HEALTH CARE COSTS AND MEDICATION COMPLIANCE AMONG ELDERLY FIBROMyalGIA PATIENTS ON DULOXETINE VersUS PREGABALIN

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OBJECTIVES: To examine whether duloxetine initiators had different medication compliance or health care costs than pregabalin initiators among elderly patients with fibromyalgia. METHODS: A large, US national claims database was analyzed to identify fibromyalgia patients aged 65 and above with Medicare supplemental insurance who initiated duloxetine or pregabalin in 2006. Initiation was defined as no pill coverage in the previous 90 days, with the first initiation date as the index date. All selected patients had 12-month continuous enrollment before and after the index date. Duloxetine initiators with diabetic peripheral neuropathic pain (DPNP) or depression, and pregabalin initiators with DPNP, post-herpetic neuralgia or epilepsy diagnosis in the 12-month pre-index period were excluded. Propensity scoring was applied to construct the duloxetine and pregabalin cohorts controlling for differences in demographics, pre-index clinical and economic characteristics, and pre-index treatment patterns. Medication compliance (i.e., medication possession ratio (MPR), proportion of patients with MPR ≥ 80%), and health care costs over the first 12-month post-index period were examined between cohorts. RESULTS: Patients in the duloxetine (n = 614) and pregabalin (n = 1188) cohorts had a mean age of 75 years. The most common comorbid conditions in both cohorts were cardiovascular disease (88.1% vs. 85.8%), hypertension (76.8% vs. 76.9%), and obesity-related diseases in different weight status subjects in Taiwan. METHODS: A cross-sectional survey based on the National Health Interview Survey (NHIS) was conducted in 2001. Subjects greater than 20 years old who lived in Taiwan, correlated by National Health Insurance (NHI) during 2001–2004 were included and finally 22,833 subjects were used for analyses. RESULTS: In general, male subjects were older, taller, heavier, larger BMI, higher medical utilization and expenditure than females. The higher BMI status, the higher prevalence of hypertension, type 2 diabetes, cardiovascular diseases and gout. All obesity-related disorders had increasing trends with larger BMI (p < 0.001). Obese subjects (BMI ≥ 27 kg/m²) had the highest prevalence of hypertension (32.8%), following by Type 2 diabetes (25.6%). After adjusting for age, smoking, drinking and obesity-related disorders, the higher BMI status and the use of medical utilization in out-patient from 1.33 to 4.04 visit/year (p < 0.05) and in-hospital from 0.05 to 0.07 admission/year (p < 0.05). The average out-patient expenditure (all cost including physician-fee and drug cost) per year was NT $1201, 1857, 3960 and 5118 dollars (exchange rate as 1USD = 32NTD) for underweight, normal, overweight and obesity subjects. CONCLUSIONS: In this study, the higher BMI status, the more medical utilization and higher out-patient medical expenditure was found. These results may help to make decision on policy for resources allocation and strategies priority of obesity to resolve the major public health problem even in the developing country such as Taiwan.

LITERATURE REVIEW OF THE ECONOMIC BURDEN OF IRON OVERLOAD ASSOCIATED WITH β-TALASSEMAIA, SICKLE CELL DISEASE, AND MYELODYSPLASTIC SYNDROMES IN THE UNITED STATES (US)

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OBJECTIVES: Patients with β-thalassemia, sickle cell disease (SCD), and myelodysplastic syndromes (MDS) require chronic blood transfusions, which lead to iron overload and substantial morbidity (e.g., cardiac failure, diabetes, hypogonadism) and mortality. To reduce the excess iron and its deleterious effects, available iron chelation therapy (ICT) includes oral deferasirox or infusional deferoxamine (DFO). The aim of this literature review was to assess the economic burden associated with patients with β-thalassemia, SCD, and MDS. METHODS: We identified economic evaluations of iron overload in patients with β-thalassemia, SCD and MDS that either were published in MEDLINE-indexed, English-language journals since 1999, or appeared in professional society websites and scientific meeting abstracts. We summarized and critically compared costs adjusted to 2009 USD) from this literature. RESULTS: The majority of information is on ICT and β-thalassemia, while the economic burden of iron overload in MDS is not clearly elucidated. More information is needed on the differential real-world impact of ICT choices on treatment adherence and on the economic burden overall.

MUTIPLE MYELOMA: PATIENT OUT-OF-POCKET COSTS AND HEALTH-CARE UTILIZATION

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OBJECTIVES: This study examined number of patient visits and out-of-pocket costs for multiple myeloma (MM) patients treated with bortezomib (BOR; Velcade®; IV administration), lenalidomide (LEN; Reclim®; oral), thalidomide (THAL; Thalidom®; oral), or other unspecified chemotherapies/radiation therapy. METHODS: Patients aged ≥ 18 yrs, diagnosed with MM between January 1, 2005 and September 30, 2007, and treated with BOR, LEN, THAL, or other unspecified chemotherapies/radiation therapy were identified using claims data from a large US commercial health plan (14 million members). Treatment episodes (each course of therapy) were identified from patient records. Health-care utilization (number of ambulatory patient visits) and inflation-adjusted patient out-of-pocket costs, including co-pays and deductibles, were examined for 1 yr from the beginning of each treatment episode. Multivariate regression analyses were performed to control for patient characteristics, comorbidities, and line of treatment. RESULTS: A total of 2642 treatment episodes for 1900 patients were identified. Most episodes were “other chemotherapy/radiation therapy” (n = 1759), followed by THAL (n = 349), BOR (n = 244) and LEN (n = 90). There were no between-group differences in inpatient or emergency room visits. Patients treated with BOR appeared to have more ambulatory visits compared with patients treated with LEN (77 versus 61; p < 0.05); however, this difference was not significant after multivariate analysis (66 versus 57; p > 0.05). The total adjusted patient out-of-pocket costs were significantly less for patients treated with BOR ($3304) than for those treated among US patients, p > 0.05) or LEN ($4766, p < 0.05). These differences were greatest for Medicare patients, with the adjusted patient costs of THAL ($8,824) and LEN ($12,568) respectively, near 2 and 3 times greater than the adjusted costs of BOR ($4,395). CONCLUSIONS: There was no significant advantage in terms of four patient visits among BOR and LEN compared with BOR, especially for Medicare patients.

MEDICAL SERVICES UTILIZATION AND EXPENDITURE OF OBESITY-RELATED DISORDERS IN TAIWANESE ADULTS

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OBJECTIVES: Obesity was associated with increasing morbidity and mortality of many chronic diseases, such as cardiovascular diseases, hypertension, diabetes mellitus, and stroke. Furthermore, the obese subjects had higher medical utilization with increasing obesity status, especially for the outpatient services. The purpose of this study is to evaluate medical service utilization and medical expenditure associated with the obesity-related diseases in different weight status subjects in Taiwan. METHODS: A cross-sectional survey based on the National Health Interview Survey (NHIS) was conducted in 2001. Subjects greater than 20 years old who lived in Taiwan, correlated by National Health Insurance (NHI) during 2001–2004 were included and finally 22,833 subjects were used for analyses. RESULTS: In general, male subjects were older, taller, heavier, larger BMI, higher medical utilization and expenditure than females. The average age of presentation was 37 years, there were no significant differences in gender distribution and annual costs with measures of central tendency and dispersion, costs were estimated at constant prices of 2008. RESULTS: The average age of presentation of the diseases was 37 years, there were no significant differences in gender distribution and annual costs with measures of central tendency and dispersion, costs were estimated at constant prices of 2008. RESULTS: Among transfusion dependent patients with $72,000 to $103,000 per patient. Annual direct medical costs of patients undergoing complications (notably cardiac disease, diabetes, etc.) varied from $27,000 to $103,000 per patient. Other complications represented a greater financial burden (the outpatient services (35%) and osteosynthesis materials (30%). We estimated the annual expected frequency of use for a patient with these characteristics. It is possible that cost trends are explained by the incorporation of a payment management program of the insurer with the use of new medicines that improve the clinical picture of patients. CONCLUSIONS: Chronic pain and neuropathic pain represent a significant economic burden, is essential to identify the most cost effective interventions in their management.

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