

polyglycemic therapy is crucial for good glycemic control, this study aimed to compare medication adherence to oral hypoglycemic therapy, as well as diabetic care and risk of acute complications between type II diabetics with schizophrenia versus those without schizophrenia. **METHODS:** This study used the National Health Insurance claims data of a randomly selected sample. Enrollees who had received oral hypoglycemic therapy in 2002 and had been diagnosed with schizophrenia were included in the study (the case group). Enrollees without schizophrenia who had received oral hypoglycemic therapy in 2002 were selected to match the age and gender of the case group (1:3) (the comparison group). All subjects were observed for one year after their index dates – the dates of their first filled prescriptions in 2002. Medication possession ratio (MPR) was measured as $MPR < 0.8$ indicated poor adherence. Indicators of diabetic care included blood glucose test and HbA1c test. Acute complications were defined as emergency room visits or hospital admissions due to coma, hypoglycemia, hyperglycemia, or diabetic ketoacidosis. Logistic models were used to evaluate likelihood of poor medication adherence and access to diabetic care. Cox proportional hazards model was adopted to assess risk of acute complications. **RESULTS:** There were 202 and 606 subjects in the case group and comparison group, respectively. The mean age was 52, and 48% were male. Approximately half of both groups were poorly adherent to their oral hypoglycemic therapy. Diabetics with schizophrenia were less likely to receive HbA1c test. Their risks of acute complications were comparable. **CONCLUSIONS:** According to our preliminary results, diabetics with schizophrenia, compared with those without such a condition, had worse diabetic care. Better disease management will be necessary for this patient group.

PMH13

DEMENTIA AND ALZHEIMER'S DISEASE IN CHINA: CHARACTERIZATION AND CAREGIVER BURDEN

Tang B¹, Harary E¹, Kurzman R¹, Mould J¹, Pan S¹, Kaminsky R², Yang J¹
¹Pfizer, New York, NY, USA, ²Boehringer Ingelheim, Hanover, Germany

OBJECTIVES: The impact of dementia and Alzheimer's disease (AD) are devastating on many levels, including the effects on the families/caregivers of the patient. This study was designed to describe and evaluate the characteristics of a cohort of Chinese dementia patients, including associated caregivers' burden. **METHODS:** A 3-month open-enrollment, multi-center study was conducted at 48 tier 3 hospitals across mainland China in 2009. Caregivers who accompanied dementia patients were asked to participate in the caregiver assessment survey. Interviews included information on caregiver profile, patient care, and caregivers' burden. Caregiver burden was measured using the Chinese version of the validated Zarit Burden Interview (ZBI). Disease severity was measured by the Clinical Dementia Rating (CDR). **RESULTS:** A total of 1425 dementia patients with 1387 associated caregivers completed the Chinese version of the ZBI. Dementia patients from this cohort were considered to have mild to moderate dementia (mean CDR score 1.67 [SD=0.79]). AD was the most common dementia subtype among this cohort (46.7%) followed by vascular dementia (28.7%). Among the caregivers who participated in this survey: 57% were female, 51% identified as the spouse of the dementia patient, and 67.3% had been caring for the dementia subject more than one year. Dementia caregiver burden was mild to moderate (mean total ZBI score of 26.6), regardless of age, gender, level of education, type of dementia, CDR, and duration of care. The caregiver burden increases over time and is associated with the progression of the disease. **CONCLUSIONS:** Dementia has significant emotional and social impact (measured by ZBI) on patients and caregivers, regardless of demographics and geography. In China, these challenges may be mitigated by improving public education and increasing public awareness on the signs and symptoms of dementia vs normal aging.

PMH14

RESILIENCE RESOURCES PREDICT HIGHER QUALITY OF LIFE (QOL) AMONG TAIWANESE DIALYSIS PATIENTS

Cromm K, Lai JCL

City University of Hong Kong, Kowloon Tong, Hong Kong

OBJECTIVES: This study with in-centre haemodialysis patients examined the impact of personal psychological resilience resources, social support, hopefulness, and perceived loss of control to doctor on mental health outcomes. We hypothesized that resilience resources are the overarching principle determining QOL among these predictors. **METHODS:** Non-invasive study with cross-sectional design, using quantitative data collected from standardized self-report measures (N=294). Predictor variables included: resilience resources (perceived control, optimism, self-esteem); social support; loss of control to doctor; hope. Control variables included: gender; age; relationship, vocational, socio-economic status; living alone; cultural identity; religious beliefs; and disease-related variables such as cause of renal failure, number of co-morbidities, time since dialysis onset, transplant status, kidney disease impact. Outcome measure: Mental Composite Score (MCS) of SF-36v2@ health survey. **RESULTS:** Only questionnaires without missing data were included in the analysis (n=219). Significant relationships ($p < 0.01$) were observed of MCS with employment status ($r = 0.25$); socioeconomic status ($r = .30$); kidney disease impact ($r = 0.60$); social support ($r = 0.21$); hope ($r = 0.27$); loss of control to doctor ($r = 0.16$); self-esteem ($r = .51$); optimism ($r = 0.40$); perceived control ($r = .40$). Hierarchical multiple regression model explained 48 percent of variance in MCS, $F(9,209) = 23.04$, $p < .01$. Demographic variables (block 1, $\Delta R^2 = .12$, $F(2,216) = 15.24$, $p < 0.01$), disease impact (block 2, $\Delta R^2 = .29$, $F(1,215) = 104.15$, $p < 0.01$), and resilience resources (block 4, $\Delta R^2 = .08$, $F(3,209) = 11.48$, $p < 0.01$) explained a significant portion of variance in MCS. Social support, hopefulness, and perceived loss of control to doctor (block 3, $\Delta R^2 = 0.01$, $F(3,212) = 0.70$) were not able to explain a significant portion of variance in MCS. **CONCLUSIONS:** Resilience resources ac-

counted for 8 percent of variance over and above all other predictors. Confirming the hypothesis, variables such as social support that had predicted mental health in earlier studies became insignificant. Future research should identify less resilient patients and make positive psychology approaches available to see if outcome can be improved in clinical practice.

MUSCULAR-SKELETAL DISORDERS - Clinical Outcomes Studies

PMS1

IRRATIONAL USE OF STEROIDS: A WARNING FOR THE HEALTH CARE SYSTEM

Jan SU

University of Balochistan, Quetta, Balochistan, Pakistan

OBJECTIVES: To investigate the irrational prescription habit of steroids by medical practitioners in patients with arthritis and lower back pain in the area. **METHODS:** Twenty-nine pharmacies were randomly selected in various areas of the Province and 321 prescriptions of those patients with complaints of arthritis or lower back pain were evaluated for use of steroids (corticosteroids). **RESULTS:** A total of 103 out of 321 prescriptions (about 30 %) were containing corticosteroids and the patients were using these steroids mostly in an irrational manner. These prescriptions were prescribed by medical practitioners of all specialties including orthopedics. A small number of non medical doctors (about 2%) were also responsible for the steroids prescriptions. **CONCLUSIONS:** This study indicates that this type of irrational practice is the reflection of state and regulatory affairs in the country and this is a warning for all developing countries which need strict regulations for steroid prescriptions.

PMS2

ALENDRONATE USE AND THE RISK OF OSTEONECROSIS OF JAW IN TAIWAN

Huang WF, Lu PY, Hsieh CF

Institute of Health & Welfare Policy, National Yang-Ming University, Taipei, Taiwan

OBJECTIVES: Using a national database to evaluate the risk of ONJ in osteoporosis females in Taiwan. **METHODS:** We used the population-based National Health Insurance (NHI) database in Taiwan to conduct a retrospective cohort study during the period from 2000 through 2008. The study population confined to the women who took alendronate or raloxifene initially from Jan, 2001 to Sep, 2005 and medication needed to be stably prescribed for 90 days. The measurements of clinical outcomes included ONJ-diagnosis (ICD-9-CM diagnosis code 526.4, 526.5, 528.3, and 730.18) and sequestrectomy (NHI payment code: 92025B and 92026B) within 3 years after stable medication use. Cox's proportional hazard model was used to analyze the risk of ONJ development. **RESULTS:** We identified 23,158 women who had been prescribed either alendronate (n = 18,504) or raloxifene (n = 4,654). The patients treated with alendronate were at a higher risk of ONJ-diagnosis compared with the raloxifene group (hazard ratio [HR] = 1.336 [95% CI, 1.100-1.622]). For sequestrectomy, patients took alendronate also had a higher risk than raloxifene group (HR = 4.648 [95% CI, 1.120-19.291]). **CONCLUSIONS:** Patients who took alendronate had a higher risk of ONJ than raloxifene patients, no matter from the perspective of having the diagnosis or performing sequestrectomy. When undertaking the bisphosphonates treatment, doctors need to pay attention to the oral condition of patients.

PMS4

INHIBITION OF CARRAGEENAN-INDUCED EDEMA BY STACHYS FRUTICULOSA EXTRACT IN RATS

Bakhtiarian A¹, Araghi S², Khanavi M¹

¹Tehran University of Medical Sciences, Tehran, Iran, ²Tehran University of Medical Sciences, Tehran, Iran

OBJECTIVES: In this research, anti-inflammatory effect of Stachys Fruticulosa-M.Bieb. extract was studied in rats. **METHODS:** The effect of the extract against acute inflammation was studied by hind paw edema test. Intraperitoneal injection of different doses (50, 100, 200 and 300 mg/kg) of Stachys Fruticulosa which was followed by hind paw carageenan injection 1 h later were investigated. The resultant edema was quantified by measuring the hind paw edema with three ways of measurement: micrometer method, paw circumference (PC), plethysmometer method. **RESULTS:** After 2, 4 and 6 h we measured the anti-inflammatory effect of Stachys Fruticulosa extract. Stachys Fruticulosa extract with doses of 100, 200 and 300 mg/kg and indomethacin at a dose of 5 mg/kg showed significant effect. **CONCLUSIONS:** It is concluded that the methanolic extract of Stachys fruticulosa - M.Bieb. has anti-inflammatory effect which can be used as an alternative for Indomethacin for treatment of inflammation. Also it might be advantageous to use this herbal drug as a synergist for Indomethacin anti-inflammatory effects, to lower the dosage and consequently.

PMS5

A RANDOMIZED, PLACEBO CONTROLLED TRIAL TO COMPARE SAFETY AND EFFICACY BETWEEN CURCUMA LONGA LINN EXTRACT [NR-INF-02], GLUCOSAMINE SULPHATE AND COMBINATION OF TWO IN THE TREATMENT OF PAINFUL KNEE OSTEOARTHRITIS

Kulkarni C¹, Madhu K¹, Saji M²

¹St. John's Medical College, Bangalore, India, ²St. John's Medical College & Hospital, Bangalore, India

OBJECTIVES: Osteoarthritis [OA] a common, chronic disabling condition in orthopaedic practice is routinely treated with non-steroidal anti-inflammatory drugs [NSAIDs] which are often associated with serious adverse reactions while long term Glucosamine sulphate [GS] is frequently used to halt its progression. Objective of this study was to compare safety and efficacy of herbal formulation NRINF02 and Glucosamine sulphate alone and their combination with placebo in treatment of patients with OA. **METHODS:** A randomized, single blind, placebo controlled trial