

Violence and aggression in the Drug Treatment Centre Board

Peter Whitty, John J O'Connor

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Abstract

Objectives: We sought to determine the prevalence of and the factors associated with violent and aggressive incidents among clients attending an out-patient methadone stabilisation and detoxification programme in Dublin.

Methods: We retrospectively examined all incident report forms over a two-year period. We also obtained information on demographics, main drug of abuse, timing and location of the incident as well as psychiatric and physical comorbidity among the perpetrators from case note review.

Results: Two hundred and ninety-five incidents occurred over the study period. The overall rate of violence and aggression was 85 per 1,000 clients attending the centre per year. Most incidents involved verbal abuse. Females were significantly more likely to be involved in assaults compared to males. A high proportion of clients (80%) who were physically aggressive tested positive for benzodiazepine medication.

Conclusions: Levels of recorded violence have remained stable however racial abuse has increased in recent years. The relatively low overall rate of violence suggests that existing measures have helped reduce the number of aggressive and violent incidents in the centre. Most of the victims were either doctors, nursing staff or general assistants. This finding reflected their respective roles in the centre, which included limit setting and dealing with positive drug screens among clients.

Key words: Violence; aggression; methadone maintenance and detoxification.

Introduction

Violence and aggression are significant occupational risks across all areas of healthcare. In a retrospective study of general practitioners 63% admitted to having experienced abuse or violence during the previous twelve months.¹ This study also reported that 18% of practitioners experienced some form of abuse at least once a month while 1% experienced verbal abuse every day. In a one year study of

emergency department staff, 55% of employees had been physically assaulted and a further 21% had witnessed a physical threat or assault.² In general hospital settings violence and aggression are equally widespread with one study reporting that as many as 68% of staff experienced verbal abuse and 27% admitted to having been assaulted over a one year period.³ Psychiatric settings provide similar findings with almost 60% of staff experiencing serious violent incidents in one prospective seven month study.⁴ Patient factors found to be related to violence included being young, male with a diagnosis of schizophrenia,⁵ particularly with neurological impairment,⁶ having a history of violence,⁷ substance abuse^{8,9} or personality disorder,¹⁰ and being involuntarily admitted to hospital.¹¹ Furthermore, workplace violence was also higher in situations where staff were uncertain of their roles¹² and where a large proportion of shifts were worked by substitute staff or staff with low levels of experience.¹¹

Violence in the workplace can have a broad impact on the psychological, emotional and economic well-being of an organisation and its staff members.¹³ The psychological impact on employees, family members and colleagues can be severe and long lasting and deleterious effects on productivity, work quality and customer service as well as increased costs due to absence and employee turnover. Increased occupational health claims and associated legal costs as well as poor corporate and public images of the organisation are further consequences of workplace violence.

We previously reported on the rates of violence and aggression in the Drug Treatment Centre Board (DTCB) between 1991 and 1996.¹³ Among a cohort of 65 clients, one percent per year were involved in violent incidents. The study recommended the introduction of a written contract signed by clients attending the service and listing unacceptable behaviours and consequences of same. With this in mind we undertook to systematically analyse all incident report forms over a two-year period with particular attention given to reports of violent behaviour. The aims of the project were to determine whether the rate of violence or aggression had changed in recent years in the DTCB. We also sought to establish the precipitants of violent episodes as well as the context in which these incidents occurred.

Method

The National Drug Advisory and Treatment Service, now known as The Drug Treatment Centre Board (DTCB), was established in 1969 and is the longest established treatment service in the country. The DTCB provides prevention, treatment, rehabilitation and aftercare programmes for out-patients and in-patients in order to minimise the harmful effects of drug addiction and prevent the spread of HIV and

*Peter Whitty, MD, MRCPsych, Consultant Psychiatrist, East London and the City Mental Health NHS Trust, Glen Road, Plaistow, London E13 8SP, John J O'Connor, MB, MRCPsych, Clinical Director and Consultant Psychiatrist, Drug Treatment Centre Board, Trinity Court, 30-31 Pearse Street, Dublin 2, Ireland.

*Correspondence

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other infectious diseases. The centre deals with complex cases of opiate dependence, which cannot be managed in the community. On commencing treatment clients attend daily and can be rewarded for providing clean urine samples with take-away doses of methadone for up to one week. Five consultant led multidisciplinary teams deliver specialised treatments for patients with substance abuse disorders and referrals are made by general practitioners, psychiatrists and medical doctors in general hospitals.

Between January 2002 and December 2003 we retrospectively examined all incident report forms in the DTCCB. The study received full Ethics Committee approval. Using similar methodology to Fahy *et al*¹⁴ we graded aggression according to degree of severity. Grade 1 was defined as verbal / racial abuse. Grade 2 was defined as property damage and Grade 3 as assault or injury. All incidents were analysed in relation to demographics of perpetrator, timing and location of incident as well as the victim of the violent incident. For incidents that involved physical aggression (Grade 2 and Grade 3) we also obtained information on main drug of abuse at time of incident, comorbid psychiatric diagnosis, diagnosis of personality disorder and history of previous violence from case note review. All data was analysed using the Statistical Package for the Social Sciences.

Results

During the course of the study 1,854 clients received treatment at the DTCCB representing an annual average attendance of 927 clients per year. Of these, 1,232 (66%) were male while 622 (34%) were female.

There were 295 documented incidents of violent or aggressive behaviour over the two years of the study. Of these, 221 (75%) were of verbal abuse of which 33 (11%) were racial in nature, 41 (14%) involved property damage and 33 (11%) involved assault or injury. In terms of the perpetrators, 157 clients [(male = 100 (64%); female = 57 (36%)] committed the 295 documented incidents. Thus the rate of violent or aggressive incidents was 85 per 1000 clients attending the DTCCB per year. The re-offence rate among some clients was high with a substantial proportion of all incidents ($n = 58$; 20%) accounted for by a relatively small number of patients ($n = 7$).

Table 1 details the person to whom the aggression or violence was directed. Most Grade 1 and 2 incidents were directed at medical and nursing staff while general assistants, security staff and other clients were often the victims of Grade 3 incidents. In terms of location most incidents occurred at the nurse's station where medications were dispensed ($n = 104$; 35%). Ninety-three (32%) occurred in the waiting area, twenty-nine (10%) occurred in consultation offices while sixty-nine (23%) occurred in other areas in the clinic (see Table 1).

Table 2 details the gender breakdown of the 157 perpetrators according to incident severity. Chi squared analysis revealed that males were significantly more likely to be verbally / racially abusive and engage in property damage while women were more likely to be involved assaults ($\chi^2 = 14.2$, $p = 0.003$).

Among the 57 clients who were physically aggressive (Grade 2 and Grade 3 incidents; Table 2), 28 (49%) had a

Table 1: Victim and location of incidents. Grade 1 = Verbal and racial abuse; Grade 2 = Property damage; Grade 3 = Assault.

	Grade 1 (n = 221)	Grade 2 (n = 41)	Grade 3 (n = 33)
Victim			
Nurse	68 (31%)	14 (34%)	2 (6%)
Doctor	49 (22%)	11 (27%)	3 (9%)
General assistant	60 (27%)	12 (29%)	8 (24%)
Security guard	26 (12%)	2 (5%)	6 (18%)
*Other staff member	7 (3%)	2 (5%)	1 (3%)
Other client	11 (5%)	-	13 (40%)
Location			
Nurse's station	85 (38%)	18 (44%)	1 (3%)
Doctor's office	21 (10%)	5 (12%)	3 (9%)
Waiting Room	66 (30%)	10 (24%)	17 (52%)
**Other location	49 (22%)	8 (20%)	12 (36%)
*Other staff member (Social worker, Counselor, Receptionist).			
**Other location (Security guard station, Reception area, Clinical treatment room, Offices of other healthcare workers).			

previous history of violence while 29 (51%) had no such history. In terms of comorbidity 15 clients (26%) had a diagnosis of major depression, six (11%) had a diagnosis of psychosis while 36 clients (63%) had no history of major psychiatric illness. Most clients ($n = 46$; 81%) did not have a personality disorder, six (10%) suffered from an emotionally unstable personality disorder and five (9%) had a diagnosis of antisocial personality disorder. Twenty clients (35%) provided a urine sample in the twenty-four hours leading up to the incident. Of these 16 (80%) tested positive for benzodiazepines, nine (45%) tested positive for opiates while two tested positive for cocaine. Only two clients (10%) were clear of benzodiazepines and illicit drugs on the day of the incident.

Discussion

The results of the present study are consistent with those of the previous study by Fahy *et al*¹⁴ in 2000. In their study the reported rate of violence was 1% compared to 0.85% in the present study. This rate is lower compared to other psychiatric settings where rates of aggression may be as high as 30%.^{9,15} The relatively low rate of violence in the present study suggests that existing measures have helped reduce the number of aggressive and violent incidents in the centre. These measures included the presence of security guards at the entrance, the creation of a weapon free environment by searching clients on entering the building, closed circuit television cameras throughout the centre as well as the signature of a contract by patients prior to engaging in treatment. This contract lists behaviours that are unacceptable and the consequences of transgressions. These consequences include daily attendance with removal of take-away prescriptions or, in certain circumstances, suspension from the treatment programme. Previous research has shown

Table 2: Gender breakdown of the 157 perpetrators who committed the 295 incidents

	Grade 1	Grade 2	Grade 3
Male	66 (66%)	22 (79%)	12 (41%)
Female	34 (34%)	6 (21%)	17 (59%)
Total	100 (100%)	28 (100%)	29 (100%)

that such measures have a role in increasing staff safety in emergency and inpatient settings.¹⁶

In terms of the total number of incidents over the two years of the study, most involved verbal abuse with nurses, doctors and general assistants most likely to be the victims of the abuse. This is likely to reflect their respective roles in the clinic, which at times can involve limit setting and warnings regarding positive drug screens. Issues related to disputes over prescriptions, takeaway doses and allegations of drug dealing on the premises are often at the heart of aggressive and explosive outbursts and doctors, nursing staff and general assistants frequently address these issues with patients. A further significant finding was the emergence of racial abuse in the clinic. In the previous study by Fahy *et al*⁴ no incidents of racial abuse were noted. However, the cultural background of staff at the clinic has changed considerably over the last five years and one consequence of this has been the emergence of racial abuse by clients.

In the present study female patients were more likely to be violent than males. Even though males accounted for more overall incidents of verbal abuse and property damage this can be explained by the fact that males accounted for most attendances during the study period. The relationship between physical assault and female gender supports much of the literature of violence in psychiatric settings where female patients are more likely to be violent and to be violent more often.¹⁷ Furthermore, the level of violence between patients was high accounting for approximately one third of all assaults. This suggests that the DTCB has become a place for clients to resolve their own conflicts as the centre represents a communal place of contact for patients with substance abusers disorders.

In terms of the factors associated with physical aggression and violence (Grade 2 and 3 incidents) almost half of the patients had a previous history of violence. This supports the literature on the importance of a past history as a risk factor for future violence.^{18,19} Over on third of patients had a major psychiatric diagnosis most of which was depression. A high proportion (80%) tested positive for benzodiazepines at the time of the incident. This finding is difficult to interpret owing to selection bias as only one third of clients provided a urine sample at the time of the incident. This was due to the policy of urine drug screens in the centre, which involved a once weekly random sample for most clients. Furthermore, estimated rates of benzodiazepine use among this population are high with cross sectional samples in the DTCB revealing that over 70% of clients test positive for benzodiazepines. Previous studies in this area have linked benzodiazepine

intoxication and violence^{20,21} and the present findings serve as a reminder of the widespread use and abuse of these medications in this country. This study supports the recent report from the Department of Health and Children recommending that benzodiazepines should not be prescribed in those with a propensity for addictions.²²

There are some limitations to this study. Firstly, this study was descriptive in nature did not include a control group. As a result we can not determine the factors predictive of violence or aggression in this group. Furthermore, the rate of violence and aggression reported is likely to underestimate the true rate in the DTCB as not all incidents were recorded especially those between patients, which can occur unknown to staff. A further limitation relates to the low number of patients who provided urine samples on the day of the incident. This was due to the policy at the clinic whereby clients provided random urine samples once per week. Nevertheless, as methadone maintenance programmes develop outside of Dublin these findings highlight that existing measures within the DTCB may have a role to play in maintaining a lower than average overall rate of violence in drug treatment centres.

Declaration of Interest: None

References

- Hobbs FD. Violence in general practice: a survey of general practitioners' views. *BMJ* 1991; 302: 329-332.
- Fernandes C, Bouthillette F, Raboud J *et al*. Violence in the emergency department: a survey of health care workers. *CMAJ* 1999; 161: 1245-1248.
- Winstanley S, Whittington R. Aggression towards health care staff in a UK general hospital: variation among professions and departments. *J Clin Nurs* 2004; 13: 3-10.
- Owen C, Jones M, Tennant C. Violence and aggression in psychiatric units. *Psychiatr Serv* 1998; 49: 1452-1457.
- Calcedo-Barba AL, Calcedo-Ordenez A. Violence and paranoid schizophrenia. *Int J Law Psychiatry* 1994; 17: 253-263.
- Krakowski MI, Czobor P. Clinical symptoms, neurological impairment, and prediction of violence in psychiatric inpatients. *Hosp Community Psychiatry* 1994; 45: 700-705.
- Morrison EF. A coercive interactive style as an antecedent to aggression and violence in psychiatric inpatients. *Res Nurse Health* 1992; 15: 421-431.
- Palmstierna T, Wistedt B. Risk factors for aggressive behaviour are of limited value in predicting the violent behaviour of acute involuntary admitted patients. *Acta Psychiatr Scand* 1989; 81: 152-155.
- Foley SR, Kelly BD, Clarke M, McTigue O, Gervin M, Kamali M, Larkin C, O'Callaghan E, Browne S. Incidence and clinical correlates of aggression and violence at presentation in patients with first episode psychosis. *Schizophr Res* 2005; 72: 161-168.
- Miller RJ, Zadolinnjy K, Hafner RJ. Profiles and predictors of assaultiveness for different psychiatric ward populations. *Am J Psychiatry*; 1993; 150: 1368-1373.
- James DV, Fineberg NA, Shah AK, Priest RG. An increase in violence on an acute psychiatric ward: a study of associated factors. *Br J Psychiatry* 1990; 156: 846-852.
- Katz P, Kirkland FR. Violence and social structure on mental hospital wards. *Psychiatry* 1990; 53: 262-277.
- Health and safety authority 2001. Prevention of violence in healthcare. Dublin H.S.A. National Audit Office 2003.
- Fahy S, Brown R, Sloan D, Keating S, O'Connor J. An audit of violent incidents in the drug treatment center. *Ir J Psych Med* 2000; 17: 29-33.
- Walker Z, Seifert R. Violent incidents in a psychiatric intensive care unit. *B J Psych* 1994; 164: 826-828.
- Black KJ, Compton WM, Wetzel M, Minchin S, Farber NB, Rastogi-Cruz D. Assaults by patients on psychiatric residents at three training sites. *Hosp Community Psychiatry* 1994; 45: 706-710.
- Larkin E, Murtagh S, Jones S. A preliminary study of violent incidents in a special hospital (Rampton). *B J Psych* 1988; 153: 226-231.
- Walker Z, Seifert R. Violent incidents in psychiatric intensive care units. *Br J Psychiatry* 1994; 164: 826-828.
- Norko MA, Baranoski MV. The state of contemporary risk assessment research. *Can J Psychiatry* 2005; 50: 18-26.
- Hoaken PN, Stewart SH. Drug abuse and the elicitation of human aggressive behaviour. *Addict Behav* 2003; 28: 1533-1554.
- Mathew VM, Dursun SM, Reveley MA. Increased aggressive, violent, and impulsive behaviour in patients during chronic-prolonged benzodiazepine use. *Can J Psychiatry* 2000; 45: 89-90.
- Report of the benzodiazepine committee. Department of Health and Children. 2002.