QUALITY OF LIFE OF PATIENTS WITH HYPERTENSION USING THE 2007 NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES) OF KOREA
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OBJECTIVES: To describe the management of ischemic stroke patients in acute phase and its impact on long-term stroke evolution in the USA. METHODS: Using the 2007 NHANES of Korea, EuroQol (EQ-5D) was used to estimate a relation between quality of life and hypertension. In the analysis, adults (age ≥19 years old) at the time of the survey were included. EQ-5D as well as each 5 category such as mobility, self-care usual activity, pain/discomfort and anxiety/depression were considered for the analysis. For the estimation in EQ-5D, a generalized linear model with a logit link and the binomial family was used because EQ-5D was a proportion variable and had high negative skewness. In each specific category, there were 3 categories indicating good (1) to worse (3). Thus, ordered logit regressions were used for the analyses. In all analyses, age, gender, types of insurance, income, years of education and comorbid conditions were included. Survey weights were incorporated in the analyses to consider the survey design. RESULTS: A total of 2767 subjects was available. Among those, 518 (18.7%) had a hypertension based on self-report on whether they had hypertension or not. Mean (SD) in quality-of-life of patients with hypertension was 0.84 (0.19), while mean (SD) of patients without hypertension was 0.93 (0.12). Among patients with hypertension, 51.7% were elderly (age ≥65 years) and 59.5% were female. Among patients without hypertension 16.6% were elderly and 57.1% were female. Patients with hypertension as compare to people without hypertension were lower in quality of life by ~0.2 (p-value: 0.038) after controlling other factors. Patients with hypertension were worsen in mobility and usual activity, but self-care, pain/discomfort and anxiety/depression had no difference from people without hypertension. CONCLUSIONS: Patients with hypertension as compared to people without hypertension were lower in quality of life mostly due to difficulties in mobility and usual activity.

CARDIOVASCULAR DISORDERS – Health Care Use & Policy Studies

IMPACT OF THE MEDICARE PART D DONUT-HOLE ON PATIENTS WITH HYPERTENSION OR HYPERLIPIDEMIA
Li P, McEligot S, Bergquist H, Schwartz S, Desbi JA
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OBJECTIVES: The impact of Medicare’s Part D coverage gap (donut hole) on drug utilization was examined among patients with hypertension and/or hyperlipidemia, comparing treatment for asymptomatic (hypercholesterolemia and hypertension) and symptomatic (G, depression, and anxiety) conditions. METHODS: The study sample consisted of patients from the 5% Medicare (A, B, and D) files with a diagnosis of hypertension and/or hyperlipidemia in 2005 and full-year (2006) fee-for-service, Medicare Part D and low-income subsidy (LIS) or non-LIS eligibility. Study outcomes included any drug use, adherence (percent days covered (PDC) ≥ 80%), and discontinuation (≥50 day continuous gap). The study employed a quasi-experimental design using a pre- (prior to donut hole) and post- (during donut hole) periods comparing three patient groups (non-LIS: without coverage, generic only coverage, and brand/generic coverage during the gap) with a contemporaneous control group (LIS: no coverage gap). A difference-in-difference approach was used with multiple regressions controlling for demographic characteristics, Medicare entitlement status, area-level information, and clinical risk. RESULTS: The donut hole was associated with statistically significant decreases in any drug use and PDC adherence, along with a decrease in the likelihood of a discontinuation for both lipid lowering and antihypertensive drugs. The magnitude of impact was largest among patients without donut-hole drug coverage: 1.1% to 4.1% drop in probability of drug use; 4.4% to 12.1% decrease in adherence; and 4.5% to 12.5% increase in discontinuations (p < 0.01 for all). Impact was smallest among patients with both generic/brand drug coverage relative to the LIS controls. The donut hole had no impact on probability of using symptomatic drugs (anti-ulcer agents, antidepressants, and pain-killers). CONCLUSIONS: The donut hole was associated with statistically significant decreases in any drug use in patients with hypertension and/or hyperlipidemia, with greater impact on patients without drug coverage.

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be effective in treating a highly prevalent, costly, and asymptomatic condition such as hypertension.

PCV122 IS PRESCRIBING JUSTIFIED BY THE EVIDENCE—COMBINATION OF ANGIOTENSIN-CONVERTING ENZYME INHIBITORS AND ANGIOTENSIN RECEPTOR BLOCKERS FOR TREATING HYPERTENSIVE OUTPATIENTS IN SOUTHERN TAIWAN

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OBJECTIVES: Angiotensin-converting enzyme inhibitors (ACEIs) and angiotensin receptor blockers (ARBs) have substantially contributed to the escalation of hypertension drug cost in Taiwan. Increasing literature has proposed potential benefits of combining ACEIs/ARBs in controlling blood pressure, but there is still a lack of evidence to support the rationale of ACEIs/ARBs combination in treating hypertension. This study aims to explore the current utilization and prescribing patterns of ACEIs/ARBs combination in Taiwan. METHODS: A cross-sectional study was conducted from 2006 to 2008, using a regional reimbursement claim database from the Kaohsiung Division of National Health Insurance. Individual data of hypertensive outpatients treated with ACEIs or ARBs for more than 28 days per year in Southern Taiwan were extracted. Demographic and prescribing data were collected, and then descriptive analyses were used to evaluate patients’ characteristics and prescribing patterns of ACEIs, ARBs and their combination. Wald chi-square tests and Student’s t-test were used to assess the differences observed. RESULTS: Among a total of 2,003,278 ACEIs and 55.31% (n = 2,479,548) ARBs prescriptions. Of all, 1.22% (n = 54,526) prescriptions have either doubled or combined ARBs. Furthermore, 0.61% (n = 27,381) prescriptions combined both ACEIs and ARBs. The majority of these combinations were prescribed in medical centers in continuous prescriptions for long-term rins, and the amount of combined prescriptions increased annually. The major co-morbidity of ACEIs/ARBs combination is diabetes mellitus (n = 9571, 36.05%), and chronic renal disease (n = 9355, 18.46%) and congestive heart failure (n = 886, 3.24%). CONCLUSIONS: We found a small proportion of ACEIs/ARBs combination, yet the combined prescriptions are increasing and used chronically in patients with specific co-morbidities. Further studies are needed to explore the effectiveness and rationality of this combination.

PCV123 DRUG UTILIZATION REVIEW OF DUAL ANTIPLATELET THERAPY AMONG TAIWANESE OLDER ADULTS

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OBJECTIVES: Upon the coverage limitations proposed by Taiwan National Health Insurance (NHI), the dual therapy with clopidogrel and aspirin would be reimbursed up to 9 months for specific indications since 2004. Although evidence showed its risks outweighed the benefits comparing to use aspirin alone, it is a lack of study examining population use of dual therapy. A secondary data analysis was performed to examine the use patterns of dual antiplatelet therapy (DAT), specifically among older adults in Taiwan. METHODS: A population-based longitudinal assessment was conducted using the 2003–2007 NHI databases. Those beneficiaries in 60 years of age and greater during the study period were evaluated. All relevant data, including visits toward physician clinics, outpatient departures, use of medications, and pertinent expenses were 66% and 85% among shorter and longer treatment patients, respectively. The cost of DAT accounted for up to 51% of total drug expense. CONCLUSIONS: Dual antiplatelet therapy was a largely increasing utilization of DAT among Taiwanese older adults since 2007. Further studies are needed to explore the contributing factors of DAT and its effectiveness and safety outcomes.

PCV124 ANTHYPTENSIVE PHARMACOTHERAPY-PHYSICIAN PERSPECTIVES AND PRESCRIBING PATTERNS IN THREE SOUTH INDIAN HOSPITALS

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OBJECTIVES: The prevalence of hypertension is increasing in epidemic proportions in the Indian subcontinent. Despite the well known benefits of aggressive blood pressure control in hypertensive patients, data from the subcontinent indicate that the control of hypertension remains remarkably poor. Our previous study demonstrated that calcium channel blockers (CCBs) were the most prescribed agents for uncomplicated hypertension in three South Indian Hospitals. The objective of this study was to assess the physician’s perspectives with regard to antihypertensive pharmacotherapy and to determine whether they are in accordance to national and/or international hypertension guidelines. METHODS: A questionnaire was developed containing questions on familiarity with guidelines, diagnosis of clinical hypertension, and evaluation of patients with hypertension without co-morbidities, without diabetes mellitus, monotherapy including choice of drugs, and drug regimens or specific drug combinations. The questionnaire was administered to internists and physicians of Medicine Department of three teaching-hospitals in South India. RESULTS: Among a total of 57 physicians who were surveyed the survey, 58.1% was familiarized with the 2003 guidelines whereas 12.8% were familiar with the Indian Hypertension Guidelines-II. Although majority of the physicians were aware of the guidelines about 37% of them indicated that they would prefer CCBs as the first drug for treating uncomplicated hypertension. Of 18 physicians who chose combination therapy over other antihypertensives and monotherapy may be attributed to the better outcome they experienced and is consistent with emerging trends observed in recent studies such the ACCOMPLISH and ASCOT trials that endorse the benefits of using combination therapy with CCBs as initial therapy for hypertension.

PCV125 UTILIZATION PATTERNS FOR ANTIARRHYTHMIC DRUGS IN BIG 5 EU MARKETS: TEMPORAL ANALYSIS FROM 2005 TO 2009

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OBJECTIVES: In January 2009, an authorization form was implemented which required Dutch clinicians to justify the prescription of branded statins, leading to significant switching of patients from atorvastatin to generic simvastatin. However, current prescription data indicates that much of this switching is occurring at less expensive doses. We sought to assess the potential consequences in terms of cardiovascular disease. METHODS: Data from a pharmacy database covering the majority of drug dispenses in the The Netherlands informed dose-specific patterns of switching from atorvastatin to generic simvastatin. RESULTS: Utilization trends were examined using IMS Market Trend Analysis, a database of global sales from all corporations with pharmaceutical products sold into a pharmacy or hospital as well as prescription information from office-based physicians. Utilization of antiarrhythmic drugs was assessed using patient days of therapy (PDoT). Descriptive analyses were conducted for specific drug classes as well as individual agents, including flecainide, procainamide, propafenone, and amiodarone. RESULTS: Overall, PDoT was highest for amiodarone, the main representative class III agent, with an average of 229 million PDoT over the five year period across all markets. During this time, PDoT for amiodarone increased by 9.5% in Italy (50.9 to 55.2 million), 13.8% in Germany (32.0 to 37.5 million), and 0.5% in France (38.5 to 38.6 million) and decreased by 20.6% in the UK (32.8 to 26.0 million) and 2.5% in Spain (27.2 to 26.5 million). This resulted in greater class III drug use in all markets except Italy, where class I agents were preferred over class III agents consistently from 2005 to 2009. Among antiarrhythmics, flecainide showed a consistent overall increase in PDoT over the study period, with a 22.4% increase from 110 to 135 million PDoT and a resulting increase in market share from 24% to 29.4% from 2005 to 2009. CONCLUSIONS: Amiodarone was the dominant antiarrhythmic drug used in all markets, and to a lesser extent also flecainide. Increased use in 4 out of 5 European countries may suggest a possible change in rhythm control strategy for the treatment of atrial fibrillation.

PCV126 THE CARDIOVASCULAR CONSEQUENCES OF SWITCHING FROM ATORVASTATIN TO GENERIC SIMVASTATIN IN THE NETHERLANDS

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