

The Psychiatric Intensive Care Unit — An In-Hospital Treatment of Violent Adult Patients

PETER MICHAEL CRAIN, M.D.* and
ERNEST G. JORDAN, R.N., M.P.S.**

Within the past decade, changing mores within society, as well as involuntary commitment procedures, largely determined by “dangerousness,” have resulted in greater numbers of patients who perform violent acts both in and out of the psychiatric hospitals. Such patients usually find their way to the state hospital, because most facilities are not geared to handle such behavior. Professionals are understandably uncomfortable with discharging assaultive patients — resorting to state hospital transfer for further care — and the deterioration of urban areas, where psychiatric beds are in shortage, leads to greater numbers of violent patients who have no place to go except the state hospital. In New York State, a legislative committee recently found that more than 12,000 violent incidents occurred each year throughout all twenty-eight of the State psychiatric centers. This committee recommended that “regularly violent patients” should be removed to more restrictive and secure surroundings in order to assure the safety of other withdrawn, harmless patients.¹⁰ In addition, the matter of employee safety was spotlighted in five issues of the State civil service newspaper.⁹ Within these contexts, the intensive care unit concept has evolved. This paper will describe one such unit that has been in operation for the past six years.

Background

Throughout the extensive bibliography of the A.P.A. Task Force Report on “Clinical Aspects of the Violent Individual,” there is no mention of special inpatient units within civil hospitals that are geared to the treatment of assaultive adult patients.⁶ In the United States, the Patuxent Institution, established by the Maryland legislature in 1951 to treat “defective delinquents,” was a psychiatric inpatient facility within the state correctional system that focused on felons with two or more previous convictions, primarily violent. A “Graded Tier System,” patterned on Crofton’s Irish Prison System in the 1850’s, evolved as a behaviorist approach to reduce violent and antisocial behavior among the patient-inmates.⁷ The latter would begin on the lowest, maximum security tier and work their way up four levels before becoming eligible for a pre-release center or half-way house. Browning Hoffman found that correctional officers managed the lower tiers, while mental health

*Dr. Crain is Clinical Instructor in Psychiatry, Albert Einstein College of Medicine, and Deputy Unit Chief, Intensive Care Unit, Bronx Psychiatric Center.

**Mr. Jordan is Nurse Administrator I, Bronx Psychiatric Center.

professionals focused on the upper. The tier system appeared to select out individuals who were articulate and intellectually facile, while others remained stuck at the lower tiers.⁵ Although this approach contained a number of flaws, it still represented a way of thinking about violent individuals that pervaded correctional institutions.

From other countries, there appeared reports of civil hospitals developing programs for violent inpatients. English authors describe an intensive care unit that was set up to ensure at all times an adequate staff-patient ratio which would help to counteract the anxiety felt by the staff who worked with assaultive patients. Guidelines were formulated for "good nursing practice," the development of a "skill of high order" among the personnel. Every effort was made to satisfy the patient's needs as an alternative to violent behavior. Nothing was mentioned about staffing patterns, staff morale, and the results of treatment — especially after the patients left the unit.¹ Canadian authors pointed out that "... most of the literature during the past twenty years either ignored the topic of disturbed behavior completely, or discussed preventive aspects, giving the impression that all disturbed behavior was predictable and preventable." They found no satisfactory total skill training for assisting staff who worked with truly assaultive patients. Rather than develop an intensive care unit, a special committee, reviewing all incidents of disturbed behavior on a monthly basis, established clinical teams on each hospital unit to educate the staff on prevention of assaultive behavior, as well as techniques of physical restraint. They utilized a forty-five minute film and a workbook. After one year, the result was a reduction in the number of incidents (9.4%), patient injuries (12%), staff injuries (10.4%), and man hours lost (31%). One can only assume that the staffing on all wards was adequate. The educational process probably alleviated anxiety, while somehow the staff's tolerance of working with these very demanding, threatening patients was not exceeded. Left out of this report, however, was a statement about the prevalence of violent behavior within the community served by the hospital.²

In this country, however, Mark and Ervin observed that psychiatric hospitals prefer not to admit individuals known to have poor control of dangerous impulses; usually, such people are shunted into correctional facilities. They envisioned a special unit staffed by competent physicians and attendants, specially trained to subdue a violent patient without significant injury to anyone involved, which would specialize in diagnosis and treatment of the disorder.⁸ In California, an attempt to set up a well-funded program of this kind triggered intense public misconceptions, akin to the behaviorist, sadistic experiments depicted in the motion picture, "A Clockwork Orange."¹¹ The climate of opinion in New York State, however, favored the development of more low-keyed units within the state hospitals — a process that continues into the present.

The Setting

The Intensive Care Unit of the Bronx Psychiatric Center is located in a borough of New York City where urban decay is far advanced, especially in the South Bronx; the assault and homicide rate is the highest in the city, and a desperate shortage of psychiatric beds exists outside of the state hospital.

For a variety of reasons, most wards in the hospital are understaffed. The majority of admissions consist of patients who have been assaultive toward person and property; hence, the usual patient in the hospital tends to be assaultive, and the staff has probably more experiences and a higher tolerance to this behavior than in most facilities.

Referral to the Intensive Care Unit

Two psychiatrists and one psychologist take turns maintaining daily coverage for all referrals. Whenever a patient appears to be so seriously assaultive, suicidal, or self-mutilative that the staff on a regular ward feels unable to prevent injury, a phone call is made to the I.C.U. for consultation. Within ten minutes, the I.C.U. Doctor returns the call and sets up a time to meet with the staff. The consultant reviews all data from the medical chart, gets accounts of the patient's condition from various staff members, and, if possible, interviews the patient in front of the staff. Every effort is made to find ways to improve the management and treatment, so that the patient can remain on the regular ward. When it appears that the recommendation simply cannot be implemented, or the risk of danger is assessed high, then the patient is transferred to the Intensive Care Unit.

The Program

The Intensive Care Unit came into existence in November, 1972, with one ward of fifteen beds to serve a hospital of approximately six hundred beds. In 1974, it was enlarged to include a second ward of fifteen beds. By October, 1976, a special program called the "Step System" was initiated — in some ways modeled after the Graded Tier System of Patuxent Institution, while attempting to remedy its flaws. Each step represented an assessment of risk for the particular patient. Tied into each step was a specific nursing care plan, which defined the extent of supervision, patient privacy, limit-setting techniques, and privileges, as well as a set of activities deemed appropriately safe for the assessed risk. As many features of the ward milieu were incorporated into the steps, this system began to resemble a contingency hierarchy that progressively reinforced patient behavior in the direction of non-destructiveness. In practice, the patient would gain increasing conveniences and benefits as he advanced from lower to higher steps, I representing the most extreme risk and V the least. This system has continued to evolve into the present.

Currently, when a patient arrives on ward 6 of the I.C.U., he is usually assigned to step II assault and/or suicide. This means that he will wear pajamas and remain under constant eye-ball contact of the staff. Indeed, one staff member sitting in the nursing station can look ahead to the dayroom, while glancing down the adjacent corridors through angulated mirrors. Under step II precautions, the patient engages in occupational therapy activities that are devoid of sharp instruments. He can write letters only with soft crayon; he is not permitted a pen or pencil. If psychotropic medication is indicated, he receives solely the liquid concentrate or injectable preparations. The patient cannot leave the ward, except for essential medical diagnostic studies. Visiting hours are shortened to one and a half hours daily, curtailed further if the visit appears to precipitate assaultive behavior. At the first sign

of menacing, threatening, or disturbed behavior, staff intervenes verbally to prevent escalation into destructiveness. If reasoning does not suffice, then the patient may enter seclusion for one to three hours. Infrequently, paraldehyde 10 cc. I.M. may be administered to the patient in seclusion who cannot restrain his aggressive impulses. Physical restraint is only rarely applied. The psychiatrist and several staff members, together, meet with the patient individually twice a week in a room located next to the nursing station; such an arrangement induces a feeling of safety for both patient and staff. After a traditional psychiatric evaluation is made on interview, or after the patient has regained sufficient rationality, the psychiatrist explains the step system to the patient, reads aloud the nursing observations of all three daily shifts, and decides with staff to which step to assign him. The patient is told clearly the reasons why he is assigned to step II and what he needs to accomplish — usually restraint from threats, assaults, self-mutilations, and destruction of property — in order to become eligible for step III one week later. This message is reinforced at each session, the patient receiving praise whenever possible for self-restraint, even if it is not deliberately intended by him, in order to shape his behavior in the direction of non-assaultiveness.

After one week of accomplishing the behavioral goals, the patient is assigned to step III. Now, he can choose between taking medication in concentrate or tablet form. A pen or pencil is available on request, as long as the patient does not hand it to others and returns it to the staff when finished. A special lounge for step III patients is set up with carpets, easy chairs, and a phonograph. A list of step III individuals is posted. They are told that they are the “candidates” who will be “selected” within one week for transfer off ward 6. If the behavioral goals are not maintained, however, then the patient may return to step II. Curiously enough, each week that a step III patient is transferred off the ward, there usually emerges another patient from the step II population, ready to take his place. This filling of the step III “slot” or role suggests a therapeutic group process effect.

The designation “step I” refers to a patient of extreme risk, who if allowed to mix with the ward 6 population will most likely attempt bodily injury or property damage. Although patients on I.C.U. are considered risky and unmanageable on their regular units, when they come to ward 6, step II precautions usually suffice. The assignment to step I is fortunately uncommon. Under these precautions, the patient is confined to the seclusion room, where he receives all meals on paperware and necessary medication. Staff in sufficient numbers accompanies the patient to the toilet, shower, or “breaks” that are specifically ordered. Visiting privileges are suspended. If he so wishes, the patient may see a lawyer to contest these restrictions. In the meantime, the psychiatrist evaluates the patient on a daily basis, attempting to take him off step I as soon as this appears feasible.

When a patient reaches step IV, he is transferred to ward 8, which is maintained as a therapeutic community. The patient wears his own clothing again, gets assigned a locker where he can store personal items, and receives a locker key. He can now participate in occupational therapy activities which employ sharp instruments, while a pool table with cue sticks and balls as well as an exercise room with weights are both available for use. The tone of the therapeutic community is set by a core of eight patients, committed to the

hospital under court order, who participate in a forensic psychiatry program. Group therapy, individual psychotherapy, therapeutic community meetings, and more extensive activities go on daily. The "ward leader" is a psychologist who sees the step IV patients individually once or twice during their week on ward 8. At the end of this week, if the patient continues his self-restraint, he then becomes step V, which means being ready for transfer back to the regular ward. If the staff of ward 8 has any misgivings, however, he may be held over on Step IV for another week of observation. Occasionally, the patient may regress into destructive behavior, which results in his return to ward 6 on step II again. This system of utilizing two wards with different staffs in diverse environments creates numerous testing situations, as well as acting as a double-check in the assessment of a patient's potential for violent behavior. When a patient reaches step V, a meeting is called for representatives of both the regular ward and the I.C.U. staff to discuss the case and interview the patient. The representatives can challenge the findings, if they have any misgivings, and establish with the patient what he can expect after returning to the regular ward. The decision for or against transfer is made at this meeting.

In practice, the majority of patients who come to I.C.U. can develop self-restraint and leave the Unit within three to four weeks. This short-term program ensures a steady flow of patients through the cycle discussed above, keeping beds open on ward 6 for new arrivals. For a small minority of patients, the short-term program does not work. After returning to their regular wards, they soon regress back into the same destructive behavior, necessitating transfer to ward 6 again. When this kind of patient reaches step IV, he may be assigned to one of five beds on ward 8 that are reserved for long-term, psychodynamically oriented group and individual therapy. Those patients who exhibit tenuous impulse control, unable to reach step III, are treated by the psychiatrist on ward 6 with long-term trials of psychotropic medication and more intensive limit-setting by the staff.

Implementation

Ward 6 and ward 8 are each assigned one Registered Nurse on the day (8 a.m. to 4:30 p.m.) and evening (4:30 p.m. to 12 a.m.) shifts. Both wards share one R.N. during the night shift (12 a.m. to 8 a.m.). These R.N.'s report to a nurse supervisor, who covers the I.C.U. as well as other wards in the hospital. Much of the patient contact and Unit operation are carried out by Therapy Aides.

Eight T.A.'s are scheduled for ward 6, a quota which ensures that no less than five T.A.'s, two of whom are men, will report to work each shift. On ward 8, a minimum of four T.A.'s is expected out of 6 scheduled. Such scheduling takes into account employee sick days, vacation, pass days, special leave, and other absences. The hospital administration is committed to keeping the staff threshold filled at all times — giving the Unit priority for recruitment of personnel, and if necessary, assigning employees to work overtime.

Criteria for staff selection have gradually evolved over the past six years. Most of the staff have already experienced working with psychiatric patients on other wards or at other hospitals, prior to their starting on the I.C.U.

Usually, they express interest in becoming a part of the specialized program, even if this means receiving no extra pay for working with violent patients. They themselves tend to live in the same community from which the patients on the Unit are derived. Commonality of socioeconomic and cultural factors appears to reduce staff-patient miscommunication and foster an intuitive empathy between both groups. The personnel records of potential new employees are checked for any propensity to get into repeated conflicts with patients, any suspicion of drug abuse, impairment of medical health, and absenteeism. Both physical and emotional stamina are necessary attributes to meet the demands of working on the I.C.U. Above all, the new staff member must have a team-oriented approach toward patients and fellow staff. Whenever possible, on-the-spot patient management is determined by team decision of all employees on a particular shift. Such organization serves to manage volatile patients who can easily provoke impulsive acts on the part of individual employees.

Once a year, a day-long training session is conducted for all personnel of the I.C.U. to review the assessment of assaultive and suicidal patients, physical restraint techniques, the complexities of writing incident reports, the step system, and other pertinent topics. For new staff, however, the basic learning really takes place on the job. They learn to develop an acuity for observation of patients, allowing early intervention with behavior that precedes destructive escalation. The R.N.'s and T.A.'s engage in formal training, supplied by the department of Nursing, which includes a section on the management of assaultive and suicidal patients. They are encouraged to take educational courses toward degrees and certificates in areas of interest. Once a week, a seminar is held on the I.C.U. for all staff to teach new material and make case presentations.

Because working on the I.C.U. can be a very stressful experience, staff morale must be considered carefully. At all times, employees must be alert to sudden outbursts of destructive patient behavior. Relief comes from scheduled breaks for meals and a lounge on each ward where an employee can rest. Personal risk is reduced by the training described above and by an alarm system in the nursing station, which when pressed during an emergency, rings on both wards and brings immediate staff re-enforcement. A buzzer and telephone are installed between the patient interview room and the nursing station for the same purpose. Most importantly, whenever a patient makes a threat toward a particular employee, the staff communicates this to the employee and takes proper precautions, and as soon as possible the patient is confronted by the team at a meeting with the doctor. No one on the team will permit a co-worker to be attacked by a patient without coming to his aid, and no staff member will run away simply for self-protection. Such an attitude is essential in order to develop a feeling of safety among staff. A mutuality of respect must exist between the line staff and their supervisors in order to avoid attempts of patients to split and turn employees against one another. After those times when patients do erupt violently, there must be opportunity for line staff to ventilate their angry feelings among themselves and to their supervisors. This allows them to experience relief and continue an objective, rather than vengeful attitude toward the patients.

Results

1. The total number of patients admitted to the I.C.U. from November, 1972, through August, 1978, constituted 1,043. Of this number, 415 or 40% were admitted more than once. The remaining 628 or 60% passed through the I.C.U. program one time without returning. In 1975, when the therapeutic approach on the Unit stressed pharmacologic intervention, according to a biological orientation, the total number of patients of that year consisted of 200. After the Step System was begun in 1976, as part of a behavioral-eclectic approach, the patients totaled 168. Curiously enough, the breakdown of the total of each year appeared unchanged — roughly the same 40% readmission rate. During 1976 and 1977, about half of the patients in the multiple admission group did not return after two stays on the Unit. The remaining 20% of the total number per year consisted of patients who returned to the I.C.U. within six months or less. In this group, there appeared to be a steady pool of patients who took turns residing on either the I.C.U. or a regular ward, at any given time. These “chronic” patients, a mixed group of personality disorders and psychotics, exhibited seemingly their own rhythm of cycles of assaultive behavior and periods of quiescence, influenced little by psychologic and pharmacologic interventions. Out of the usual 30 patients on the I.C.U., approximately six or 20% would usually fall into this category. The ages of patients passing through the Unit ranged from 16 to 75 years.

2. The amount of psychotropic medication prescribed in 1975 and 1977, before and after the Step System respectively, is documented in the accompanying table.

TABLE 1

The amount of psychotropic medication prescribed in 1975 and 1977 on the Intensive Care Unit was as follows:

Medication	1975 quantity	1977 quantity
Haloperidol concentrate	245.76 gm.	50.4 gm.
Haloperidol injectable	7.405 gm.	0.1 gm.
Meparazine concentrate	687 gm.	27 gm.
Chlorpromazine concentrate	2,328 gm.	1,202.4 gm.
Thioridazine concentrate	18 gm.	183.6 gm.
Paraldehyde injectable	(3,755 ml)	(1,455 ml)
Sodium Amobarbital gr. 4	26.75 gm.	7.59 gm.
Sodium Amobarbital gr. 7½	39 gm.	10 gm.

The amounts indicate that significantly less medication was prescribed overall for 1977. Concurrently, however, patients were placed in the seclusion room much more frequently in 1977, as compared to 1975, in order to interrupt behavior which might become violent. As forms of restraint, less psychotropic medication seemed to correlate with increased use of seclusion.

3. Since the I.C.U. staff had to escort patients to seclusion more frequently in 1977, a review of absences under workmen's compensation might reveal a trend toward more employee injuries. The figures themselves, however, indicated that throughout the hospital, employees applied for workmen's compensation much less frequently in 1977 than in 1975. This reflected a change in the law that allowed the first two weeks of absence on the basis of sick leave, rather than leave with pay, as in 1975. The rate of

absence among I.C.U. staff changed in the same direction as that of other hospital employees; hence, staff injuries did not increase appreciably with the greater use of seclusion.

Discussion

Despite changes in therapeutic approach, the rate of re-admission to the I.C.U. does not seem to change from year to year. The number of referrals also remains sufficient to ensure a patient census close to capacity from week to week, even though 60% of the patients admitted during a six-year period do not return. These findings could be attributed to a group process effect, in which the violent patient unwittingly plays a role, created by the particular group dynamics described by Bion and Bach.^{4,3} Whenever a violent patient is removed from a regular ward by transfer to the I.C.U., inevitably, some other patient will come along to fill the "slot." There usually exists on any ward the contrast between good and bad patients. Certain individuals may have greater proclivities toward violent behavior than others, and tend to fill the slot more often, but as demonstrated on the I.C.U., these "bad patients" can become "good" as newer arrivals displace them from their old "bad" position. Such an effect ensures that the Step System will generate enough candidates leaving the I.C.U. each week to make available beds for fresh referrals.

Conclusion

The Intensive Care Unit does not solve the basic problem of violent behavior in the hospital. Rather, it offers a solution for the moment: what to do with a particular violent individual who simply cannot be treated with an acceptable level of safety on a regular ward. It also provides a more humane treatment setting for such individuals whose behavior ordinarily would provoke angry, punitive responses from the environment. The treatment for a majority of patients on the I.C.U. is brief, requiring three to four weeks. Despite the change in program that occurred, the constant rate of I.C.U. return suggests that the two different treatment orientations did not significantly alter the subsequent expression of violence among patients who passed through both programs. Qualitatively, however, patients who graduate presently from the Step System do look more "natural," rather than "medicated." This may be a consequence of their achieving control over aggressive impulses with less reliance on psychotropic medication.

References

1. Allison C, Bale R: A hospital policy for the care of patients who exhibit violent behavior. *Nursing Times*, Vol. 69, March 22, 1973, pp. 175-177
2. A program for the prevention and management of disturbed behavior. St. Thomas Psychiatric Hospital, Ontario, Canada. *Hospital and Community Psychiatry*, Vol. 27, No. 10, October 1976, pp. 724-727
3. Bach GR: Observations on transference and object relations in the light of group dynamics. *Internat J Group Psychother*, 7:65, 1957
4. Bion WR: *Experiences in Groups*. Tavistock Publications, London, 1961
5. Hoffman PB: Patuxent Institution from a psychiatric perspective, circa 1977. *The Bulletin of the American Academy of Psychiatry and the Law*, Vol. V, No. 2, 1977, pp. 171-199
6. Clinical Aspects of the Violent Individual. Task Force Report 8, July 1974, American Psychiatric Association
7. Legins P: The Patuxent experiment. *The Bulletin of the American Academy of Psychiatry and the*

Law, Vol. V, No. 2, 1977, pp. 116-133

8. Mark VH, Ervin FR: Violence and the Brain. Harper and Row, New York, 1970
9. Schept K: Assaults: Special report. Civil Service Leader, Friday, February 17, 1978, p. 8
10. Violence Revisited . . . A report on traditional indifference in State mental institutions toward assaultive activity. New York State Senate Select Committee on Mental and Physical Handicap. Senator James H. Donovan, Chairman, 1975-1976
11. West LJ: A discussion of the obstacles to setting up a center for the study of violent behavior at the University of California, Los Angeles. 128th Annual Meeting of the American Psychiatric Association, Anaheim, California, 1975