PIH72
IMPACT OF PHARMACIST INTERVENTION ON THE UTILIZATION OF TERIPARATIDE IN OSTEOPOROSIS
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OBJECTIVES: According to osteoporosis guideline, bisphosphonates are the first choice of osteoporosis. Alternative treatments include raloxifene, calcitonin, teriparatide and the last one is least cost-effectiveness. There is strict national health insurance (NHI) payment rule for teriparatide in Taiwan. If the patient does not meet the NHI criteria, this reimbursement payment will be cut and hospital has to pay the fee (several times of NTD$15766). The objective study was to evaluate the pharmacist intervention to enhance the utilization of teriparatide and decrease reimbursement payment cut. **METHODS:** When physician prescribed teriparatide initially, the order would send to the regulation system and pharmacists had to review whether the patient met the criteria. If patient did not meet the criteria, pharmacists would inform the physician to change order at next clinic visit. Patient could receive teriparatide if pass the evaluation vice versa. The data collected from March 2010 to December 2011. **RESULTS:** The initial prescription number significantly decreased from 51 to 8 per month during March 2010 and December 2011. The NHI set new payment criteria resulted in the prescription rate declined, particularly after January 2011. The cut in reimbursement fee of NTD$ 36,2618 in quarter one of 2010 reduced to zero in quarter three of 2011 since pharmacists intervened and reviewed the criteria via regulation system before prescribed. **CONCLUSIONS:** Pharmacists intervention enhanced the rational use of high cost of teriparatide and decreased reimbursement payment cut.Pharmacists intervention enhanced the rational use of high cost of teriparatide and decreased reimbursement payment cut.

PIH73
DISPARITIES ON CONGENITAL SYPHILIS IN COLOMBIA FROM 2006 TO 2009
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OBJECTIVES: To describe disparities in the incidence of diagnosed cases of congenital syphilis by Departments in Colombia between the years 2006-2009. **METHODS:** Ecological study. National incidence and incidence by Departments of congenital syphilis in Colombia were estimated. A descriptive comparison of these ratios showing the lowest and highest incidence by Departments each year is showed. Information was obtained form the National Administrative Department of Statistics database. **RESULTS:** National incidence of congenital syphilis in Colombia increased from 1.98 per 1000 live births in 2006 to 2.56 per 1000 live births in 2009. The lowest regional incidence in Colombia was found in Caldas with 0.35 cases per 1000 live births in 2009. Departments with the highest incidence of congenital syphilis in the same year were Chocó and Meta, with incidences of 7.43 and 5.92 per 1000 live births, respectively. **CONCLUSIONS:** Incidence of congenital syphilis has been increasing in Colombia in the last years, and it is far from the goals of the World Health Organization (0.5 cases per 1000 live births). There are notorious differences among Departments in Colombia suggesting avoidable disparities in the strategies for preventing and controlling this disease during pregnancy among them. A critical review of current programs of public health should be done.

PIH74
DISPARITIES ON MATERNAL MORTALITY AMONG COLOMBIAN REGIONS IN 2000, 2005 AND 2008
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OBJECTIVES: The aim of this ecological study was to describe disparities in maternal mortality by assessing the excess of risk among Colombian regions. **METHODS:** We estimated Maternal Mortality Ratios (MMR) for all the departments of Colombia, for all mortality causes and for the years 2000, 2005 and 2008. We described the main causes of maternal mortality in Colombia and we estimated the excess of risk by assessing the attributable risk fraction (AF). We compared with the best maternal mortality ratios (MMR) in the world. **RESULTS:** The estimated MMR ranged among Colombian regions from 25 to 673 per 100.000 live births. The MMR of the best country in the world ranged from 2 to 4 per 100.000 live births. In the years assessed, we found an excess of risk of maternal mortality for all regions over 90% compared with the world. The main causes of maternal mortality in Colombia were: other obstetric conditions not classified and hypertensive disorders related to pregnancy. **CONCLUSIONS:** There is still a big gap in the MMR among Colombian regions and between Colombia compared with developed countries. These findings show persistent inequities in maternal mortality in Colombia given that these deaths are unnecessary, avoidable and unfair. Re-evaluation of current programs of safe motherhood and/or new health policies and strategies are requested to reduce these inequities.

PIH75
DISPARITIES IN NEONATAL MORTALITY IN COLOMBIA FROM 2000 TO 2009
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OBJECTIVES: To describe disparities in neonatal mortality rates among Colombian regions between 2000 and 2009. **METHODS:** Ecological study. Early, late and total neonatal mortality rates by Departments in Colombia were estimated from 2000 to 2009. The main causes of neonatal deaths in 2005 were tabulated. The risk excess was estimated using the attributable fraction, comparing the Departments rates with the country with the lowest mortality rate in the world for the same year. Profiles of death causes were compared between Colombia and the country of reference. Information was obtained from the National Department of Statistics. **RESULTS:** The estimated cumulative rate of neonatal mortality in Colombia from 2000 to 2009 was 10.2 deaths per 1000 live births. The worst department had 16 times the mortality rate of the best country in the world. Attributable fractions for all departments exceeded 78% in all cases. The neonatal mortality rate decreased by 39% during the study period. Chocó had the lowest decrease during the period (9%), and the highest decrease was observed in Caquetá (61%). The main causes of early neonatal mortality were respiratory disorders, followed by obstetric complications and congenital malformations. **CONCLUSIONS:** Even though neonatal mortality rates decreased during the study period, the risk excess observed was very high when an external point of reference was used. Differences in neonatal mortality rates within the Country showed an increasing gap between Departments during the study period. Some of these disparities found were avoidable and suggest disparities in the quality and access to safe motherhood and early infancy programs within the country, that should be evaluated.

PIH76
CLINICAL, HUMANISTIC, AND ECONOMIC BURDEN OF MENSTRUAL SYMPTOMS IN JAPANESE WOMEN
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OBJECTIVES: The study aims at gaining a clear picture of the clinical, humanistic, and economic burden on women's daily living caused by menstrual symptoms, especially pain and bleeding. **METHODS:** An online survey was conducted in two phases, with sampling structured to approximate the age and geographic distribution of women between the ages of 15 to 49. The first survey (n= 21,477) investigated retrospectively the conditions associated with menses, and impact on work and productivity within the previous three months. 'Menses-related conditions' in this research referred to 6 domains from the Menstrual Distress Questionnaire (MDQ©). The second survey analyzed the difference between women seeking medical care (n=274) and those not seeking care (n=500), with details such as costs, reasons for seeking care, medications, and treatment satisfaction. **RESULTS:** The first survey analyzed 19,254 female with menses (90% of total). Of those, 1.9% reported seeking medical care within the last 3 months, 18.5% >3 months prior, and 79.6% reported no visits. 79% reporting any medical contact had received prescription drugs. Of the total sample, 36% were taking OTC medication, 17% experienced impact on work (absence or lost productivity). About half of those not seeking care selected 'unnecessary' as the reason, however, 70% of this group also reported inhibition/ limitation of daily life. About 20% reported 'resistance/dislike' as reason for not seeking care. MDQ© score was strongly correlated to medical visit and impact on work. Extrapolated total annual economic burden amounted to 682 billion yen (direct and indirect costs, ~8.88 billion USD). **CONCLUSIONS:** These findings are similar to a large study conducted ten years ago, suggesting that there has been no change in treatment, medication, and patient behavior in dealing with menstrual-related problems. The burden remains large, and those not seeking care perhaps did not recognize this to be a condition warranting medical help.

PIH77
ANNUAL OVERALL AND EPILEPSY-RELATED HEALTH CARE UTILIZATION IN ADULT EPILEPSY PATIENTS IN THE UNITED STATES
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OBJECTIVES: There are multiple drug options for the treatment of epilepsy. Some patients may be refractory to treatment and require combination antiepileptic drug (AED) treatment. We compared healthcare utilization of refractory and stable epilepsy patients. **METHODS:** Using a claims database covering 2007-2009, we identified adults (age≥18years) with epilepsy who were either stable on therapy (no change in AED over 12 months) or were refractory (defined as adding AED therapy to an existing regimen). An index date in 2008 was selected: the date on which an additional AED was started for refractory patients; and a convenience date for stable patients. All pharmacy and medical claims in the post-index year were used to estimate overall utilization. Claims with epilepsy in any diagnosis field were used to estimate epilepsy-related utilization. Logistic regression models were used to adjust for baseline differences. **RESULTS:** There were 1536 refractory and 8571 stable patients (age: 41.8 vs. 43years; 50.7% vs. 47.6% female; mean Charlson comorbidity index: 0.7 vs. 0.5). Refractory patients were hospitalized more often than stable patients, both for any diagnosis (18.3% vs. 9.8% had ≥1 hospitalization) and for epilepsy-related diagnoses (15.7% vs. 7%). Refractory patients had greater mean hospital length of stay (any diagnosis: 10.9 vs. 7.1 and epilepsy-related: 8.9 vs. 5.6 days). They also had more physician office visits than stable patients (any diagnosis: 12 vs. 9 and epilepsy-related: 3.6 vs. 2.2). After adjusting for demographics, region, usual-care physician specialty, and risk factors, the odds of hospitalization (OR:1.8; 95% CI:1.6-2.1), emergency department visit (OR:1.6; CI:1.5-1.8), epilepsy-related hospitalization (OR:2.2; CI:1.9-2.6), and epilepsy-related emergency department visit (OR:1.9; CI:1.7-2.2) were greater in the refractory group. **CONCLUSIONS:** Patients with refractory epilepsy use significantly more health care services than those with stable disease. As new and more effective AEDs become available, it may be possible to reduce utilization in the refractory group.

PIH78
EFFECT OF HOSPITAL WASTES ON DRINKING WATER QUALITY OF KPK HOSPITALS PAKISTAN
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OBJECTIVES: Evaluating the effect of hospital wastes on drinking water quality of KPK hospitals and in Pakistan. **METHODS:** The study was carried out to in Ayub