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**PMH33** 

#### **COST-UTILITY ANALYSIS OF DULOXETINE VERSUS** VENLAFAXINE IN THE MANAGEMENT OF MAJOR **DEPRESSION IN PORTUGAL**

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OBJECTIVES: The aim of this study is to estimate the costeffectiveness ratio of Duloxetine compared to Venlafaxine in the management of major depression in Portugal. A model developed by MEDTAP International Inc. was adapted in order to reflect clinical practice in Portugal. METHODS: The model allows for the estimation of costs, QALY, the proportion of patients achieving remission, and the average time spent in remission by each patient during one year. The societal perspective was adopted. In each cycle a patient may drop-out, achieve remission, respond to treatment not achieving remission, or have no response. Clinical evaluation is based on patients' scores in the Hamilton scale. Patients that do not achieve remission may have their dose adjusted, switch to or add another anti-depressant. Clinical data was taken from a randomized controlled trial between Duloxetine and Venlafaxine. Results show that Duloxetine allows more patients to achieve remission, despite the fact that less patients achieve response. Duloxetine is also associated with a higher proportion of patients with adverse events. Recurrence and relapse rates were taken from the literature. Quality of life and resource consumption data were collected through a Delphi panel of psychiatrists with large clinical experience. Official sources were used to get unit costs. RESULTS: Patient that start treatment with Duloxetine spend 34.5 weeks in remission, with 83.9% achieving remission at the end of the period. As a consequence, Duloxetine enables 0.708 QALYs per patient. Those who start treatment with Venlafaxine stay in remission during 34 weeks, with 83.5% achieving remission at the end of the period. Therefore, Venlafaxine treated patients benefit from 0.698 QALYs. Duloxetine also allows for savings in resources used. It implies a total expenditure of €1126 per patient while Venlafaxine related expenditure equates to €1231. CONCLUSIONS: Duloxetine is more effective and less costly, being a dominant alternative.

**PMH34** 

### WORKPLACE BURDEN OF MILD, MODERATE, AND SEVERE **DEPRESSION IN THE UNITED STATES**

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OBJECTIVES: While the substantial health care cost of depression in the workplace is well documented, less is known about the impact of depression severity on workplace burden. The objective is to document workplace burden of major depressive disorder (MDD) by severity. METHODS: Using U.S. data from the National Comorbidity Survey-Replication, workforce respondents (n = 4465) were classified into clinical severity categories (not clinically depressed, mild, moderate, severe) using standard scales (CIDI/QIDS-SR). Outcomes included employment status (employed, disabled, unemployed), workplace performance (measured as hours worked, self-rated performance, days of missed work), and workplace burden (estimated by multiplying work hours lost by self-reported hourly income, from HPQ). Outcomes were compared across depression severity groups using multivariate models that adjusted for demographic characteristics. Total monthly US burden of reduced work and

performance was estimated through extrapolation using government workforce statistics. RESULTS: Among the 539 depressed respondents, 13.8% were mild, 38.5% moderate and 47.7% severely depressed. Respondents shared similar demographic characteristics across severity levels. Depressed respondents were 2.6 times more likely to be unemployed/disabled than nondepressed respondents (p < 0.001). The prevalence rates of unemployment/disability increased with depression severity: 15.7%, 23.3% and 31.3% for mild, moderate and severely depressed respondents respectively (p < 0.01). Moderately and severely depressed employed respondents were 4-5% less productive than mildly depressed/non-depressed respondents (p < 0.01). Severity is negatively associated with work performance. Compared to non-depressed respondents, mildly depressed respondents have reduced monthly workplace performance by 3.0 hours (not statistically significant), vs.12.0 hours (14.8 hours) for moderately (severely) depressed respondents (p < 0.001) The monthly cost of lost performance was \$188 (\$199) per moderately (severely) depressed worker; the total monthly U.S. burden of reduced work and performance is \$2.1 billion/ month. CONCLUSIONS: Among MDD respondents in the workforce, there was a positive association between depression severity and rates of unemployment and disability. Depression is also negatively associated with work performance.

### COST ANALYSIS OF THE TRENDS IN HOSPITALISATION OF PATIENTS WITH SCHIZOPHRENIA IN SPAIN FROM 1980-2004

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OBJECTIVES: Cost analysis of the changes in hospitalisation for patients with schizophrenia in Spain over a 25-year period (1980-2004). METHODS: Cost analysis of the hospitalisation for patients with schizophrenia over a 25-year period based on the data exploited from the Spanish National hospital utilization databases: Minimum Basic Data Set and Survey of Hospital Morbidity. Taking into account the changes in the number of admission episodes, average length of stay (LOS) of such episodes, and costs generated per stay, an estimation of the varying hospitalisation costs in this period was carried out. RESULTS: Our data shows that the trend in hospitalisation rates for schizophrenics has increased over the entire period (3.70 in 1980 to 5.89 in 2004). LOS has substantially decreased during the study period from 148 days in 1980 to 36 days in 2004. The estimated cost per day in a psychiatric hospital for a schizophrenic patient in Spain in the year 2000 was €215.60. Some factors affecting the cost of inpatient treatment has been the evolution, consumption pattern and pharmaceutical cost of the antipsychotic drugs used in the treatment of these patients. From 1990-2001, antipsychotic consumption has almost doubled from 3.31 DID (Daily defined dose, DDD, per 1000 inhabitants and per day of treatment) to 6.04 DID. The cost of these drugs has increased 13 times, mainly due to the increase in the cost of atypical antipsychotics which has risen from representing less than 1% of the total cost in 1993 to representing 92% in 2001. The DDD cost has risen, in constant euros, from, €6.48 in 1990 to €20.31 in 2001. In addition, as a growing number of patients are being taken care of in the community, as supported by the deinstitutionalisation process, admissions into other types of institutions should be considered. There are studies showing an increase in the number of places in residential care and supervised and supported housing, having doubled in Spain from 5.1 per 100.000 population in 1990 to 10.6 in 2006. Of course, the costs per day vary greatly depending on the institution where the

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schizophrenic patient is placed, ranging from €67.4 per day in a day centre, to €164 per day in a long term residency or €315.7 per day in a mental health unit of a general hospital, where most stays are currently taking place in Spain. CONCLUSIONS: Following the deinstitutionalisation process of psychiatric patients that has occurred in most Western countries, in Spain, we observe an increase in admissions rates linked to a decrease in LOS for schizophrenic patients. The changing patterns of use of hospital resources parallel to the changes in community care, mean that the costs have varied complementarily throughout this reform process. These trends could have important implications for policy makers and health care providers.

#### **MENTAL HEALTH—Patient-Reported Outcomes Studies**

**PMH36** 

# WHAT DO PATIENTS WITH SCHIZOPHRENIA WANT OUT OF THEIR MEDICATION? IDENTIFYING PATIENT REPORTED "PROCESSES" IN MENTAL HEALTH

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Poor compliance of schizophrenic patients is well known and linked to negative treatment outcomes. To address persistent issues of compliance we need to adopt a more patient centric approach towards evaluation of medicine with an aim to better appreciate the requirements of patients. OBJECTIVES: To identify patient requirements towards drug characteristics, with further emphasis on route of administration, and to examine if attitudes are modified with experience with a depot. METHODS: Based on 13 relevant drug characteristics, extracted through patient focus groups [n = 20] and literature a survey instrument was developed. Respondents were asked to rank and then rate the factors using 5-point Likert scales. Respondents included depot naïve [n = 33], depot experienced [n = 34], and patients currently on depot [n = 38]). Data was analyzed using descriptive statistics. RESULTS: In aggregate, patients ranked avoidance of dyskinesia (79.25), positive influence on sleep (75.25), onset of action (72.75), and no/little weight gain (72.25) as important drug characteristics. The least rated factors were no/little interaction with alcohol (52.75) and drug costs (53.5). With regard to differences between patients experiences with a depot, current depot users gave frequency of application a higher ranking (Rank 4 vs. Ranks 8,8). The preference for a depot formulation was highly dependent on previous experience (depot: 84%, depot experience: 29%, depot-naïve: 3%, p < 0.05), with an overall preferred frequency of injection every four weeks. CONCLUSIONS: Patients with Schizophrenia are capable and willing to share their attitudes about key processes related to the medical management of schizophrenia. Incorporating patient preferences into decision making offers an opportunity to better understand issues of adherence and management of therapy. Experience with a depot medication seems to lead to higher acceptance and appreciation of such formulations. More research is need to understand if these differences are related a optimal selection of medication or a learning by doing phenomena.

PMH37

# SWITCHING OF ANTIPSYCHOTICS FROM THE PATIENTS POINT OF VIEW: RESULTS OF A QUANTITATIVE PATIENT SURVEY

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Janssen-Cilag GmbH, Neuss, Germany, <sup>2</sup>GfK AG, Nürnberg, Germany **OBJECTIVES:** Considering the patients point of view in treatment decision making is crucial for a successful therapy. In con-

trast to somatic diseases in schizophrenia there are only few examples where the patients attitude and point of view was systematically recorded. Objective of the study was to collect the attitude of schizophrenic patients towards generic substitution of atypical antipsychotics. METHODS: In the quantitative survey schizophrenic patients, capable to give one's consent, aged 18-60 years were interviewed on the basis of a structured questionnaire. All participants received a second generation antipsychotic for at least one year. Getting in contact with the patients was facilitated via practice-based psychiatrists who secured the recruitment of the appropriate patients in line with the screening criteria. RESULTS: The survey was conducted in November/December 2007. 104 patients (Æ 41.2  $\pm$  11.1 yrs.; Æ treatment duration  $3.5 \pm 3.2$  yrs.). According to the patients' information drug treatment was changed 1.7 times on average during the last 5 years (range 1-14). In case of a generic substitution initiated by the attending physician 69% of the patients expressed a willingness to take the medication further on. The acceptance of a treatment switch was reduced if the switch was not justified by a lack of efficacy/tolerability (28%). Especially the regular switch of drugs with the same agent in the pharmacy would be met with a refusal as voiced by 76% of the patients. **CONCLUSIONS:** The study shows that the conduction of a quantitative survey with schizophrenic patients is feasible and differentiated statements regarding patients' attitudes towards pharmacotherapy can be generated. The results emphasize the importance of an extensive education of the patients prior to a generic substitution in order to support therapy adherence, which is fragile per se. Physicians are expected to fulfill this educational task.

**PMH38** 

## CAN PATIENTS WITH SCHIZOPHRENIA COMPLETE A CONJOINT ANALYSIS? EVIDENCE FROM GERMANY

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Patient preferences are an important indicator of patients' underlying values and could enlighten literatures on both compliance and satisfaction with treatment. Patient preference methods, such as conjoint analysis, are increasingly used in clinical areas, but applications in mental health remain limited. OBJECTIVES: To determine the capability of patients with schizophrenia to complete a conjoint analysis questionnaire, document patients' reactions to conjoint tasks and assess the validity and reliability of their responses. METHODS: Attributes and levels relating to the medical management of schizophrenia were identified through patient focus groups and literature reviews to create simple conjoint analysis task of six attributes with two levels each. Respondents (n = 25) were patients diagnosed with at least one episode of schizophrenia, presently stable and undergoing therapy with a neuroleptic medication and were recruited through clinics from four cities in Germany. The majority of respondents were presented with eight paired-comparisons; but a limited number of respondents were presented with sets of four scenarios to test satiation. Questionnaires were administered in person with limited explanation, were audio recorded and later analyzed. RESULTS: Respondents easily completed the conjoint tasks and results were consistent with underlying hypotheses. Specifically we identified four statistically significant factors: i) ability to think clearly (p > 0.001); ii) tiredness (p > 0.001); iii) having a supportive physician (p > 0.001); and iv) the ability to participate in social activities (p > 0.005). The reliability of responses based test-retest was high, 82.35% agreement between responses, Kappa 0.648 (p > 0.0001). Patients could also complete more complicated tasks based on choice among four