

dex scores have been slightly increased from 0.94 to 0.96 during 2007-2010. Male adults had higher EQ-5D index scores than female (0.96 vs. 0.92). Elderly (age $\geq$ 60) had significantly lower EQ-5D index scores (score ranges: 0.02 to 0.11) than young adult (age=19-29) after adjusting for other variables. EQ-5D index scores were significantly reduced by stroke (reduced by -0.10), arthritis (reduced by -0.05), cardiovascular disease (reduced by -0.04), and diabetes (reduced by -0.02). **CONCLUSIONS:** QOL in South Korean adults was significantly reduced by chronic diseases and age. Despite national efforts to detect and treat chronic diseases at early stage of disease, significant reduction in QOL due to chronic diseases still exist. It is emphasized the need for implementation of effective public health programs for decreased prevalence of chronic diseases.

#### PIH38 CAPTURING QUALITY OF LIFE IN CONDITIONS WITH FLUCTUATING SYMPTOMS

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**OBJECTIVES:** In a real world setting, to design a system to measure the effect of fluctuating symptoms (problem periods) by capturing information on days of the largest and smallest impact. **METHODS:** The evaluation was conducted throughout the UK using a web-based system - PROBE (patient reported outcome based evaluation). We investigated women reporting problems with their periods. The issues in setting out and programming the study design were a) determining the day on which they would suffer the greatest impact, b) duration of impact c) predicting when the normal data could be collected. Variability exists between woman to woman and between cycles for each woman. The problems were addressed by an initial screening questionnaire, which determined time between menses, length of menses, regularity of menstrual cycle and date of next menses so that questionnaires could be sent out on the appropriate days. 5 consecutive days of questionnaires were completed during menses and 3 consecutive days between menses. Measures included demographic data, symptoms, previous treatments, current medications, absenteeism, presenteeism, HRQoL using SF 36 and EQ 5D. **RESULTS:** Target numbers were 2000 for the screening questionnaire and 200 for the main survey, in reality 2699 women participated in the screening questionnaire with 331 in the main survey. 165 women completed the survey at both the time of menses and between menses allowing a direct comparison of their reported outcomes. On the validated questionnaires the data quality was high as reported by the Copyright holders. Significant findings were obtained on the primary and secondary measures. **CONCLUSIONS:** This evaluation shows that a web based survey system (PROBE methodology) is flexible, interactive and reliable in obtaining patient reported outcomes in a condition with fluctuating symptoms.

#### PIH39 OCCUPATIONAL STRESS AND BURNOUT: IMPACT ON THE ATTITUDES OF PHARMACISTS IN PROVIDING PHARMACEUTICAL SERVICES

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**OBJECTIVES:** To determine the relationship between occupational stress and burnout of pharmacists in community pharmacies as well as the influence on the pharmacists' attitudes about their own work with patients. **METHODS:** The sample included 278 pharmacists employed in community pharmacies, 172 of whom were from state and 106 from private pharmacies. Instruments used: self-assessment tests for levels of stress and burnout, and Pharmacists' Attitudes and Beliefs Scale (PABS) created for research purposes. **RESULTS:** More than half of the pharmacists are under stress (56.1%), and 34.1% of pharmacists have symptoms of burnout. There is a correlation between scores on the test for self-assessment of stress levels and the following variables of PABS scale: the degree of burnout ( $r = 0.767, p < 0.01$ ), pharmacists' opinion that patients take their precious time ( $r = 0.656, p < 0.01$ ) and conflicts ( $r = 0.516, p < 0.01$ ). The degree of burnout is correlated with the pharmacists' perception that patients do not understand the instructions about the therapy they receive from the pharmacists ( $r = 0.701, p < 0.01$ ). Depending on the working environment (pharmacists working alone in shifts, with other colleague/s or with technicians) pharmacists differ significantly in the level of stress ( $F(3,274) = 5.6, p = 0.01$ ), as shown by the correlation between these variables ( $r = -0.517, p < 0.01$ ). There is a correlation between stress levels and the degree of burnout. Pharmacists who are stressed have a feeling that their patients are consuming valuable time and often came into conflict with patients. The degree of burnout is correlated with the pharmacists' perception that patients do not understand the instructions about the therapy they receive from the pharmacists. **CONCLUSIONS:** The results show that the stress of pharmacists causes burnout, leading to changes in the pharmacists' attitudes about their own work with patients.

#### PIH40 WHAT DO HEALTH ECONOMISTS EXPECT FROM THEIR EMPLOYER- RESULTS FROM AN ON-LINE SURVEY IN GERMANY

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**OBJECTIVES:** The business model of the pharmaceutical industry is changing and a higher emphasize is placed on health economic expertise in order to demonstrate not only clinical but also economic value of new products. While many studies evaluate work preferences of physicians, we have not come across a study on health economists, although their importance is increasing. To fill this gap, we surveyed health economics students and experienced health economists about their job expectations and job preferences. **METHODS:** From the management literature we have identified four relevant factors that affect job satisfaction: Corpo-

rate culture, employer's reputation, financial remuneration, and scientific way of working. By means of an online survey we have asked 54 health economics students and experienced health economists about the importance of those factors. The respondents also had to assess the expression of the factors within industry, academia, insurances, hospitals, and associations. **RESULTS:** Experienced health economists differ in their work preferences from health economic students. For students, the financial aspect of the job plays a bigger role compared to the experienced health economists. For both groups, corporate culture is the most important determinant of job satisfaction. The academic sector enjoyed the highest reputation, while the perception of the remuneration in this sector was low. An opposite pattern was observed for the pharmaceutical industry. Only 6% of the health economist students are interested in an industry career, the majority wants to work in hospitals and health insurance companies. **CONCLUSIONS:** From an industry perspective, it is recommended to raise awareness for career opportunities in the pharmaceutical industry. This particularly applies against the background of demographic change and increasing demand for health economists.

#### INDIVIDUAL'S HEALTH - Health Care Use & Policy Studies

#### PIH41 LONG-TERM FISCAL IMPLICATIONS OF FUNDING ASSISTED REPRODUCTIVE THERAPIES: REVIEW OF THE LITERATURE

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**OBJECTIVES:** Progressive population ageing in developed countries leads the assessment of policies that favor birthrates. Thus, the purpose of this study was to assess the evidence available about long run net fiscal implications of State-subsidize assisted reproductive therapies (ART). **METHODS:** Systematic review of articles published both in English or Spanish during the last decade combining the search terms: "infertility", "assisted reproductive technology", "economics/cost and cost analysis" was conducted on Medline, Embase and Cochrane Library databases. Reference lists of included studies were also searched to identify other relevant studies. **RESULTS:** A total of 86 articles were identified, of which 13 (15%) were included in this review. Of these, 5 (38%) economically quantified lifetime future net tax revenues from an ART-conceived child in different countries (Brazil, Denmark, Sweden, UK and United States) applying a generational accounting model. Results from these studies concluded that each monetary unit invested in funding ART would revert in tax benefits for the States estimated between 1.24 and 13.91 monetary units. The age at which at which the financial position between the individual and the State begins to be favourable to the States was established between 38 and 41 years. **CONCLUSIONS:** Generational accounting models allow estimating long-term fiscal implications of public funding of ART. It would be recommendable to have a similar analysis for Spain in order to inform decision makers about policies which encourage birthrates.

#### PIH42 EFFECTIVENESS OF A PROTOCOL FOR RESPIRATORY SYNCYTIAL VIRUS (RSV) IMMUNOPROPHYLAXIS IN PRE-TERM INFANTS BORN AT <34 WEEKS GESTATION AGE

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**OBJECTIVES:** 1) To evaluate the effectiveness of a Protocol for respiratory syncytial virus (RSV) immunoprophylaxis in pre-term infants born at <34 weeks gestation age (GA), and 2) To calculate economic burden in accordance with the Protocol versus labeled indication for palivizumab. **METHODS:** Setting: Spain/1500-bed Hospital. RSV season: October 2011 through March 2012. An evidence based protocol on SRV prophylaxis was developed by the Neonatal Intensive Care Unit (NICU) and Pharmacy Department. The protocol recommended prophylaxis for infants: 1) Born at 32-34 weeks of GA who were born later 1st August and having school-aged brothers or sisters. 2) Born at 29-32 weeks of GA if younger than 6 months of age. 3) Born at <28 weeks of GA-if younger than 12 months of age. These criteria were more restrictive than palivizumab label. All patients received palivizumab 15 mg/kg and a maximum of 5 doses was administered. All data were gathered from electronic medical record. The patients were followed until May 1, 2012. The cost of 100 mg vials of Palivizumab were 814, 3€. **RESULTS:** A total of 168 children <35 weeks of GA were born from January 2011-March 2012. Ninety-six patients were treated with palivizumab. 9 of them needed hospitalisation because RSV: 72 children <35 weeks of GA, who did not perform our criteria for palivizumab administration. None of them were hospitalised because RSV. The economic burden of palivizumab treatment was 353.000 €. Using this protocol we have been able to obtain a saving of the 68.2% compared to the label recommendations. **CONCLUSIONS:** The protocol appears to cover all subgroups of patients at risk of RSV infection. Patient selection based on the best evidence hasn't had a negative impact on clinical outcomes. The palivizumab use can be optimized if highest risk of RSV infection infants are correctly identified.

#### PIH43 COMPARISON OF UNINTENDED PREGNANCY RATES AMONG WOMEN WHO INITIATED ORAL CONTRACEPTIVE THERAPY WITH A 84/7 ESTRADIOL OR A 84/7 PLACEBO

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