
CONCLUSION: SPMI subjects had reductions in metabolic syndrome risks and improvement in health status demonstrated by decrease in waist size, glucose, cholesterol and triglycerides and an increase HDL. Some benefits were lost when subjects curtailed exercise compliance in maintenance phase. The sample size limits our ability to make population inferences, yet findings suggest that a psychoeducation program including nutrition/exercise modules should be universally available, encouraged and ongoing to have maximum health benefit and reduction in overall health costs.

PMH44

PERCEPTION OF SIDE EFFECTS, MEDICATION ADHERENCE
AND QUALITY OF LIFE IN PSYCHIATRIC PATIENTS

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OBJECTIVES: Numerous side effects are known to be associated with psychotropic medications. In our previous research we have shown that side effects associated with asthma therapy affect patient quality of life and medication adherence. The goal of this study was to explore psychotropic patient perceptions about side effects and to assess their interaction with quality of life (QOL, SF-36 RAND questionnaire) and medication compliance (Morisky scale).

METHODS: A convenience sample of 19 consecutive patients with psychiatric disorders has been surveyed (schizophrenia—8, schizoaffective disorder—4, bipolar disorder—4, recurrent depressive disorder—3). All patients were using at least one medication for their therapy. The patients were asked to recall their use of medicines during the last two weeks. The survey consisted of a symptom checklist (SC) that consisted of 140 side effects associated with most commonly prescribed medications. The patients were asked to indicate whether they experienced each symptom listed in the checklist and whether they felt that each symptom they had was caused by their medications. The patients were also asked to evaluate intensity of their physical and emotional suffering due to side effects during the last two-weeks from zero (no suffering) to ten (the most severe suffering) and indicate the number of days they suffered from side effects during the last two-weeks.

RESULTS: Two parameters of QOL were negatively associated with side effects with borderline significance: intensity of side effects and social functioning (p = 0.06) and limiting of physical functioning and number of days of suffering from side effects (p = 0.06). There was no association between medication adherence and side effects. Lower medication adherence was associated with lower number of days of suffering (p = 0.04). CONCLUSIONS: We concluded that the side effects associated with psychiatric medications might affect quality of patient care. Further studies with larger sample size are needed.

Mental Health—Schizophrenia

PMH45

HISTORY OF SUBSTANCE ABUSE ASSOCIATED WITH POOR PROGNOSIS IN THE TREATMENT OF SCHIZOPHRENIA:
RESULTS FROM A CLINICAL TRIAL DATABASE

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OBJECTIVE: This research was conducted to determine if history of substance abuse confers poor prognosis in schizophrenia as measured by onset of illness and treatment outcome.

METHODS: This was a post hoc, pooled analysis of four randomized, double-blind, 24-28 week studies of schizophrenia treatment. All treatment groups were collapsed for a total of 1627 patients and 142 patients with a history of substance abuse at any time. Positive and Negative Syndrome (PANSS) scores and onset of illness were compared between patients who had history of substance abuse (males, n = 116; females, n = 26) and patients who did not have history of substance abuse (males, n = 932; females, n = 533) using analysis of variance.

RESULTS: Patients with a history of substance abuse had an earlier onset of illness in both male and female patients. History of substance abuse also had a negative effect on treatment outcomes. Specifically, patients with a history of substance abuse had less improvement in PANSS total and subscores than other patients. The differences in PANSS total (p < 0.01), PANSS positive (p = 0.02), PANSS negative (p = 0.03), and PANSS general psychopathology (p = 0.02) scores were statistically significant for male patients with history of substance abuse.

CONCLUSIONS: History of substance abuse is an important factor to consider when treating patients with schizophrenia, as these patients have an earlier onset of schizophrenia and poor response to treatment compared to other patients. Further studies are needed to determine if substance abuse promotes schizophrenia onset; or alternatively, certain traits predispose individuals to both substance abuse and schizophrenia.

PMH46

RELIABILITY AND VALIDITY OF THE READINESS FOR DISCHARGE QUESTIONNAIRE IN SCHIZOPHRENIA

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OBJECTIVES: Research on the effects of an intervention on hospital length of stay and discharge are often confounded by socioeconomic factors unrelated to the intervention. The Readiness for Discharge Questionnaire (RDQ) is a newly developed tool designed to assess readiness for discharge of inpatients with schizophrenia, independent of socio-economic factors. This study examined the psychometric properties of the RDQ.

METHODS: The RDQ consists of six items assessing suicidality/homicidality, control of aggression/impulsivity, activities of daily living, medication-taking, delusions/hallucinations interfering with functioning and global clinical status. A final yes/no question assesses readiness for discharge. Data from a pilot study (n = 149) and a large randomized double-blind study (n = 382) were used to examine test-retest reliability, construct validity, and responsiveness. A third study (32 raters, six cases) provided data on content validity and inter-rater reliability.

RESULTS: The inter-rater reliability was high for all items of the RDQ (reliability coefficient > 0.9) and moderate/high for the readiness for discharge status (84% agreement, kappa 0.39, polychoric corre-
The RDQ has favorable reliability and validity properties, and is an easy to use instrument for assessing readiness for discharge of inpatients with schizophrenia. The RDQ can be a useful tool in research settings, as it provides a measure of the effects of an intervention on discharge, independent of socio-economic influences.

**SYSTEMATIC REVIEW ON RELAPSE AND ANTIPSYCHOTIC NON-ADHERENCE IN SCHIZOPHRENIA**

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**OBJECTIVE:** This study aims to conduct a systematic review on the literature concerning relapse and non-adherence in schizophrenia patients in eight countries (Australia, Canada, France, Germany, Italy, Spain, UK, and US). **METHODS:** As of September, 2004, a literature search was performed in a number of databases including MEDLINE (1966–2004), EMBASE (1980–2004), PsycINFO (1967–2004), Cumulative Index to Nursing and Allied Health Literature (1980–2004) and other health technology assessment databases. Of the 1000 retrieved articles, around half were eventually reviewed in full text. **RESULTS:** Although definitions and measures of adherence and relapse between studies were very diverse, the rate of relapse in schizophrenia appeared to be from 40% to 55% for patients not taking the medication, and 14% to 30% for stabilized patients maintained on medication. Conventional antipsychotics tended to have higher rates of relapse than atypical antipsychotics. Most relapses tended to occur within the first year and, as such, many studies had a short follow-up period. The medication adherence rate for patients with schizophrenia ranged from 20% to 90%. This review has found that adherence is affected by environmental factors (e.g. social support), medication factors (e.g. side effects or lack of efficacy), doctor-patient relationship (e.g. lack of knowledge concerning the illness), forgetfulness, and treatment factors (e.g. medication regimes that are too complex). There was substantial evidence that depot medication aids patient adherence. Because current depot medications are available for conventional antipsychotics and risperidone, it was suggested that considerable advantages may be observed when more atypical antipsychotics are used in depot form. **CONCLUSION:** Relapse and non-adherence to antipsychotic agents in schizophrenia patients are quite prevalent and associated with adverse consequences. Furthermore, because treatment adherence appears to be strongly linked with relapse in schizophrenia, it is important that treatment interventions continue to address the problem of medication non-adherence.

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**USE AND COST OF POLYPHARMACY IN SCHIZOPHRENIA: DATA FROM A RANDOMIZED, DOUBLE-BLIND STUDY OF RISPERIDONE AND QUETIAPINE**

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**OBJECTIVES:** The use of concomitant antipsychotics and other psychotropics and the costs of polypharmacy in patients randomized to risperidone or quetiapine were examined in a prospective double-blind study. **METHODS:** Subjects were patients with an acute exacerbation of schizophrenia or schizoaffective disorder. In a 14-day phase, patients were randomized to risperidone, quetiapine, or placebo monotherapy. In the following 28-day additive-therapy phase, clinicians were allowed to add antipsychotics or other psychotropics (including antidepressants, anxiolytics, mood stabilizers and sedatives/hypnotics). Doses of risperidone or quetiapine were fixed in the additive therapy phase. **RESULTS:** Mean (±SD) doses at monotherapy endpoint were 4.7 ± 0.9 mg/day of risperidone and 579.5 ± 128.9 mg/day of quetiapine. Among 133 patients randomized to risperidone, 33% received additional antipsychotics and 36% received one or more psychotropics (including antipsychotics). In the quetiapine group (N = 122), 53% and 53% received additional antipsychotics or psychotropics, respectively (P < 0.005 vs. risperidone in both). In the placebo group, 57% received antipsychotics and 62% psychotropics. The relative risk (quetiapine vs. risperidone) for antipsychotic polypharmacy was 1.90 (95% CI 1.29–2.80). Improvements in PANSS total scores were significantly greater in patients receiving risperidone than quetiapine or placebo at monotherapy endpoint (P < 0.001) and significantly greater with risperidone than placebo at the additive-therapy endpoint (P < 0.01); quetiapine-placebo differences were not significant. The mean costs of antipsychotic polypharmacy (for the duration of the additive-therapy phase) per randomized patient were $57.03 in the risperidone group and $101.64 in the quetiapine group (P < 0.05). The costs of the primary antipsychotic plus the additional antipsychotics were $354,339 in the risperidone group and $524,319 in the quetiapine group. **CONCLUSIONS:** The results confirm earlier observations of higher rates of polypharmacy with quetiapine than with risperidone. These findings suggest that differential costs associated with polypharmacy can be substantial.

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**ESTIMATING ANNUAL US PREVALENCE OF SCHIZOPHRENIA IN 2002**

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**OBJECTIVES:** This study estimates the 2002 annual prevalence of schizophrenia in the US based on administrative claims data analyses and a comprehensive literature review. **METHODS:** The population-specific annual prevalence rates of schizophrenia in the US were estimated separately for privately insured, government insured (Medicare, Medicaid), and uninsured populations. The 2002 annual prevalence for privately insured individuals was calculated based on a de-identified administrative claims database of approximately 3.0 million privately insured beneficiaries covering the period from 1999 to 2003. The 2002 prevalence of Medicaid enrollees was calculated from Medi-Cal claims covering the period from 2000–2002. The 2002 schizophrenia prevalence in Medicare population was calculated as a weighted average of the prevalence rates of Medicare/Medicare dual eligibles and private insurance program enrollees over 65. Published statistics were used to estimate the prevalence of schizophrenia in the uninsured population. Finally,