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## Food insecurity among adults with severe mental illness

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### To the Editor

In 2011, almost 1 in 6 Americans was food insecure or lacking adequate financial access to food (1, 2). Some studies suggest that rates of food insecurity are high in severely mentally ill populations (3), but its prevalence has not been widely studied. We sought to determine this prevalence and its association with use of psychiatric emergency services.

We administered a cross-sectional survey to outpatients attending an urban community mental health clinic in the summer of 2011. Inclusion criteria were being age 18 years or older, an established clinic patient, and fluent in English. We excluded actively psychotic patients. We approached 146 (26%) of the 556 patients who attended the clinic. The Committee on Human Research of the University of California, San Francisco, approved the study.

The survey included demographic information and the 10-item Household Food Security Survey Module of the U.S. Department of Agriculture. We determined psychiatric emergency service utilization using the electronic medical record of the hospital that served more than 70% of this population. We obtained psychiatric diagnoses from the clinic's electronic medical record.

We examined 3 levels of food security (food security, mild food insecurity, and severe food insecurity). We examined the association between food insecurity and psychiatric emergency service utilization with unadjusted linear regression models and adjusted logistic regression models.

A total of 111 (76%) of the 146 outpatients approached consented to participate. The mean age of participants was 46.2 years (s.d.=10.1), 25% were female, and 37% were white. Overall, 62% had a schizophrenic spectrum disorder and 29% had a drug or alcohol abuse disorder.

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These findings were presented as a poster at the annual meetings of the American Psychiatric Association, Philadelphia, May 5–9, 2012, and the American Public Health Association, San Francisco, October 27–31, 2012.

#### **Disclosures:**

The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

The authors report no competing interests.

More than 75% (111/146) of outpatients approached consented to participate. The prevalence of food insecurity was 71% (79/111), with 27% (n=30) reporting mild food insecurity and 44% (n=49) reporting severe food insecurity.

Overall, 32% (n=35) of respondents had a psychiatric emergency room visit in the previous year. Participants with severe food insecurity had more mean visits in the past year (1.73) compared to food secure participants (0.52,  $p=0.01$ ). Severely food insecure participants had a five times higher odds of any psychiatric emergency room visits in the past year compared to food secure participants after adjusting for age, gender, race, and housing status (OR=5.06, 95% CI:1.43–17.9,  $p<0.05$ )

We found a 71% prevalence of food insecurity and a 44% prevalence of severe food insecurity among our sample of patients with severe mental illness. These rates are substantially higher than observed in other populations. For example, in the United States, the prevalence of food insecurity is 14.9% and the prevalence of severe food insecurity is 5.7% (1). In a chronically ill but not psychiatrically ill population served within the same safety net, the prevalence of food insecurity was found to be 50%, with a 20% prevalence of severe food insecurity (4, 5).

We noted a relationship between food insecurity and use of psychiatric emergency services. Increased use of health services by food-insecure individuals has also been found in a national cohort of homeless individuals (5). Studies are needed to determine whether food insecurity leads to de-compensation or whether illness severity leads to food insecurity.

Despite the limited generalizability of the findings, they suggest that community mental health providers should screen patients for food insecurity.

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