OBJECTIVES: Non-adherence to a prescribed therapeutic program is an issue in the treatment of chronic diseases more so for asthma, in which the lack of symptoms may undermine the importance of regular inhalers, and beliefs about inhaling corticosteroid could also result in non-adherence. The objective of the study was to analyse the self-reported adherence to ICS therapy and beliefs about medicine. METHODS: Adult patients previously diagnosed with asthma and who were prescribed ICS, visiting an emergency or a tertiary care public chest hospital for asthma exacerbation were recruited (March 2008-December 2009). Patients completed self-reported questionnaire containing 49 questions on six domains: socio-demographic, clinical profile, causal belief, self-report on adherence, beliefs about medicines and medication adherence report scale (MARS) after stabilization. RESULTS: Of the 200 patients, 51.5% were between 30-40 years, 64% were female, mean duration of asthma was 10.5 ± 8.1 years and 51.5% were having severe asthma. Salient findings on self-report adherence were, 49% reported that they took ICS even if asymptomatic; 91% reported that they forget to take their ICS some or most of the times; 84% reported that they avoided ICS some of the times. In response to individual item for MARS, 15.5% claimed that they took ICS as prescribed. Significant positive correlation was observed between treatment necessity and reported adherence (r = 0.445, p < 0.001). Patients who were concerned for the potential effects and risk of dependence had low adherence with significantly negative correlation. Younger age group had a significant correlation with social inhibition and female gender correlated significantly with fear of adverse effects and social inhibition as the cause for avoiding ICS. CONCLUSIONS: The findings support the model of treatment adherence, which incorporated beliefs about treatment as well as illness perceptions. The necessary-concerns offer a potentially useful framework to help clinicians elicits key treatment beliefs influencing adherence to ICS.

RESULTS: Out of 140 TB patients 92 (65.7%) were Libyans while 48 (34.3%) were non-Libyans. Majority (n=89, 63.6%) of TB patients fall in age between 20-40 years with mean age of 36.14 ± 11.2. Ninety six (69.7%) patients were married and 31% had at least some level of education with intermediate level of education and average monthly income between 200-400 Libyan Dinar (n=73, 52.1%). Ninety (64.3%) had urban residency. Mean knowledge score for Libyan TB was 12.26 ± 4.3 (out of 23) while Non Libyan TB patients scored 7.85 ± 4.8 (out of 23). The overall mean knowledge score among all TB patients was 10.75 ± 4.5, while statistical significance difference was observed between the mean knowledge scores of Libyan and Non-Libyan TB patients (P < 0.001). CONCLUSIONS: The present study findings reflect that overall level of knowledge among study respondents was low. Moreover, Libyan TB patients scored better as compared to their counter parts. Further investigation using a regression model is advisable to highlight factors affecting knowledge among TB population in Libya. This will help in designing a health educational campaign for all TB patients in Libya.

OBJECTIVES: To compare knowledge towards etiology, transmission, risk factor, treatment and prevention of TB among general population in North East Libya. METHODS: A cross sectional study was under-taken among pre-validated questionnaire consisting of 23 items. A total of 750 respondents from the 2010 China National Health and Wellness Survey (NHWS) was used. The NHWS is a self-reported survey administered to the adult population in urban China using a mixed methodology. Respondents who reported that they had been diagnosed with asthma were compared with those who had not on health status (using the SF-12v2 instrument). RESULTS: A total of 880 patients reported a diagnosis of COPD (4.46%). Most patients reported their condition as mild (n=697; 78.3%) with the remaining patients reporting their condition as either moderate or severe (n=193; 21.6%). Even after adjusting for covariates, patients with moderate/ severe states, patients with asthma reported significantly worse mental (44.90 vs. 46.27, t = 3.8) and physical (47.26 vs. 49.59) component summary scores compared with those without COPD (p < 0.05). Similarly, patients with moderate/severe COPD reported significantly worse health state utilities compared with those without COPD (0.68 vs. 0.71). Gender differences were observed between those with COPD and those without COPD. CONCLUSIONS: The results suggest a significant burden among those who reported a diagnosis of COPD in urban China. As the prevalence of COPD continues to rise, a greater emphasis on disease management could result in an improvement in health status.

OBJECTIVES: The prevalence of COPD in China has been estimated at approximately 8%, with only a third of patients receiving a diagnosis. The overall prevalence is expected to rise considerably. The aim of this study was to quantify the burden associated with this condition in urban China. METHODS: Data from the 2010 China National Health and Wellness Survey (NHWS) were used (N=19,954). The NHWS is a self-reported survey administered to the adult population in urban China using a mixed methodology. Respondents who reported that they had been diagnosed with asthma were compared with those who had not on health status (using the SF-12v2 instrument). RESULTS: Of the 200 patients, 51.5% were between 30-40 years, 64% were female, mean duration of asthma was 10.5 ± 8.1 years and 51.5% were having severe asthma. Salient findings on self-report adherence were, 49% reported that they took ICS even if asymptomatic; 91% reported that they forget to take their ICS some or most of the times; 84% reported that they avoided ICS some of the times. In response to individual item for MARS, 15.5% claimed that they took ICS as prescribed. Significant positive correlation was observed between treatment necessity and reported adherence (r = 0.445, p < 0.001). Patients who were concerned for the potential effects and risk of dependence had low adherence with significantly negative correlation. Younger age group had a significant correlation with social inhibition and female gender correlated significantly with fear of adverse effects and social inhibition as the cause for avoiding ICS. CONCLUSIONS: The findings support the model of treatment adherence, which incorporated beliefs about treatment as well as illness perceptions. The necessary-concerns offer a potentially useful framework to help clinicians elicits key treatment beliefs influencing adherence to ICS.

CONCLUSIONS: The present study findings reflect that overall level of knowledge among study respondents was low. Moreover, Libyan TB patients scored better as compared to their counter parts. Further investigation using a regression model is advisable to highlight factors affecting knowledge among TB population in Libya. This will help in designing a health educational campaign for all TB patients in Libya.
than 0.05 was considered significant. RESULTS: Out of 1500 questionnaires, 1000 were received (response rate 0.66%). Majority of the respondents were Libyans (n = 883; 88.3%) while 117 (11.7%) were non Libyans. Fifty three percent (n=474) of Libyans respondents were females while seventy four percent (n=87) of non Libyans respondents were males. Forty eight per cents (n=420) of Libyans and forty four percent (n= 51) of non Libyans were categorized in 25–40 years age group. Majority (n = 529; 59.9%) of Libyans respondents had high level of education while non Libyans respondents (n = 61; 5.2) had intermediate education. Knowledge score was significantly higher among Libyans (317 ± 3.8) than non Libyans (97.7 ± 4.7, t = 26.13), (P < 0.001). A significant difference was noted when Libyans and non Libyans were compared with age, gender and tertiary educations level (P < 0.001). No significant differences were seen among other demographic variables and knowledge scores.

CONCLUSIONS: The present study findings showed that overall level of knowledge of Libyans and non Libyans respondents was low, however, Libyans had more knowledge edge about non Libyans about TB. There is a need of massive health education campaign by policy makers in order to improve the population’s knowledge towards TB.

PRS13 DISCRIMINATING THE PRICE OF A PRODUCT BASED ON THE TARGET PATIENT SEGMENT BY LAUNCHING DIFFERENT DELIVERY MECHANISMS: A COMPARISON OF CHINA, INDIA AND KOREA

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OBJECTIVES: In many countries a large portion of COPD patients are paying cash for the most innovative medications. It is remarkable to believe that there is the potential to respond to the medical need, and expected value of public payers vs. self payers, by developing a new molecule delivered in different inhalers for different markets. This could be an interesting strategy for companies trying to maximize the level of access. Contrary to China and India, in markets with a single payer, such as Korea, a price discrimination based on different inhalers would not be reimbursable. The objective of this study is to compare the reimbursement and sustainability of a device based price discrimination strategy in the COPD market in India (cash market), China (mixed system) and Korea (public coverage).

METHODS: Qualitative discussions with a representative sample of payers based on two product portfolios of the same molecule, delivered in two different devices: a high tech multi dose DPI and a simple monodose inhaler.

RESULTS: Price discrimination was possible in India where the market is mainly cash but not in China or Korea. In China, the existence on the market of a low cost device makes the premium device unattractive for the public payer at the regional level. In Korea, the launch of the low cost device warrants a re-evaluation of the premium inhaler by HTA.

CONCLUSIONS: Companies find attractive the idea of discriminating the price based on the level of health care coverage a patient has access to. However this study suggests that discrimination at the payer level by the patient segment is not only difficult in countries providing a universal health care coverage, but also in those countries where there is a mixed cash/public system. It is possible, however, in cash markets such as India.

SENSORY SYSTEMS DISORDERS - Clinical Outcomes Studies

PSS1 NICOTINE AS A INDICATOR OF TOBACCO EXPOSURE AND ITS EFFECT ON ORAL HEALTH

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OBJECTIVES: 1) Assessment of the periodontal status among 35–44 year old tobacco users using Community Periodontal Index 2) Estimation of Nicotine levels in Blood and Urine by Spectrophotometry, and 3) Correlation between Nicotine levels in the Blood and Urine samples of the subjects and their Periodontal status.

METHODS: A cross sectional institution based study was conducted to assess the periodontal status of 100 smoker and non smoker subjects. The amount of resources used and urine. The study instrument consisted of a questionnaire for recording information on tobacco use. The second part was for recording the clinical data using Community Periodal Index. The third part was to record the concentration of nicotine in blood and urine by spectrophotometer and Karl Pearson Chi square. Correlation tests were used and data was analyzed using SPSS -17 software.

RESULTS: In this study of 150 male subjects aged between 35–44 years aimed at assessing and comparing the periodontal status of tobacco users and non tobacco users. The findings showed that tobacco users with the highest prevalence of periodontal disease. The difference in community periodontal index scores of various tobacco users and non tobacco users was found to be statistically significant (p<0.0005). When blood and urine nicotine levels were compared with various forms of tobacco users, the nicotine levels was maximum in beeds smokers and minimum in cigarette smokers. However, there was no significant correlation when periodontal status was correlated with nicotine levels in blood and urine (p>0.005).

CONCLUSIONS: The findings suggested a marked association between tobacco use and prevalence of periodontal disease. The present study showed that blood and urine nicotine level is increased in various tobacco users compared to non tobacco users. The nicotine levels in blood and urine may be considered as good indicators to assess the exposure to tobacco in our population.

PSS2 EPIDEMIOLOGY, TREATMENT PATTERNS AND MEDICAL EXPENSES OF DIABETIC MACULAR EDEMA IN TAIWAN: A NATIONWIDE CLAIM-BASED DATABASE STUDY

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OBJECTIVE: To investigate the epidemiology, treatment patterns and associated medical expenses of diabetic macular edema (DME). METHODS: Data was collected and analyzed from 1 January 2004 to 31 December 2009 from Taiwan National Health Insurance Research Database, a source that covers more than 99% of Taiwan’s 23 million citizens. Study subjects were recorded as having DME according to ICD-10 (code H110) in the chart analysis. Treatment patterns and associated medical expenses of DME were retrieved and calculated from 2004 to 2009. Age, gender and treatment distribution of treated DME visual impairment patients was estimated in 2009.

RESULTS: In 1.43 million diabetes mellitus population, 0.11 million patients (7.3%) have DME and 18.6 thousand patients (0.3%) have received treatment for DME visual impairment. The direct medical cost of DME patient was 3.1 times higher than the average national health expenditure per person (NTD 100,005 vs. NTD 32,240). Most treated DME visual impairment patients were older than 50 years. The male-to-female ratio was 1.05. There were 85.5% of treated DME patients (1.3%) of DM patients treated with laser or IVI or vitrectomy in Taiwan. Medical claims data have shown that un-licensed use of intravitreal treatments in DME is increasing.

SENSORY SYSTEMS DISORDERS - Cost Studies

PSS3 MEDICAL RESOURCE USE AND ASSOCIATED COSTS IN OPEN-ANGLE GLAUCOMA IN 10 ASIA-PACIFIC COUNTRIES

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OBJECTIVES: More than 40% of worldwide open-angle glaucoma (OAG) cases occur in Asia. The OAG prevalence and associated economic burden are expected to rise further. We extrapolated the findings from a German patient chart review in ocular hypertension (OHT) and OAG to 10 Asia-Pacific countries using expert interviews, in order to estimate the country specific OAG management costs. METHODS: Two to 5 key opinion leaders per country were asked to review a list of medical resources used in OHT/OAG (ophthalmologist visits, examinations/tests, outpatient or inpatient surgery/laser, eye drops) collected during the retrospective COGIS study in 159 patients. More than 40% of worldwide open-angle glaucoma (OAG) cases occur in Asia. The OAG prevalence and associated economic burden are expected to rise Further. We extrapolated the findings from a German patient chart review in ocular hypertension (OHT) and OAG to 10 Asia-Pacific countries using expert interviews, in order to estimate the country specific OAG management costs. METHODS: Two to 5 key opinion leaders per country were asked to review a list of medical resources used in OHT/OAG (ophthalmologist visits, examinations/tests, outpatient or inpatient surgery/laser, eye drops) collected during the retrospective COGIS study in 159 patients. More than 40% of worldwide open-angle glaucoma (OAG) cases occur in Asia. The OAG prevalence and associated economic burden are expected to rise Further. We extrapolated the findings from a German patient chart review in ocular hypertension (OHT) and OAG to 10 Asia-Pacific countries using expert interviews, in order to estimate the country specific OAG management costs. METHODS: Two to 5 key opinion leaders per country were asked to review a list of medical resources used in OHT/OAG (ophthalmologist visits, examinations/tests, outpatient or inpatient surgery/laser, eye drops) collected during the retrospective COGIS study in 159 patients.

RESULTS: Thirty ophthalmologists validated the data (Australia 2 experts, China 4, Hong Kong 3, India 5, Malaysia 3, New Zealand 3, South Korea 2, Singapore 2, Taiwan 2, Thailand 2). The increasing frequency of resources used with increasing disease severity and number of switches was generally approved. The average annual cost per patient ranged from 186US$ to 168US$, mainly driven by topical medications, examinations/tests and clinical