NH9

SUPPLEMENTAL DIETARY USE IN THE UNITED STATES: NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES), 2007-2009

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OBJECTIVES: A dietary supplement (DS) is defined as “any product intended for ingestion as a supplement to the diet.” These substances include vitamins, minerals, herbs, amino acids, and other substances. Marketing data show a dramatic increase in DS sales in the last decade. The most recent published literature on the prevalence of DS use in United States was based on data from 1999-2000. There is a need for updated literature. The primary objective of this study was to examine the prevalence and incidence rates of DS use in United States.

METHODS: DS data from 2007–2009 National Health and Nutrition Examination Survey (NHANES), a nationally representative, cross-sectional survey of US health and nutrition, was analyzed. The proportions of users of any DS, multivitamins/multiminerals, vitamin B-8 complex, calcium, calci-um/antacids were calculated. Bivariate and Multivariate analyses were done to assess the relationship of DS use and some demographic/lifestyle characteristics.

RESULTS: Approximately 65% of US population reported taking DS(s) in the month; DSs were consumed by females (48%) more than males (38%), (0-11 years; 33%) and elders (40 years and more; 59%) more than middle age (12-39 years; 29%), more than high school educated people (56%) than less than high school (30%), non-Hispanic Whites (50%) more than other races (average 30%). Multivitamins/multiminerals were the most commonly consumed DS (60%) followed by antacid, vitamin B-complex and vitamin C. In bivariate analyses non-Hispanic White race, older age categories, more education, and female gender were significantly associated with greater use of any DS. In multivariable analysis the latter three characteristics were still associated with greater use.

CONCLUSIONS: A substantial proportion of the US population takes DSs mainly as vitamins, minerals, and/or dietary supplements. This study provides detailed information for health care professionals and researchers regarding the DS use.

PIH10

UTILIZATION PATTERNS OF BISPONHRONATES AND SELECTIVE SEROTONIN REUPTAKE INHIBITORS FROM 2004 TO 2008 AMONG ADULT WOMEN

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OBJECTIVES: Selective serotonin reuptake inhibitors (SSRIs) have been associated with increased risk of osteoporotic-related fractures. Bisphosphonates (BPs) are one of the recommended medications for osteoporosis and fracture prevention. The primary objective of this study was to examine the proportion of BP users who are also on SSRIs and to explore the relationship between concomitant use and patient age among women aged 45 years and older.

METHODS: Data from the 2004-2008 Medical Expenditure Panel Survey (MEPS) was used to examine usage patterns of BPs and SSRIs for women aged ≥45 years. Analyses were based on yearly consolidated data and prescribed medicines files. Descriptive statistics were used to describe patterns of medications use and proportions were reported. Age was categorized into two groups: 45-64, and 65-85 years old.

RESULTS: In the timeframe examined, 3.5% women in 2004, 3.8% in 2005, 4.0% in 2006, 3.9% in 2007, and 4.0% in 2008 received bisphosphonates. In the same period, 8.6% of women in 2005, 8.0% in 2006, 7.1% in 2007, and 7.2% in 2008 received SSRIs. Concomitant use (BPs + SSRIs) was observed in 0.4% women in 2004, 0.5% in 2005, 0.6% in 2006, 0.6% in 2007, and 0.6% in 2008. In 2006, 2007, and 2008, concomitant use of BPs and SSRIs was higher in the 65-85 age group compared to that of 45-64 years. This pattern may be in large due part to increasing population of older women in the United States.

CONCLUSIONS: Concomitant use of BPs and SSRIs in adult women ≥45 years is not uncommon and might be higher in older postmenopausal women. The observed concomitant use presents drug safety challenges and concerns regarding the bone health of postmenopausal women. Studies are needed to investigate the potential interactive effects of SSRIs on BP therapy.

PIH11

PREVALENCE AND INCIDENCE RATES OF MOST COMMON COMORBID CONDITIONS AMONG PATIENTS WITH TUBEROUS SCLEROSIS COMPLEX: A NATIONAL CLAIM DATABASE ANALYSIS

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OBJECTIVES: Tuberous sclerosis complex (TSC) is a multi-system disorder that can affect any organ in the body. The objective of this study is to examine the prevalence and incidence rates of the common co-morbid conditions among patients with TSC. METHODS: We used a large national health care claims database for 39 million commercially insured US populations. Patients with a TSC diagnosis between 2000 and 2009, and continuous enrollment 12 months before and 12 months after their first TSC diagnosis were included in this analysis (These selection criteria lead to the exclusion of those at age less than one). Approximately 40 TSC related clinical conditions were identified using ICD-9 codes or CPT codes. The prevalence and incidence rates of these conditions are assessed and reported.

RESULTS: Patients (N=1249) with TSC had mean age of 33.9 years at their 1st TSC diagnosis, and 57.5% were females. The most prevalent comorbid conditions within the first post TSC year were vision disorders (34.8%), benign neoplasm of skin (28.1%), seizure (16.1%), convexul (15.0%), dysrhythmia (12.2%), depression (11.3%), cardiac dysrhythmia (10.1%), anxiety (8.6%), sleep disorder (7.8%) and maturia (6.3%). The conditions with highest incidence rates (per 10,000 patient years) in the same period were benign neoplasm of skin (3.16%), vision disorders (1.017), dysrhythmia (0.800), seizure (0.64), and convexul (0.56); subependymal giant cell astrocytoma (0.66) and Cardiac rhabdomyomas (0.08) were also observed. CONCLUSIONS: Multi-systems and organs are affected with many comorbid conditions. Vision disorders, benign skin cancer, seizure, convexul, dysrhythmia, depression, cardiac dysrhythmia, anxiety, sleep disorders and maturia are the most prevalent ones in the real world. Managing TSC could be challenging due to its multi-system involvement. Future effort should focus on developing treatment that treat the underlying cause of the disease.

INDIVIDUAL’S HEALTH – Cost Studies

PIH12

BUDGET IMPACT ANALYSIS OF ADDING A NEW FIXED-DOSE COMBINATION THERAPY OF DUTASTERIDE AND TAMSULOSIN TO THE TREATMENT OF SYMPTOMATIC BENIGN PROSTATIC HYPERPLASIA IN CANADA, INDIA, ISRAEL, JAPAN, KOREA, TURKEY AND USA

We used a large national health care claims database, which was cross-sectional survey of US health and nutrition, was analyzed. The proportions of users of any DS, multivitamins/multiminerals, vitamin B-8 complex, calcium, calci-um/antacids were calculated. Bivariate and Multivariate analyses were done to assess the relationship of DS use and some demographic/lifestyle characteristics.

RESULTS: Approximately 65% of US population reported taking DS(s) in the month; DSs were consumed by females (48%) more than males (38%), (0-11 years; 33%) and elders (40 years and more; 59%) more than middle age (12-39 years; 29%), more than high school educated people (56%) than less than high school (30%), non-Hispanic Whites (50%) more than other races (average 30%). Multivitamins/multiminerals were the most commonly consumed DS (60%) followed by antacid, vitamin B-complex and vitamin C. In bivariate analyses non-Hispanic White race, older age categories, more education, and female gender were significantly associated with greater use of any DS. In multivariable analysis the latter three characteristics were still associated with greater use.

CONCLUSIONS: A substantial proportion of the US population takes DSs mainly as vitamins, minerals, and/or dietary supplements. This study provides detailed information for health care professionals and researchers regarding the DS use.

METHODS: We identified 1536 refractory and 8571 stable patients (age range: 18-64years; 50.7% vs. 47.6% female; mean Charlson comorbidity index: 0.7 vs. 0.5). We identified adults (age:18-years) with epilepsy requiring additional AED therapy (defined as refractory) and not requiring such therapy (stable) from the MarketScan claims database in 2007-2009. An index date was selected during calendar year 2008: the date on which an additional AED was started for refractory patients; and convenience date for stable patients whose AED use was unchanged in the prior year. All pharmacy and medical claims in the post-index year were used to estimate overall costs. Claims with epilepsy in any use was unchanged in the prior year. All pharmacy and medical claims in the post-index year were used to estimate overall costs. Claims with epilepsy in any