

Policy Brief

Community-Level Risk Factors for Schizophrenia Hospitalizations

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Overview – Across the United States, hospitalizations for people suffering from schizophrenia are common and very costly. For example, among hospitalized patients ages 18-44, schizophrenic disorders are the fourth most common diagnosed illness, with a mean cost per stay of \$18,000. Yet, despite these facts, very little is known about the community-level risk factors associated with schizophrenia hospitalizations. This study is the first to present and examine nationally representative data on this subject. It examines how socio-economic factors and the makeup of local health care systems affect the rate of schizophrenia hospitalizations. It identifies geographic areas with elevated rates. It also presents a discussion about the findings. It should be of interest to government and private health plan administrators, as well as those responsible for designing mental health delivery systems – anyone interested in creating outpatient treatment programs that may prevent costly hospitalizations.

About the Study – The study used data from the year 2000 in 14 states: Arizona, Colorado, Florida, Iowa, Kentucky, Maine, New Jersey, New York, North Carolina, Oregon, South Carolina, Washington, West Virginia, and Wisconsin. Analysis was carried out at the county level. Hospitalizations were attributed to the patient's county of residence. Sources for the data were the AHRQ Statewide Inpatient Database, Census Bureau, Department of Agriculture, and Health Resources and Services Administration

Key Findings

- The 14 states included in the study had 811 counties and a total population of about 90 million people in the year 2000. The overall schizophrenia hospitalization rate in those counties for patients age 20 and above was 1.6 per 1000 residents, similar to national estimates from the Centers for Disease Control.
- Overall, counties designated as Metropolitan Statistical Areas (MSAs) did not have significantly higher hospitalization rates than non-MSAs. However, when using more precise definitions or urban-rural (i.e., Urban Influence Codes) rural counties were found to have significantly lower hospitalization rates compared to the most urban counties (population greater than 1 million).
- Counties with higher proportions of people living in poverty and unemployment had significantly higher hospitalization rates for schizophrenia.
 - A 10 percent increase in poverty levels increased hospitalizations 35 percent.
 - A 10 percent increase in unemployment raised hospitalizations 53 percent.
- Counties with a higher proportion of residents with insurance had higher hospitalization rates. This finding, the authors said, suggests discretionary hospitalizations. Unexpectedly, an increase in the proportion of the population enrolled in an HMO increased the hospitalization rate, but the impact was relatively small.

- Counties with greater numbers of hospital beds and social workers had higher rates of hospitalizations for schizophrenic disorders.
 - The hospitalization rate increased 4.3 percent for each additional hospital bed per 1000 residents.
 - The hospitalization rate increased 9 percent for each additional social worker per 1000 residents.

Limitations and Implications

The authors cite several limitations to the study: although counties seem to be an appropriate unit of analysis, results may have differed if another unit such as zip codes or states had been used; when geographic units are used for analysis, inferences at the individual level must be made cautiously; because the Statewide Inpatient Database included the patient's zip code but no unique identifier, the study data reflects multiple admissions for some patients.

Despite the limitations, the study was conducted in a high quality database and produced the first nationally representative data about community level risk factors for schizophrenic hospitalizations. While the path to hospitalization is complex and includes individual and community risk factors, the authors suggest that many of these hospitalizations may be preventable with the creation high-quality outpatient treatment programs targeted to geographic areas with elevated rates.

THE WICHE Center for Rural Mental Health Research is supported by the Federal Office of Rural Health Policy, Health Resources and Services Administration (HRSA), Public Health Services, Grant Award, U1CRH03713-02-00

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