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ESTIMATED UNITED STATES INCIDENCE AND COST OF EMERGENCY DEPARTMENT STAFF ASSAULTS PERPETRATED BY AGITATED ADULT PATIENTS WITH SCHIZOPHRENIA OR BIPOLAR DISORDER

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Objectives: The annual United States (U.S.) incidence of emergency department (ED) staff assaults perpetrated by agitated adult patients with schizophrenia or bipolar disorder is difficult to quantify, given staff tendencies toward under-reporting, differing definitions of assaultive behaviors, and the broad array of data collection methods used. Based on a review of the published literature, we sought to estimate the 1-year U.S. incidence and associated costs of patient assaults on ED staff.

Methods: Systematic literature review and meta-analysis of published literature from 1/1/1966-12/31/09 using MEDLINE terms: (“Psychomotor Agitation” OR “Aggression”) OR “Violence”) AND “Emergency Service, Hospital” AND (English[lang] AND “adult”). “True” annual incidence was calculated as the average annualized number of reported assault cases divided by the percent of actual incidence represented by these cases. Costs, assessed from the hospital perspective, were calculated for work days lost by victimized staff.

Results: There were 512 publications identified, of which 23 were included. Among an estimated 119 million annual U.S. ED visits, patients with schizophrenia or bipolar disorder accounted for 0.8% (952,000) and 4-9% (4.8-10.7 million) of visits, respectively. On average, ED nurses (N=31,905) and physicians (N=17,000) each reported 2.75 and 3.4 annual physical assaults (total 145,539) perpetrated by patients. According to staff surveys, approximately 65% of actual assaults upon staff were unreported. The “true” annual incidence of assaults on ED staff perpetrated by patients with schizophrenia or bipolar disorder appears to exceed 415,000 [$31,905 \times (2.75/35\%)$] + [$17,000 \times (3.4/35\%)$]. On average, 1.5 work days are lost by staff following patient assault at an annual cost of \$444.4 million (based on hourly pay rates for nurses and doctors of \$41 and \$162, respectively).

Conclusions: Rapid and effective de-escalation of agitation among patients with schizophrenia or bipolar disorder seeking care in the ED may reduce the incidence and associated costs of staff assaults.