For Major Depression in Thailand

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OBJECTIVES: To determine the cost-effectiveness of interventions for major depression in Thailand. METHODS: A microsimulation model was developed to describe the course of disease in individuals. Model inputs included Thai data on disease parameters and costs while impact measures are derived from a systematic review and meta-analysis of the international literature. Results are presented as costs (Thai Baht) per quality-adjusted life-year (QALY) averted, and separate analyses for high-cost patients compared to the null scenario (nothing). Fluoxetine as the cheapest antidepressant drug in Thailand was analyzed for treatment of episodes plus a 6 month continuation phase and for maintenance treatment over 5 years of follow-up. Cognitive behavioral therapy (CBT) was analyzed for episodic treatment and for 5-year maintenance treatment. RESULTS: The incremental cost-effectiveness ratios (ICER) of fluoxetine for episodic treatment with or without a continuation or maintenance phase are just below one times GDP per capita in Thailand of 110,000 Baht. CBT during an episode of depression (ICER = 39,000) is more cost-effective than medications (ICER = 89,000); a maintenance version of CBT is the most cost-effective option with an ICER of 27,000. Episodic drug treatment has the lowest cost (250 Million Baht) and averts 3000 DALYs. Episodic treatment with CBT, which has an ongoing effect for 1.5 years, costs 100 Million Baht more than drug treatment but it averts more than 6800 DALYs compared to drugs. CONCLUSIONS: CBT is the most cost-effective treatment option for both episodic and maintenance treatment. Maintenance treatment is more the cost-effective of the two. However, there is currently a lack of mental health personal, especially psychiatrists and psychologists, who would be expected to deliver CBT in Thailand. Antidepressant drugs are quite a bit less effective but also less costly than CBT.

Cost-effectiveness of Atypicals and Psychosocial Interventions for Schizophrenia in Thailand

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OBJECTIVES: To determine the optimal treatment package, including drug and non drug interventions, for schizophrenia in Thailand. METHODS: A Markov model was used to evaluate the cost-effectiveness of typical antipsychotics, generic risperidone, olanzapine, clozapine, and family interventions. Health outcomes included relapse/severity, extrapyramidal symptoms and weight gain as side effects; and a reduction in suicide (for clozapine only). Intervention costs included treatment cost, hospitalization cost as well as time and travel cost of patients and families. Uncertainty was evaluated using a multivariate Monte Carlo simulation. As a generic version of risperidone is expected on the market soon, a sensitivity analysis of varying costs of risperidone was undertaken. RESULTS: The cost-effectiveness results indicate generic risperidone, assuming a cost of 4 baht per 2-mg tablet will improve health outcomes and save costs of roughly the same magnitude as the predominant treatment of typical drugs. The ideal criterion of treatment of risperidone is as first line treatment (dominant intervention), adding family interventions for all patients (Incremental cost-effectiveness ratio of 2000 baht/DALY) and adding clozapine to severe patients (an estimated 33% of patients). This also adds to an incremental cost-effectiveness ratio of 290,000 baht/DALY, which is still less than three times GDP per capita. CONCLUSIONS: The introduction of generic risperidone will lead to more efficient outcomes and lower costs if it can be produced for less than 10 baht per 2-mg tablet. Providing family interventions for all patients and treating more severe patients with clozapine can further improve outcomes of Thai patients with schizophrenia in a cost-effective manner.

Mental Health – Patient-Reported Outcomes Studies

PMH13

Association of Medication Persistence and Health-care Utilization in High-Cost Patients with Major Depressive Disorder Treated with Duloxetine or Venlafaxine XR


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OBJECTIVES: Adequate duration of antidepressant therapy is essential for the treatment of major depressive disorder (MDD). This study examined the association between medication persistence and hospitalization and emergency room (ER) visit for high-cost patients with MDD in the usual clinical setting. METHODS: In a large US commercial managed-care claims database, 8177 MDD patients (18 to 64 years old) were initiated on duloxetine or venlafaxine XR during the calendar year 2006. All of the patients had no active prescription of study medications for 6 months prior to initiation and had continuous enrollment for 12 months prior to and post-medication initiation. High-cost patients were defined as patients whose total treatment costs in the prior 1 year were above the median of total costs for all MDD patients in 2005 (n = 5953). After propensity-score matching on observed variables known to affect medication choices, 1714 duloxetine patients and an equal number of venlafaxine XR patients were included for this analysis. Medication persistence was defined as the length of therapy without exceeding a 15-day gap. Logistic regression analyses were used to examine the associations between medication persistence and health-care utilization in the year following treatment initiation. RESULTS: In the post 1 year, duloxetine patients stayed on the medication significantly longer (119.5 vs. 110.4 days, P = 0.047) than venlafaxine XR patients. Treatment persistence >3 months was significantly associated with reduced odds of psychiatric hospitalization (OR = 0.66, 95% CI = 0.37–0.85), nonpsychiatric hospitalization (OR = 0.77, 95% CI = 0.64–0.92), and ER visit (OR = 0.69, 95% CI = 0.60–0.79). Treatment differences in health-care utilization were not statistically significant. These findings had no essential changes with adjustment for demographics, comorbid conditions, and prior high-cost analyses for duloxetine versus venlafaxine XR patients. CONCLUSIONS: Duloxetine therapy appears to have longer persistence than venlafaxine XR for high-cost patients with MDD. Medication persistence >3 months is associated with reduced hospitalization and ER visit.

Adherence and Persistence with Duloxetine versus Escitalopram among High Health-Care Resources Utilizers with Major Depressive Disorder

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OBJECTIVES: Adherence and persistence to prescribed medication is important in the management of major depressive disorder (MDD). This study compared adherence and persistence between duloxetine and escitalopram among high health-care utilizers with MDD. METHODS: In a large US commercial managed-care claims database, 10,803 MDD patients (18 to 64 years) who initiated on duloxetine (n = 4542) or escitalopram (n = 6261) during the calendar year 2006 were identified. All of the patients had no recorded prescription of study medications for 6 months prior to initiation and had continuous enrollment for 12 months prior to and post-medication initiation. High-health-care utilizers (duloxetine, n = 3113; escitalopram, n = 3157) were defined as patients whose total treatment costs in the prior 1 year were above the median of total costs for all MDD patients in 2005. Adherence was defined as Medication Possession Ratios (MPR) >20%, and persistence was defined as the length of therapy without exceeding a 30-day gap. Statistical analyses included chi-square test, Wilcoxon rank sum test, multivariate logistic and Cox regression. RESULTS: In the post 6 months (6M) and 12 months (12M), adherence rates were significantly higher for duloxetine-treated patients (6M 54.6% and 12M 40.9%) than escitalopram-treated patients (6M 47.4% and 12M 31.7%) (P-values < 0.001). Duloxetine-treated patients also stayed on the medication significantly longer (6M 115.9 days and 12M 171.1 days) than escitalopram-treated patients (6M 108.4 days and 12M 154.6 days) (P-values < 0.001). Results were essentially unchanged with adjustment for demographics, comorbid conditions, prior medications use, and health-care utilization, resulting in duloxetine therapy maintaining its better adherence and longer persistence versus escitalopram. CONCLUSIONS: Duloxetine-treated patients appear to be more adherent and have a longer stay on the medication than escitalopram-treated patients for high resources utilizers. Further research is needed to examine clinical and economic benefits of better adherence and persistence with duloxetine therapy.

The Validation of Two Measures Assessing Reasons for Antipsychotic Discontinuation and Continuation from Patients’ and Clinicians’ Perspectives

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OBJECTIVES: Treatment discontinuation is an important effectiveness measure for evaluating antipsychotic treatment, yet is typically assessed only on a high level (e.g., “lack of efficacy,” “adverse event,” or “patient decision”). The RAD-I was developed as a structured interview assessing patient’s perspective regarding specific reasons for treatment discontinuation, resulting in duloxetine therapy maintaining its better adherence and longer persistence versus escitalopram. CONCLUSIONS: Duloxetine-treated patients appear to be more adherent and have a longer stay on the medication than escitalopram-treated patients for high resources utilizers. Further research is needed to examine clinical and economic benefits of better adherence and persistence with duloxetine therapy.
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PMH16 PHARMACISTRUN METHODONE CLINIC IN A MALAYSIAN PUBLIC HEALTH CENTER: EVALUATING PATIENT SATISFACTION AND QUALITY OF LIFE OUTCOMES
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OBJECTIVES: To assess the satisfaction and health-related quality of life (HRQoL) improvement of patients enrolled in a pharmacist-run Methadone Maintenance Therapy (MMT) program. METHODS: A cohort study design was used to measure satisfaction and to evaluate changes in HRQoL of patients after one month of receiving methadone therapy at Taiping Health Clinic. Respondent's satisfaction was measured by using an eight-item pre-validated questionnaire. A post-survey reliability analysis of the questionnaire showed a high internal consistency of the items (Cronbach’s α = 0.785). Meanwhile, the HRQoL was measured using a validated EQ-SD and EQ-VAS questionnaire that are administered by face-to-face interview in two groups in self care activity and pain dimensions. However, EQ-VAS score was significantly improved from the baseline (P < 0.01), normal activity (6.5% vs. 15%; P = 0.002) and anxiety (10.5% vs. 21%; P < 0.01), normal activity (6.5% vs. 15%; P < 0.05) and anxiety (54.5% vs. 71%; P < 0.001). There was no statistical difference found between the groups in self care activity and pain dimensions. However, EQ-VAS score was significantly lower in MMT group compared to rehabilitation group (65.5 [SD 17.6] vs. 71.43 [SD 14.5]) during the one-month follow-up (P = 0.008). CONCLUSIONS: MMT program was able to improve patients’ QoL even in short duration of time. Improvement on dissatisfactions toward travelling distance, needs to travel daily to clinic and inadequate dose will help to increase treatment success.

PMH17 COMPARISON OF HRQOL BETWEEN PATIENT RECEIVING METHADONE TREATMENT (MMT) AND REHABILITATION PROGRAM
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OBJECTIVES: This study aims to compare HRQoL between patients receiving methadone maintenance therapy (MMT) program with those in the rehabilitation program. METHODS: This was a cross-sectional study involving 400 randomly selected patients from two primary and secondary hospitals and one rehabilitation center (PUSPEN) in northern part of Malaysia. Consented patient was interviewed to collect their socio-demography, drug consumption and quality of life information. The quality of life was measured by using EQ-SD and EQ-VAS questionnaires. Their quality of life scores were then compared using independent t-test. RESULTS: Majority of the participants were male with mean age 38.49 (SD = 9.6) in MMT group and 34.77 (SD = 8.6) in rehabilitation group. Mean duration of treatment for MMT group was 17.5 months (SD = 15.74) and rehabilitation group was 7.8 months (SD = 3.52). EQ-SD score was significantly higher among MMT participants (mean = 0.783, SD = 0.190) compared to those in rehabilitation program (mean = 0.707, SD = 0.227). Participants receiving MMT treatment also had lesser problems in mobility (10.5% vs. 21%; P < 0.01), normal activity (6.5% vs. 15%; P < 0.05) and anxiety (54.5% vs. 71%; P < 0.001). There was no statistically difference found between the groups in self care activity and pain dimensions. However, EQ-VAS score was significantly lower in MMT group compared to rehabilitation group (65.5 [SD = 17.9] vs. 73.5 [SD = 17.6], P < 0.001). CONCLUSIONS: This study shows that treatment for patient with substance use disorder with MMT program can provide a better quality of life compared to rehabilitation program (PUSPEN). Variation seen between EQ-SD and EQ-VAS scores suggest that patients might perceived their health worst than the general population value.

PMH18 THE EFFECT OF DIAGNOSED, SELF-REPORTED, AND AT-RISK DEPRESSION ON HEALTH-RELATED QUALITY OF LIFE AND WORK PRODUCTIVITY IN JAPAN AND EUROPE
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OBJECTIVES: The aim of this current study was to establish the burden of depression diagnosed, self-reported, and at-risk in both Europe and Japan. METHODS: Data from the 2008 EU and 2009 Japan National Health and Wellness Survey (NHWS) were used. Patients were categorized into four groups: diagnosed depression, self-reported depression, at-risk for depression, and controls. Differences among these groups were examined on quality of life (mental (MCS) and physical component summary (PCS) scores of the SF-12v2), as well as overall work impairment, controlling for demographics and patient characteristics. RESULTS: In the EU, 584 patients (10.9%) were diagnosed, 2037 (3.8%) were self-reported, 13168 (24.6%) were at-risk, and 32471 (60.7%) were controls. In Japan, 884 (4.4%) were diagnosed, 162 (0.8%) were self-reported, 5681 (28.4%) were at-risk, and 12737 (64.6%) were controls. After controlling for demographics and patient characteristics, those diagnosed with depression (Adjusted Mean (Madj) = 34.4), self-reported depression (Madj = 35.5), and at-risk depression (Madj = 41.0) reported significantly lower levels of MCS than controls (Madj = 31.10, P < 0.0001) across all countries. The gap between controls and self-reported depression (b = 3.18, P = 0.000) and at-risk depression (b = 0.63, P < 0.001) was significantly greater in Japan than in the EU. To assess the burden of depression in terms of quality of life and work impairment in the EU and China. METHODS: Data were obtained from the 2008 EU and 2009 China National Health and Wellness Survey (NHWS). Patients were categorized into four groups: diagnosed depression, self-reported depression, at-risk for depression, and controls. Differences among these groups were examined on quality of life (mental (MCS) and physical component summary (PCS) scores of the SF-12v2), as well as overall work impairment, controlling for demographics and patient characteristics. RESULTS: In the EU, 584 patients (10.9%) were diagnosed, 2037 (3.8%) were self-reported, 13168 (24.6%) were at-risk, and 32471 (60.7%) were controls. In Japan, 884 (4.4%) were diagnosed, 162 (0.8%) were self-reported, 5681 (28.4%) were at-risk, and 12737 (64.6%) were controls. After controlling for demographics and patient characteristics, those diagnosed with depression (Adjusted Mean (Madj) = 34.4), self-reported depression (Madj = 35.5), and at-risk depression (Madj = 41.0) reported significantly lower levels of MCS than controls (Madj = 31.10, P < 0.0001) across all countries. The gap between controls and self-reported depression (b = 3.18, P = 0.000) and at-risk depression (b = 0.63, P < 0.001) was significantly greater in Japan than in the EU. Rates of at-risk depression were higher. Although the burden of depression was substantial, the results suggest that the work impairment burden in Japan is significantly greater than in the EU.

PMH19 THE BURDEN OF DIAGNOSED, SELF-REPORTED, AND AT-RISK DEPRESSION IN CHINA AND EUROPE
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OBJECTIVES: The objective of this project was to assess the burden of depression in terms of quality of life and work impairment in the EU and China. METHODS: Data were obtained from the 2008 EU and 2009 China National Health and Wellness Survey (NHWS). Patients were categorized into four groups: diagnosed depression, self-reported depression, at-risk for depression, and controls. Differences among these groups were examined on quality of life (mental (MCS) and physical component summary (PCS) scores of the SF-12v2), as well as overall work impairment, controlling for demographics and patient characteristics. RESULTS: In the EU, 584 patients (10.9%) were diagnosed, 2037 (3.8%) were self-reported, 13168 (24.6%) were at-risk, and 32471 (60.7%) were controls. In Japan, 884 (4.4%) were diagnosed, 162 (0.8%) were self-reported, 5681 (28.4%) were at-risk, and 12737 (64.6%) were controls. After controlling for demographics and patient characteristics, those diagnosed with depression (Adjusted Mean (Madj) = 34.4), self-reported depression (Madj = 35.5), and at-risk depression (Madj = 41.0) reported significantly lower levels of MCS than controls (Madj = 31.10, P < 0.0001) across all countries. The gap between controls and self-reported depression (b = 3.18, P = 0.000) and at-risk depression (b = 0.63, P < 0.001) was significantly greater in Japan than in the EU. Rates of at-risk depression were higher. Although the burden of depression was substantial, the results suggest that the work impairment burden in Japan is significantly greater than in the EU.

MENTAL HEALTH – Health Care Use & Policy Studies

PMH20 SWITCHING BETWEEN SSRI BRANDS IN AUSTRALIA
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OBJECTIVES: To study the extent of brand substitution and switching between Selective Serotonin Reuptake Inhibitors (SSRI) available on the Pharmaceutical Benefit Scheme (PBS). METHODS: PBS prescription claims data provided by Medicare Australia of a 10% random sample of all Australian long-term concession card holders covering the time period August 2007 through July 2008 were assessed. Patients had to fill at least four prescriptions for an SSRI with generics over the 1-year period (fluoxetine [2 doses forms with up to 12 brands], fluvoxamine [2 strengths with up to 5 brands], paroxetine [1 strength with 11 brands] and sertraline [2 strengths with up to 13 brands]). The proportions of non-switchers (single brand only) and multiple switchers (two or more switches between brands) were determined for each strength of each SSRI molecule. RESULTS: A total of 18,691 Concessional patients filled at least four prescriptions for a SSRI in the 12-month time window. The majority of these patients received a single brand over the period, ranging from 49% for fluvoxamine to 67% for fluoxetine. Only a small proportion received three or more brands: ranging from 12% for fluoxetine to 16% for fluvoxamine. The proportions of multiple switchers varied slightly between molecules with: 22% for fluoxetine, 32% for fluvoxamine, 26% for paroxetine and 24% for sertraline. Switching was greater for...