OBJECTIVES: The objective of this study was to estimate the direct annual cost of treating patients with schizophrenia in Greece, in 2005. METHODS: Due to the lack of quantitative data, information on the treatment pathway and medical resource utilization of patients were collected from a consensus panel of 9 psychiatrists representing different medical settings and geographic regions and 5 health economists. For estimating costs a bottom up approach from the National Health System perspective was used. Cost analysis included personnel salaries, diagnostic procedures, medication, outpatient visits, hospitalization and stay in supervised dwelling. Due to the variations between hospital pricing and reimbursement, three-scenarios were used to account for variability on hospitalization costs.

RESULTS: The panel of experts defined three patient categories based on the severity of the disease and the medical setting where treatment is received: (a) outpatient setting (50% probability of hospitalization for 20 days per year); (b) ambulatory care (100% probability of hospitalization for 50 days per year); and (c) inpatient setting (100% probability of hospitalization for 60 days per year and 40% probability of 305-day stay in protected dwelling). The annual direct cost per treatment patient was found to be: €3187 (€2659–€4166) in the first category, €10,135 (€7429–€13,972) in the second category and €20,782 (€17,482–€25,462) in the third category. The total cost of treatment increased with the severity of the disease and the use of hospitalization, while the contribution of medication to the total cost decreased compared to other cost attributes. CONCLUSIONS: The provision of health care to schizophrenic patients has a high cost for the health care system. Systematic data collection on medical resource utilization must be established at the national level to facilitate further research and guide the efficient use of resources.

COST-UTILITY ANALYSIS OF ANTIDEPRESSANTS FOR SECOND-LINE TREATMENT OF MAJOR DEPRESSIVE DISORDER

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OBJECTIVES: This analysis estimated the cost-utility of second-line treatment for major depressive disorder using generic selective serotonin reuptake inhibitors (SSRIs), escitalopram, paroxetine CR, sertraline or venlafaxine XR. METHODS: A Markov probabilistic decision analysis was constructed with cycle dependent transition probabilities for persistence over 52 weeks, examining whether persistent patients would have a response, and if this response was followed by remission. Response was defined as ≥50% improvement from baseline in depression rating score. Remission was defined as ≥7 HAM-D or ≥10 MADRS. Remission and response rates were obtained from published clinical trials and entered into the model using beta distributions. Utilities were based on duration of treatment and changed weekly over the year. Baseline utility scores were 0.35, 0.21, and 0.30 for remission, response, and treatment failure, respectively; between days 36–365 utility scores were 0.85, 0.72, and 0.58, respectively. Wholesale acquisition costs were used for medication costs. Remission, response, and treatment failure costs were obtained from the literature and were estimated using gamma distributions. The analysis was conducted using 10,000 Monte Carlo simulations with first- and second-order sampling procedures. RESULTS: The lowest cost option was generic SSRIs agents ($3283), with the highest being venlafaxine XR ($4111). The effectiveness was greatest for venlafaxine XR (35.2 quality-adjusted life weeks (QALWs), followed by escitalopram (34.1), sertraline (34.1), generic SSRIs (33.8), and paroxetine CR (33.4). Cost per QALW ranged from $97 for generic SSRIs to $117 for venlafaxine XR. The incremental cost effectiveness ratio (ICER) for venlafaxine XR relative to generic SSRIs was $609. When QALW are converted to quality-adjusted life years (QALYs), the ICER per QALY for venlafaxine XR relative to generic SSRIs was $31,621. CONCLUSIONS: Using a Monte Carlo Markov model, the analysis suggests that venlafaxine XR is more effective in terms of QALWs and has an acceptable ICER relative to generic SSRIs.

REHOSPITALIZATION RATES IN SCHIZOPHRENIA: COMPREHENSIVE LITERATURE REVIEW

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The major cost to the health care system in treating schizophrenia is hospital based care. To help estimate the cost of treating schizophrenia and to assess the effectiveness of treatment comprehensive data on rehospitalization rates are appropriate. METHODS: Published clinical trials of antipsychotic medications and large representative naturalistic studies were systematically identified by conducting searches of the Cochrane Library Schizophrenia Group’s Register and MEDLINE databases. Identified sources were supplemented with a reference search for additional relevant literature. Studies were included if they were published from 1990–2004 and reported 1-year rehospitalization rates among patients not hospitalized. This included (a) clinical trials of outpatients or of recent discharge patients; and (b) naturalistic cohorts followed after discharge from hospital. Hospitalization rates were adjusted based on the sample size. Studies were stratified based on the patient group treated. RESULTS: Patients after their first hospitalization for schizophrenia (first episode patients; n = 36,192) from case registries in 5 nations had an average annual readmission rate of 33% (range 15–55%). Of stable response patients, comparison between patients on first generation (conventional; n = 265) and second generation (novel; n = 628) antipsychotic regimes indicated that those on second generation were significantly less likely to be readmitted (Mean difference = 3.02; 95% CI = 1.75:4.29). Similarly, of patients treated for clinical exacerbation comparison between patients on first (n = 761) and second generation (n = 1141) regimes indicated that those on a second generation regime were significantly less likely to be readmitted (Mean difference = 5.07; 95% CI = 4.41:5.72). CONCLUSIONS: Rehospitalization rates were significantly lower for patients on second than first generation antipsychotics. This finding appears to be robust across patient groupings. The use of second generation antipsychotics may reduce the cost of care.

PREDICTING VIOLENT OFFENDING AMONG MENTALLY ILL IN A MULTINATIONAL SETTING—NAIVE BAYESIAN FUSION AND MODEL MERGING WITH P-COURSE

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Violent crimes perpetrated by the mentally ill are a global problem causing significant financial and human burden. Severe mental disorders are associated with an increased risk of violent offending. However, predicting violent offending in the mentally ill...