(i) and 4-page (ii) formats; staff preferred 4-page (ii) and 2-page (i) formats. Using this, we selected version (ii), 4-page format, the common preference of both groups. Survey developers should incorporate end-users to provide insight into format preferences and cognitive processing.

PMH50

THE ROLE OF ANTIPARKINSONIAN AGENTS IN SELF-REPORTED COGNITIVE IMPAIRMENT AND AKATHISIA DURING THE LONG-TERM TREATMENT OF SCHIZOPHRENIA

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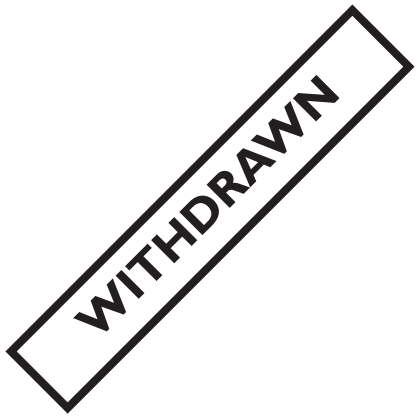
OBJECTIVES: In the treatment of schizophrenia, antiparkinsonian agents (APKs) are customarily used to counteract drug-induced reversible movement disorders such as extrapyramidal symptoms in order to facilitate adherence to antipsychotic regimens. Unfortunately, in addition to beneficial effects, APKs were shown to cause other adverse effects such as cognitive impairment. This study prospectively examined the role of APKs in self-reported medication-related cognitive impairment and akathisia (subjective or objective restlessness) among patients treated over a 3-year period in usual care with olanzapine or risperidone. **METHODS:** Using data from a 3-year observational study of schizophrenia, we included olanzapine (N = 372) and risperidone (N = 229) treated patients who continued on index medication for at least 1-year post enrollment. Medication use was based on medical records. Self-reported medication-related cognitive impairment and akathisia were assessed with validated instruments. Analysis included mixed models adjusted for covariates. **RESULTS:** Utilization rates of APKs were almost twice as high among risperidone than olanzapine-treated patients ($p = 0.001$). When not receiving APKs, akathisia was significantly worse for risperidone than olanzapine-treated patients, and rates of akathisia were comparable when receiving APKs. However, when receiving APKs, risperidone-treated patients reported significant increases in cognitive impairment compared to olanzapine-treated patients ($p = 0.0198$). **CONCLUSIONS:** In this naturalistic 3-year study, freedom from adjunctive antiparkinsonian agents was associated with worse akathsia for risperidone than olanzapine-treated patients. Moreover, use of antiparkinsonian agents was linked to worsening of self-reported cognitive impairment for risperidone but not for olanzapine-treated patients. Further studies are needed to examine this phenomenon.

PMH51



PMH52

IMPROVEMENT IN QUALITY-OF-LIFE WITH RISPERIDONE AUGMENTATION IN TREATMENT-RESISTANT DEPRESSION

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OBJECTIVE: To evaluate the effect of adjunctive risperidone treatment on quality of life in patients with treatment-resistant depression (TRD). **METHODS:** Data from the open-label treatment phase (4–6 weeks) of an international study designed to evaluate the efficacy, safety, and maintenance effect of risperidone augmentation to SSRI-treatment in TRD. Quality of life was evaluated using the short form of Quality-of-Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q). Change in Q-LES-Q from baseline was analyzed by paired t-test. Correlation analyses between MADRS and Q-LES-Q change scores were performed using Pearson method. **RESULTS:** This analysis included 386 subjects, mean age 47.1. Baseline and endpoint mean (SD) Q-LES-Q scores were 42.8 (14.6) and 56.0 (18.6), indicating an improvement of 13.2 with risperidone augmentation ($P < 0.0001$). Significant improvements were observed as early as day 7 ($P < 0.0001$). Q-LES-Q item 15, medication satisfaction, was rated as good or very good by 61% of subjects. Correlation between Q-LES-Q and MADRS total change scores at endpoint was –0.6. **CONCLUSIONS:** These findings suggest that augmentation with risperidone rapidly and significantly improves quality of life in TRD patients. Consistent with previous work, the correlation between Q-LES-Q and MADRS indicate a meaningful relationship between quality of life improvement and symptom relief.

PMH53

HOSPITALIZATION RATES DURING COMBINATION THERAPY WITH ATYPICAL ANTIPSYCHOTICS IN BIPOLAR DISORDER

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OBJECTIVE: Investigate the effect of atypical antipsychotics (quetiapine, risperidone, and olanzapine) in combination with a mood stabilizer on hospitalization rates for bipolar disorder. **METHOD:** From the MEDSTAT MarketScan© medical claims database (1998–2001), 977 individuals were identified who had

a diagnosis of bipolar disorder and received combination therapy with an atypical antipsychotic and a mood stabilizer. A 2-stage sample selection model controlled for differences between individuals receiving antipsychotics and factors that may impact the probability of hospitalization, i.e. demographics, bipolar type, disease severity, comorbidities, mood stabilizer used, and antipsychotic used. **RESULTS:** Individuals most likely to be hospitalized were those diagnosed as manic or bipolar depressed, or were receiving divalproex sodium or gabapentin. In pair-wise comparisons, hospitalization in the year following the start of combination antipsychotic therapy was 44% less likely for those receiving quetiapine vs olanzapine (P = 0.0354). There was no significant difference in the likelihood of hospitalization for the quetiapine group compared to the risperidone group (P = 0.5826). **CONCLUSIONS:** In patients with bipolar disorder receiving a mood stabilizer plus an atypical antipsychotic, the probability of hospitalization with quetiapine was significantly lower than with olanzapine, and similar to risperidone. These findings are relevant to prescription choices among atypical antipsychotics, for maximizing patient benefit and minimizing the burden of disease.

PMH54

WORK LOSS ASSOCIATED WITH BIPOLAR DISORDER

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OBJECTIVE: To assess indirect costs of work loss associated with bipolar disorder and major (unipolar) depression. **METHOD:** From MEDSTAT's employer-based MarketScan© database for year 2000, workers (mean age 42 ± 9) with a primary ICD9-CM diagnosis of bipolar disorder (N = 740), major depression (N = 6314), and one-to-one matched controls with no psychiatric diagnosis were identified. Work loss parameters were absence hours and payments for short-term disability and worker compensation. **RESULTS:** Mean annual absence hours were 55 (±49) for the bipolar group vs 21 (±27) for controls (P = 0.009), and 53 (±154) for the unipolar depression group vs 24 (±48) for controls (P < 0.0001). Mean short-term disability payments were $1231 (±3424) for the bipolar group vs $131 (±967) for controls (P < 0.0001), and $741 (±2873) for the unipolar depression group vs $178 (±1309) for controls (P < 0.0001). Mean worker compensation payments were $554 (±4231) for the bipolar group vs $228 (±2289) for controls (P = 0.15), and $518 (±4814) for the unipolar depression group vs $220 (±2449) for controls (P = 0.0001). **CONCLUSIONS:** Bipolar disorder and major (unipolar) depression significantly increased work loss. Patients with bipolar disorder may exhaust their sick leave and go onto short-term disability more frequently than those with unipolar depression.

PMH55

CHILD HEALTH ILLNESS PROFILE AS A QUALITY OF LIFE MEASURE OF CHILDREN WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

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OBJECTIVE: The Child Health Illness Profile-Child Edition (CHIP-CE) instrument is a psychometrically sound pediatric quality of life measure that works well in diverse ethnic and racial populations. Although the CHIP-CE has been used in a variety of populations, no known studies have used this instrument to evaluate the quality of life of children with Attention Deficit/Hyperactivity Disorder (ADHD). Our objective was to evaluate the quality of life of children using the CHIP-CE in a population of ADHD patients commonly treated with medications. **METHODS:** The CHIP-CE is a 76-item, parent-report questionnaire that assesses multiple domains of children's health-related quality of life including: satisfaction (with self and health), comfort (emotional and physical symptoms and limitations), resilience (positive activities that promote health), risk avoidance (risky behavior that influences future health), and achievement (of social expectations in school and with peers). Standard scores (mean = 50, SD = 10) are established. One hundred thirty people in the United Kingdom (UK) were screened to find 83 eligible parents of children with ADHD to participate in a survey including the CHIP-CE questionnaire and an ADHD symptom frequency measure, the ADHD-RS. **RESULTS:** The total mean ADHD-RS score (37.2) in the sample was high and comparable to patients in drug trails (the normative non-ADHD score ranges from 7.4 to 12.5). The children of the parents rated had a mean age of 12.6. Seventy-two and three-tenths percent were currently being treated with stimulants and 97.6% were currently receiving therapy of either stimulants or psychotherapy. Children in the sample had considerable impairment in all 5 domains of the CHIP-CE, in particular the risk avoidance (25.2), achievement (29.1), and satisfaction (28.7) domains. **CONCLUSION:** The CHIP-CE assessment shows significant quality of life impairment in this sample of children with ADHD, despite 70% of the patients being currently treated with stimulant medication.

MENTAL HEALTH

MENTAL HEALTH—Health Policy Studies

PMH56

MENTAL HEALTH SERVICES AND DRUG UTILIZATION PATTERNS FOR STUDENTS WITH MENTAL ILLNESSES IN SCHOOL-BASED HEALTH CENTERS

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OBJECTIVE: Mental health disorders among children and adolescents do not have sufficient attention. The purpose of this study was to assess direct health care costs and drug utilization for students with mental health illnesses in School-Based Health Centers (SBHC) and comparable schools. **METHODS:** Four SBHC intervention and two comparable non-SBHC schools (districts) in Ohio were selected for this study. A total of 1200 students who were enrolled in Medicaid program and had at least one mental illness diagnosis and received mental health medications were identified for this cohort. There were 850 students in those schools with SBHCs, and 350 students in non-SBHCs. The study period was from August 1997 to August 2002. Repeated measures analysis of covariates (ANCOVA) was conducted to assess the adjusted monthly total cost and the monthly mental health service cost before and after the SBHC program. **RESULTS:** The cohort involved 64.8% male, 40.7% African-American, and average 9.8 (SD 2.65) years-old in September 2001. During the study period, average monthly total costs were $221 (SD 692) before SBHC and $295 (SD 742) after SBHC. The most frequently diagnosed mental illnesses for all students were hyperkinetic syndrome of childhood, adjustment reaction, disturbance of emotion/conduct, affective psychoses, neurotic disorders, and specific delays in development. Frequently prescribed medications were antihyperkinesis agents (4.3 Rx per