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PH12 ADD-BACK THERAPY USE AMONG ENDOMETRIOSIS PATIENTS INITIATING LEUPROLINE ACETATE (LA) THERAPY: ASSOCIATION WITH IMPROVED ADHESION AND LOWER FOLLOW-UP RATES IN A COHORT OF COMMERCIALLY INSURED WOMEN
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OBJECTIVES: To describe the impact of add-back therapy on adherence and surgery rates among endometriosis patients starting leuprolide acetate (LA) therapy. Hormonal add-back therapy is used in conjunction with LA treatment of endometriosis patients to reduce potential side effects associated with LA gonadotropin releasing hormone agonist effects. METHODS: Truven Health MarketScan Commercial Encounters database was used to identify women aged 18-49 with endometriosis (ICD-9-CM code 617.xx) who were recruited in 2005-2010, had one LA injection per pre- and post-index and no evidence of endometriosis-related surgeries pre-index or up to 30 days post-index, no pre-index use of estrogen or non-contraceptive hormones and no diagnoses of uterine fibroids, benign neoplasms, infertility, or pregnancy were included in the analysis. Proportion of patients treated with LA measured by Medication Possession Ratio (MPR)≥0.80, and time to endometriosis-related surgery in the post-index period were compared between patients with no add-back therapy, patients who used norethindrone/norethindrone acetate (NETA) add-back and patients who used other add-back (estrogens, progesterins, or combinations) using logistic and Cox Proportional Hazard regression models controlling for demographics, comorbidities and pain medication use. RESULTS: Final study sample included 5,114 women with 3,869 years of person time. The majority of women did not use add-back (n=1,965, 63.1%) while 22.9% used LA with NETA (n=713) and 13.9% used other add-back (n=436). NETA patients had higher likelihood of being adherent to LA than other add-back (HR=0.70, 95% CI: 0.51, 0.97) or not using add-back (HR=0.58, 95% CI: 0.37, 0.91) in their first three months of LA therapy. NETA patients had lower surgery rate in the 1-months period compared to other add-back (HR=0.62, 95% CI: 0.46, 0.83) or non-add-back patients (HR=0.72, 95% CI: 0.58, 0.92). Conclusions: Use of add-back and NETA LA add-back was associated with improved adherence to LA and reduced rates of endometriosis-related surgery, which has substantial economic and patient burden.

PH13 THE IMPACT OF PARENTS’ KNOWLEDGE AND PRACTICE ON THEIR CHILDREN IMMUNIZATION TIMELINESS: EXPERIENCE FROM MALAYSIA
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OBJECTIVES: To assess parents’ knowledge and practice about childhood immunization status. Study this impact of parents’ knowledge and practice on children immunization status. METHODS: Children immunization timeliness was evaluated using a retrospective cohort study design. The data were collected from ten public clinics in the state of Pahang, the largest state in peninsular Malaysia. Immunization related information was collected from the child’s immunization record card obtained from the parents. Parents’ knowledge and practice was evaluated using a prospective cross-sectional study design by answering validated knowledge and practice questionnaire. Data were analyzed using SPSS version 20.0. Results: A total of 479 children immunization records were screened and their parent were interviewed. High immunization coverage (>95%) for each of the recommended vaccine has been found in this study. However, 63.5% (n=304) of the children had overall age appropriate immunization status. Parents’ education, employment status, family size, and place of living were identified as risk factors for not having age appropriate immunization. More than half of the parents (54.9%, n=22,579 women using a questionnaire; 17,582 the second (6 months post recruitment), 13,565 the third, 12,893 the forth, and after 5 years, 11,174 the fifth (49.5% of all enrolled). Linear regression was done in very few influences of age (beta=.05; p<.00), BMI (beta=0.04; p<.00), angina pectoris (beta= –0.3; p<.00), venous thrombosis (beta= –0.2; p=0.02) and diabetes (beta=. –0.2; p=0.02) on drop-out. Smoking, hypertension, high cholessterol, depression, and anxiocity had no effects. Conclusions: Using a carefully designed cascade of procedures, a relatively low loss-to-follow-up-rate can be achieved in prospective product safety studies. Study relevant morbidity and behavioral factors had hardly any impact on the women’s participation. Therefore, a nearly unbiased sample was retained after a follow-up period of five years.

PH14 SAMPLE STRUCTURE IN A PROSPECTIVE STUDY OF 22,000 WOMEN USING HORMONE REPLACEMENT THERAPY (HRT) RETAINED UNBIASED AFTER A FIVE YEAR FOLLOW-UP
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OBJECTIVES: Loss-to-follow-up in prospective long-term pharmacoepidemiological studies can severely reduce sample size and potentially induce bias into the final sample, if drop-out is related to study relevant variables. The objective of the present contribution is to estimate the impact of health and behavioral factors on adherence to follow-up in a large, prospective, long term study of women with HRT prescriptions. METHODS: For a prospective observational study of the safety of HRT, women were recruited at gynecologists and community clinics. All women who started HRT in 2010 were invited to join a follow-up questionnaire. At baseline and within the five follow-up waves, personal variables, medical history, drug utilization, and health behavior information were recorded. A cascade of initial initial missing visits, a total and a pilot questionnaire was used to initiate follow-up. A multiple-regression model was applied to analyze the impact of disease status, drug utilization and health behavior at baseline on drop-out and the long-term participation in the study. RESULTS: 22,579 women using HRT at baseline (2010) were invited to participate. Of these, 18,269 women in the first follow-up questionnaire; 17,582 the second (6 months post recruitment), 13,565 the third, 12,893 the forth, and after 5 years, 11,174 the fifth (49.5% of all enrolled). Linear regression was done in very few influences of age (beta=.05; p<.00), BMI (beta=0.04; p<.00), angina pectoris (beta= –0.3; p<.00), venous thrombosis (beta= –0.2; p=0.02) and diabetes (beta=. –0.2; p=0.02) on drop-out. Smoking, hypertension, high cholessterol, depression, and anxiocity had no effects. Conclusions: Using a carefully designed cascade of procedures, a relatively low loss-to-follow-up-rate can be achieved in prospective product safety studies. Study relevant morbidity and behavioral factors had hardly any impact on the women’s participation. Therefore, a nearly unbiased sample was retained after a follow-up period of five years.

PH15 FACTORS AFFECTING IMMUNIZATION TIMELINESS IN MALAYSIA
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OBJECTIVES: To determine the immunization coverage, completeness, and timeliness of children for the first 2 years of age, and to identify parents’ characteristics that are associated with age appropriate immunization status. METHODS: A retrospective cohort study was conducted in which mothers and fathers of children recruited from ten public clinics in state of Pahang, the largest state in peninsular Malaysia. Immunization related information was collected from the child’s immunization record card obtained from the parents. Parents’ socio demographic characteristics and predictors of immunization were measured by self administered questionnaire. Data were analyzed using SPSS version 20.0. Chi square and Fisher’s exact tests were used to examine the association between age appropriate immunization status and parents’ characteristics. Binary logistic regression was used to identify the predictors for age appropriate immunization status. RESULTS: A total of 479 children immunization records were screened and their parents were interviewed. High immunization coverage (>95%) for each of the recommended vaccine has been found in this study. However, 63.5% (n=304) of the children had overall age appropriate immunization status. Parent’s education, employment status, family size, and place of living were identified as risk factors for not having age appropriate immunization. More in larger family size and place of living were predictors for not being age appropriately immunized. Conclusions: Immunization coverage for each of the recommended vaccine was high. However, more attention should be given to immunization timeliness. This is particularly relevant as the children are fully immunized. Immunization timeliness of children of low educated parents, born in large family should be closely monitored.

PH16 ANTIMUSCARINIC MEDICATION USE IN ELDERLY OVERACTIVE BLADDER PATIENTS
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OBJECTIVES: Antimuscarinic agents are the first line of treatment for overactive bladder (OAB). However, little is known regarding the utilization pattern of antimuscarinic agents (AAs) in the elderly population and predictors of antimuscarinic prescribing in elderly OAB patients using national ambulatory survey data. METHODS: This cross-sectional study utilized 2009-2010 National Ambulatory Medical Care Survey (NAMCS) and outpatient component of National Hospital Ambulatory Medical Care Survey (NHAMCS). The study sample included patients aged ≥65 years diagnosed with OAB. Antimuscarinic medications were operationally defined using the American Hospital Formulary Service (AHFS) classification and identified using Malignum lexicon codes. Descriptive statistics using sampling weights were used to estimate the prevalence of antimuscarinic medication use. Multivariable logistic regression within the conceptual framework of Andersen’s model and micro-marketing model was used. Data were analyzed using SPPS version 20.0. The study found that less than half of the elderly OAB patients (49.9%, n=22,579 women using a questionnaire; 17,582 the second (6 months post recruitment), 13,565 the third, 12,893 the forth, and after 5 years, 11,174 the fifth (49.5% of all enrolled). Linear regression was done in very few influences of age (beta=.05; p<.00), BMI (beta=0.04; p<.00), angina pectoris (beta= –0.3; p<.00), venous thrombosis (beta= –0.2; p=0.02) and diabetes (beta=. –0.2; p=0.02) on drop-out. Smoking, hypertension, high cholessterol, depression, and anxiocity had no effects. Conclusions: Using a carefully designed cascade of procedures, a relatively low loss-to-follow-up-rate can be achieved in prospective product safety studies. Study relevant morbidity and behavioral factors had hardly any impact on the women’s participation. Therefore, a nearly unbiased sample was retained after a follow-up period of five years.