of everyday life and 17.0% agree with taking these medicines if the person suffers severely of light mood swings. CONCLUSIONS: Survey results suggest that stigmatization around schizophrenia and major depression is present in Tunisia; there is a greater public willingness to help mental disease patients as demonstrated by our study. To conclude, raising public awareness in mental health could improve the mental health burden in terms of social functioning in families and societies from one side. On the other side, this stigmatization contributes to marginalize patients, exclude them from health care management and affects their disease severity.

PMS6
THE USE OF INTEGRATED CONCEPT MAPPING TO DEVELOP THE DEMENTIA CARE MODEL BY COMMUNITY PARTICIPATION

Hannah G.1, Sooksi N.2, Rangseekejare P.3, Namatasane S.4, Wisodorn C.5, Tangisuran B.1
1Univesiti Sains Malaysia, Pulau Pinang, Malaysia, 2Koen Kam University, Koen Kam, Thailand, 3Burapha University, Chonburi, Thailand
OBJECTIVES: The purpose of this study is to develop the dementia care model by using integrated concept mapping and community participation. METHODS: Six health care professionals (1 psychogeriatrician, 1 family physician, 1 residency, 1 pharmacist, 1 nurse, and 1 physical therapist) and seven non-health care professionals (3 village headmen, 2 village health volunteers, and 2 patients relatives) participated the first meeting conducted by Trochim’s concept mapping to generate the ideas then sort and rate the ideas for the feasibility and the importance. Later all participants except the psychogeriatrician took part in the second meeting conducted by Novak’s concept mapping to name the clusters of ideas by brainstorming and organizing the ideas and finally adding the details to make the complete model by the IHMC CmapTools computer programme. Multidimensional scaling and hierarchical cluster analysis including quadrant analysis were applied by SPSS software.
Hariprasad K.1, Prabhu N.2, Acharya S.3, Nagappa A.4, Naik V.5, 1Malaviyacharya Institute of Ayurveda Medicine, 2Manipal University, Manipal, India, 3Department of Pharmacy Management, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal, India
OBJECTIVES: To compare the effect of P38, NF-kB p65 and caspase-3 activity in “High F group” as group intervention and the other groups as control intervention, using Se supplementation. The study was conducted in the OPD and IP of MAMS, Manipal with 3 total groups A-Tayroshadangguggulu, B-Mustadiyapanayogabasti and C-Combined Tayroshadangguggulu and Mustadiyapana yoga basti for the period of 10 weeks in 30 diagnosed gridihari patients irrespective of their sex and age group18-60. RESULTS: in group A-Tayroshadangguggulu, 50.00% of patients were assessed under improved category, 10.00% each were assessed under marked improvement and moderate improvement category and 30.00% showed Unchanged. Nobody included under complete relief category. In group B-Mustadiyapana yoga basti, 90.00% of patients were assessed under improved category, 10.00% each were assessed under marked improvement and moderate improvement category and 10.00% showed Unchanged. Nobody included under complete relief, marked improvement or moderate improvement category. In group C-combined therapy of Tayroshadangguggulu and Mustadiyapana yoga basti, 50.00% of patients were assessed under moderate improvement category, 40.00% each were assessed under marked improvement and 10.00% were showed marked improvement category. Nobody included under complete relief category.

PM5
MUSCULAR–SKELETAL DISORDERS – Clinical Outcome Studies

PMS1
OUTCOMES IN SEVERE OSTEOPOROTIC WOMEN IN KOREA USING SEQUENTIAL TREATMENT

Kim RM.1, Burge R.1, Klein TM.2, Smolen LJ.3
1Lilly Korea Ltd., Seoul, South Korea, 2Lilly and Company, Indianapolis, IN, USA, 3Medical Decision Making Indianapolis, IN, USA
OBJECTIVES: Clinical management of osteoporosis often involves different pharmacologic therapies in a sequential manner. Real-world outcomes based on sequential treatment in Korean population was a purpose of this study. Our purpose was to compare outcomes (fractures, life years (LYs), and quality-adjusted life years (QALYs)) for post-menopausal osteoporosis (PMO) women using teriparatide followed by alendronate versus only alendronate (PMO) women using teriparatide followed by alendronate versus only alendronate (PMO) women using teriparatide followed by alendronate versus only alendronate (PMO) women using teriparatide followed by alendronate versus only alendronate (PMO) women using teriparatide followed by alendronate versus only alendronate (PMO) women using teriparatide followed by alendronate versus only alendronate (PMO) women using teriparatide followed by alendronate versus only alendronate (PMO) women using teriparatide followed by alendronate versus only alendronate (PMO) women using teriparatide followed by alendronate versus only alendronate (PMO) women using teriparatide followed by alendronate versus only alendronate (PMO) women using teriparatide followed by alendronate versus only alendronate

PM54
THE EFFECTS OF GALLIUM CHLORIDE ON APOPTOSIS OSTEOROSIS MODEL OF RATS CAUSED BY TRETINOIN ACID

Chen Q.1, Liu D.2, Xiong YM.2, Wang XZ.2, 1Xi’an Jiaotong University Health Science Center, Xi’an, China, 2The fifth hospital of Xi’an, xi’an, China
OBJECTIVES: Cell apoptosis is one of the pathogenesis of osteoporosis. Among a lot of medicine, only gallium salts can promote bone formation. The aim of this study is to investigate the effect of gallium chloride on apoptosis in osteoporosis rats which caused by tretinoin acid. METHODS: 67 sprague-Dawley (SD) female rats, three months of age, were divided into two groups. 49 rats of model group were treated with tretinoin acid for 85mg / kg by gavage while 18 rats of normal group were treated with distilled water for same amount. All rats were administrated for 15 days. After the model has been duplicated successfully, the model group rats were divided into three groups: 18 rats of osteoporosis group were treated with tretinoin acid for 85mg / kg by gavage, 19 rats of gallium chloride treatment group were administrated with glycine 25 mg/kg by gemination, 12 rats of estragon treatment group were give estradial benzoate (0.2 µg/kg, 3 times per week) by intraperitoneal injection. After treatment for 30days, the rats were killed, and content of MDA in serum was detected by TBA method. The apoptosis of osteocyte was detected by agarose gel electrophoresis. RESULTS: The apoptosis ratio of osteocyte in osteoporosis group rats was increased than the other three groups while the contents and molecular weight of DNA were decreased. The content of MDA in osteoporosis group rats was higher than the other groups. The content of DNA in gallium chloride treatment group rats was higher than that of the osteoporosis group rats. CONCLUSIONS: Gallium chloride can increase the DNA content of bone, through decreasing lipid peroxidation to suppress apoptosis of osteocyte.
A72

VALUE IN HEALTH 17 (2014) A719–A813

PM55

THE RESEARCH OF EFFECTS OF IGURATIMOD(T-614) ON THE APOPTOSIS OF PERIPHERAL BLOOD MONONUCLEAR CELL AND TH1 IN RHEUMATOID ARTHRITIS

Li D1, Liu CF1, Wang N2, Min XY1, Ma N1, Lin Y1, Chen QF1, Li X2
1The Fifth Hospital of Xi'an, Xi'an, China, 2The Fifth Hospital of Xi'an, Xi'an, China

OBJECTIVES: To observe the effect of iguratimod (T-614) on peripheral blood mononuclear cells (PBMC) TH1 cells and the expression level of IL-8 of rheumatoid arthritis (RA) patients, and to explore the possible mechanism of T-614 in treating RA.

METHODS: 6 patients were diagnosed with RA referred to Department of Rheumatology, The Fifth Hospital of Xi'an. They were evaluated by the score of VAS, DAS28 and the response rates of ACR20/70, respectively. PBMC were collected from 6 patients in active stage of RA, and treated with T-614 at different concentration (lower dose: 100μg/ml, higher dose: 1mg/ml) for 1h and 24h. Flow cytometry (FCM) were performed to examine the apoptosis of PBMC and the level of IFN-γ secretion by T cells.

RESULTS: We found that: 1) Iguratimod effectively induced apoptosis in PBMCs in 1h treatment, T-614 100μg/ml was 19.3±2.8% and 1mg/ml 26.4±3.1%, (P<0.05); 2) Compared with control, iguratimod effectively inhibit CH111 in vitro, T-614(1mg/ml) 1.33±0.2% and control (without T-614) 2.91±0.13% (P<0.05). 3) Levels of IL-8 in the supernatant of T-614 treated group and control group were tested by ELISA, iguratimod effectively inhibit IL-8 production and there were significant differences (P<0.05).

CONCLUSIONS: The results suggest that T-614 induced PBMC apoptosis and decreasing CD3+ T cell IFN-γ production and secretion of IL-8 in peripheral blood might be the possible mechanism of the effective of T-614 in treatment of RA.

PM56

ENCEUMBERANCE TO THE TREATMENT OF OSTEOPOROSIS: PHYSICIAN AND PATIENT PERSPECTIVE

Bhattacharya DS, Salikar MT, Majumdar A
Bombay College of Pharmacy, Mumbai, India

OBJECTIVES: The objective of this pilot study was to assess the barriers to the treatment of Osteoporosis in post-menopausal women, from both a physician and patient perspective.

METHODS: An open-ended structured survey was conducted for Physicians and patients across suburban areas of Mumbai. Questionnaires were designed to have questions on incidence of fractures, assessment methods for treatment, treatment regimen, for physicians, and history of fractures and compliance to treatment for patients, identified thorough review of the literature.

RESULTS: As reported by the Physicians, 35% of the post-menopausal women had vitamin D deficiency, High Incidence of Bone Fracture (hip) were common among 70%of Patients, Preferred Regimen was Calcium Supplement (Dietary, Oral dose 500mg twice daily), Multivitamins and/or Bisphosphonates with D (70%/65%/600mg) tablet once a week, Patients with high risk had Bone Density Test and were written 16.2% and 8% of the time, respectively. Patients with gastrointestinal bleeding or perforation history were 5.8% of the OA population. Celexco is associated with gastro-intestinal damage did not have a copy. The base case scenario assumes 13,333 patients.

RESULTS: Going from (A) to (B), the total cost of celexco increased $2,679,866 (94.42%) while the total cost of diclofenac decreased $1,733,740 (17.54%). The incremental cost-effectiveness ratio (ICER) was $55,851/quality-adjusted life-year (QALY).

CONCLUSIONS: The impact on a payer’s plans for the year was only due to drug costs since the cost to administer prior authorization was not considered. The per member per month (PMPM) for $0.07 from $31.22 to $31.23.

PM57

METABOLIC DISORDERS, OSTEOPOROSIS AND FRACTURE RISK IN ASIA: A SYSTEMATIC REVIEW

Sugian P1, Sato M2, Fukagawa T3
1Shimane University Faculty of Medicine, Izumo, Shimane, Japan, 2Eli Lilly Japan, Kobe, Japan, 3Orpum, Sydney, Australia

OBJECTIVES: The prevalence of both lifestyle-related metabolic disorders and osteoporosis is increasing in Asia. The aim of this systematic review was to summarize all published studies within Asia on the association between disorders of glucose and fat metabolism (type 2 diabetes, hyperglycemia, hypercholesterolemia, hyperlipidemia, dyslipidemia, metabolic syndrome (MetS) and others), and risk of fracture and osteoporosis. The relationship between metabolic disorders and bone mineral density (BMD) was also examined.

METHODS: EMBASE (including MEDLINE) and the Cochrane Library were searched. Only studies conducted within Asia (including East, South-East and South Asia and the Middle East) were included. The search strategy was adapted to suit the language and publication status of each database. Two reviewers independently examined and included the articles.

RESULTS: A total of 33 studies were included, of which 32 were assessed to be of high quality. Although some studies also examined diabetes and fracture, some studies included a total of 3,947 women. In general, women with diabetes had a higher risk of fracture compared with women without diabetes. This association was found for type 2 diabetes and BMD, although a high degree of heterogeneity was observed. Women with diabetes had a lower risk of fracture compared with women without diabetes (risk estimate range: 1.10 to 2.52). Included studies consistently reported that MetS is likely associated with osteoporosis. Women with MetS and other metabolic disorders had a lower BMD compared with women without these conditions. However, some studies were unable to detect an association between diabetes and BMD, which may be due to the heterogeneity of the data.

CONCLUSIONS: These findings suggest that diabetes is a risk factor for fracture in Asian populations. Atherosclerosis may also be associated with increased fractures in Asian populations, and MetS associated with bone loss in Asian men. The extent of causality in these observations is yet to be determined, with further prospective cohort studies needed. Nevertheless, these findings highlight the importance of properly managing patients with these risk factors to minimize the risk of fractures.

PM58

MUSCULAR-SKELETAL DISORDERS – Cost Studies

PM59

ESTIMATING THE IMPACT OF EXPANDING ACCESS TO CELECOXIB FOR OSTEOARTHRITIS PATIENTS IN CHINA

Wang BC1, Xie XP2, Furnbach V3
1Academy of Life Sciences, Somerset, NJ, USA, 2Pfizer Inc, Beijing, China

OBJECTIVES: Currently in China, celecoxib is prescribed to patients with gastrointestinal bleeding or perforation history. The aim of this study was to model the effects of expanding access to all osteoarthritic (OA) patients in China.

METHODS: We created a one-year budget impact model from a payer perspective comparing two scenarios. The first scenario (A) restricts the use of celecoxib to only patients with gastrointestinal bleeding or perforation history while the second scenario (B) does not restrict usage. In (A), prescriptions were either diclofenac or celecoxib, but those prescribed celecoxib were only dispensed celecoxib if they had gastrointestinal bleeding or perforation history. Those prescribed celecoxib but not fitting the criteria were dispensed diclofenac. In (B), all prescriptions were dispensed as written. For both scenarios, celecoxib and diclofenac prescriptions were written 16.2% and 8% of the time, respectively. Patients with gastrointestinal bleeding or perforation history made up 5.8% of the OA population. Celecoxib was associated with a 20% copy cost of diclofenac did not have a copy. The base case scenario assumes 13,333 patients.

RESULTS: Going from (A) to (B), the total cost of celecoxib increased $2,679,866 (94.42%) while the total cost of diclofenac decreased $1,733,740 (17.54%). The incremental cost-effectiveness ratio (ICER) was $55,851/quality-adjusted life-year (QALY).

CONCLUSIONS: The impact on a payer’s plans for the year was only due to drug costs since the cost to administer prior authorization was not considered. The per member per month (PMPM) for $0.07 from $31.22 to $31.23.

PM60

SHARING PATTERN AND COST ANALYSIS ON (DMARD’S) DISEASE MODIFYING ANTI-RHEUMATOID DRUGS IN RHEUMATOID ARTHRITIS PATIENTS OF A TERTIARY CARE TEACHING HOSPITAL IN SOUTH INDIA – A CROSS SECTIONAL STUDY

Suman D1, VIV Raghavendra Institute of Pharmaceutical Education & Research, Anantapur, India

OBJECTIVES: To study the current prescription pattern and to analyze the cost of treatment prescribed to RA patients referred to orthopedics OPD in a tertiary care teaching hospital of South India.

METHODS: The study protocol was approved by the institutional ethics committee. Patients attending Orthopedic OPD for existing RA disease were recruited as per inclusion criteria. Written informed consent was sought. Total 100 consecutive rheumatoid arthritis patients fulfilling the American College of Rheumatology Criteria 1987 were recruited during study period. Study Design: Cross-sectional study. Study Duration: 6 Months (From July 1st, 2013 to 31st, 2014) Study Site: Department of Orthopedics, Government Medical College and Hospital, Anantapuramu, Andhra Pradesh, India.

RESULTS: Majority of patients (67%) in the study population were on combination of two DMARDs. Most frequently prescribed two DMARDs combination was methotrexate and hydroxychloroquine (49%). Cost effectiveness was $1,675.68+370.52, while average hospital and out of pocket expense were $281.12 and 482.88 respectively.

CONCLUSIONS: The drug use pattern in RA was found to be DMARDs based. Majority of the cost was borne by the patient. The total increase in cost was due to administration of drugs to treat the adverse drug reaction. Prospective studies in a larger number of patients are needed to assess the utility of prescription audit and cost analysis of drugs used in RA.

PM61

THE COSTS OF MAJOR AND MINOR CYCLING ACCIDENTS IN TASMANIA, AUSTRALIA

Palmer AJ1, St L, Gordon J2
1University of Tasmania, Hobart, Australia

OBJECTIVES: To estimate the societal costs of cycling accidents in Tasmania, Australia. Methods: Between July 2011 and March 2012, 136 regular cyclists completed a telephone-based questionnaire. Information collected included demographics, cycling habits and details of major (requiring medical treatment or days off work) and minor (not requiring medical treatment or whole days off work) cycling accidents. The societal costs of accidents in 2011 Australian Dollars ($) were estimated from self-reported medical resource consumption and lost work time, time, combined with published medical resource unit costs and salar y data. Results: Participants reported 59 major accidents in 5 years preceding the interview, and 27 minor accidents in the previous 12 months. The total mean costs of a major accident were $15,625, compared between direct and indirect costs of $2,238, respectively. The total annual costs to society of major cycling accidents in Tasmania were estimated at $4,123,445. Conclusions: Costs resulting from both minor and major cycling accidents are substantial. The costs of improvements to cycling infrastructure/safety may be offset by reduced costs to society of cycling accidents.