

# **Facts about Schizophrenia Medication Adherence**

## The Issue

- The National Institute of Mental Health has estimated that schizophrenia costs the United States about \$32.5 billion each year for about 2 million patients with the diagnosis
- The majority of direct health costs related to schizophrenia are attributable to hospitalizations for both initial episodes and later relapses. At least half of the relapses can be associated with a lack of compliance with drug therapy, with the remainder linked to issues of treatment efficacy.
- The review found a mean rate of relapse of 76 percent within the first two years after discontinuation of an antipsychotic treatment, even among patients whose illness was considered to be in remission. Relapse rates for patients who took maintenance medication intermittently were about twice those for patients who took medication continuously
- The review suggests an overall monthly relapse rate of approximately 11 percent for noncompliant patients, based on average follow-up periods of six months to two years. This rate is equivalent to a 75 percent annualized risk of relapse for noncompliant patients.
- This general pattern of relapse data—approximately 75 percent for poor compliance and 35 percent for good compliance.
- *Poor compliance with medication treatment is likely to result in an increased frequency of relapse, more intense symptoms, and longer inpatient stays. These studies provided resource use and unit cost data that suggest a range of estimates for relapse costs of between \$10,000 and \$26,000 per episode (hospitalization represents around 85 percent to 95 percent of the relapse costs, with the remainder distributed among the costs of increased drug dosages, additional clinic follow-ups over the subsequent year, and general case management.).*

## Medication Non-Adherence

- In over 35 double-blind trials which have included more than 3,500 patients, the role of antipsychotic medications in preventing symptom exacerbation and re-hospitalization has been firmly established (Davis et al., 1993).
- As with medical disorders, more than 50% of patients with schizophrenia do not take medications as prescribed (Serban and Thomas 1974; Sackett and Haynes 1976; Sullivan et al., 1995; Dolder et al., 2002; Olfson et al., 2000; Velligan et al., 2003; Gilmer et al., 2004).
- 74% of patients with schizophrenia become non-compliant with medication within two years after hospital discharge (Weiden et al., 1995).
- The fact that a high percentage of patients who participate in clinical research (i.e. patients who are willing to follow research protocols) demonstrate non-adherence to medications suggests that adherence may be more influenced by poor ability to comply rather than by refusal to comply (Duncan and Rogers 1998)
- *Poor ability to comply includes forgetfulness, and other deficits in cognitive function such as problems with planning and organization. Due to these neurocognitive deficits, forgetfulness and failure to establish routines that promote adherence to medication are more likely to be problems for schizophrenia patients than for those with physical disorders.*

## The Treatment

- For patients with cognitive deficits, even simple regimens may seem complex or difficult to follow. Moreover, a significant number of schizophrenia patients report non-compliance with medications due to forgetfulness (Hoffman et al., 1974; Serban and Thomas 1974). Serban and Thomas (1974) reported that a majority of schizophrenia patients stated they would take medications if given reminders, or if someone gave them their medication.

In sum, there is substantial evidence that forgetfulness, cognitive deficits, and lack of daily routines contribute significantly to failure to take medication as prescribed in patients with schizophrenia. Reducing the demands on the patient to remember can favorably affect adherence.

According to Haynes et al. (1987), as well as Zygmunt et al (2002) successful programs for improving adherence to pharmacotherapy share four common characteristics:

- 1) they provide information regarding the illness
- 2) they use prompts and reminders
- 3) they provide positive reinforcement for adherence and
- 4) they provide social support for treatment.

The Med-eMonitor System offers the solution