Is it Good to be Bad? The Association of History of Violence and Symptom Change

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Background

Violent behavior is of course undesirable in most circumstances, though it has often been observed at the hospital under study that patients with histories of violence sometimes engage more readily in treatment than patients who are vegetative or prone to internalization. Thus, violent behavior may be an (albeit problematic) manifestation of libido that could inform treatment outcomes if properly harnessed. Research yields mixed findings on the association of violence and the mental health symptoms that lead to psychiatric hospitalization. Some studies reported no association, though other studies concluded that mental health symptoms (mainly command hallucinations and paranoia) did in fact correlate with risk for violence, particularly when the mentally ill participants were not taking their psychiatric medications as prescribed. Accordingly, further study on history of violence and symptom change is warranted.

Aim

The purpose of this study was to determine whether there was a statistically significant association between history of violence and symptom change for a sample of adult psychiatric inpatients. Additionally, it was necessary to explore a potential interaction effect between history of violence and medication non-adherence on symptom change.

Methods

One hundred twenty four inpatients were administered the Brief Psychiatric Rating Scale Expanded Version (BPRS-E) as both a pretest near admission, and as a posttest near discharge. The BPRS-E consists of 24 items that measure a wide range of psychiatric signs and symptoms on a Likert scale from 1-7 (low-high severity) according to patient self-report and clinician observation. From hospital charts, data was collected on whether or not patients had histories of medication non-adherence and criminal justice. Research supports that patients often do not report this information accurately, which made it necessary to rely on official records.

Sample: *Gender:* 77 men (61.6%), 48 women (38.4%). *Ethnicity:* 43 White (34.4%), 48 Black-African American (34.8%), 14 Asian (11.2%), 16 Hispanic (12.8%), 1 East Indian (0.8%), 3 Middle Eastern (2.4%). *Mean age*: 37.65 years. *Mean level of education*: 12 years. *Employment Status*: 115 not working (92%), 10 working (8%). *Diagnosis*: Schizophrenia: 35 (28%), Schizoaffective: 35 (28%), Psychosis NOS: 17 (13.6%), Bipolar I: 31 (24.8%), Depressive Disorders: 7 (5.6%). *Hx Violence*: 65 yes (52%), 59 no (47.2%), 1 missing data (0.8%). *Hx Non-Adherence*: 79 yes (63.2%), 46 no (36.8%). *Admission status*: 112 involuntary (89.6%), 13 voluntary (10.4%). *Mean length of stay (LOS)* = 12.25 days. *Mean Psych ER visits and Hospitalizations in past 12 months* = 2.15, 0.94.

	Hx Violence	Hx Non-Adherence	Hx Violence + Hx Non-Adherence
Symptom Change	F = 0.10	F = 0.02	F = 0.06

Results

As noted above, there was no statistically significant difference in symptom change for participants based on history of violence or medication non-adherence. An analysis of covariance revealed that history of violence and history of non-compliance did not have a significant interaction effect (on symptom change). However, the mean symptom change of 17.52 points on the BPRS-E, from a mean pretest score of 64.6 to a mean posttest score of 47.08 (a 27% change), is moderately significant according to research standards for the measure. It is also noteworthy that this improvement tended to occur over the course of a relatively short length of stay (Mean = 12.25 days) for a sample of psychiatric inpatient adults who were predominantly: Involuntarily confined, unemployed, under-educated, highly symptomatic, diagnosed with bipolar or schizophrenic disorders, and had significant histories of medication non-adherence, criminal justice involvement, emergency room visits, and prior hospitalization. As such, this sample is demographically and clinically representative of a larger population of severe and chronically mentally ill adults that tends to be poorly prognosed. Nevertheless, most participants in this study, including those with histories of criminal justice and medication non-adherence, improved significantly.

Conclusions

The hypothesis that criminal justice history would predict symptom change was rejected, as was the hypothesis about a potential interactive effect of medication non-adherence. Although statistically insignificant, the null finding may be *clinically significant* in its implications. Over the course of a relatively short length of stay, a sample of severely and chronically mentally ill adults tended to improve significantly, *regardless* of whether or not they had histories of criminal justice involvement or medication non-adherence. Whereas a poor treatment prognosis is often assumed for severely and chronically mentally ill adults who have histories of criminal justice or medication non-adherence, our findings suggest that symptom recovery is nevertheless possible. Although statistical power for this study was above 0.90, further study with a larger sample size is needed in order to ascertain the reliability of these findings.

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