

ing  $95.51 \pm 10.09$ . Mean rate of own health on EQ-VAS was  $80.30 \pm 15.21$  and mean EQ-5D index, based on Polish TTO value set, was  $0.94 \pm 0.07$  (in the range from -0.523 to 1). Students of 1<sup>st</sup> year reported lowest QoL independently of the measure used: EQ-VAS  $76.4 \pm 17.72$  and EQ-index  $0.92 \pm 0.07$ . **CONCLUSIONS:** Generic questionnaires used in the survey are sensitive enough for measuring quality of life in young and relatively healthy population. Students of 1<sup>st</sup> year reported lowest quality of life with all questionnaires. The survey needs to be continued in next years.

#### PIH51

##### WHAT DO PATIENTS WITH RARE DISEASES EXPERIENCE IN THE MEDICAL ENCOUNTER? EXPLORING PATIENT-PHYSICIAN-INTERACTION PATTERNS, ITS ANTECEDENTS AND ITS CONSEQUENCES

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**OBJECTIVES:** A growing body of evidence links effective physician-patient communication to desirable outcomes such as improved adherence to treatment and higher satisfaction of both patient and physician. However, when it comes to rare diseases, the patient is forced to become knowledgeable about his own disease state and therapies. Our objective was to describe and specify the experiences of patient-physician-interaction in rare diseases, to develop an empirically derived typology of interaction patterns and to explore the challenges associated with each of these patterns. **METHODS:** We designed a multi-case study as a series of semi standardized interviews with patients suffering from rare diseases. Therefore we extracted six different rare diseases: Amyotrophic lateral sclerosis, Marfan's syndrome, Wilson's disease, Epidermolysis bullosa, Duchenne muscular dystrophy and Neurodegeneration with brain iron accumulation. A total of 120 interviews were recorded, transcribed and analyzed thematically based on emerging codes. **RESULTS:** As suggested, insufficient expertise of the health care providers proved to be a major problem in the highly specialized treatment process of rare diseases. Here, it is often the patient himself who becomes an expert to determine what kind and how much service he needs. Thus, we could identify the patient-directed interaction as a widely experienced communication pattern among patients with rare diseases. Physician's ability and willingness to accept the patient as an expert emerged as a major determinant for patient satisfaction. **CONCLUSIONS:** People with rare diseases often face challenges due to the low prevalence and the resulting lack of knowledge among their providers. Our study showed the relevance of the provider's ability to acknowledge the active role of the patient as an informed, involved and interactive partner in the treatment process. However, allowing the patient to control therapy may require a change of mind-set with some longstanding traditional roles in healthcare.

#### Individual's Health – Health Care Use & Policy Studies

#### PIH52

##### MEDICINE PRESCRIBING PATTERNS IN HIV/AIDS AND NON-HIV/AIDS CHILDREN: A COMPARATIVE STUDY IN THE PRIVATE HEALTH CARE SECTOR OF SOUTH AFRICA

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**OBJECTIVES:** Although the prevalence of human immunodeficiency virus (HIV) infection among children is reported to be high, little is known about antiretroviral (ARVs) treatment patterns. This study aims to compare medicine prescribing patterns of children with HIV/AIDS to those without HIV in the private health care sector of South Africa. **METHODS:** A quantitative, retrospective drug utilisation review was performed utilising medicine claims data of a pharmacy benefit management company. Data for a four-year period (January 1, 2005 to December 31, 2008) were analysed. The study population consisted of all children ( $\leq 12$  years, divided into those receiving ARV medications and a control group ( $\leq 12$  receiving ARVs). Data were analysed using the SAS<sup>®</sup> Programme (9.1). **RESULTS:** A total of 0.2% of all children in 2005 (N = 197 323) received ARVs versus 0.4% in 2008 (N = 98 939). HIV/AIDS children received  $7.39 \pm 4.69$  prescriptions for ARVs per year during 2005 versus  $9.72 \pm 4.49$  in 2008. An average  $3.05 \pm 0.65$  ARVs were prescribed per prescription in 2005 versus  $3.19 \pm 0.58$  in 2008. HIV/AIDS children received  $11.51 \pm 7.17$  prescriptions for other medication (non-ARVs) per year during 2005 and  $13.46 \pm 7.14$  during 2008 compared to  $3.86 \pm 3.71$  (d = 0.8) prescriptions per year in 2005 and  $4.36 \pm 4.05$  (d = 1.25) in 2008 for the control group. HIV/AIDS children received mostly sulphonamides and combinations, followed by antitussives and expectorants, penicillin and combination analgesics whereas the control group received mostly penicillin followed by antitussives and expectorants, combination analgesics and analgesics/antipyretics. **CONCLUSIONS:** There was an increase in the number of children with HIV/AIDS over the study period. These children received significantly more prescriptions per year than the control group. Further research is needed to investigate the future medicine treatment cost of HIV/AIDS children in the South African private health care sector.

#### PIH53

##### ALPHA BLOCKERS, 5-ALPHA REDUCTASE INHIBITORS, PDE-5 INHIBITORS AND ANTIMUSCARINIC MEDICATION USE IN US PATIENTS DIAGNOSED WITH BENIGN PROSTATIC HYPERPLASIA, AND LOWER URINARY TRACT SYMPTOMS WITH AND WITHOUT ERECTILE DYSFUNCTION

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**OBJECTIVES:** To evaluate the alpha blockers, 5-alpha reductase inhibitors, PDE-5 inhibitor and antimuscarinic medication use in US patients diagnosed with benign prostatic hyperplasia (BPH), lower urinary tract symptoms (LUTS) and erectile dys-

function (ED). **METHODS:** Employing a retrospective study design on a large US healthcare claims database (MarketScan), male patients aged 18+ with a diagnosis for BPH, LUTS and/or ED between 1/1/07 and 12/31/09 were identified. Patients with prostatectomy were excluded. Eligible patients had 24 months of continuous pharmaceutical and medical benefit coverage. Chi-square and Wilcoxon tests were used to make statistical comparisons between cohorts: BPH Only (BPH), ED Only (ED), BPH+ED, BPH+LUTS w/o ED and BPH+LUTS w/ED. **RESULTS:** There were 308,844 patients that met inclusion criteria, and overall 33%, 15%, 19%, and 6% had a prescription for alpha-adrenergic antagonist, 5-alpha-reductase inhibitor, phosphodiesterase-inhibitor, and antimuscarinic, respectively. Overall, 53% had medication use where 6% received combination therapy, 19% switched therapy and 36% discontinued therapy. BPH patients had higher rates of combination medication use (8% vs. 1%,  $p < 0.0001$ ); switching (8% vs. 7%,  $p = 0.0017$ ) and medical visits (17 vs. 14 mean visits,  $p < 0.0001$ ) than ED patients. However, ED had higher rates of therapy discontinuation (27% vs. 15%,  $p < 0.0001$ ) than BPH and ED. In addition, BPH+ED had higher switching (15% vs. 8%,  $p < 0.0001$ ), discontinuation (24% vs. 15%,  $p < 0.0001$ ) and medical visits (19 vs. 17 mean visits/yr,  $p < 0.0001$ ) than BPH. Furthermore, BPH+LUTS w/ED had higher switching (24% vs. 18%,  $p < 0.0001$ ), discontinuation (27% vs. 22%,  $p < 0.0001$ ) and incurred more medical visits (25 vs. 23 mean visits/yr,  $p < 0.0001$ ) than BPH+LUTS w/o ED. **CONCLUSIONS:** BPH and BPH+LUTS patients with ED had higher switching and discontinuation rates than patients without ED. Thus, patients with comorbid ED may require more extensive pharmacologic management and monitoring, resulting in more medical visits than patients without ED.

#### PIH54

##### ANALYSIS OF THE FORMULARY ENSURE CHILDREN'S HOSPITALS IN UKRAINE: FIRST RESULTS

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**OBJECTIVES:** The Order of Ministry of Health (N 529 from July 22, 2009) was introduced system of formulary medicines in Ukraine. In 2011 the third edition of the Ukrainian State Formulary of medicines was made. However, the State formulary for children in Ukraine has not been adopted. **METHODS:** We conducted a retrospective analysis of a local formulary for children, according to two divisions - Children's neonatology and intensive care for children in an Lviv medical hospital. We used the method of ABC-analysis, the costs and rates of provision children's medicines for public funds and resources for parents. **RESULTS:** Established that the local formulary of children's health-care setting contains 443 medicines with 14 ATC -groups. The major share of exchanges takes four groups: A-20%; R-16%; J -14%; N - 12%. Determined that the cost of treatment of pulmonary surfactant preparations is 1175 euros for one child (at June 1, 2011, 1 Euro = 11,40 UAH). Provision of surfactant for infants for the budget is only about 28%, the rest is funded by parents. In the Formulary 17 includes antibiotics, of which only 24% provided by the budget, the rest - at the expense of patients. Innovative antibiotics financed only by 2-4% of the requirement. In children's hospitals 2.5% took medication extemporaneous production, in particular vitamin powders, solutions, powders with folic acid, solution for rehydration, and others. **CONCLUSIONS:** Real data of medicines in children's hospitals do not meet the need. Necessary to create the State formulary for children, costs to be financed from public funds. The method of "willingness to pay" to determine the list of medicines that will pay parents.

#### PIH55

##### NECESSITY OF ADMISSIONS AND HOSPITALIZATIONS IN SELECTED TEACHING UNIVERSITY AFFILIATED AND PRIVATE HOSPITALS OF SHIRAZ, IRAN IN 2007

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**OBJECTIVES:** The use of acute hospital beds is an issue of concern both to policy-makers and practitioners. In most countries attempts to improve efficiency and reduce costs in this sector. One of the most widely used instruments for assessing inappropriate hospital use is Appropriateness Evaluation Protocol (AEP), which consists of a set of standards based on objective criteria relating to the condition of the patient or clinical services received. The aim of this study was to measure inappropriateness of admission and inpatient stays in four major hospitals of Shiraz, Iran. **METHODS:** One of the most widely used instruments for assessing inappropriate hospital use is Appropriateness Evaluation Protocol (AEP), which consists of a set of standards based on objective criteria relating to the condition of the patient or clinical services received. **RESULTS:** Results: The results showed that 22% of the total admissions in four hospitals were rated as inappropriate. Most and least inappropriate admissions were found in both teaching university affiliated hospitals. Our data show that a total of 29.6% (average 6.40%) of the hospital stays in the sample were judged to be inappropriate. The result of Least Significant Difference (LSD) Test showed a significant association between the mean days of inappropriate stay and turn of admission in all hospitals. In all hospitals, a significant association was observed between inappropriateness of hospital stay, costs and length of stay. **CONCLUSIONS:** Considering the findings of this study and other studies in Iran and other countries, we can conclude that factors involving in inappropriate admission of patients in the hospitals are mostly fixed and similar factors. To solve this problem we can use some strategy such as: Improving the performance of the referral system, using standard criteria for an appropriate evaluation protocol by the medical staff, Extending of outpatient diagnosis services for reducing of inappropriate hospitalization.