff and the older age of our participants may have contributed to the high levels of violence in our sample.

We have thus seen that violence against mental health staff is highly prevalent in a psychiatric service in Nigeria, however, the study had some limitations. It was retrospective and limited to one facility with the possibility of recall bias, and in addition data on the types of individuals

who perpetrated these acts of violence could not be obtained from the staff with reliability as information was obtained by self-report. The hospital administration did not have a policy in place on reporting of assaults at the time this study took place. Data from psychiatrists and nurses were combined because of the small number of psychiatrists in the hospital at the time of this study. Despite these limitations, the study has shown that there is a need for multicentre studies from Nigeria using appropriate methods to explore patient and staff variables likely to lead to assaultive behaviour in a psychiatric setting, with a view to putting in place preventive measures. There is an additional need to formulate policies that would ensure proper reporting and documentation of assaultive behaviour in Nigerian mental health institutions. Training of professionals on management of patient violence should be updated and audited on a regular basis.

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# Improving physical health monitoring in secondary care for patients on clozapine

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**Aims and method** To assess how well psychiatric teams follow up abnormal results from physical health monitoring of patients in a secondary care clozapine clinic compared with follow-up in a specialist secondary care physical health clinic, using an audit/re-audit method of comparison. Prevalence data for cardiovascular risk factors within the clinic population were also obtained.

**Results** Substantial and statistically significant (P<0.01) improvements in follow-up of abnormal results were made following the introduction of a specialist clinic compared with treatment as usual. Prevalence of all cardiovascular risk factors among the patients on clozapine was very high compared with the general population.

**Clinical implications** Patients on clozapine have significant and multiple cardiovascular risk factors, which may be best managed within a specialist secondary care physical health clinic that can follow up abnormal results and coordinate care across primary and secondary care.

**Declaration of interest** None.

It has been recognised for some years that people with a diagnosis of schizophrenia have notoriously poor access to healthcare. Life expectancy is reduced by 20%, with 60% of the excess mortality due to physical illness. The large-scale US Clinical Antipsychotic Trials in Intervention Effectiveness (CATIE) study identified major deficiencies in lack of diagnosis and treatment for cardiovascular risk factors in this population.<sup>2</sup> The 2006 guidelines for schizophrenia from the National Institute for Health and Clinical Excellence (NICE) recognised these problems and identified the need for these patients to receive appropriate physical healthcare.<sup>3</sup> The NICE guidelines stipulate that the majority of antipsychotic monitoring should take place in primary care, but that patients who cannot access a general practitioner (GP) should receive care from secondary care psychiatric services. The guidelines also stipulate that psychiatric case notes should document who is taking responsibility for care. Furthermore, it follows that if monitoring takes place in primary care, then results need

to be disseminated to psychiatrists in secondary care to ensure that they can adequately weigh up the risk-benefit ratio of prescribing antipsychotics.

Three years on, the question is how well have these guidelines been implemented?

The largest British study<sup>4</sup> pertinent to this question to date was conducted in 2007 – a year after the NICE guidelines were released. This study assessed the prevalence of untreated cardiovascular risk factors out of a cohort of 1966 patients in assertive outreach teams. Screening rates were low; for every one person with diabetes, one was missed; for dyslipidaemia, seven were missed; and for hypertension, four were missed. Questionnaires sent to teams showed that a third of staff did not think they were responsible for physical healthcare, half did not know how to interpret results, and many teams had no basic equipment to do health checks. This suggests that further work needs to be done in secondary care teams to ensure better physical healthcare.

