

# A Study of Violence Within a Forensic Treatment Facility

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According to most studies, psychiatrists cannot reliably predict violent behavior.<sup>1</sup> For those individuals who have been repeatedly violent, however, there are data to suggest that the likelihood of future violent behavior is greatly increased and, therefore, predictable to some degree.<sup>2</sup> The staff of maximum security treatment facilities for mentally disordered offenders (MSTF-MDO) treat patients known to have had previous violent episodes. This means that both staff and patients within the MSTF are at increased risk of being targets of violent episodes. Previous empirical studies,<sup>3,5</sup> as well as theoretical papers,<sup>6</sup> emphasize the multivariant nature of these violent acts and stress the importance of studying environmental factors associated with the aggressive behaviors.<sup>7,10</sup>

## Background

This study was undertaken to better understand aggressive behavior and its management within a maximum security treatment facility for mentally disordered offenders.

The study took place within North Florida Evaluation and Treatment Center, a modern 200-bed maximum security diagnostic and treatment institution for mentally disordered male forensic patients. The Center is located on a 55-acre campus on the outskirts of Gainesville, a northcentral Florida university oriented community. The facility has 15 buildings, ten of which provide combined residential, dining, and recreational facilities. Each of these houses 18 to 27 men. They are divided into two or three nine-room pods, each room accommodating one patient. The patients on a pod have their own indoor recreational areas but share a common dining facility with the other pods in the building. Each building is monitored from a control room.

The Center has four separate treatment units, three for general psychiatric patients and one for mentally disordered sex offenders. Each treatment unit has a unit director who is responsible for the administration and clinical management of the treatment programs. Each unit also has mental health professionals, usually social workers, who function as primary therapists and as case managers for the nine patients residing on a pod. These primary therapists also clinically supervise treatment and rehabilitation specialists who perform a variety of management and rehabilitative services. Registered nurses, who serve as health coordinators for the units, administer psychotropic medications prescribed by staff psychiatrists.

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In view of the institution's limited medical staff and facilities, its clientele is composed of ambulatory patients. Through contractual agreement, faculty and residents from the Departments of Psychiatry and Clinical Psychology of the University of Florida serve as consultants for the Center. The Center receives all patients under forensic commitment by the court. This includes persons sent from jails as incompetent to stand trial or not guilty by reason of insanity (NGBRI) and from prisons as mentally ill and dangerous or as a mentally disordered sex offender (MDSO). No cases are received solely for purposes of evaluation.

The average length of stay is 5.5 months for those incompetent to stand trial, 10 months for the NGBRI, and 18 months for the MDSO. Because the sex offender group is quite different from the general psychiatric population at the Center they are excluded from this study.

Since the facility serves forensic patients exclusively, perimeter security is a critical concern. The treatment area is surrounded by two fences equipped with alarm systems monitored at the central control tower. Patrolling security vehicles and strategically located security towers continuously monitor the perimeter.

Internal security is primarily the responsibility of unit treatment staff who operate the control rooms in each treatment building and are responsible for administering the patient accountability system. In addition, uniformed security officers patrol the secure area during high activity periods of the day and evening and on a random basis during night hours.

Within the secured perimeter, patients have graded degrees of freedom to move about on the campus. Some are not allowed out of the building unless accompanied by staff, while others are permitted to be alone outside their residence building. All patients are locked within their building from 10 p.m. to 8 a.m. and are locked in their individual rooms from midnight until 6 a.m., except for the night preceding holidays and on Friday and Saturday when they can be outside their rooms until 2 a.m. A curfew exists from 12 noon until 1 p.m. and from 5 to 6 p.m. when patients are required to be in their assigned building. Medications are dispensed 6 to 7 a.m., 12 to 12:30 p.m. and 5 to 5:30 p.m. Meals are served at 7 to 8 a.m., noon to 1 p.m. and 5 to 6 p.m. Unless restricted, patients eat in the common room. Depending on the size of the building, there could be 18 to 27 patients in this area during mealtime. The highest patient density on a pod is nine patients and occurs when patients are restricted to their building or are participating in group therapy or recreational activities. Patient density outside of the residential building is generally greatest during recreational activities.

## Methods

The authors reviewed the method of reporting incidents within the institution. They then implemented revisions for obtaining more detailed information regarding aggressive acts occurring within the institution. These new forms obtained the following information on each aggressive incident from both security and treatment staff: place, date, and time of occurrence; type of aggression; clinical as-

**Table 1. Occurrence of Incident Following Admission**

Month	Number	Percent
1	20	32.2
2	13	21.0
3	5	8.1
4	2	3.2
5	0	0
6	4	6.5
7 to 32	18	29.0

assessment of patient's level of agitation on a scale of 1 to 7; and different modes of staff intervention in response to patient's aggressive behavior.

Aggressive acts were categorized into four levels: (1) passive aggression (refusal to take medicines, violation of standing procedures, and refusal to comply with verbal orders), (2) verbal abusive behavior (verbal abuse directed toward other patients, treatment staff, or security staff), (3) threatened violence (threats directed toward self, other patients, treatment staff, security staff, or property), and (4) acts of violence (violence directed toward self, other patients, treatment staff, security staff, or property).

The types of intervention of treatment staff were: (1) issuance of verbal orders to the patient, (2) calling security, (3) calling a nurse, and (4) placing the patient on special precautions. Security interventions consisted of: (1) accompanying the patient in movement, (2) standing-by, (3) issuance of verbal orders to the patient, (4) conducting a search of patient and/or room, (5) applying handcuffs or body restraints, and (6) placement of the patient in an observation or seclusion room. The nature of intervention required was a decision of the treatment staff.

The incident group (n=63) was comprised of the patients who committed an aggressive act during the four-month period of the study. The control group (n=135) consisted of all patients (excluding the sexual offenders) in the institution who did not engage in an aggressive incident during the four months of the study. The sex offenders were excluded from the control group because no sex offenders were involved in any incidents during the time of the study and they were judged to differ markedly from the general psychiatric population of the Center.

## **Results**

For the four-month period of the study, 63 of the 255 patients (25 percent) at this MSTF were responsible for the total number of incidents that occurred (n=188) for an average of slightly more than 1.5 incidents per day. The number of incidents per patient in the incident group ranged from 1 to 15 with a mean of 2.98 and a median of 2.0. Twenty-seven patients (42.8 percent) participated in three or more incidents.

Table 1 shows the occurrence of the incidents in months following admission. Over 50 percent of the incidents occurred within the first two months following admission, about 18 percent took place in the next four months, and 29 percent occurred six months or more following admission. Eighteen patients were in-

Table 2. Aggressive Incidents by Day of Week

	Number	Percent
Monday	28	14.9
Tuesday	34	18.1
Wednesday	25	13.3
Thursday	36	19.1
Friday	25	13.3
Saturday	23	12.2
Sunday	17	9.0

volved in their first incidents after being in the institution for six months. The occurrence of these incidents ranged from 7 to 32 months after admission with no more than two occurring in any single month. These data suggest that there is an initial two-month period of adjustment for the newly admitted patient during which time the patient is more likely to initiate aggressive incidents. The decrease in the number of monthly incidents after the second month following admission seems to reflect the stabilization of the patient through the treatment program.

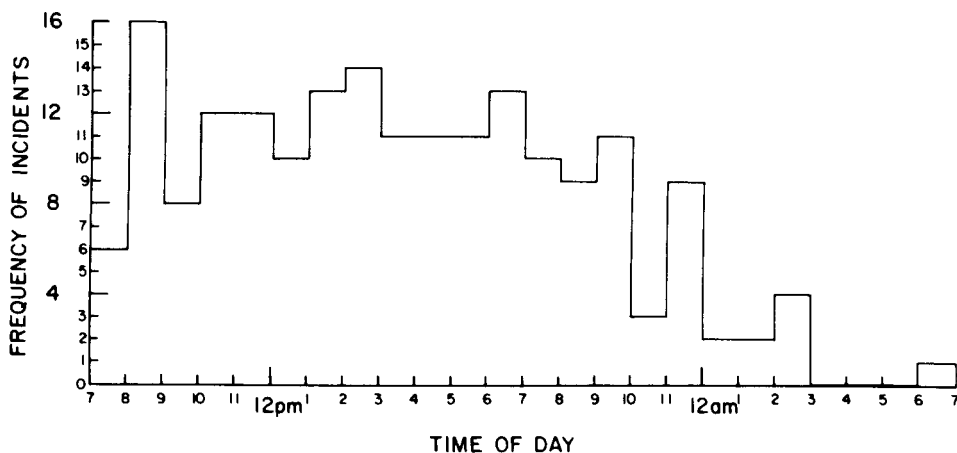
Table 2 presents data on the occurrence of the incidents by day of week. There is a fairly even distribution of the incidents throughout the week with slightly more than average taking place on Tuesday and Thursday and slightly less than average on Saturday and Sunday. These data are in keeping with the staffing patterns at the Center. On Tuesdays and Thursdays, staff meetings and/or training sessions are scheduled and, consequently, more staff are present. Thus more staff members are engaged in treatment-oriented activities with the patients.

The treatment philosophy of the Center is that patients are expected to function at the most responsible level of behavior of which they are capable. Most often the staff's judgment as to whether a patient is carrying the level of responsibility is made on the basis of whether he fulfills assigned tasks of daily living within the unit. If the patient carries out his assigned tasks at the expected level, the staff respond with words of encouragement and permit the patient to enjoy a greater level of freedom. On the other hand, if the patient does not fulfill his obligations, the staff confront the patient and reduce his level of independence and autonomy within the institution. By design, an effort is made by the staff to closely monitor the patient and engage him in therapeutic interaction during the week. Saturdays and Sundays are low activity days with low levels of therapeutic interaction.

We hypothesize that the greater frequency of incidents on Tuesdays and Thursdays results from the increased confrontations between the staff and patients in therapeutic interactions, due to the larger number of staff present on those days, and the resulting opposition expressed by the patient. It may, however, in part be a result of the increased surveillance due to the presence of more staff members.<sup>11,12</sup>

Figure 1 shows the distribution of aggressive incidents on an hourly basis. The marked drop in number of incidents after 10 p.m. is positively correlated with the time patients are required to be in their residential building. There is another drop at midnight when they are locked in their own rooms with the

Figure 1. Distribution of Incidents by Hour of Occurrence



exceptions of weekends and holidays when they can stay in the common area until 2 a.m. The highest peak occurs between 8 to 9 a.m. Following breakfast is the time when the staff are making the effort to organize the patient's daily program. It should be noted that there is no increased level of incidents during mealtime. In fact, there is a drop in level associated with the noon meal. This lack of increased level of aggressive behavior during mealtime may be related to the architectural design and the institutional policy of feeding the patients in the common room of their own building rather than in one large centralized dining hall.<sup>12</sup> Under the arrangement at the Center there are only 18 to 27 men eating together in one room.

**Location** Table 3 shows the frequency of aggressive incidents at various locations of the Center by place of occurrence. Nearly half (49 percent) of the incidents took place during the day shift with 41 percent on the evening shift, and 8 percent on the night shift. On all shifts aggressive incidents most often occurred in the patients' rooms, with the common room on the pod having the next highest frequency. The place of the aggressive incident does not differ significantly between shifts except at night, when, without access to outside space, a higher percentage of incidents occurred within the patients' rooms and common room. The association of high frequency of incidents with high patient density areas (common room) is in keeping with the findings of other researchers.<sup>13,14</sup> The high

Table 3. Place of Occurrence of Aggressive Incidents by Time of Occurrence

	Day		Evening		Night	
	7 a.m. - 3 p.m. (N=84)	Percent	3 p.m. - 11 p.m. (N=76)	Percent	11 p.m. - 7 a.m. (N=17)	Percent
Patient's room	36	42.9	32	42.1	9	52.9
Common room	29	34.5	29	38.2	7	41.2
Observation-seclusion room	6	7.1	3	3.9	1	5.9
Outside area	13	15.5	12	15.8	0	0

Table 4. Incident and Control Groups, by Race, Marital Status, and Occupation

Race	Incident Group		Control Group	
	(N=63)	Percent	(N=135)	Percent
White	27	42.9	57	42.2
Black	16	25.4	50	37.0
Hispanic	20	31.8	28	20.7
Marital Status	(N=59)	Percent	(N=107)	Percent
Married	6	10.2	21	19.6
Single	45	76.3	72	67.3
Broken	8	13.6	14	13.1
Occupation	(N=61)	Percent	(N=116)	Percent
White collar	5	8.2	6	5.2
Blue collar	46	75.4	87	75.0
Student	6	9.8	4	3.4
Unemployed	4	6.6	19	16.4

frequency of occurrence associated with low patient density (patient's room) is contrary to previous findings. It is more understandable, however, when viewed through a framework of territoriality. Each patient has his own private room and is defensive about invasion of this space by staff or other patients. Since confrontation of patient by staff usually occurs in the confines of the patient's room, one can see why density is not the only factor contributing to location site of aggressive acts.

**Comparison of the Incident and Control Groups** While there was no significant difference in the distribution by race or national origin in the incident and control groups, there was a slight overrepresentation of Hispanics and underrepresentation of blacks in the incident group compared with the control group (Table 4). The mean age of the incident group was significantly younger than the control group (27.5 v. 30.4) (Table 5). This finding confirmed those of previous researchers.<sup>5,13,14</sup> The incident group was significantly less educated than the control group (8.6 v. 9.8 mean grades). There was no statistically significant difference in marital status, nor were there differences in the occupation of the groups (Table 4). Both groups were largely single and blue collar. A comparison of mean height and weight for the incident and control groups shows no statistical difference (Table 5).

Table 5. Mean Age, Education, Weight, and Height for Incident and Control Groups

	Incident Group			Control Group		
	Number	Mean	S.D.	Number	Mean	S.D.
Age	63	27.52	8.98	134	30.43	9.15
Education	58	8.59	4.11	124	9.82	3.05
Weight	58	158.95	29.00	121	164.13	31.50
Height	59	68.63	3.00	120	68.98	2.9
					N.S.	
					N.S.	

Table 6. Primary Diagnosis of Patients in Incident and Control Groups

	Incident		Control	
	(N=63)	Percent	(N=135)	Percent
Organic brain syndrome	4	6.3	7	5.2
Schizophrenia	28	44.4	84	62.2
Bipolar	4	6.3	7	5.2
Atypical psychosis	2	3.2	7	5.2
Mental retardation	5	7.9	3	2.2
Depressive neurosis	0	0	3	2.2
Alcohol abuse	0	0	4	3.0
Mixed substance abuse	2	3.2	4	3.0
Adjustment reaction	1	1.6	1	0.7
Personality disorder	17	27.0	13	9.6
General anxiety disorder	0	0	1	0.7
Paranoia	0	0	1	0.7

Table 7. Primary Diagnosis of Schizophrenia and Personality Disorders in Patients of Incident and Control Groups

	Incident		Control	
	(N=63)	Percent	(N=135)	Percent
Schizophrenia	28	44.4	84	62.2
Personality disorder	17	27.0	13	9.6
Other	18	28.6	38	28.1
$\chi^2 = 10.94$				
$p < .01$				

Table 8. Patients Originating Aggressive Incidents by Race

	White		Black		Hispanic	
	(N=27)	Percent	(N=16)	Percent	(N=20)	Percent
Passive aggression	1	3.7	5	31.2	0	0
Verbal abuse	0	0	0	0	2	10.0
Threatened violence	5	18.5	1	6.2	1	5.0
Violent act	21	77.8	10	62.5	17	85.0

Table 6 compares the primary diagnoses, DSM-III, of patients in incident and control groups. Our initial hypothesis was that the patients with personality disorders would be more highly represented in the incident group than would the psychotic patients. We therefore grouped the diagnostic categories into schizophrenia, personality disorder, and a residual other group. We found that patients with the diagnosis of schizophrenia were underrepresented in the incident group whereas those with the diagnosis of a personality disorder were overrepresented. These differences are significant at the  $p < .01$  level (Table 7).

**Levels of Aggressive Incidents** Other researchers have reported that non-whites are overrepresented in the group of patients who engage in violence while in institutions.<sup>13,15</sup> Our data do not confirm this finding (Table 8). In this Center, 50 percent of the staff for nonmentally disordered sex offender patients are black; it is suggested this high proportion of black staff members may account in part for this finding. In fact, although not statistically significant, blacks are less likely to

**Table 9. Primary Diagnosis of Schizophrenia and Personality Disorders in Patients by Level of Aggression**

	Schizophrenia		Personality Disorder		Other Diagnoses	
	(N=28)	Percent	(N=17)	Percent	(N=18)	Percent
Passive aggression	5	17.9	0	0	1	5.6
Verbal abuse	1	3.6	1	5.9	0	0
Threatened violence	2	7.1	4	23.5	1	5.6
Violent act	20	71.4	12	70.6	16	88.9

**Table 10. Intrainstitutional Violent and Non-Violent Incidents**

	Initial Non-Violent		Initial Violent	
	(N=29)	Percent	(N=34)	Percent
Subsequent Violent Incident(s)	14	48.3	14	41.2
Subsequent Non-Violent Incident(s)	4	13.8	4	11.8
No Subsequent Incidents	11	37.9	16	47.1

p < .05 McNemar Test for Significance of Changes

engage in incidents within the Center than are whites or Hispanics. Furthermore, when blacks do contribute to disruptive episodes, they are less likely to precipitate a violent act than are whites or Hispanics but are more likely to engage in passive-aggressive behavior.

As previously stated, schizophrenics are less likely to participate in incidents, and personality disorders are more likely to threaten violence than the other (residual) diagnostic groups. However as Table 9 shows, when schizophrenics are involved in aggressive acts they are as likely to be violent as are the personality disorders. This finding is at odds with Fottrell who reported a higher percentage of schizophrenic patients acted violently than did patients with personality disorders. In Fottrell's study the patients were nonforensic patients from general hospitals, whereas our group was comprised of forensic patients. While there is no statistical difference between the three diagnostic groupings, patients in the other diagnostic category performed more violent acts than either the schizophrenics or personality disorders. This mixed diagnostic group was comprised mainly of patients with mental retardation, organic brain syndrome, bipolar affective disorder, and substance abuse.

The patients who had an initial nonviolent episode were classified into three groups: (1) those whose subsequent incidents were all of a nonviolent nature, (2) those who had one or more subsequent incidents that were of a violent nature, and (3) those who had no further incidents. The patients who had an initial violent episode were classified into like groups: (1) those who had one or more subsequent incidents that were of a violent nature, (2) those whose subsequent incidents were all of a nonviolent nature and (3) those who had no further incidents (Table 10).



## Study of Violence

Of the nonviolent group who had subsequent incidents ( $n=18$ ), 14 (77.8 percent) had at least one subsequent violent incident. This is the identical percentage for the violent group where of the 18 patients with an initial violent episode, 14 (77.8 percent) had at least one further violent episode. This change toward violence is significant at the  $p < .05$  level.

Table 10 indicates that nearly half (48.3 percent) of the patients whose initial incident was nonviolent became violent in a subsequent incident; a slightly lesser percentage (41.2 percent) of the patients with an initial violent episode subsequently engaged in an additional violent episode.

It is important to note that a large percentage (47.1 percent) of patients with an initial violent episode had no further involvement in reportable problem behavior during the time frame of our study. Furthermore, 58.9 percent of those patients with an initial incidence of violence in the institution either had no further involvement in reportable problem behavior or were involved only in nonviolent incidents.

## Discussion

Using a system for monitoring aggression within a maximum security treatment facility for mentally disturbed offenders we found that although all patients had been sent by the courts to the Center labeled "mentally ill and dangerous," only one-fourth of them were involved in an aggressive incident during this reporting period.

Most of our findings point to the importance of environmental factors in understanding intrainstitutional violence. In this study environmental factors were more significant than were race and diagnosis of patient. Our finding that a patient who engages in more than one disruptive incident is increasingly likely to initiate a violent act might indicate such individuals should receive more staff intervention earlier. Our data indicated the first two months after admission were the critical time in the life of the patient and were associated with most of the aggressive incidents. Other environmental factors such as day of week, time of day, and place of occurrence also were significant. The peak incidents of aggression occurred during times when staff were available and when they were making efforts to structure the patients' activities.

If constructive changes are to come about within the life of the mentally ill patient, staff efforts to intervene are a necessary component; however, the process of intervention may evoke an aggressive response from the patient. Certainly this does not mean that mental hospitals should be staffed by fewer people or that the staff should leave patients to their own wishes, but rather that more effective modes of staff intervention should be sought that would not be associated with an increase in aggressive responses from patients.

Theoretically, aggression is a force that can be used for constructive or destructive purposes. One may speculate that forensic patients have had life experiences in which they have learned destructive modes of expression and that unless major changes come about they will bring these reactive patterns with them to the

forensic institution. The challenge for staff and patient would be how best to manipulate the therapeutic milieu so patients have the best opportunity to learn constructive ways of expressing aggression and resolving frustration and conflict without resorting to destructive behaviors.

We believe a system of aggression monitoring such as presented here can be used effectively to analyze the interaction of patients and staff. In so doing, the staff of maximum security treatment facilities for mentally disordered offenders may be able to move away from a belief that dangerousness of a patient is exclusively related to his/her diagnosis and move toward looking for those environmental variables that either facilitate or prevent violence.

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