OBJECTIVES: Huntington’s disease (HD) is a rare neurodegenerative disease leading to cognitive impairment, disability and poor quality of life (QoL) for patients as well as caregivers. This study, conducted in US as a part of an international survey, investigated a disease-specific QoL instrument, the HD QoL Battery for Carers (HDQoL-C). METHODS: The shortened version of the HDQoL-C comprised two components: components with 13 items assessing the general HRQoL of HD caregivers (HD QoL-13) and two components with 17 items assessing the specific HRQoL of HD caregivers (HD QoL-17). Caregivers were asked to answer socio-demographic questions and complete the short version of the (HDQoL-C), a previously validated questionnaire. Item response could be chosen among 10 possibilities depending on frequency or intensity. Internal validity was evaluated through the factorial structure and internal consistency. External validation was tested using known-group comparisons analyses between three severity subgroups (low, moderate, high), according to demographic, clinical severity and caregiver burden. RESULTS: The HDQoL-C was composed of 361 family carers from US with 76% female, 16 single and 51 of average age. The majority of the caregivers represented the main caregivers of the HD patient (73%) and 27% of them lived with the HD patient. There were 2 items out of 20 with potential floor effects and 3 items with ceiling effects. Cronbach’s alpha coefficients ranged from 0.68 to 0.90 in the whole sample, indicating high internal consistency. Analyses of the component of the HDQoL-C dealing with the feeling of burden, showed the HDQoL-C scores were higher for carers who cared for patients in the low severity group than the two other groups, meaning that these caregivers had better QoL. CONCLUSIONS: The US short version of the HDQoL-C demonstrated good internal consistency and congruent validity when compared to the original English version.

PN46

USE OF DIARY ALARMS ON ELECTRONIC DEVICES FOR COLLECTING DATA FROM MIGRANE SUBJECTS WITH PHONOPHIA

Bangladesh IM, Gary ST

PHT Corporation, Boston, MA, USA

OBJECTIVES: Electronic Patient Reported Outcomes (ePRD) such as daily diaries are used to collect subjective data to collect information about migraine frequency, duration, severity, and symptoms in general. Alarm sounds are an effective tool for prompting subjects to complete diaries on schedule. However, 70-80% of patients suffer from pharmophobia during a migraine. Thus, it is possible that alarm sounds may be used to measure the sound level of alarms on three models of the PHT LogPad handheld electronic device, and readings were compared to published sound aversion thresholds (SAT) for migraineurs. METHODS: The LogPad (UW, CV and LV) models were placed at a distance of one or five feet from the decibel meter. Alarm sound was measured on two devices in triplicate at each sound setting. RESULTS: The SAT for migraineurs is approximated by 76 decibels (db) (c) and 91 db (intercartil). Healthy subjects have a SAT of 105 db. When the LogPad UW and decibel meter were placed one foot apart, the decibel meter measured 58, 67, 75, and 83 db at the normal, medium, high and very high sound settings, respectively, and measured 110 db for the CV and LV models. When any LogPad model was placed five feet away from the decibel meter, all readings were below the icat SAT for migraineurs. CONCLUSIONS: Even at a 1 foot distance, the alarm volume on the LogPad UW can be considered safe for migraineurs with the highest background sound. At a distance of 5 feet, all models tested are below SAT and above background. Therefore, the LogPad is a suitable handheld electronic device to use with migraineurs that suffer from pharmophobia with alarm volumes that can be used below SAT.

PN47

FREQUENCY AND NATURE OF PATIENT-REPORTED OUTCOME CONVERSATIONS BETWEEN PHYSICIAN AND PATIENTS WITH CYSTIC FIBROSIS

Hautamaki E1, Prado M1, Narayanani S1

Signa HealthCure, Columbus, MD, USA, 1Real Health Data, Santa Cruz, CA

OBJECTIVES: To describe the frequency and nature of patient-reported outcome (PRO) conversations between physicians and patients with Cystic Fibrosis. METHODS: A random sample of de-identified patients with Cystic Fibrosis in the United States was selected from a large de-identified database of medical office visit transcriptions. Transcriptions were based on physician-directed voice recordings detailing every individual patient encounter/init. De-identified medical visit transcriptions were evaluated to analyze the burden of discussions related to Cystic Fibrosis (CF) experienced by the patient-physician dyad in the real-world practice setting. Descriptive statistics are reported. RESULTS: 333 transcriptions of medical encounters between 130 physicians and 66 patients over a 2-year period were evaluated (mean patient age: 31yrs, 27% > 18yrs, male: 55%). Non-symptom related discussions included qualifying life and psychosocial impacts, nutrition, and exercise (28%), patient reported outcomes (27%) and symptom-related discussions (24%). The most commonly reported concerns were related to anxiety (n=61,9%), depression (n=44,8%) ability to perform daily activities (n=74,5%), and school/summer productivity (n=62,1%) and sleep (n=55,7%) were the most commonly reported symptoms (n=37,1%). CONCLUSIONS: PROs as a function of disease burden, were routinely discussed by patients with Cystic Fibrosis. PRO discussions were observed more frequently among adult patients than the pediatric patients, and symptom-related PROs were discussed more frequently than PROs related to quality of life and psychosocial impacts. Modalities to alleviate this burden are needed, including appropriate therapeutic interventions, warrant scrutiny.

PN48

DETERMINANTS OF QUALITY OF LIFE OF CHILDREN WITH EPILEPSY IN INDIA

Banag D1, Azad C2, Gugliani V2

1Institute of Pharmaceutical Research and Education, Mohali, Punjab, India, 2Government Medical College and Hospital, Chandigarh, India

OBJECTIVES: The objectives of this study were to assess the quality of life and the determinants affecting QoL in children with epilepsy using Pediatric Quality of Life Inventory (PedsQL) version 4.0. The prospective study was conducted in a public hospital in this study children less than 18 years of age, diagnosed with epilepsy were included. HRQoL was assessed using PedsQl, which correlates well with several other epilepsy indices. Each participant was assessed in four phases: baseline; 4 weeks; 12 weeks and 24 weeks. The main research question was to identify the determinants of HRQoL. RESULTS: A total of 270 children with epilepsy were included. The symptoms of the disease were also measured in this study. The most commonly reported symptoms included weakness (94%), memory problems (92%), and school performance (91%). CONCLUSIONS: The study showed that the main significant factors affecting the quality of life were the child’s age, severity of the disease, and the type of medication. These factors significantly affected the child’s QoL. The study provides evidence for the need for individualized treatment strategies for children with epilepsy.
drug treatment treatment, polythyrapy, low mean seizure free interval, male gender, presence of VASO, mean duration of disease are significantly (p < 0.05) associated with low HRQoL scores. CONCLUSIONS: Epilepsy has a negative impact on their HRQoL. The determinants found by this study will help in framing different strategies to improve patient’s compliance and their HRQoL.

PND49
THE IMPACT OF HERPES ZOSTER ON ABSENTEEISM AND QUALITY OF LIFE AMONG IMMUNOCOMPROMISED PATIENTS
Foley K.1, Durden K.2, Thomson E.2, Juneau P.3, Zhang D.4, Kawai K.5, Gebremeskel B.1
1South Carolina College of Pharmacy – USC Campus, Columbia, SC, USA, 2University of South Carolina, Greenville, SC, USA
OBJECTIVES: Little evidence exists on the impact of herpes zoster (HZ) on quality of life (QoL) and work absenteeism for immunocompromised patients. This study describes work absenteeism, and loss in quality of life due to HZ among immunocompromised individuals in the United States, UK, Canada, France and Germany.
METHODS: A web-based survey was conducted with adult males and females visiting 19 clinics (V1-V9 cancer or SCT; V10-V19 cancer and stem cell transplant (SCT); and V20-V29 HZ and cancer group) 2) cancer or SCT without HZ (cancer group); and 3) had neither cancer, SCT or HZ (immunocompetent group). Validated measures included the Brief Faux Inventory (BFI), activities of daily living (ADL), the EQ-5D-5L, and the World Health Organization Health and Work Performance Questionnaire (WHO HQP) for work absenteeism. Multivariable logistic regressions controlling for demographic characteristics and comorbidities examined the impact of HZ on the EQ-5D-5L and absenteeism relative to the cancer-immunocompetent groups.
RESULTS: Overall, there were 353 respondents with HZ (HZ and cancer group), 351 with cancer only, and 353 were immunocompetent. HZ patients had average pain scores that were at least 2 and 3 points greater (p < 0.001) than the cancer and immunocompetent groups respectively. Across all ADLs, HZ patients scored 4 and 5 points higher (p < 0.001) than the cancer and immunocompetent groups, respectively. HZ patients had 2 and 2.3 months of absenteeism than the cancer and immunocompetent (p = 0.006) groups, and scored 0.5 and 7.3 points lower on the EQ-5D-5L than the cancer and immunocompetent (p = 0.011) groups. CONCLUSIONS: HZ respondents had greater pain, more absenteeism and lower EQ-5D-5L scores than those without HZ. Despite the difference in HZ severity between HZ and cancer groups on ADLs and pain, these groups reported similar scores on the EQ-5D-5L, suggesting the EQ-5D-5L may not be sensitive enough to capture the impact of HZ.

NEUROLOGICAL DISORDERS – Health Care Use & Policy Studies

PND50
TRIPAT USE AND ASSOCIATED HEALTH CARE UTILIZATION AND COSTS IN ADULTS WITH MIGRAINES
Narayanan S.1, Wu J.1, Durden K.2, Thompson E.2, Juneau P.3, Zhang D.4, Kawai K.5, Gebremeskel B.1
1Tufts Health Analytics, Ann Arbor, MI, USA, 2Tufts Health Analytics, Austin, TX, USA, 3Tufts Health Analytics, Cambridge, MA, USA, 4Tufts Health Evans, Rydell, MD, USA, 5Mercer & Co., Inc, West Point, PA, USA
OBJECTIVES: Migraine is a common neurological disorder affecting 10% of adult population and has a significant economic impact. This study examined the associations between triptan use and migraine-related utilization and expenditures. Set the baseline for future research.
METHODS: Migraine respondents (N = 438 million people) were included in the survey and composed of about 30% of the US population. Migraine utilization patterns and ascertain differences in cost between triptan and non-triptan users in migraine patients.
RESULTS: Migraine utilization patterns and ascertain differences in cost between triptan and non-triptan users in migraine patients.

PND52
THE CHALLENGE OF MANAGING AGE-RELATED DISEASES IN CHINA: EXAMPLE OF ALZHEIMER’S DISEASE
Clyde S.1, Van J.2, Milea D.3, Ge L.4, Toumi M.4
1Creative-Ceuticals, Paris, France, 2Creative-Ceuticals, London, UK, 3Lundbeck Pte Ltd, Singapore, 4CIBA, Beijing, China
OBJECTIVES: Due to a rapidly aging population, age-related diseases, such as Alzheimer’s disease (AD), are becoming a great concern in China. The objective of this study is to examine the future scenarios of AD in China, and discuss the increasing prevalence of AD in China.
METHODS: A literature review was done to collect information on the disease management, the demographic projections, and medical capabilities available in China. To answer the questions that emerged from the literature review, a two-country team of experts and two hospital administrative payers were interviewed.
RESULTS: It was estimated that there would be 10 million cases of AD in China in 2010. As a typical aging disease, the burden of AD in China is sure to grow and will continue growing as the elderly population grows. Around 43% of the Chinese population is expected to be older than 60 in 2050, representing 438 million people. A large imbalance was found between AD management needs and availability of health care services for AD patients, as a result of 1. Chinese cultural value family care for the elderly, while the single-child policy resulting in 4 grand-parents and 2 parents being cared for by one child, 2. extremely poor awareness of AD in China both publicly and privavate (asattilated as dementia), and 3. limited medical capabilities for AD. As a result, it is predicted that an elderly Chinese population will have to take time to provide informal care for the elderly, leading to an important impact on the productivity.
CONCLUSIONS: Results suggest China is an emerging market for AD treatments. There is a large imbalance between AD management needs and capabilities to provide it in China.

PND53
DRUG EXPENSES FOR ALZHEIMER’S DISEASE IN BRAZIL: A DESCRIPTIVE ANALYSIS
SchneiderRF, Xavier LC, Mosca M, Alexandre RF, Nascimento Junior JM, Gadelha CAG, Ciole D1, Lee KM, Sabare K2
1University of Ottawa, Ottawa, ON, Canada, 2Canadian Agency for Drugs and Technologies in Health (CADTH), Ottawa, ON, Canada, 3Canadian Agency for Drugs and Technologies in Health, Ottawa, ON, Canada
OBJECTIVES: The Brazilian public health system (SUS) provides donepezil, rivastigmine and galantamine for all individuals with Alzheimer’s disease (AD). The Ministry of Health (MoH) is responsible for the acquisition of rivastigmine and donepezil, whereas the States are responsible for the acquisition of galantamine, reimbursed by MoH. The aim of this study is to characterize patients with AD and the financial resources employed by the MoH. METHODS: Descriptive analysis of the profile of patients and drug expenses, based on data about the amount dispensed and values reimbursed by the MoH in 2012, available in the database of the SUS (current values; exchange rate: US$ 1 = R$ 2.36). Were considered: a) MoH expenses with central acquisition of donepezil and rivastigmine and b) values of galantamine reimbursement. RESULTS: In 2012, 119,378 patients with AD were treated with medicines in the SUS. These patients had a mean age of 78.57 years and 65.87% were women. Most of them was treated with rivastigmine (42.98%), followed by donepezil (39.07%) and galantamine (17.95%). The annual costs per patient with galantamine were 17 times higher than donepezil (US$ 1,045.07 with galantamine, US$ 439.78 with rivastigmine and US$ 61.47 with donepezil). The MoH expenses in this period with these drugs summed up to US$ 14,176,227.12. This amount represented 0.73% of the total MoH’s budget of high-cost drugs in 2012. The biggest expenses occurred with rivastigmine (76.16%), followed by donepezil (12.09%) and galantamine (11.74%). CONCLUSIONS: Despite the higher cost of treatment with galantamine, the impact with rivastigmine was lower because it is the most common drug. The central acquisition of drugs results in lower treatment cost due to its scale economy and the public development partnerships results, a strategy aimed to strengthen the health industrial complex, the resource optimization and the access to medicines.

PND54
REIMBURSEMENT BASED ECONOMICS: AN APPLICATION TO TRIPAT TREATMENTS FOR MIGRAINE THERAPY
Ciole D1, Lee KM, Sabare KA2
1University of Ottawa, Ottawa, ON, Canada, 2Canadian Agency for Drugs and Technologies in Health (CADTH), Ottawa, ON, Canada, 3Canadian Agency for Drugs and Technologies in Health, Ottawa, ON, Canada
OBJECTIVES: The aim of this study is to provide a comprehensive analysis of the economic impact of using migraine treatment. The study is designed to provide a detailed analysis of the cost-effectiveness of migraine treatment. The study is designed to provide a detailed analysis of the cost-effectiveness of migraine treatment.