

# Editorial

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The articles in this issue consider the effects of selective serotonin reuptake inhibitors (SSRIs) compared with tricyclic antidepressants (TCA) in medical care (Chung), racial disparities in prescription drug use for mental illness (Han & Liu), relationships between depression and academic productivity (Hysenbegasi *et al.*), and the utilization and costs of mental health services for schizophrenia in four Spanish mental health districts (Vazquez-Polo *et al.*).

Chung (p. 119) examines the relative substitution effect of SSRIs on the overall utilization of outpatient and inpatient care and other prescription drugs compared with TCAs. To estimate the direct effect of SSRIs and TCAs on the medical care resources in a naturalistic setting, the author uses the 1996-1998 data of the U.S. Medical Expenditure Panel Survey (MEPS), a population-based national panel covering the U.S. non-institutionalized population. The MEPS survey is conducted five times per respondent during the course of two calendar years. The study analyzes data on medical expenditures associated with all types of medical services utilization (including inpatient and outpatient care and prescription drugs), first collected from the household component (HC) survey and then verified and corrected using the Medical Provider Component (MPC) survey. The MPC sample includes all hospitals, hospital-based physicians, and pharmacies and about 50% of office-based physicians reported in the HC. The overall sample (n=1997) was composed of SSRI (62%) and TCA (38%) users. Seventy percent of SSRI users (n=865) and 24% (n=186) of TCA users were codified with depressive conditions (depressive disorder, manic-depressive disorder, neurotic depression, depressive reaction and other depressive disorders). Controls were made for baseline physical health status, depression severity, and socioeconomic factors that could affect antidepressant choice and medical care utilization. The average length of the post-baseline period for each individual was 13.2 months with no statistically significant differences between SSRI and TCA users. The authors report that the analysis of the relative substitution effect of SSRIs over TCAs in terms of medical care utilization and expenditures shows that SSRIs reduce overall outpatient visits and other prescription drug use. Antidepressant choice does not affect the utilization or expenditures for inpatient services, which constitute the largest fraction of overall medical expenditures. The study shows that a large percentage of those who use antidepressants do not report depression symptoms, the trend being higher among TCA users (77%) than among SSRI users (40%). According to the author, these results invite

further analysis the clinical and economic effects of antidepressants for health conditions other than depression.

Han & Liu (p. 131) investigate whether there is a disparity in psychiatric drug use between Whites and three racial minorities in the U.S.: Blacks, Hispanics and Asian-Indians. The study uses the U.S. Medical Expenditure Panel Survey (MEPS) data, specifically household survey data from 1996 through 2000, with a focus on expenditures for prescription drugs for people with specific mental disorders. The authors found that all three racial minorities with reported mental illnesses of interest were estimated to be less likely than Whites to use mental health services in the form of prescription drugs (Blacks by 8.3, Hispanics by 6.1 and Asian-Indians by 23.6 percentage points) and to have lower spending than Whites on prescription drugs (Blacks USD 606.53, Hispanics USD 9.83 and Asian-Indians USD 179.60 less per year). The authors stress the importance of further examining the role of non-socioeconomic factors (such as cultural specificity) for each racial minority regarding mental illnesses and mental health treatments.

Hysembegasi *et al.* (p. 145) explore the effects of depression and its treatment on the academic performance of college students. The study uses a health and productivity survey distributed to the undergraduate students of Western Michigan University who had been diagnosed with depression between January 1998 and April 2000 at the on-campus Health Center (n=121) and to a sample drawn from the student population (n=209). The control group was developed from the pool of survey respondents: they were eligible as controls if they reported that they had not received a diagnosis of depression from a health care provider and had not reported more than three of six symptoms of depression. The primary outcome of interest, academic productivity, was measured using (i) the students' Grade Point Average (GPA), an observer-generated measure of academic productivity, and (ii) students' self-reported academic performance. The authors report that diagnosed depression was associated with a decrease of 0.49 points, or half a letter grade, in student GPA and that treatment was associated with a protective effect of approximately 0.44 points. The self-reported data regarding the impact of depression on the performance of academic tasks was consistent with these findings, with an elevated and generally increasing impairment in the months preceding the diagnosis, and with a steady decrease through three months post-diagnosis. The authors report that the analysis shows similarities with the results of studies on the impact of depression and its treatment on worker productivity. Depression may have a disruptive influence on

students' future careers by delaying entry into the job market or inhibiting the job search process. The authors highlight the importance of educating about the availability of mental health facilities for the college population and of adequate access to mental health treatment.

Vazquez-Polo *et al.* (p. 151) analyze the utilization of resources and the costs of treating subjects affected by schizophrenia in four small Spanish mental health districts in Barcelona, Granada, Madrid and Navarra. The sample in the four mental health districts totaled 356 patients, aged 18 to 65, with a diagnosis of schizophrenia who were in contact with the mental health service system during a particular six-month period. The patients were clinically assessed at the beginning of the study and reassessed one year and two years

later; information on the utilization and costs of health care and social services was also collected. Bayesian hierarchical models were used to discuss the factors that determine such costs and the differences between mental health districts. The authors report that residence in the family household, older patient age and being employed were associated with lower treatment costs. The number of relapses was directly associated with higher treatment costs. The authors did not observe differences in resource use between the four mental health districts.

Dismuke (p. 167) reviews the book *Mental health services: A public health perspective*, by B. Lubotsky Levin, J. Pettila and K.D. Hennessy.