information on behavior of the pathogen distribution for all age groups and their changes over time and is thereby a real extension to classical static decision tree based methods in HTA. The used validated simulation system is dealing with transparent parameters and is better understandable for decision makers in HTA.

**ANTI DEPRESSANT PRESCRIBING TO PATIENTS AGED 18 YEARS AND YOUNGER**

**OBJECTIVES:** Antidepressants carry an increased risk of suicidality in children, adolescents and young adults. The primary aim was to determine antidepressant prescribing and cost to patients aged 18 years and younger in a South African private health care sector population. **METHODS:** A retrospective, cross-sectional, pharmacoeconomic study was undertaken on prescription data of a private pharmacy group in South Africa for 2009. The study focused on antidepressant prescribing. No diagnoses were available, a total of 814540 antidepressants were prescribed, of which 12549 were prescribed to patients aged 18 years or younger. **RESULTS:** A total of 4269 patients (53.74% females) received an average of 2.94 (SD = 3.31) antidepressants over the year. The total cost of antidepressant prescribing was R1.581480, with an average cost of R126.02 per product (item). Two-thirds (66.67%) of antidepressants were prescribed to patients from 12 to 18 years of age. Selective serotonin re-uptake inhibitors (SSRIs) accounted for 55.91% of antidepressant prescribing, followed by tricyclic antidepressants (32.32%), together accounting for 79.45% of antidepressant cost. Lithium was only prescribed to 1.04% of patients in this age group. The lowest average cost was for serotonin and noradrenaline re-uptake inhibitors (SNRIs) (R322.94 per product), selective mono-amine oxidase inhibitors (R177.20) and SSRIs (R1355.52). Tablets were the preferred dosage form. The most frequently prescribed active ingredients were imipramine (19.77%), escitalopram (14.60%), citalopram (14.09%) and fluoxetine (13.92%), together accounting for 62.38% of prescribing frequency. **CONCLUSIONS:** Diagnoses were not available, therefore only prescribing trends could be investigated. Fluoxetine generally has a favourable risk; benefit balance (prescribed “off label”), yet it only had a prescribing frequency of 11.92% in this study. Active ingredients such as escitalopram and citalopram are not preferable in this age group. The risk of prescribing antidepressants in children, adolescents and young adults should be balanced against the clinical need.

**AN ESTIMATE OF COSTS AND BENEFITS OF ALTERNATIVE METHODS OF DELIVERY: AN EMPirical ANALYSIS IN AN ITALIAN HOSPITAL**

**OBJECTIVES:** There is a large increase in caesarean sections (CSs) in Europe seems not to be completely justified. CS is practiced independently of epidemiological evidence. This work analyzes costs and benefits of two methods of delivery: vaginal delivery (VD), with and without epidural anesthesia, and planned caesarean. **METHODS:** The empirical analysis has been conducted in an Italian University hospital, through direct collection of data, questionnaires and interviews with patients and staff. A logistic regression model has been used to define the probability of the event “delivery with planned caesarean section” occurring as a function of a set of clinical and socio-economic characteristics of the women. **RESULTS:** The results confirm the hypothesis that CS is performed for nonmedical reasons (Osborn, 1995). The analysis shows that CS is, on average, more expensive than VD, but the difference is marginal if we take into account the opportunity-cost of labour time. **CONCLUSIONS:** Since CS is generally reimbursed more than VD to cover the supposed higher costs of surgery, differences between the real costs and the DRG tariffs may induce opportunistic behaviour in terms of clinical practice. We show that, in general, VD with analgesia provides better results both in terms of costs and, but the final effect of its introduction is not clear: it may reduce the frequency of inappropriate caesarean sections, but it may also increase the costs due to complications.

**EVALUATING THE PERCEPTION OF HOSPITAL PHARMACIST TOWARDS THEIR CURRENT CLINICAL ROLE IN HEALTH CARE SYSTEM OF PAKISTAN**

**OBJECTIVES:** To investigate hospital pharmacists’ perception towards their current clinical role in Pakistan’s health care system. **METHODS:** The study population consisted of hospital pharmacists from three cities of Punjab, Pakistan; Islamabad, Faisalabad and Lahore, a sample of 116 hospital pharmacists was selected from government hospitals from these three cities. **RESULTS:** At least 77.6% of the hospital pharmacists involved in patient counseling in Pakistan. Although they are willing to take personal responsibility to resolving any drug related problem but pharmacist (n = 98, 84.5%) conveyed that their current role is more focusing towards the record keeping of hospital pharmacy. Only (n = 67, 57.8%) of the hospital pharmacist expressed that they are involved in making and designing of hospital formulary. In this case significant difference was noted with respect to age (p = 0.020) and gender (p = 0.036). As far as experience with other health care profession is concern, only (n = 60, 51.7%) of the respondents were agreed of having collaborative relationship with other health care professional. Moreover only (n = 65, 56.0%) of the hospital pharmacist agreed regarding their suggestion taken into consideration by physician. **CONCLUSIONS:** The findings suggest that the hospital pharmacists in Pakistan do have concerns about their present professional role but they are facing significant barriers in terms of increasing clinical services. Moreover, pharmacists need to be proactive in collaboration with other health care professionals. This paves the way for the concept of pharmaceutical care in health care system of Pakistan.