Assessing Intimidation Using a Brief Intrusiveness Measure

David I. Mayerhoff, [1,2] Jeffry R. Nurenberg[1]

Abstract

Aims: Patient intrusiveness has been associated with violence in psychiatric services and perceived intrusiveness may undermine therapeutic environments even without threatened violence. We assessed whether this construct was considered useful and quantifiable in a State Hospital setting. **Methods:** Staff members were asked to rate their perceptions of the intrusiveness of each patient using a single Likert-type item. **Results:** Staff from multiple disciplines found the indicator to have face validity and to be readily scorable. Ratings among staff varied moderately as did repeated ratings. The measure showed significant, albeit modest, associations with aggressive incidents ($r=0.50$; $p<0.01$). It appeared to track positive environmental change on the unit over time. **Clinical Implications:** Intrusiveness warrants investigation as an independent construct. The readily administered indicator shows promise for assessing patient and staff needs.

Key Words: Intimidation, Intrusiveness, Aggression, State Hospital, Severe Mental Illness

This project was presented, in part, at the American Psychiatric Association's Annual Meetings in Atlanta, Georgia, May, 2005 and Toronto, Ontario, May, 2006.

Introduction

Violence is an ongoing and increasing concern in a wide range of clinical settings, including State Hospital systems (1). Assessment of violence risk remains a challenge considering the broad range of relevant factors and the diversity of clinical settings. Violence also poses a personal threat to workers in psychiatric settings, especially those treating patients with severe disorders, who may often experience intimidation by patients and perceived threats of violence. Among the less well-studied aspects of such experiences is the perception of incursion by patients (or others) into staff's "personal space." This can be experienced as unpleasant, anxiety-provoking, and threatening.

[1]Greystone Park Psychiatric Hospital
[2]Department of Psychiatry, University of Medicine and Dentistry of New Jersey-New Jersey Medical School

Address for correspondence: Dr. David I. Mayerhoff, 50 Ellis Drive, Greystone Park Psychiatric Hospital, Greystone Park, NJ 07950
Phone: 973-538-1800, x 4560; Fax: 973-292-4066;
E-mail: David.Mayerhoff@dhs.state.nj.us

Submitted: Jan 23, 2007; Revised: Feb 16, 2007; Accepted: Feb 19, 2007

Short-term predictors of aggression on psychiatric units include positive psychiatric symptoms and impulse dyscontrol (as well as, in contrast, predatory behavior) (1-4). Several studies have called attention to the role of crowding and intrusions into personal space (5-7) as predictors of aggressive acts in institutional settings (6). While noted to be associated with aggressive behavior and staff attitudes about such behavior (8, 9), studies referencing intrusiveness have tended not to distinguish actual physical contact from other intrusions (overtly threatening and not) into personal space. Our clinical impression on a state hospital inpatient unit was that perceived physical and social boundary intrusions by patients contribute substantially to staff and patient anxiety and to perceived lack of safety. Perceived intrusiveness appeared to be important even in the absence of overt physical aggression or threatening behavior. Considering the limited attention given to this behavioral dimension, we sought to ascertain whether intrusiveness was experienced as such by staff and whether that perception is quantifiable. As a first step, we explored a single-item perceived intrusiveness indicator that did not require substantial time and effort from an already burdened staff. The intent was not to

develop a formal scale, but rather to assess staff awareness of the construct and its potential predictive value.

Methods

Institutional Review Board approval was obtained for administration of the measure. Independent staff responses at team meetings were elicited on a single item scored using a Likert-type scale. With only minimal explanation, staff were asked to rate each patient on the unit by assigning a score of 1-5 (1 being the least intrusive), "based upon your perception of the patient's violating your personal 'space,' being 'in your face.' This does not require the presence of any violent behavior. Each patient should be scored in the context of your entire experience."

The measure (Greystone Intrusiveness Measure or GIM) was applied on a clinical inpatient unit, with multiple staff from different disciplines (psychiatry, nursing, nursing aides, psychology, social work, occupational therapy, recreational therapy, and dietary). Patients (n=39 in total, including all patients present on the twenty-bed unit on each assessment occasion) were scored on up to thirteen occasions over a three-year period. While largely descriptive, statistical analyses, when indicated, included t-tests and ANOVAs for group comparisons and Pearson "r" for correlational analyses; all tests utilized SPSS, version 12.0.

Results

Feedback from initial use of the single-item score revealed minimal difficulty in working with this construct. With the minimal explanation staff were able to rate their unit of twenty patients in less than ten minutes. Among twenty-eight staff raters using the measure for the first time over the several years, the full range of scores was used (for 522 ratings, GIM=1 was assigned to 45%; GIM=2 to 25%; GIM=3 to 20%; GIM=4 to 5%; and GIM=5 to 5%). Staff ratings appeared to vary considerably across patients and, to a lesser extent, among staff for the same patient. Staff with similar clinical backgrounds and patient exposure had similar ratings: for the twenty-three staff who rated at least ten patients concurrent with other staff, those with professional degrees (n=15 physicians, psychologists, social workers, dietitians, and occupational therapists) had mean between-staff Pearson-r correlations, at their first use of the measure, of 0.60; paraprofessional staff (n=8) had mean correlations of 0.55; while mean correlations between professional and paraprofessional staff was 0.49. The differences among the level of correlations (ANOVA; SPSS, version 12.0) was significant ($F=4.69$, df 2,117; $p<0.02$); post hoc tests revealed significantly smaller correlations of professionals with paraprofessionals compared with the correlations among the professional staff themselves ($p<0.01$).

As a preliminary assessment of within staff variability over time, scores on the first and second ratings for the same patients were compared for fourteen staff with available repeat measures. Correlations (Pearson r) between first and second measures were >0.7 for nine of fourteen staff, with the lowest correlation for any staff being r=0.46. Those nine staff showed no significant change ($p>0.05$) between their first two sets of measures (One Sample t-test); four showed a significant drop in their scores ($p<0.05$), while one showed a significant increase. The staff that showed changes did not appear to be derived from a particular professional group.

To begin to assess the potential role of GIM scores as an indicator of the staff's overall impression of patient intrusiveness, mean scores for all raters of all patients were calculated for each of thirteen occasions over three years (15-20 patients and 3-11 raters at each rating). Mean scores for all patients on the unit appeared to decrease over the first few months assessed: the mean scores for the unit obtained at approximately three week intervals beginning in November, 2003 were: 2.53, 2.46, 2.31, and 2.30. During that initial three-month period (November, 2003-January, 2004), there were thirteen patients present on the unit throughout the interval (i.e. for each of four measurement occasions). The mean GIM scores for these thirteen patients were lower at the fourth compared with the first measures (2.35±0.71[SD] vs. 2.77±1.24; paired $t=2.27$, df 12, $p<0.05$). In addition to ongoing patient treatment, with expected improvement over this time, the three-month interval was associated with administrative changes that were considered by staff to have improved unit ambience. During the following two years (with too few patients hospitalized throughout to permit paired analyses), GIM scores tended to decrease gradually and then stabilize at what appeared to be a "steady state" range (January, 2004: 2.31±0.81 [n=17]; July, 2005: 2.07±1.14 [n=19]; January, 2006: 2.06±1.05 [n=20]; June, 2006: 1.95±0.89 [n=20]; September, 2006: 2.09±0.95 [n=20]; October, 2006: 1.96±1.03 [n=20]).

There was a significant, albeit moderate, correlation between mean patient GIM scores (n=29 during the nine-month interval for which data was available) and the number of incident reports (routinely logged into the hospital's clinical database at the time) associated with aggressive events, including perpetrator events ($r=0.39$, $p<0.04$), victim events ($r=0.42$, $p<0.03$), and total (perpetrator + victim) events ($r=0.50$, $p<0.01$). Comparing patients with no events versus those with one or more perpetrator and victim events revealed a trend for each to be associated with higher GIM scores: perpetrator events (7 with any events) $t=1.94$, df 27, $p<0.07$; victim events (8 with events) $t=1.88$, df 27, $p<0.08$. The presence of either a perpetrator or victim event (11 with any events) was associated with increased GIM scores: $t=2.53$, df 27, $p<0.02$.

Discussion

These preliminary observations suggest that assessing staff perceptions of patient intrusiveness behavior on a psychiatric inpatient service is feasible and efficient. The GIM measure, which was not defined in relation to overt aggression per se, appears to be associated with, although distinct from, aggression. That impression is supported by the only modest but still significant correlation of GIM with incident reports and, for example, by the staff's identification of certain patients whom they considered non-threatening but still highly intrusive. The construct and its measure shows promise for the assessment of patient behavior and behavioral risk, as well as differences among staff in their experience of patients. Due to the clinical nature of the project, without available extensive and formal psychometric assessments, the meaning of variability in scores among raters and over time remains unclear. That variability may represent differences among and within patients and/or differences in staff members' subjective clinical experiences. Perceptions of intrusiveness and temporal changes in scores may have prognostic value concerning patient risk for violence, but may also identify exaggerated or underestimated staff perceptions of such risk. Intrusive behavior, even without overt aggression, would likely be counterproductive for patients following hospital discharge as well, placing them at risk for preemptive aggression by others.

> *"Our clinical impression … was that perceived physical and social boundary intrusions by patients contribute substantially to staff and patient anxiety and to perceived lack of safety."*

Assessing staff impressions of patient intrusiveness may help identify staff needs. Perceived patient intrusiveness, whether or not associated with actual threat, may contribute to the perception of unpleasant and unsafe working conditions, increasing "burnout" and staff turnover. On the unit, staff would often comment that such intrusive patients, including many who were never violent, left them "exhausted" at the end of the day. Staff exposure to intrusive behavior, and differences in staff sensitivities to such intrusiveness, may identify areas for staff support and intervention. Unit-wide perceived intrusiveness, as a fluctuating measure of interpersonal tension, may provide an indicator of short-term needs with respect to maintaining safe and therapeutic clinical environments.

Clinical Implications

Intrusive, "in your face" behavior warrants focused attention. The ease and rapidity of administration and the minimal training required suggest that GIM or similar measures may provide a useful tool in busy clinical settings. Systematic assessment of GIM's psychometric properties and its association with other behavioral measures appears warranted. Measures such as GIM may serve as an adjunctive at-risk clinical screening and facilitate more effective staffing assignments. It may also have applications in other dyadic interactions, such as identifying patient perceptions of incursions by other patients or by staff. This may vary considerably. Violent prisoners, for example, are reported to require body buffer zones many fold greater than nonviolent prisoners (10). Identifying such buffer zones among patients (and staff) may reduce interpersonal risk on psychiatric units.

Acknowledgments

The authors would like to thank and acknowledge Steven J. Schleifer, MD and Mr. Willis Parker for their assistance with this project and the hospital ward staff for their contributions in caring for the patients and scoring the instrument. No external funding has been obtained for this project and no financial conflicts of interest are being declared.

References

1. Nolan KA, Czobor P, Roy BB, Platt MM, Shope CB, Citrome LL. Characteristics of assaultive behavior among psychiatric inpatients. Psychiatr Serv 2003;54(7):1012-1016.
2. Krakowski MI, Czobor P. Clinical symptoms, neurological impairment, and prediction of violence in psychiatric inpatients. Hosp Community Psychiatry 1994;45(7):700-705.
3. McNiel DE, Binder RL. The relationship between acute psychiatric symptoms, diagnosis, and short-term risk of violence. Hosp Community Psychiatry 1994;45(2):133-137.
4. Nolan KA, Volavka J, Czobor P, Sheitman B, Lindenmayer JP, Citrome LL. Aggression and psychopathology in treatment-resistant inpatients with schizophrenia and schizoaffective disorder. J Psychiatr Res 2005;39(1):109-115.
5. Ng B, Kumar S, Ranclaud M, Robinson E. Ward crowding and incidents of violence on an acute psychiatric inpatient unit. Psychiatr Serv 2001;52(4):521-525.
6. Kumar S, Ng B, Robinson E. The crowded ward. [Letter.] Psychiatr Serv 1999;50(11):1499-1500.
7. Fagan-Pryor EC, Haber LC, Dunlap D, Nall JL, Stanley G, Wolpert R. Patients' views of causes of aggression by patients and effective interventions. Psychiatr Serv 2003; 54(4):549-553.
8. Jansen GJ, Middel B, Dassen TW. An international comparative study on the reliability and validity of the attitudes towards aggression scale. Int J Nurs Stud 2005;42(4):467-477.
9. Forster J, Finlayson S, Bentall R, Day J, Randall F, Wood P. The perceived expressed emotion in staff scale. J Psychiatr Ment Health Nurs 2003;10(1):109-117.
10. Kinzel AF. Body-buffer zone in violent prisoners. Am J Psychiatry 1970;127(1):59-64.