Mental Illness and Violent Behavior in School: A Primer for College Administrators

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The following paragraphs comprise a primer on public health perspectives regarding the links between campus violence and mental health problems. Knowledge of current research findings and their implications are crucial tools for administrators facing heightened – and often unrealistic – demands to predict and control student behavior.

In spite of media hype following the tragedy at Virginia Tech, the national incidence of on-campus violence does not seem to be increasing. Still, there is no such thing as an "acceptable" level of violence. In the search for effective youth-violence reduction strategies schools, colleges, and communities must explore the controversial topic of the correlation between mental illness and violent behavior.

Earlier this year four of the authors, who are medical students, embarked upon a service learning project sponsored by a community mental health association. The fifth author served as their project advisor. Their objective was to promote screening programs for depression and suicide in area high schools. The authors hypothesized that such mental health programs might contribute to the reduction of school violence, a major concern of local principals and parents, as well to the prevention of suicide.

The authors decided to explore the correlation between violence and mental health among adolescents through a review of the medical and public health literature on the subject. As will be obvious, the analysis of this literature can be applied equally well to secondary and post-secondary settings.

MENTAL DISORDERS AND VIOLENCE TO OTHERS

The Centers for Disease Control estimated that 5,570 people ages 10-24 were murdered, and approximately one third of high school students reported being in a physical fight within the past year. The cost of youth violence exceeds $158 billion a year as a result increasing medical costs, decreasing productivity, and decreasing the quality of life - all of which seriously impact society. (Centers for Disease Control and Prevention, "Youth Violence: Fact Sheet" Retrieved on March 6, 2007 from http://www.cdc.gov/ncipc/factsheets/yvfacts.htm).

The most recent Bureau of Justice Statistics numbers indicate that although college students' experience of violence is lower than that for non-students aged 18 to 24, between 1995 and 2002 college students were victims of about 520,000 crimes, on average, annually. An average of about 128,000 of these violent crimes involved a weapon or serious injury, and over 90% of the crimes occurred off campus. Between 1995 and 2002 the rate of reported violence against college students decreased by 54%. Newer data for college students have not yet been published, but data for the population at large indicate that the last decade's near-steady decline in rates of

criminal activity may have leveled out. (Violent Victimization of College Students 1995-2002 by Katrina Baum and Patsy Klaus, January 2005, NCJ 206836, http://www.ojp.usdoj.gov/bjs/).

John Monahan, writing in a 1992 issue of the journal American Psychologist, ("Mental Disorder and Violent Behavior: Perceptions and Evidence," Vol. 47, pp. 511-521), summarized studies illustrating a relationship between mental disorders and violence. One of the studies he cited sampled 400 adults from New York City, some of whom were randomly selected, while the others were former patients of a mental institution. Violence was significantly more prevalent in the patient population, even when age, gender, educational level, ethnicity, socioeconomic status, family composition, and other factors were taken into account. Interestingly, when the study controlled for current psychotic symptoms, the rates of violence between the patient and non-patient populations were no longer different.

Monahan himself studied the incidence of violence in a population with mental disorders. Monahan's subjects consisted of 728 men from the Cook County (Chicago) jail and 328 male inmates in California prisons. When compared to the general population and controlled for race and age, the prevalence among the jail inmates of mental disorders such as major depression, bipolar disorder, and schizophrenia, was significantly greater. A 1990 study by Texas researchers Jeffrey Swanson, Charles Holzer, Vijay Ganju, and Robert Jono looked at pooled data from 10,059 respondents in which there was some violent behavior recorded during the current year. They found that more than half of the respondents who self-reported violent behavior met criteria for a psychiatric disorder, and those with more than one disorder were more likely to engage in violent behavior ("Violence and Psychiatric Disorder in the Community: Evidence from the Epidemiologic Catchment Area Surveys,". Hospital and Community Psychiatry Vol. 41, July 1990, pp. 761-770).

One of the most illuminating recent studies for the lay reader is "Violence and Mental Illness – How Strong is the Link?" by Richard Friedman, director of the Weill Cornell Psychopharmacology Clinic at Weill Cornell Medical College NY. Friedman reported an increased rate of violence among those with mental disorders. Data on violence was collected from approximately 7,000 subjects across five U.S. communities. The results showed that patients with schizophrenia, major depression, or bipolar disorder were two to three times more likely to commit assaultive acts when compared to people without such an illness. (New England Journal of Medicine, Vol. 355, No. 20, November 16, 2006, pp. 2064-2066, http://www.nejm.org).

MENTAL DISORDERS AND VIOLENCE TO SELF

Not only has research demonstrated an association between mental disorders and violence to others, but studies have also shown a link between mental disorders and violence to self, namely suicide.

The Centers for Disease Control, reporting on school violence data from 2001, noted links between suicide attempts and fighting. The CDC stated that students who attempted suicide were almost four times more likely to engage in fighting compared to students who had not attempted suicide. Since suicidal ideation epitomizes violence directed inward, individuals exhibiting such behavior have a greater tendency to direct their rage outward. The CDC analysis also cited previous studies that found that students who committed school shootings were suicidal prior to or during the incident. ("Suicide Attempts and Physical Fighting Among High School Students – United States 2001" by M.H. Swahn,, K.M. Lubell, and T.R. Simon TR (*MMWR Weekly*, 53(22), June 11, 2004, pp 474-476, at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5322a3.htm). The CDC (Swahn et al, Above) warned that the physiological or psychological mechanism that linked suicidal behaviors and violent behaviors remained unclear. Severe and rare forms of mental illness (psychosis, schizophrenia) are most likely to be associated with violence, but the CDC's findings suggest that suicidal, depressed and anxious young people should, from a health perspective, be regarded as possibly at risk for violence. Conversely, students who engage in physical violence or weapons possession may be candidates for screening for depression, anxiety and suicide ideation.

A recent Canadian study conducted by Alexandre Dumais and associates related violent methods of suicide to a high level of lifetime impulsive-aggressive behaviors. This study used data from the "psychological autopsies" of individuals who had committed suicide in the Greater Montreal area, i.e. interviews with the suicide victim's family and associates, and coroner's notes. Nonviolent methods of suicide included overdoses, poisoning, gas, and drowning, with all other methods considered violent. Of 310 cases, 242 were violent and of these, 166 were completed by hanging. Lifetime alcohol and drug problems along with psychotic disorders were significantly associated with a violent method of suicide. ("Is Violent Method of Suicide a Behavioral Marker of Lifetime Aggression?" by Alexandre Dumais, Alain Lesage, Aleksandra Lalovic, Monique Séguin, Michel Tousignant, Nadia Chawky, and Gustavo Turecki, in the American Journal of Psychiatry, Vol. 162, No. 7, July 2005, pp. 1375-1378).

Adolescent suicide is a complex and multifaceted phenomenon that has many identifiable risk factors and yet is still difficult to predict and prevent. Impulsive aggression, one of these factors, is strongly associated with suicide as it greatly increases the likelihood of acting on suicidal thoughts. Physicians David Brent and J. John Mann proposed that more precise understanding of the genetic links and the roles of aggression in suicide will improve the assessment of individual risk for suicide. In the December 28, 2006 issue of the New England Journal of Medicine they argued that imaging studies that demonstrate that individuals with impulsive aggression have lower

serotonin levels make a case for a possible genetic predisposition. Family stressors such as neglect and abuse as well as neurocognitive disorders add to these risk factors. ("Familial Pathways to Suicidal Behavior-Understanding and Preventing Suicide among Adolescents" by David Brent and John Mann, New England Journal of Medicine, Vol. 355, no. 26, 2006, pp., 2719-2721).

OTHER RISK FACTORS FOR VIOLENCE

Other factors, such as young age, male gender, low socioeconomic status, access to guns, and exposure to violent media, are involved in the propensity of children and young adults to act out violently. A child's social environment also plays a significant role. In the classroom, when both teachers and students have low achievement expectations, children are at a greater risk of acting out in violence. In the family, factors such as marital conflict, abuse, neglect, and lack of discipline have been correlated with violent behavior in youngsters. (See Swanson, et al, 1990. Above. See also, "How Should Emergency Psychiatrists Respond to School Violence?" by Rachel Glick, Laura Hirshbein and Nanya Patel in Psychiatric Services, Vol 55, No. 3, March 2004, pp. 223-224, at http://ps.psychiatryonline.org.)

Swanson et al. (1990, above) found that the most common disorders among those who self-reported violent behaviors were alcohol abuse and dependence disorders. For example, in a study of 4500 high school seniors and dropouts from Oregon and California conducted in the 1990's, public health researchers Phyllis Ellickson, Hilary Saner, and Kimberly McGuigan discovered that violent youth were "10 times more likely to sell drugs... Between 2 and 3 times as likely to be weekly users of alcohol, cigarettes, or marijuana; to have tried cocaine; or to be polydrug users" (p.987, "Profiles of Violent Youth: Substance Use and Other Concurrent Problems", by Phyllis Ellickson et al, American Journal of Public Health, Vol. 87, No. 6, June 1997, pp. 985-991). A study of adolescents in Finland demonstrated that smoking, alcohol use, as well as other factors lead to an increased risk of violence and injury ("Risk Factors for Violence and Violence-Related Injuries among 14- To 18-Year-Old Finns" by Ville Mattila, Jari Parkkari, and Arja Rimpela , in the Journal of Adolescent Health, vol. 38, 2006, pp. 617-620).

While the above studies show that having a mental disorder is significantly associated with acting violently to self and others, these two events are not inextricably linked. Friedman (2006, above) emphasized that not all people with mental illness are violent, and not all violent people have a mental illness. As Monahan (1992, above) cautioned, the increased risk of violence in mentally disordered patients depends on whether patients are currently experiencing certain symptoms, such as psychosis, in which thoughts and perceptions are severely impaired.. In fact, Swanson et al. (1990, above, , p. 768) stated: "People with the same diagnosis behave differently under different conditions depending on their age and gender, living environment, personal history, cultural orientation, and position in the social structure." Thus, multiple factors must be taken into consideration when estimating the risk of violence in a person who is mentally ill.

PREVENTION AND TREATMENT IN SCHOOL AND COMMUNITY

While many view violent behavior as a phase or a part of growing up and hope that it will pass, the American Academy of Child and Adolescent Psychiatry warns that it is not something to be ignored. It could very well be a sign of an underlying mental health disturbance that beckons attention and the possibility of treatment by mental health professionals. (see "Understanding Violent Behavior in Children and Adolescents, AACAP, 2001; retrieved March 6, 2007 from http://www.aacap.org/page.ww?name=Understanding+Violent+Behavior+In+Children+and+Adolescents&section=Facts+for+Families)

If having a mental disorder increases the likelihood of violence, treatment is a possible solution for reducing this risk. Friedman (2006, above found that the rates of violence among psychiatric patients during the year after hospital discharge were no different from the rate of violence in people without such disorders. He attributed this finding to the direct alleviation of the symptoms. For example, a person who is schizophrenic may hear voices that command him to harm others. Effective and appropriate treatment may quell the hallucinations, removing the voices from the patient's mind and thus lessening the risk of violence.

Along similar lines, it is believed that risk-prone youth can be taught skills that will lessen the likelihood of violent behavior. In "Violence in the Schools: Clinical Issues and Case Analysis for High-Risk Children," Thomas Miller, Richard Clayton, Jean Miller, Jaye Bilyeu, Jamie Hunter, and Robert Kraus collected data on school shootings in Kentucky, Arkansas, Oregon, and Colorado (in Child Psychiatry and Human Development, Vol. 30, No. 4, Summer 2000, pp. 255-272). The authors described the majority of the perpetrators as depressed, aggressive, or impulsive, while some were on antidepressants. Prior to their deadly acts, these youth were seen as quiet and isolated. They were often bullied by peers and humiliated at school, which may have worsened the status of their mental health. In regards to this study, Glick et al. (2004, above) observed: "These children lacked skills of conflict resolution and anger management, and their interaction with peers stimulated a need for power and control." (p. 223). They imply that, had these children received proper counseling or treatment to resolve conflicts and manage their anger, they may not have acted violently.

By becoming involved in violent acts, the perpetrator increases the risk of morbidity and mortality for self and others. Angela Browne, Catherine Barber, Deborah Stone, and Aleta Meyer reported that aggression and self-harm by adolescents has "ongoing and negative effects on future development" as well as "involvement in community and family life," thus illustrating the widespread effects that such experiences can have on a person. In turn, the physical aggression, fighting, threats or attempts to hurt others, use of weapons and vandalism must be taken seriously ("Public Health Training on the Prevention of Youth Violence and Suicide: An Overview" by Browne et al, American Journal of Preventive Medicine, Vol. 29, Issue 5, Supplement 2, December 2005, pp 233-239.)

Various statutes and legal processes enable society - and school and university conduct processes - to "classify" someone as dangerous and impose sanctions or mandate treatment after the person has committed a harmful or overtly threatening act. Restricting liberty or property interests solely on the basis of what health research statistics suggest that someone might do sets off a multitude of human rights and civil liberties alarms. To date, we have no bright line or diagnostic tool reliable enough to predict future violent behavior with the certainty demanded by law, policy, and ethics.

In "Developing a Clinically Useful Actuarial Tool for Assessing Violence Risk," John Monahan and his co-authors claimed to have developed an effective method for predicting which psychiatric patients are most likely to commit violence post-discharge. Previous violent behavior looms large in the equation. (see John Monahan, Henry Steadman, Paul Appelbaum, Pamela Robbings, Edward Mulvey, Eric Silver, Loren Roth, and Thomas Grisso, in the British Journal of Psychiatry, Vol. 176, 2000, pp 312-319). Nevertheless, psychiatrists Rachel Glick, Laura Hirshbein and Nanya Patel observed recently that, "Research on the ability of psychiatrists to predict violent behavior among persons with mental illness is not reassuring. A number of studies have shown that clinicians are poor predictors of violence." (p. 224, "How Should Emergency Psychiatrists Respond to School Violence? in Psychiatric Services, Vol 55, No. 3, March 2004, pp. 223-224, at http://ps.psychiatryonline.org.).

As medical knowledge about mental illness continues to improve, and more sophisticated, evidence-based diagnostic tools are developed, some experts propose careful re-examination of the legal standards for involuntary commitment or mandated treatment. Dr. Richard Friedman (2006, above) mused that it might make sense to "reset the threshold" for mandating treatment to include "known clinical risk factors," not just the unambiguous evidence of immediate danger to self and others currently demanded by law.

In "Mania and the Law in California: Understanding the Criminalization of the Mentally Ill" (American Journal of Psychiatry, Vol. 160, July 2003, pp. 1245-1250), researchers Cameron Quanbeck, Mark Frye, and Lori Altshuler suggested the need for "mental health courts" that would specialize in addressing behaviors that stem from mental disorders, particularly when the individual refuses to recognize the disorder and/or to participate in treatment that would ameliorate the pattern of disordered behavior.

IMPLICATIONS FOR HIGHER EDUCATION

In summary, youth who engage in violent behaviors are 1.5 times more likely to have mental health problems than their nonviolent peers. People with mental health problems are slightly more predisposed to violence than people who are not experiencing mental health problems. However, these predictors are relatively weak when compared to other more powerful correlates with young adult violence: a past history of violence, being male, involvement with substance abuse, and a history of academic problems. Put another way, many, many people who are violent do not experience mental illness. Most people who experience mental illness will never become violent.

Administrators under pressure to “step up” monitoring of mental health problems on campus must proceed cautiously, bolstered by sound public health evidence and practice. Historically, public misperceptions that equate mental illness with dangerousness have resulted in horrible abuses and stigmatization of people with mental illness. Misusing the data could pose great risk to the mentally ill, while doing little to promote anyone’s safety. The science of predicting whether an individual with mental illness is likely to be violent has yet to be mastered by the health care or legal professions. It should never be attempted by educators and administrators.

Increased knowledge of the characteristics of students who commit violence imposes upon Student Affairs professionals increased demands to avoid misusing that knowledge. Let us pretend for a moment that a reliable predictive diagnostic tool exists. A college receives reports about two students who have evinced similar “weird” or “creepy” behavior – maybe they have inserted disturbing content into their creative writing assignments. Neither has engaged in rule violations that would form a basis for sanctioning, but, under expanded preventative health and safety policies both students are required to undergo psychological risk assessments. Using our imaginary diagnostic tool, a mental health clinician reports that Student A has a 15% likelihood of committing a violent act, while student B’s risk of violence is at the 80% level. Does this information permit the college to dismiss Student B while Student A remains? Such hypothetical scenarios must be discussed when developing violence reduction programs.

Even if we could or would want to remove a student with an assumed propensity for violence, expulsion is not a prophylactic for violence on campus. High profile shootings have involved expelled or disciplined students or fired employees. Some contend that disciplinary or restrictive action – even questioning – must be handled with utmost care and expertise so as not to exacerbate the sense of alienation, persecution, frustration and anger in the troubled mind.

Correlations between certain forms of mental illness and violence in young people are substantial enough that campus health and discipline services will be well advised to collaborate to refine and develop programs that assess and address students who evince mental health problems and/or violence in order to minimize the possibility that they will harm themselves or others. For instance, suicide and violence are not always on the same trajectory, but they are linked, especially in males. We currently lack researched documentation of the role suicide prevention efforts play in violence reduction, but it stands to reason that sound suicide prevention strategies and mental wellness programs may interfere with violence as well.

Perhaps this primer has provided more data than direction, and posed more questions than answers. From a public health perspective, it is fair to say that when it comes to connecting mental illness with violence, the amount of research needed exceeds research accomplished, and controversy outstrips consensus. The authors nevertheless hope that a public health perspective will aid higher education

administrators in the development of security and discipline programs that support student mental wellness.

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