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fered from high levels of anxiety, stress, and depression. The most frequent comorbidities included hypertension, coronary artery diseases, hyperlipidemia, diabetes, obesity, depression, other skin diseases, and inflammatory bowel disease. Psoriasis may also confer an independent risk of acute myocardial infarction. CONCLUSIONS: Psoriasis was reported to have adverse effects on patients' quality of life including daily activities, social life, and productivity. Clinical burdens associated with psoriasis included a number of serious co-morbidities. The evidence retrieved as part of this systematic literature review well addressed the clinical importance of psoriasis in Asia Pacific countries.

### PSY2

### EFFECT OF INTRAVENOUS PARECOXIB ON POSTOPERATIVE PAIN RELIEF AFTER TOTAL KNEE ARTHROPLASTY

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OBJECTIVES: This study examined the opioid-sparing effectiveness, analgesic efficacy and tolerability of postoperative administration of parecoxib in total knee arthroplasty (TKA) patients. METHODS: We performed a retrospective study of enrollees received patient-controlled analgesia (PCA, consisted of morphine 1 mg/ml and fentanyl 30 mcg/ml) with or without single-dose of intravenous 40 mg parecoxib following TKA from November 2010 through April 2011. Effect was as sessed by the amount of PCA used, pain intensity, length of hospital stay (LOS), satisfaction score and adverse events. RESULTS: Nine patients under PCA with parecoxib as the parecoxib group and 73 patients without parecoxib as the controlled group were evaluated. PCA consumption was observed to be reduced in the parecoxib group by 17.2 %, 25.5 % and 39.8 % less than the controlled group at 24 h, 48 h, and 72 h after surgery. Pain at movement improved significantly at 48 h and 72 h for the parecoxib group with visual analogue score (VAS). There were no significant differences in pain scores at rest and LOS, however, between those who received parecoxib or not. Satisfaction was described as "good, fair, and poor" by 0 %, 89 %, and 11 % in the parecoxib group, respectively, compared with 4 %, 81 %, and 15 % of the controlled group. The overall incidences of adverse events were reported for 78 % of patients with parecoxib and 71 % of patients without parecoxib. CONCLUSIONS: In this study, postoperative administration of parecoxib demonstrated benefit in terms of PCA consumption and VAS score at movement. Therefore, it seemed that parecoxib provided opioid-sparing and analgesic effect. Also, the parental preparation of parecoxib may be especially useful when patients were unable to take oral medication or were experiencing nausea and vomiting.

### PSY3

# ASSESSING THE COST EFFECTIVENESS OF PUBLIC HEALTH INTERVENTIONS TO PREVENT OBESITY: A SYSTEMATIC REVIEW OF THE EFFECTIVENESS OF 16 OBESITY PREVENTION INTERVENTIONS

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OBJECTIVES: Obesity and overweight constitute a significant public health issue in New Zealand. The aim of this systematic review was to formally assess the evidence on the effectiveness of selected obesity interventions. METHODS: The first phase of this research involved a wide-ranging scoping search of the literature to identify population-based obesity-prevention interventions. The search was conducted using the Embase and Medline databases, a general internet search and via the contributions of the stakeholder reference group. A total of 95 relevant primary prevention interventions were found, with 38 of these assessed in Australia or New Zealand. The research team and the stakeholder reference group considered the results of the scoping search and selected 16 interventions that appeared to be effective using a weight-based outcome for full systematic review. **RESULTS:** The selected interventions were based on both nutrition and physical activity in a variety of age groups and settings (pre-school, school, tertiary education, community, primary care and workplace). Interventions generally showed greater reductions in body mass index (BMI), BMI z-score, weight, weight to height ratio, waist circumference and the incidence of being overweight or obese compared with controls. In a school-based nutrition and physical activity intervention in Australia, children in the intervention group gained significantly less weight compared with the control group (-0.92 kg; P=0.03). In a study of general health screening conducted in Denmark, the body mass index of adults receiving the intervention increased 0.6 kg/m<sup>2</sup> less that those not receiving the intervention. CONCLUSIONS: A number of interventions were shown to have the potential to prevent obesity in a range of populations and settings. The most cost-effective interventions for obesity prevention were a school-based programme for children and general health screening and advice for adults in a primary care setting.

### PSY4

## STUDIES ON LEAD DETOXIFYING EFFECT OF ASCORBIC ACID IN TRAFFIC POLICE SUBJECTS OF KARACHI

Gilani AH, Shah AJ, Fazal O, Mehmood MH, Tariq S Department of Biological and Biomedical Sciences, The Aga Khan University, Karachi, Pakistan OBJECTIVES: Lead toxicity has been labeled as a major health problem globally with limited therapeutic options. Literature reveals controversial reports on the lead detoxifying potential of ascorbic acid (vitamin C). The aim of this study was to see if vitamin C supplementation reduces lead levels of blood in adult subjects exposed to lead. METHODS: After ethical approval and informed consent the traffic police study subjects (all male) were randomly divided into two groups each containing 40 subjects. One group received 500 mg vitamin C, while the second group was given 1000 mg orally daily for a period of one month. Blood samples were collected at 0, 15, and 30 days of treatment and lead levels were analyzed from the PCSIR Lab, Karachi using atomic absorption spectrophotometer. RESULTS: The data showed raised levels of lead in study subjects of both groups (21.74  $\pm$  1.62 and 22.51  $\pm$  1.28 mcg/dl; mean  $\pm$  SEM; N=40) compared to the safe limit (< 10 mcg/dl) recommended by WHO. The treatment with vitamin C (500 mg) reduced the lead levels to  $16.91 \pm 1.08 \text{ mcg/dl}$  (N = 29) after 15 days treatment (P<0.01), while the lead level after 30 days treatment was further reduced to 12.61  $\pm$  1.50 mcg/dl (N = 36;  $p{<}0.001$  compared to control, 21.74  $\pm$  1.62). In the second group subjects, which received 1000 mg vitamin C, the lead level after 15 days treatment was 15.80  $\pm$ 0.89 mcg/dl (N =33; P<0.001)), with no further drop (P>0.05) after 30 days treatment, as the resultant lead level was 14.64  $\pm$  1.05 mcg/dl (N =31). CONCLUSIONS: These data indicate that vitamin C has a dose and time-dependent lead-detoxifying effect and that vitamin C supplementation may be an effective, safe and economical method in reducing blood lead levels in chronically exposed subjects such as traffic police.

# PSY5

# ESTIMATING THE PREVALENCE OF FIBROMYALGIA AND ITS IMPACTS ON HEALTH IN THAIS: A COMMUNITY-SURVEY IN BANGKOK, THAILAND

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OBJECTIVES: A validated screening tool for the diagnosis of fibromyalgia (ACR 2010 FM-STD) had been introduced in Thailand. The aim of this study is to explore with the FM-STD the prevalence of fibromyalgia (FM) and estimate its burden of disease (BOD) within the community of Bangkok, Thailand. METHODS: A cross-sectional nonclinical survey process was conducted in urban and suburban Bangkok during August-December 2011. The questionnaire was designed to collect data related to pain, likelihood of FM diagnose, pain impact and treatment patterns. Primary interviews were conducted by field researchers. Every respondent, whose scores met the diagnostic criteria of FM, were subsequently referred to further investigation by our research physicians who confirmed final diagnoses of those cases. RESULTS: One thousand respondents from various socio-economic backgrounds participated in the survey. Six of them (0.6%) were medically found positive to FM; their mean age (range): was 47.67 (33-63) years. Mean widespread pain index (WPI) and symptom severity (SS) scale score (range): 10.17 (7-16) and 7.83 (7-12), respectively. Lower back and right shoulder girdle were the first and second most frequent pain locations. Intermittent throbbing pain was the most general presentation among FM cases. For key FM features, all six respondents reported, mild to severe intensity fatigue and waking unrefreshed while altogether cognitive impairment was reported unproblematic. Furthermore, FM had strong impact to daily activities, particularly for sleep, walk and routine work. Mean ability to accomplish work declined up to 71.67% (60%-90%). All cases required a minimum one monthly therapy to manage their pain symptoms; massage/spa being the most frequent treatment method selected in this study. Average monthly out-of-pocket expense, related to pain management was US\$16.11 (0-33.33). CONCLUSIONS: This is the first epidemiological survey of FM in Thailand. Therefore, study's findings will generate a better understanding of FM problem among Thai health care providers

## PSY6

## THE PREVALENCE AND TREATMENT STATUS OF HEMOPHILIA IN MAINLAND CHINA: A SYSTEMATIC REVIEW AND META ANALYSIS

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**OBJECTIVES:** To describe the prevalence and treatment status of hemophilia A (HA), hemophilia B (HB), hemophilia C (HC) and Von Willebrand disease (VWD) in mainland China based on existing data, and to estimate the cost of switching from on-demand therapy to prophylaxis. METHODS: We conducted a systematic literature review in Aug, 2011 using PubMed, EMBASE, and Cochrane Library in English and CBM, CNKI, VIP, Wanfang Database in Chinese. No retrieval limitation was set. In addition, we carried out a search of general and targeted hemophilia related websites. Reference lists of key reviews were hand-searched for further relevant researches. Studies providing data of prevalence or cost of hemophilia in mainland China were included. Meta-analysis was done using the generic inverse variance model. RESULTS: 22 epidemiological and 16 economic studies were included for the analysis. The weighted prevalence of hemophilia (HA+HB+HC+VWD) was 3.6 per 100,000 (95%CI: 2.7-4.9 per 100 000). We estimated the number of hemophiliac in mainland china to be 49,339 based on the data from the 6<sup>th</sup> nationwide census. The official registration number of hemophiliac now is 9804. More than 50% of hemophiliacs in mainland China were un-treated or treated occasionally. In the choice of treating product, less than 50% used pure blood coagulation factors. Less than 10% received prophylaxis. Based on the cost-effective study, low dose prophylaxis was a cost-saving strategy compared to on-demand therapy. The frequency of bleeding could be reduced by 80% and the life of hemophiliac would be close to normal if CNY2.66 billion (CNY53845per case) were invested every year. extra CONCLUSIONS: The prevalence of hemophilia in mainland China is underestimated. Registration management has to be improved. Patients with hemophilia lack treatment generally. It is practical to consider switching the treatment of hemophilia from on-demand therapy to low dose prophylaxis.

# SYSTEMIC DISORDERS/CONDITIONS - Cost Studies

PSY7

IMPACT OF ANTI-VIRAL TREATMENT ON THE ECONOMIC BURDEN OF CHRONIC HEPATITIS B IN TAIWAN

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