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DEPRESSIVE DISORDER: A META-ANALYSIS

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OBJECTIVES: To compare indirectly the efficacy and safety of duloxetine and venlafaxine-XR, the two currently available seroton-in-norepinephrine reuptake inhibitors (SNRIs) in treating major depressive disorder. METHODS: Outcomes from published, randomized, placebo-controlled trials reporting on moderately-to-severely depressed patients [Hamilton Rating Scale for Depression (HAM-D) ≥ 15]. A systematic literature search was performed (1996–January 2005) on Cochrane, EMBASE and MEDLINE databases. Two independent reviewers judged the trials for acceptance. Last Observation Carried Forward (LOCF) data were extracted. Differences in remission (8-week HAM-D score ≤7), response (50% decrease on HAM-D), and dropout rates from lack of efficacy (LOE) and adverse events (AEs) were meta-analyzed using a random effects model. Each rate was contrasted from placebo. RESULTS: Data were acquired from 8 trials from 1754 patients for efficacy and 1791 patients for discontinuation/safety. Venlafaxine-XR rates were 17.8% (CI95%: 9.0%–26.5%) and 24.4% (CI95%: 15.0%–37.7%) greater than placebo for remission and response, compared to 14.2% (CI95%: 8.9%–26.5%) and 18.6% (CI95%: 13.0%–24.2%) for duloxetine. Although numerically higher for venlafaxine-XR, no statistically significant differences were found between drugs, however, both demonstrated overall remission and response rates significantly higher than placebo (p < 0.001). Dropout rates due to AEs were, contrasted with placebo, for venlafaxine-XR 6.1% (CI95%: 2.5%–9.7%) and for duloxetine 5.7% (CI95%: 1.5%–10.0%) greater than placebo. Dropout rates due to LOE were for venlafaxine—XR 10.7% (CI95%: 6.4%–15.1%) and for duloxetine 11.1% (CI95%: 6.3%–15.9%) less than placebo. Again, when the two drugs were compared, no statistically significant difference was found for both dropout rates. Reported adverse events were comparable between drugs. CONCLUSIONS: Venlafaxine-XR tends to have a favorable trend in remission and response rates compared to duloxetine, but for dropout rates and AE these agents did not differ. A direct comparison is warranted to confirm this tendency.

COST EFFECTIVENESS OF DULOXETINE COMPARED WITH VENLAFAXINE-XR IN THE TREATMENT OF MAJOR DEPRESSIVE DISORDER

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OBJECTIVES: To determine the cost effectiveness of a new reuptake inhibitor, when compared with -XR in treating major depressive disorder. METHODS: A cost effectiveness analysis, using a decision tree modeled outpatient treatment over six months. Analytic perspectives were those of society (all direct and indirect costs) and the Ministry of Health of as payer for all direct costs. Rates of success and dropouts were obtained from a meta-analysis of placebo-controlled trials. Costs were taken from standard lists, adjusted to 2005 Canadian dollars; discounting was not applied. One-way sensitivity analyses were performed on monthly acquisition costs and success rates; Monte-Carlo analysis examined all parameters over 10,000 iterations. RESULTS: From both perspectives, outcomes all numerically-XR (Expected success = 53% and 57%, Symptom-free
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COST-EFFECTIVENESS ANALYSIS OF ESCITALOPRAM IN THE TREATMENT OF MAJOR DEPRESSIVE DISORDER IN GERMANY
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OBJECTIVES: To compare the cost-effectiveness of escitalopram with venlafaxine and generic citalopram and in the first-line treatment of Major Depressive Disorder (MDD) in Germany.
METHODS: A two-path decision analytic model with a 6-month horizon was adapted to the German setting using local clinical guidelines and data. All patients (aged ≥ 18 years) started at the primary care path and were referred to specialist care in the secondary care path in case of insufficient response. Model inputs included drug-specific probabilities derived from a meta-analysis, clinical trials, published literature and expert opinion.
RESULTS: From both perspectives, treatment with escitalopram yielded lower expected cost and greater success of treatment compared to generic citalopram. The expected success rate for escitalopram was higher (61.7%) compared to generic citalopram (57.7%). From the GKV perspective, the total expected cost per successfully treated patient was €149 (17.7%) lower for escitalopram (€694) compared to generic citalopram (€843). From the societal perspective, the difference was €463 between expected costs of €1,717 and €2,180, respectively. Escitalopram demonstrated a similar treatment success to that of venlafaxine at lower costs (€83 and €103, for GKV and societal perspective, respectively). Multivariate sensitivity analyses demonstrated the robustness of the results. In addition escitalopram shows a similar cost-effectiveness-ratio even at costs of £0 for generic citalopram (€694 vs. €691).
CONCLUSION: Escitalopram is a cost-effective alternative compared to generic citalopram and venlafaxine in the first-line treatment of MDD in Germany.

COST OF AFFECTIVE DISORDERS IN EUROPE
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OBJECTIVES: The economic burden of affective disorders (mood disorders) has become an important issue both for health care providers as well as society as a whole. This study aims at developing a model to estimating the cost of affective disorders to the European society. METHODS: A model was developed, based on the prevalence of the most prevalent affective disorders (depression and bipolar disorders) and the cost per patient for these disorders. The model served the following purposes: (1) transform and convert available economic data to a defined time period as well as currency (€2005) (2) adjust country specific economic data for purchasing power and relative size of economy (3) impute data for countries where no data were available (4) combine epidemiology and economic data to estimate the total cost of affective disorders. The model was based on published economic evidence in affective disorders in Europe, as well on epidemiologic evidence from literature and databases. National and international statistics for the model were retrieved from the Eurostat 2004 and OECD Health 2004 databases. The estimates were presented in Euro for 2004. RESULTS: The total number of adult people afflicted with affective disorders amounted to 20.9 million in Europe. The cost of affective disorders in Europe was estimated at €108.6 billion in 2004 prices. The cost of depression only amounted to €91 billion, and bipolar disorders to €31.6 billion. Indirect costs constituted 71% of the total cost of affective disorders. Drug costs made up €7.2 billion or 7% of the total cost. CONCLUSIONS: The cost of affective disorders poses a significant economic burden to European society. The cost estimation model gives a reliable estimate of the cost of illness in Europe based on the data and model algorithm used.

QUALITY OF LIFE IN MAJOR DEPRESSION: RESULTS OF THE MC3 TRIAL
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OBJECTIVE: to assess quality of life and quality of life changes in subjects with major depression treated pharmacologically with S-adenosyl-methyonine or imipramine. METHODS: This quality of life assessment was a part of the MC3 trial, a short-term, multicentre, prospective, randomised, double-blind, double placebo controlled study of the anti-depressant effect of 42 days course of oral SAMe 1600mg per day vs. oral imipramine 150mg per day in subjects during a major depression episode. We used the EuroQol instrument to evaluate QoL before (t0) and after treatment (day 42). RESULTS: The analysis considered 238 patients during a major depressive episode who completed the study (72% female; mean age 45 +/- 12 years).Subjects had extremely low comparable levels of overall QoL as measure through the EQ-VAS (35.1 +/- 15 on average), which increased comparably as an effect of treatment with either SAMe or imipramine (67 +/- 20). Several domains of QoL which where impaired before treatment, improved afterwards, mainly anxiety and depression, and ability to perform usual activities. EQ-VAS was only fairly correlated with physician administered depression scales at the start of treatment, while the correlation was good or very good at the end of treatment. Self administered depression scales showed a similar behavior as the EuroQol. CONCLUSION: Our estimates show that the level of perceived overall QoL in subjects with a major depressive episode is dramatically low. Pharmacological treatment with SAMe or imipramine has a similar, noticeable positive impact on QoL.