

spondents refused to complete the computerized survey. All those who agreed to complete it were able to use the computer after receiving brief (less than five minutes) instructions. More respondents needed help completing the survey by computer than by paper and pencil (eight respondents, or 17 percent, compared with one respondent, or 2 percent;  $\chi^2=4.28$ ,  $df=1$ ,  $p<.05$ ), although respondents preferred the computer by a ratio of 3:1. No significant differences were noted in respondents' evaluation of the time to complete the instruments, understanding of items, clarity of instructions, or any other concerns.

The reliability of ratings made by computer versus by paper and pencil was high, with intraclass correlation coefficients ranging from .83 to .9 for the Polaris Strength Scales and from .82 to .95 for the BASIS-24 domains. Differences in mean scores on the domains assessed were not statistically significant, with one exception: participants reported significantly more frequent psychotic symptoms by paper and pencil than by computer ( $F=7.19$ ,  $df=1, 44$ ,  $p=.01$ ).

Limitations of this study include its small sample and possible memory or order effects (that is, whether respondents used the computer first or paper and pencil first), which were not assessed. Self-report of mental health status by computer may enhance quality improvement efforts by improving the capacity to monitor treatment outcomes with greater efficiency than can be achieved with paper-and-pencil methods. Further research is needed to test computerized administration of standardized instruments in larger samples from multiple sites.

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## Reducing Assaults Among Hospitalized Youths

**To the Editor:** In the June 2004 issue, Ryan and her colleagues (1) report on a study of assaults by hospitalized youths. They note the unexpected frequency with which the verbal directives of staff members served as precursors to assaults—in 68 percent of the 215 assaults in the sample. This finding, which the authors appear at some loss to explain, is of enormous clinical import given ongoing concern about how best to prevent acute aggression in inpatient settings for children and adolescents (2) as well as active efforts to reduce the use of inpatient seclusion and restraint with this population (3). As such, it warrants further consideration.

Ryan and her colleagues are probably not alone in their surprise that level-based behavioral management—that is, attempting to motivate patients by rewarding them with greater privileges for certain behaviors—appears so centrally implicated in aggressive behavior. They are also not alone in pondering whether “the very nature of limit setting” associated with such management practices “may place staff at risk of assault.” For instance, a more recent model for

working with explosive, aggressive youths—collaborative problem solving (CPS)—views oppositional behavior as transactional: the manner in which caregivers respond to deviations from expectations for compliance has the capacity to either ignite or defuse potential outbursts (4).

Behavioral management approaches view noncompliance as indicating a lack of motivation, which they seek to instill through rewards and consequences. In contrast, CPS views compliance as a developmental achievement and its lack as akin to a behavioral learning disorder. It therefore emphasizes discovering the specific pattern of cognitive skill deficits implicated in a given child's inability to comply and works to remediate these deficits. From this viewpoint, contingency management practices are seen as having the potential to paradoxically increase frustration and arousal—sometimes to the point of violence—among youths when they are verbally redirected. Efforts to adopt CPS within the Cambridge Health Alliance's child and adolescent assessment units, as part of a larger Massachusetts initiative to reduce the use of seclusion and restraint, were recently recognized by the American Psychiatric Association with a Gold Achievement Award (5).

It would have been quite interesting if Ryan and her colleagues had provided even a sampling of situation-specific, verbatim data on just what constituted verbal direction or redirection in the assaults in their sample. It is my experience that in retrospective accounts of childhood disruptive behavior, information about adults' words or behavior during the interaction that preceded aggressive incidents is routinely elided by reporters and rarely sought by clinicians, which masks the transactional nature of such episodes. That is, parents and other caregivers describe in excruciating detail the aggressive outburst that seems to require hospitalization, but they leave out what they did or said that may have precipitated this outcome, and clinicians rarely attempt to elicit this kind of detailed information. Both parties act as

if it has no conceivable relevance.

Ryan and her colleagues have documented an urgently important finding that ought to invite the psychiatric community to ponder the enduring therapeutic utility of level-based behavioral systems.

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**In Reply:** Dr. Whelan raises several important points in his comments about our article. Caregivers, teachers, and hospital staff members often see oppositional behaviors as best met by behavioral contingencies designed to operantly teach adaptive behaviors. Such responses overlook the fact that such behaviors in children and adolescents, who are typically hospitalized because of significant problems with impulsivity, affect regulation, and behavioral dyscontrol, often reflect expressions of frustration, efforts to demonstrate autonomy, a desire for engagement, or some other

meaningful interpersonal transaction.

We appreciate Dr. Whelan's noting the importance of considering behavioral management systems as possible catalysts in negative interactions between patients and staff on a unit. We also agree with his observations and conclusion that the transactional nature of patient-staff interactions is typically not addressed in an effective manner. As clinicians who have worked in inpatient settings and have also observed firsthand the limitations of level-based behavioral management systems, we were still surprised by the high rate of assault on staff. In the hospital in which this study took place, there have been ongoing and successful efforts to decrease seclusion and restraint. However, we wonder whether such efforts may inevitably plateau in their success and even have the unfortunate "side effect" of facilitating other forms of dyscontrol within the confines of traditional level-based behavioral management systems.

One of us attended a workshop at the annual meeting of the American Academy of Child and Adolescent Psychiatry in October 2003 (1) in which Ross Greene discussed CPS (2) and its role in eliminating the use of seclusion and restraint in an inpatient setting very similar to the one in our study. One of the many reasons that we perceive the CPS approach to be effective is that it addresses the main reason that people choose to work with difficult children for low pay—to help them. As Dr. Whelan states, CPS "emphasizes discovering the specific pattern of cognitive skill deficits implicated in a given child's inability to comply and works to remediate these deficits." Our observation has been that efforts to address the transactional component between staff and patients often convey to staff that they are doing something "wrong" and that they are somehow inappropriately implementing the otherwise effective unit management program. CPS focuses on therapeutic interactions rather than on limit setting, in which there is inevitably a winner and a loser.

Dr. Whelan suggests that it would have been of value to record "situa-

tion-specific, verbatim data" for the verbal reprimands given to patients. Again, he makes a good point. However, such an effort would capture only one element of the transaction in the microclimate of the inpatient unit. There are many other facets of the interaction that would likely affect the transaction, such as a staff member's reputation with patients on the unit, the tone of voice used, the staff member's familiarity with that patient, and the patient's familiarity with the level system.

**Eileen P. Ryan, D.O.**

**Jeffrey Aaron, Ph.D.**

**Virginia Sparrow Hart, Ph.D.**

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## Hallucinations With Tolterodine

**To the Editor:** We report a case of anticholinergic delirium that illustrates the importance of assessing patients' cultural and religious beliefs.

An Asian-American octogenarian woman had been taking 4 mg of tolterodine (Detrol LA) every evening for incontinence, a dosage that she had been maintained on for approximately two and a half years. She was admitted to a major military tertiary care center because she had had three or four episodes of loose, bloody stools over a period of approximately a week. Psychiatry was consulted because the patient said she had been troubled by images at night, between 8:30 and 9:00 p.m., while she was in bed. She described these "visions" as those of "spirits" enveloped in clouds. Faces with varying forms seemed to emerge from the shadows of her bedroom and float over the top of her bed. One face in particular was very clear. It was the