The Prediction of Violent Behavior During Short-Term Civil Commitment

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The predictive validity of the clinical judgment of dangerousness in the context of short-term civil commitment was studied prospectively by comparing the behavioral scale ratings of both verbal and physical aggression between 37 persons committed on the basis of "danger to others" versus 31 persons committed on other grounds. No statistically significant difference was found between these two groups of detainees with regard to the levels of aggression measured during their approximately three-day detention. This finding is in agreement with abundant previous research which documents the inability of psychiatrists to accurately predict future dangerousness, prompting the author to suggest that the "dangerousness" criterion for civil commitment be rejected.

Although society is unlikely to resurrect the broadly defined "in need of treatment" criterion because of its historically demonstrated ever present potential for abuse, the author suggests an alternative criterion for civil commitment which, in perhaps a more well-defined and more practical way, would allow the state to maintain its doctrine of *parens patriae* toward mental patients.

Numerous investigators[1-3] have cited the inability of psychiatrists and other mental health clinicians to accurately predict future dangerousness, leading Stone[4] and Roth[5] to propose a return to the previous criterion of "in need of treatment" rather than the criterion of "dangerousness," which is used by virtually every state in the civil commitment of mentally ill persons.[6] A reconsideration of the data concerning prediction of dangerousness showed that the predictions had been made in a long-term context. One would expect improved accuracy of prediction of imminent violent behavior in the context of short-term civil commitment.[7] The best way to test this hypothesis would be to study the subsequent behavior of individuals who, although considered appropriate for civil commitment, would instead be released;[8] however, "one cannot simply observe a patient predicted to be violent in his or her natural surroundings and then take a 'body count.'"[9] Attempts were made in three separate studies[9-11] to approximate that situation by com-

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paring the amounts of reported violent behavior of detainees committed on the basis of "danger to others" with the amounts of reported violent behavior of other psychiatric inpatients. The data from the Rofman *et al.*[10] and McNiel and Binder[11] studies showed that the former group did engage in significantly more violent behavior than the control groups during the short-term detentions, and these authors cite their findings as evidence supporting the predictive validity of clinical judgments of dangerousness made in the context of short-term emergency commitment. The data of Yesavage *et al.* (9), however, did not show a significant difference in the incidence of violent behavior between these two groups of patients during short-term detention.

The purpose of this study is to determine whether persons civilly committed on the basis of "danger to others" were more likely to engage in violent behavior during their 72 to 120 hours detention than persons civilly committed on other grounds.

Methods

The subjects included 68 patients admitted involuntarily during a seven-week period in the summer of 1987 to an 11-bed, locked mental health detention facility providing psychiatric inpatient services to persons who had been civilly committed for a period of up to three working days pending judicial review. According to the statutes of the midwestern state where this study was conducted, a person may be civilly committed if, as a result of mental illness, he meets any one of the following criteria: (1) danger to others, (2) danger to self, or (3) inability to care for self. In making a decision whether or not to commit a patient, the mental health clinician takes into account such factors as the patient's psychiatric diagnosis, his mental status (e.g., flagrantly psychotic, intoxicated, etc.) past history of violence, the immediate circumstance which led to a request for an evaluation for involuntary commitment, an assessment of the situation to which the patient would be returning if released, etc.[12]

The legal papers of the detainees included in this study were reviewed to determine which criterion/criteria were used in the civil commitment proceedings in each case. In addition, the legal papers of 18 persons were reviewed who, after evaluation for civil commitment, were released instead of committed, showing that five of them had been brought for this evaluation on the grounds of danger to others, and the other 13 had been brought for evaluation based on other grounds. For the purpose of this study, the criteria for commitment were categorized as "a danger to others" or "not a danger to others." A patient was rated as a danger to others if he or she had been committed on the grounds of danger to others, regardless of whether the additional grounds of danger to self or inability to care for self had been applied. A patient was rated as not a danger to others if he or she had been committed on the basis of danger to self or inability to care for self.

During the seven-week study, 107 pa-

tients were civilly committed in the jurisdiction in which the study was conducted. Twelve of these patients were detained on a substance abuse unit of a private hospital. Four were detained on the locked units of private hospitals, and 13 were transferred to the state mental hospital for a variety of administrative reasons, including lack of bed space or lack of readily available medical care at the 11-bed detention unit. Importantly, however, records clearly showed that one of the 13 patients transferred to the state mental hospital for his short-term detention was transferred there because it was felt that the 11-bed unit lacked the resources to adequately manage the potentially "extreme" violence of that particular patient. For the most part, antipsychotic medications were used only on a *pro re nata* basis for control of extremely agitated behavior, although detainees were permitted to consent to voluntary antipsychotic medication up until 24 hours before their court appearance, at which time all antipsychotic medication was discontinued for administrative reasons.

Of the 78 patients detained at the 11-bed unit during the seven-week period, 68 are included in this study. One patient was omitted from the study because his chart was not available for review. The other nine patients were omitted due to failure of the nursing staff to record measurements of "overt aggression" on them during their detention.

Thirty-seven of the 68 patients were committed as a danger to others, and 31 patients were committed on grounds other than danger to others. Forty-four percent were women and 56 percent were men. The mean ±SD age was 34.7 ± 12.7 years (range, 18 to 78 years). Fifty-nine percent were Caucasian, 26 percent were black, one percent was American Indian, and one percent was Asian. Upon further evaluation, 56 percent of the detainees were subsequently released, seven percent were court-ordered to outpatient psychiatric treatment, and 37 percent were court-ordered to inpatient psychiatric treatment.

Although DSM-III-R nomenclature was used at this facility during the time of the study, there was a fair amount of imprecision regarding the listing of principal diagnoses at the time of discharge. Even though the diagnosis established at admission was often based on only limited information, in many cases it was retained as the final diagnosis even after information gained during the brief hospitalization would have suggested the need for refinement of the diagnosis. For example, it was fairly arbitrary whether the final diagnosis was listed as psychosis not otherwise specified versus brief reactive psychosis versus chronic paranoid schizophrenia with acute exacerbation. Also, in some cases it seemed somewhat arbitrary as to whether this principal diagnosis was listed as a thought disorder rather than as a problem with substance abuse. For this reason the DSM-III-R diagnostic categories were collapsed in this study as follows: psychosis (59%), depression (13%), substance abuse (12%), manic phase of bipolar illness (4%), organic syndrome (3%), personality disorder (1%), marital problems (1%).

Although testing for blood levels of alcohol or other substances was rarely performed at this facility, 20 percent of the patients were clinically suspected to be intoxicated with one or more substances at the time of admission. There was evidence that four percent of the detainees were experiencing command hallucinations at the time of admission. The information available at admission showed that 82 percent of the detainees had a history of prior contact with the mental health system. The mean global assessment scale[13] rating $\pm SD$ was 36.7 $\pm$ 13.5 (range, 15 to 70).

The violent behavior of patients during detention was rated prospectively using the modified overt aggression scale developed by Kay, Wolkenfeld, and Murrill (Lipton A, personal communication).[14] The head nurse on each eight-hour shift was asked to rate each detainee's verbal and physical aggression using this behavioral scale. The scale described verbal aggression as "statements or invectives which seek to inflict psychological harm on another through devaluation/degradation, and threats of physical attack." Detainees were to be rated as having engaged in verbal aggression if they exhibited any of the three grades of verbal aggression listed on the modified overt aggression scale:

1. "Shouts angrily, mild curses, or personal insults."
2. "Curses viciously, severely insulting, temper outbursts."
3. "Impulsively threatens violence towards others or self (e.g., to gain money or sex)."

The modified overt aggression scale described physical aggression as "violent action intended to inflict pain, bodily harm, or death upon another." Detainees were to be rated as having engaged in physical aggression if they exhibited any of the four grades of physical aggression listed on the scale:

1. "Makes menacing gestures, swings at people, grabs at clothing."
2. "Strikes, kicks, pushes, scratches, pulls hair of others (without injury)."
3. "Attacks others, causing mild injury (bruises, sprains, welts, etc.)."
4. "Attacks others, causing serious injury (fractures, loss of teeth, deep cuts, loss of consciousness, etc.)."

Results

Comparison of the patients judged to be a danger to others with those judged not to be a danger to others revealed no significant differences on any of the demographic variables listed in the last section. Chi-square analyses, corrected for continuity, were used to evaluate whether the criteria for commitment were associated with violent behavior as measured by the verbal aggression and physical aggression scales during the first 24 hours of detention as well as during for the entire detention period.

The numbers and proportion of patients who engaged in violent behavior (see Table 1) suggests a weak trend that the patients judged to be a danger to others exhibited more verbal and physical aggression than those judged not to be a danger to others, but this trend did not reach statistical significance. Using "physical aggression" as defined by the modified overt aggression scale as the

Table 1
Proportion of Detainees Engaging in Violent Behavior During Detention for 37 Detainees Judged Dangerous to Others and 31 Detainees Not Judged Dangerous to Others

	First 24 Hours				Entire Detention			
	Dangerous to Others		Not Dangerous		Dangerous to Others		Not Dangerous	
	N	%	N	%	N	%	N	%
Physical Aggression	6	16	3	10	9	24	3	10
Verbal Aggression	17	46	10	32	19	51	12	39
Physical or Verbal Aggression	17	46	10	32	19	51	12	39

target symptom of violent behavior, the specificity of the clinical prediction of violent behavior in the short-term context is found by this study to be 24 percent. This scale does not show how many actual batteries (formal legal definition) occurred, but there were no grade four and only one grade three instances of physical aggression reported during this study; i.e., one instance of minor injury secondary to physical aggression was reported. No major injuries were reported.

Sensitivity of the clinical prediction of violent behavior in the short-term context could not be determined, since the incidence of subsequent violent behavior is unknown for the 18 individuals who, following psychiatric evaluation, were not felt to meet the criteria for civil commitment.

Review of the overt aggression scale forms completed by the head nurse showed that these forms were actually completed on each patient in approximately 86 percent of all possible eight-hour shifts during the study, not including the nine detainees on whom no forms were completed.

Discussion

Like the study reported by Yesavage *et al.*,[9] this study does not show a significant difference in the incidence of violent behavior between the detainees judged to be a danger to others and those judged not to be a danger to others; however, there was a weak trend showing that the former group exhibited more physical and verbal aggression during their detention than the latter group. The small group size is recognized as a weakness in the present study. It is interesting to note that this study is in agreement with McNiel and Binder's[11] observation that detainees are much more likely to exhibit violent behavior during the first 24 hours of detention than at any other time during their detention.

One of the merits of this study is its use of prospective methodology and clear operational definitions of the types of behavior being measured, although it is acknowledged that, since dangerousness is to a large extent "in the [subjective] eyes of the beholder."[15] research in this area is still hampered by a lack of consensus regarding these operational

definitions.[16] Perhaps studies of this type would have wider applicability and greater replicability if the formal legal definition of battery was included as one of the target behaviors to be measured.[17]

In 24 percent of the persons who were civilly committed in this study because a psychiatrist felt that there would be a significant likelihood of subsequent violent behavior to others secondary to an identifiable mental illness, physical aggression of some kind was recorded during that person's detention. Whether or not the treatment/confinement in this particular mental health detention facility exacerbated or attenuated the detainees' propensity to violent behavior is an open question which does not lend itself easily to empirical investigation. As noted previously, not all detainees received antipsychotic medication or other medication during their detention, and this study does not address the possible relationship between the administration of antipsychotic medication and the amount of violent behavior exhibited.

This author is aware of no empirical evidence showing that the average psychiatrist's ability to predict violence is any greater than the predictive ability of the average lay person. (A comparative study of the ability of a psychiatrist versus a professional fortune-teller to predict violence would be of interest.) In fact, the task of predicting violent behavior was thrust upon psychiatry by a legal system which continues to refuse to recognize the limited degree of ability which psychiatrists possess in the prediction of violent behavior, as shown by the fact that roughly only one-fourth of the detainees judged to be a danger to others in this study exhibited any actual physical aggression during their detention.

This author suggests that the proposition that violence can be validly predicted clinically has very little empirical support. The concept of the "prediction of dangerousness" is a legal concept, empty of clinical power and meaning. In circumstances such as the present one in which psychiatric research has the potential to influence public policy making, psychiatry must take care not to unwittingly permit its own neurotic "need to be needed" complex to be wed with society's primitive, infantile, unconscious fantasy of the psychiatrist (or physician) as "savior." Hence, it may be well if psychiatry would candidly acknowledge that neither the "dangerousness" criterion nor the "in need of treatment" criterion is wholly acceptable as a funnel into the civil commitment process.

A modification of one of Gutheil's[18] innovative concepts reveals what it is that clinicians are actually doing when they participate in the civil commitment process. The crucial issue would seem to be whether the presence of a major mental illness is compromising the individual's competence to weigh the risks/benefits/alternatives involved in making decisions concerning: the care of bodily needs, the treatment of mental/physical illness, and the management of aggressive impulses. This is not just semantics; this is what the clinician is actually doing.

This view of the clinician's role in the

civil commitment process fits well with the types of symptoms which Segal *et al.*[19] found to make up the concept of dangerousness shared by the clinicians in their study. The symptoms identified by those clinicians which are correlated with dangerousness are the very factors most likely to impair the patient's competence to weigh the risks/benefits/alternatives of either expressing or suppressing his own aggressive impulses. "Symptoms most strongly related to danger to others in our sample were irritability and impulsivity, but there were also consistent moderate associations with formal thought disorder and expansiveness, as well as weaker but consistent significant correlations with impaired judgment and behavior and inappropriate affect."[20]

Segal *et al.*[20] note that "a difficulty arises in cases where the patient is potentially dangerous, impulsivity is an enduring characteristic, and there is little symptomatology." That difficulty could be considerably eased if the clinician would simply abandon the pipe dream that he is able to predict dangerousness, and instead bring his professional ability to bear on the question of whether an identifiable major mental illness has compromised the patient's competence to weigh the risks/benefits/alternatives of either expressing or suppressing his own aggressive impulses.

Mills'[21] opinion regarding the success of the civil commitment process may be premature because no sensitivity data on this subject has yet been reported and because the specificity data, necessarily soft as discussed above, do not appear to support the proposition that violence can be validly predicted on a clinical basis. That a procedure for identifying "dangerous" persons for segregation from the rest of society should be aimed specifically at mentally ill persons is not entirely justifiable. It is difficult to believe that (given the studies of Gelles and Straus,[22] which show the widespread extent of violence, specifically intrafamily violence, in the general American population) mentally ill persons commit significantly more violent acts than the rest of the general American population. Although this question is complex[23–25] and not yet settled, the experience of this author in working at a community mental health center in a medium-sized midwestern city has been that mentally ill patients are more likely to become the victims of violence rather than the perpetrators of violence; and Herjanic and Meyer's[26] study would seem to offer support for this observation.

Further research is indicated. In order to test Gelles and Straus'[22] conclusion that violence is not a product "of mental illness but the result of social circumstances that the majority of American families experience at one time or another," it may be useful to focus attention on those subgroups of mentally ill persons who would seem to be more vulnerable to becoming participants in the civil commitment process, such as: the noncompliant, the overly sensitive to medication side effects, the treatment nonresponders, the never treated, the socially isolated, those concomitantly diagnosed with substance abuse problems or personality disorders, etc. As 82 per-

cent of the detainees in this sample had previous contact with the mental health system, it would be useful to delineate what factors, if any, within the mental health system itself might predispose particular mentally ill persons or subgroups of mentally ill persons to become participants in the civil commitment process.

Again, though, it may be well if psychiatry would candidly acknowledge that, given the utter complexity of the multitudinous societal and political factors impinging on decisions regarding the civil commitment process and related mental health matters, empirical data painstakingly derived *in vitro* can only be applied with the greatest of caution to the real world. Fresh conceptualizations of these very complex issues, such as the innovative ideas of Gutheil,[18] may be of as much importance as further empirical research. Given the importance of these issues to society, psychiatry must continue to address these issues with all of its resources.

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