

IBM SPSS for windows statistical software version 20 (SPSS Inc, Chicago, USA). Data was presented using descriptive statistics (i.e. numbers, percentages). **RESULTS:** A total of 450 questionnaires were administered to the respondent. After exclusion, finally 378 respondents were included. Majority of the respondents (94%) accepted their habit of practicing self-medication. In this study, 86% of the respondents were found to have habit of advising medicines to others, while 70% respondents tried medicines according to their friend's suggestion. Most common reason cited for self-medication was found to be convenience (42%), followed by quick relief (21%), time saving (13%), economical (10%) and others (14%). **CONCLUSIONS:** Self-medication is highly prevalent in pharmacy students. One potential reason could be the easy availability of wide range of drugs without prescription.

#### PIH9

##### RISK FACTORS AND CAUSES OF INTRAUTERINE DEATH

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**OBJECTIVES:** To measure all those risk factors of danger that may lead to intrauterine death. To introduce the frequency of intrauterine death related to maternal origins and the diseases of the foetus. **METHODS:** Our research was carried out in Teaching Hospital Markusovszky, Szombathely. We examined 50 pregnancies followed by intrauterine death by document analysis between the period of 1 January, 2007 and 31 December 2014. We applied average and frequency calculation within descriptive statistical methods for analyzing data. Defining the relation between the two variants, we calculated chi2 probability ( $p < 0,05$ ). **RESULTS:** Significant differences can be seen between incidence rate of foetal death regarding singular pregnancies CI 0,78-0,97 and multiple pregnancies CI 0,02 - 0,21; as well as in terms of foetal death between undeveloped foetus CI 0,23-0,49 and developed foetus between CI 0,50-0,76. Our examination found that in most cases there were maternal predisposing factors, operation carried out previously on the mothers, and circulatory diseases ( $p > 0,05$ ) which were followed by endocrin diseases ( $p > 0,05$ ). The most frequent predisposing factors of the foetus were placenta abnormalities in particular placenta abruptio. According to our examination, the riskiest period in terms of intrauterine death is between 25-30 gestational weeks. There were 19 (38%) boy and 33 (66%) girl foetus morti. The most frequent intrauterine deaths are among the foeti of 501-1000 grams and 31-35 centimeters. According to our examination maternal predisposing factors were hypoxia, multiple pregnancy, obesity, hyperthyroidism and smoking. The following risk factors of foetus occurred: dysmaturity, abruptio placentae, polyhydramnion, premature birth, developmental abnormality of the foetus. **CONCLUSIONS:** For the decrease in number of intrauterine deaths, it would be extremely important to record accurate maternity anamnesis. In our view, with early identification of exposure to risk, prevention of complications and its early identification, stillbirths can be reduced

#### INDIVIDUAL'S HEALTH – Cost Studies

#### PIH10

##### IMPLANT VERSUS ORAL CONTRACEPTION USE: 3-YEARS BUDGET IMPACT ANALYSIS FOR THE NATIONAL HEALTH SYSTEM IN PORTUGAL

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**OBJECTIVES:** To develop an interactive tool to estimate the budget impact of implant versus daily oral contraception (OC) use over a 3-year time horizon. **METHODS:** A previously developed and published decision-analytic model was adapted to build an interactive tool in which users can evaluate the costs of implant and OC use over 3-years (healthcare payers' perspective) for a given population and by customizing some model inputs. Costs associated with a population of women initiating each method are calculated at the end of each year and for 3 years cumulatively. The model allows method discontinuation throughout time followed by switch to another hormonal contraceptive or drop out. Pregnancy and contraceptive costs incurred after switching or drop out are allocated to the starting contraceptive method. Model inputs: 1) contraceptive methods discontinuation and failure rates; 2) risk of dropping out contraception and due probability of getting pregnant; 3) market share for hormonal contraceptives; 4) pregnancy outcomes probability and costs; 5) contraceptive and medical follow-up costs. Model outputs are unplanned pregnancies and costs. Default scenario is presented for national level (Portuguese sources of data were used when available, including unit costs). **RESULTS:** National default results were calculated for 1000 women. Implant utilization was associated with higher costs at the 1st year (due to its acquisition and insertion). For the 2nd, 3rd year and for cumulative results OC was associated with higher costs due to higher risk of unplanned pregnancies. **CONCLUSIONS:** A tool was created to provide healthcare stakeholders with the opportunity to perform a customized analysis and to make evidence-based decisions considering the economic perspective when assessing the most appropriate methods to offer women in the NHS setting. In the Portuguese default scenario implant initial acquisition and insertion costs are offset by decreased pregnancy related costs, when comparing with OC use during 3 years

#### PIH11

##### BEMFOLA® CAN POTENTIALLY REDUCE DRUG WASTAGE AND ASSOCIATED COSTS OF INTERTILITY TREATMENT

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**OBJECTIVES:** Bemfola®, an EMA approved Gonal-f® biosimilar, is a recombinant follicle-stimulating hormone (rFSH) used for in-vitro fertilisation (IVF). Bemfola®

is an equally efficacious alternative to urinary derived FSH, Menopur®. One differences between these products is their delivery devices; Gonal f® is provided as a multidose pen, Menopur® in vials or multidose preparation, and Bemfola® as a fixed dose pen. The aim of this study was to determine the impact of delivery device on drug wastage and associated cost. **METHODS:** A retrospective analysis of Gonal-f® and Menopur® prescription and usage data from five UK infertility clinics was conducted to identify the level of wastage occurring from IVF cycles. Data collected included: number IVF cycles conducted in previous 12 months; daily dose; length of treatment; dose adjustment following ultrasound scan and FSH formulation(s) prescribed. The drug wastage for each patient was calculated and results compared to the potential Bemfola® wastage for these patients. The wastage cost was then determined using NHS list prices. **RESULTS:** A total of 4724 IVF cycles were incorporated into the analysis. Of the 4078 Gonal-f® cycles, overall drug wastage was 650,775IU (5.7% of total dose prescribed) equating to 160IU per patient. For the 646 Menopur® cycles the wastage was 190,163IU (11.6% of total dose prescribed) equating to 294IU per patient. Had Bemfola® been used in these patients, the wastage would have been reduced to 104IU and 61IU per patient respectively. The use of Bemfola®, across all cycles, results in a drug wastage reduction of 376,800IUs and an associated cost saving of £100,011. Extrapolating this data to the annual number of UK IVF cycles results in a potential cost saving of £1,157,579. **CONCLUSIONS:** Using Bemfola® as an alternative to Gonal-f® or Menopur® can potentially reduce drug wastage and associated costs to both patients and the NHS.

#### PIH12

##### COST-EFFECTIVENESS ANALYSIS OF BOTULINUM TOXIN TYPE A TREATMENT FOR CEREBRAL PALSY

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**OBJECTIVES:** To conduct a cost-effectiveness analysis of abobotulinumtoxinA+standard therapy (ST), onabotulinumtoxinA+ST and standard therapy solely in patients with spastic cerebral palsy in Russia for 2-year period. Standard therapy includes centrally acting muscle relaxant, physiotherapy, casting and orthosis. **METHODS:** A decision tree model used to simulate the effects of abobotulinumtoxinA, onabotulinumtoxinA and standard therapy. The data on drugs efficacy (measured as proportion of patients with spastic forms of cerebral palsy, avoided orthopedic surgery at 2nd year of therapy) was obtained from available clinical trials. In the long term, surgery in older children with cerebral palsy have lower risk of recurrence compared with the operations carried out in early childhood. In this regard, there is a particular importance of botulinum toxin therapy effect on the likelihood of reducing the frequency of the orthopedic surgeries or postponing them at a later period by reducing spasticity and prevent contractures. The following costs were taken into account: the costs of pharmacotherapy, inpatient and outpatient care, costs of adverse events, sanatorium-resort medical care, casting orthopedic surgeons, disability pensions, disable child care benefit. **RESULTS:** It was revealed that the abobotulinumtoxinA+standard therapy helps to avoid surgical intervention in 93% of patients compared to 90% of patients with onabotulinumtoxinA+standard therapy and for 48% of patients with standard therapy. It was found that the regimen abobotulinumtoxinA+standard therapy has the lowest cost-effectiveness ratio (11,509 RUB/215 \$) in comparison with drug therapy onabotulinumtoxinA+standard therapy (12 872 RUB/ 238 \$) and standard therapy with a centrally acting muscle relaxant without BTA (27 715 rubles/467 \$) by the end of 2 years of treatment. **CONCLUSIONS:** Treatment scheme abobotulinumtoxinA+standard therapy is considered the most cost-effective one for spastic cerebral palsy therapy in the Russian Federation compared with onabotulinumtoxinA+standard therapy and standard therapy solely.

#### PIH13

##### ESTIMATING THE LIFETIME INDIRECT COST OF CHILDHOOD OVERWEIGHT AND OBESITY: A MARKOV MODELLING STUDY

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**OBJECTIVES:** To estimate the lifetime indirect cost of childhood overweight and obesity for Germany. **METHODS:** An incidence-based lifetime cohort model was developed using Markov modelling approach. The model consisted of two parts: (a) Model I used German data on prevalence of BMI categories (normal weight, overweight and obesity) during childhood and adolescence to evaluate BMI trajectories before the age of 18; and (b) Model II analysed the lifetime BMI trajectories based on the history of childhood BMI and estimated lifetime excess indirect cost attributable to childhood overweight and obesity. The model used data from the German Interview and Examination Survey for Children and Adolescents (KiGGS) and the German Microcensus 2009. Indirect costs were defined as the opportunity cost of lost productivity due to morbidity or early mortality and were identified through a systematic literature review. **RESULTS:** Our analysis showed that the majority of overweight and obese children remained in the same BMI category during their adult life, resulting in significant indirect costs over the lifetime. We estimated that overweight and obesity during childhood resulted in an excess lifetime cost per person of 4,209 EUR (discounted at 3%) for men and 2,445 EUR (discounted at 3%) for women. For the current prevalent German population, the excess lifetime cost of overweight and obesity was 145 billion EUR (discounted at 3%). **CONCLUSIONS:** Our study showed that overweight and obesity during childhood results in significant economic burden on the society. Therefore, cost-effective strategies targeted at reducing the prevalence of obesity during the early years of life can significantly reduce both healthcare and non-healthcare costs over the lifetime.

#### PIH14

##### COST STUDY OF ASSISTED REPRODUCTIVE TECHNOLOGIES IN UKRAINE

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