found to have adequate knowledge and practice. Significant associations were noted for knowledge-practice groups with parents' age, education level, and family income (p<0.05). CONCLUSIONS: Understanding parents' knowledge and practice is an important factor in order to improve immunization uptake and timeliness. Educational interventions targeting parents with inadequate knowledge and practice about childhood immunization are needed.

PIH9 PREVALENCE AND PREDICTOR OF ANTIDEPRESSANTS USAGE DURING PREGNANCY IN THE US: AN HANES STUDY

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OBJECTIVES: To determine (1) the prevalence of antidepressants usage among pregnant women in the US and (2) the characteristics of women who were using antidepressants.

METHODS: We used data of 12,488 United States women (age ≥ 20 years) who participated in the National Health and Nutrition Examination Survey (NHANES) from 2005-2006 (NHANES examination survey of the US population) and who were known to be pregnant at the time of the interview. Antidepressant utilization was assessed as reported by the study participants. Logistic regression models were used to identify factors associated with antidepressants usage in pregnancy. RESULTS: The prevalence of antidepressant usage increased from 3.1% to 9.7% in 2001 to 2012 (p<0.001). Among those women who reported using antidepressants 15-45% had a diagnosis of clinical depression. Selective Serotonin Reuptake Inhibitors (SSRIs) were found to be the most commonly prescribed class of antidepressants (78.9%). Race was found to be a strong predictor of antidepressant use. Non-Hispanic White women were found to be 3.18 times more likely to be on antidepressants compared to other races (OR = 3.18, 95%CI 1.95 – 4.56). The other factors found to be significantly associated with antidepressant use were age, diagnosis of depression, and education. CONCLUSIONS: Utilization of antidepressants during pregnancy has increased in the past decade specifically the use of SSRIs. The prescription of antidepressants varies significantly by age, race, and education. Although an increase in antidepressant use potentially signifies treatment of maternal depression, it stresses the need for clinical guidelines to treat maternal depression.

PIH10 DEVELOPMENT, VALIDATION, AND ANALYSIS OF A LINEAR REGRESSION MODEL PREDICTING CHILD’S BIRTHWEIGHT FROM MOTHER’S RACE, EDUCATION LEVEL, SMOKING STATUS, AND GESTATION AGE

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OBJECTIVES: Birthweight is a strong predictor of an individual’s baby’s survival as well as overall infant mortality and low birthweight is associated with adverse health outcomes. This study utilized a linear regression model to predict a child’s birthweight from the mother’s race, education level, smoking status, and gestation age. METHODS: A publicly available dataset of births in Philadelphia, PA from 1995-2005 was analyzed on five variables: mother's race, years of education, smoking status during pregnancy, and gestational age (weeks) and birthweight (gms). The dataset was randomly divided into 2 subsets for model development and validation. The model was developed against the validation dataset, verified against the validation dataset, and retailed to the entire sample to generate the final results. RESULTS: The final fitted model was: Y = 30 + 1.61X1 + 0.43X2 + 0.6X3 + 0.23X4 + 0.04X5 where: Y indicates the mother’s race was black, X1 indicates the mother smoked during pregnancy, and X4 represents gestation age (centered). Mother’s education was dropped from the model due to lack of significance. Negative effects were observed for race (β = -227.22, 95% CI: [-287.01, -167.43], p<0.001), maternal smoking (β = -316.53, 95% CI: [-451.16, -181.90], p<0.001), while a positive effect was observed for the interaction of race and smoking (β = 210.31, 95% CI: [86.80, 333.82], p<0.009). With respect to gestation age, the positive linear effect (β = -144.40, 95% CI: [-163.60, -125.20], p<0.001) was slightly offset by a small negative quadratic effect (β = -1.47, 95% CI: [-2.84, -0.10], p=0.035). CONCLUSIONS: The results indicate that premature birth, mother’s race, and smoking during pregnancy are risk factors for lower birthweight, but the combined effect of a black mother who smoked during pregnancy is sub-additive. Mother’s education is not an independent risk factor, after controlling for these other factors.

PIH11 ASSOCIATION OF OUTDOOR AIR POLLUTION AND STILLBIRTH RISK IN ULAANBAATAR, MONGOLIA

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OBJECTIVES: There is an increasing trend of stillbirth in Mongolia for the last few years and Ulaanbaatar city is the 2nd most polluted city in the world by WHO. This study was to determine the association of outdoor air pollution and stillbirth risk in Mongolia. METHODS: This was a case-control study. The case group consisted of 909 stillbirths and the controls included 15976 live births from singletons born in 2008 in Ulaanbaatar. Air quality data between January 2007 and December 2013 was obtained. Association between air pollution and stillbirth was determined using Logit regression. Odds ratios were estimated per 10-ppb change for nitrogen dioxide (NO2), sulfur dioxide (SO2) and for particulate matter with aerodynamic diameter ≤ 2.5 μm (PM2.5) and 100-ppb change for carbon monoxide (CO) during different gestational periods. RESULTS: Average duration of gestation for stillbirths were 24.7 weeks whereas for live births average duration was 38.5 weeks (p<0.0001). 28.2% of stillbirths occurred in spring. Stillbirth risk increased in association with 10-ppb change for SO2 in all trimesters (OR = 1.01; CI 0.99-1.03). Stillbirth risk also increased in association with 10-ppb change for NO2 in first-trimester (OR = 1.01; CI 0.95-1.07). 100-ppb change for CO during all trimesters of gestation increased risks of stillbirth (OR = 1.01; CI 0.95-0.98-1.04). There was an increased risk of stillbirths in association with 10-ppb change for PM10 in first-trimester (OR = 1.02; CI 0.99-1.04). CONCLUSIONS: Exposure to outdoor air substances may increase the risk of stillbirth, and that these susceptible time periods for exposure are during the first trimester of gestation.
Ukraine. Patients fully pay costs out-of-pocket. So implementation of health insurance is three times more expensive than the scheme with mifepristone. Almost all are quite expensive for Ukrainian women. In particular, the scheme of ulipristal appears to continue the observation of the impact that could have this public health PIH16 programme. We calculated the costs for anogenital warts. Treatment costs were obtained according to DRG for cervical dysplasia and cervical cancer. For anogenital warts the cost was estimated according to data obtained through a Delphi panel made in 2013 (accepted for publication in the Mexican Urology Journal Ref. UROMX-D-15-00004). RESULTS: In the Mexican Urology Journal Ref. UROMX-D-15-00004. In the other way, an increase in spending is observed when treating ano-dysplasia has shown a decrease in spending from 22,798,807,215 to 21,507,746,764 USD. In the other way, an increase in spending is observed when treating ano-dysplasia and cervical cancer. For anogenital warts the cost was estimated according to data obtained through a Delphi panel made in 2013 (accepted for publication in the Mexican Urology Journal Ref. UROMX-D-15-00004).

**RESULTS:**

The observed results are interesting to mention, since the decrease in the expense of treating cervical dysplasia may reflect greater Epidemiological surveillance and early detection. But, is interestingly the increasing of spending in anogenital warts, which can also be a result of increased diagnosis and awareness by health professionals. In Mexico vaccination campaign against human papilloma virus began in 2007, however, it is not currently assumed a relationship between the cost of treating injuries and human papillomavirus vaccination, but is of great interest to continue the observation of the impact that could have this public health intervention in the Mexican population, as well as the budgetary impact for Mexico.

**RESULTS:**

ANALYSIS OF TREATMENT COST FOR UTERINE FIBROIDS IN UKRAINE

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OBJECTIVES: Uterine fibroids (UF) are the most common benign gynecological tumors. Prevalence data range from 5% to 21% of adult women in reproductive age. Despite the progress in the development of modern effective drugs the primary treatment is still surgical interventions. At the same time, the trend in recent years of the increasing of the incidence of UF in younger women, expansion of childdbearing age limits period necessitates the revision of management of UF. The aim of the study was to calculate the average cost of hormonal therapy of UF in Ukraine for a minimum period of 3 months, considering that the main aim of this therapy is to manage bleeding and pain symptoms and to provide pre-operative treatment of UF. METHODS: We analyzed the cost of treatment hormones per patient for course. We used the real data from medical records of patients who were treated in the Lviv Regional Perinatal Center and Lviv Regional Clinical Hospital in 2014. We have analyzed almost 300 stories diseases for 2008 cases from Ukrainian Ministry of Health database on 01.01.2015 (1 USD = 15,75 UAH).

**RESULTS:** In the perspective of Ministry of Health.

A Markov model was constructed to estimate the effects and direct costs of PCV-13 programme compared to other PCV programmes for newborns initiated in Kazakhstan. Treatment efficacy and transition probabilities were synthesized from local registries of vaccine with 5 year follow-up. The characteristics of patient cohort and treatment costs (vaccine cost, monitoring, adverse effects management) in year 2014 Kazakhstan tenge (KZT) were estimated from republican official sources. Annual 3% discounting rate and 1 year cycles (with half-cycle corrections) were utilized for the model. Robustness of the model parameters was explored by one-way and probabilistic sensitivity analysis. RESULTS: Analysis of the registries showed significant decrease of incidence of diseases associated with S. pneumoniea in children that received the PCV-13. Moreover, the introduction of PCV-13 decreased the under 1-age mortality due to pneumonia by half (95%CI, p value= 0.001). As a result of 5 years of the introduction of the model, the CER of PCV-13 was estimated as 8432 tenge/LYG (95% CI: 8574 tenge/QALY, whereas CER for no PCV-13 was estimated as 7441 tenge/LYG or 7605 tenge/QALY). ICER was estimated as 122 070 tenge/QALY, which is within the cost-effectiveness threshold values recommended by WHO.

**RESULTS:**

The introduction of PCV-13 seems to be a cost-effective programme in Kazakhstan. Three findings may better inform decision makers regarding formulary inclusion and reimbursement in the vaccine programmes in Kazakhstan.

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ANALYSIS OF TREATMENT COST FOR UTERINE FIBROIDS IN UKRAINE

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