of having an alcohol/substance abuse disorder, pregnancy, obesity, and upper respiratory symptoms (URS) were more prevalent in patients with asthma (ICD-9-CM 491.xx, 492.xx, 496.xx) health care resource utilization (HCRU) and costs. Generalized Linear Models (GLM) with gamma distribution and log link function were utilized to identify HCRU cost predictors. RESULTS: A total of 17,382 treated CB patients met inclusion/exclusion criteria (50.6% female, mean age 66.7±14.4 years). During follow-up, the mean number of A1CPs (Canada’s Medication Fill Records) per patient was 7.6±3.3; all-cause MPR was 0.39% had ≥1 INPT, 26.6% had ≥1 ED visits, and 98.4% had ≥1 office visits; and mean total all-cause HCRU cost was $25,747±$51,105. COPD-related HCRU was 32.6% had ≥1 INPT, 12.9% had ≥1 ED visits, and 81.8% had ≥1 office visits; mean total COPD and asthma-related HCRU was $12,659±$16,801. Two identified patient clusters showed high HCRU and costs. CONCLUSIONS: HCRU and costs among CB patients treated with COPD maintenance medications were considerable during the follow-up. New medications and disease management interventions aiming to reduce HCRU and costs among CB patients warrant exploration.

RESPIRATORY-RELATED DISORDERs – Patient-Reported Outcomes & Patient Preference Studies

PR30
INHALED CORTICOSTEROID AND LONG-ACTING BETA-AGONIST MEDICATION COMPLIANCE IN PATIENTS WITH MODERATE TO SEVERE ASTHMA

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OBJECTIVES: Inhaled corticosteroids (ICSs) and long-acting beta-agonists (LABAs) have been recommended for patients with moderate to severe persistent asthma. This study quantified medication possession ratios (MPRs) for those asthmatic patients and assessed the association between severe asthma exacerbations (SAEs) and degree of medication compliance. METHODS: The primary data source was the MarketScan Multistate Medicaid database from 2002 to 2007. A total of 299,917 patients identified as having moderate or severe asthma were selected. Drug use was tracked for ICSs, LABAs, ICS/LABA combination drugs, short-lasting beta-agonists leukotriene modifiers, and oral and IV steroids. An ICS-and-LABA MPR was calculated as the sum of days’ supply for ICS and LABA drugs divided by the number of follow-up days during the first year after the patient’s asthma index date. Logistic regressions were used to assess the risk of SAEs associated with degree of medication compliance. RESULTS: There were 21,852 (7.3%) patients with severe persistent asthma and 278,065 (92.7%) patients with moderate persistent asthma. Within 12 months after asthma index date, average MPRs were 0.23 (median 0.14) for ICSs and 0.27 (median 0.18) for LABAs. 8.1 years and 51.5% were having severe asthma. Salient findings on self-report adherence were, 49% reported that they took ICS even if asymptomatic, 4% reported that they forgot their ICS some or most of the time; 84% reported that they avoided ICS some of the times. In response to individual item for adherence and asthma control. The necessary-concerns offer a potentially useful framework to help clinicians elicit key treatment beliefs influencing adherence to ICS.

PR31
A CROSS-SECTIONAL EVALUATION OF ILLNESS PERCEPTION ABOUT ASTHMA AMONG ASTHMA PATIENTS AT A TERTIARY CARE PUBLIC CHEST HOSPITAL IN DELHI, INDIA

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OBJECTIVES: Suboptimal beliefs about the chronicity of asthma may interfere with adherence to therapy and result in poor asthma control. Objective of the study was to characterize the beliefs about the chronicity of asthma and determine its association with medication adherence and self-management in asthma patients. METHODS: Adult patients (n=166) with previously diagnosed persistent asthma visiting emergency room (March 2009–December 2009) of a public chest hospital of Delhi for asthma exacerbation completed interviewer-administered questionnaire on socio-demographics, clinical history, disease beliefs, use of inhaled corticosteroids (ICS), and self-management of asthma after stabilization of their condition. RESULTS: The cohort had 54% patients in the age group of 30-40 years, 64% females, 11% illiterate, and 65% patients earning less than INR 10,000/month. Overall 87% patients believed that they had asthma when they are having symptoms, which is associated with high adherence, no asthma belief. No association was found between no symptoms, no asthma belief with gender, income, family history of asthma and co-morbidity. Younger patients in the age group 18-29 years had four to fivefold greater odds and patients with education above 10th grade had three to fourfold greater odds of having the no symptoms, no asthma belief or the acute episodic belief. Acute episodic belief was negatively associated with beliefs about always having asthma, asthma being a serious condition, having lung inflammation, or the importance of using ICS, and was positively associated with expecting to be cured (p<0.05). All patients irrespective of their belief of acute or chronic nature of asthma and their adherence to the treatment and other self-perception behaviors. CONCLUSIONS: Majority of the asthma patients believed asthma as acute episodic disease and had sub-optimal information about asthma. These beliefs need to be addressed by providing asthma education leading to medication adherence and asthma control.

PR32
SELF-REPORTED ADHERENCE TO INHALED CORTICOSTEROIDS AND BELIEFS ABOUT MEDICINES IN ASTHMA PATIENTS: A STUDY FROM EMERGENCY ROOM OF A CHEST HOSPITAL IN DELHI, INDIA

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OBJECTIVES: Non-adherence to a prescribed therapeutic program is an issue in the management of chronic diseases like asthma. The poor adherence to the treatment and other self-perception behaviors may be interpreted as remission and beliefs about inhaled corticosteroids (ICS) could also result in non-adherence. The objective of the study was to analyze the self-reported adherence to ICS therapy and beliefs about medicine. METHODS: Adult patients previously diagnosed with asthma and who were prescribed ICS, visiting emergency room of a tertiary care public chest hospital for asthma exacerbation were recruited (March 2008–December 2009). Patients completed self-reported questionnaire containing 49 questions on 6 domains: socio-demographic, clinical history, causal belief, self-report on adherence, beliefs about medicines and medication adherence report scale (MARS) after stabilization. RESULTS: Of the 200 patients, 51.5% were between 30-40 years, 64% were female, mean duration of asthma was 10.5±8.1 years and 51.5% were having severe asthma. Salient findings on self-report adherence were, 49% reported that they took ICS even if asymptomatic, 4% reported that they forgot their ICS some or most of the time; 84% reported that they avoided ICS some of the times. In response to individual item for adherence and asthma control. The necessary-concerns offer a potentially useful framework to help clinicians elicit key treatment beliefs influencing adherence to ICS.

PR33
THE EFFECT OF ADHERENCE TO COMBINATION THERAPY OF LONG-ACTING BETA-AGONIST AND INHALED CORTICOSTEROID (LABA + ICS) ON EMERGENCY DEPARTMENT (ED) UTILIZATION IN NEWLY DIAGNOSED ASTHMA PATIENTS

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OBJECTIVES: Asthma is a chronic inflammatory disorder of the airways and the prevalence of asthma has been increasing since the early 1980 across all age, gender and racial groups. Current asthma treatment guidelines suggest combination therapy of inhaled corticosteroid(ICS) and long-acting beta agonist(LABA) for management of moderate to severe asthma. The primary objective was to identify the effects of adherence to combination therapy of LABA and ICS(LABA + ICS) on emergency department(ED) utilization in newly diagnosed asthma patients. The secondary objective was to identify and use instrumental variables(IVs) to control for sample-identification bias. METHODS: Inpatient identification: a nationwide commercial database was used to identify 7171 patients who were newly diagnosed with asthma. Patient adherence to LABA+ICS was measured using Medication Possession Ratio(MPR) with two years follow-up. IVs including medication copy and a binary indicator variable for mail prescription order were tested for over-identification and endogeneity using Sargan test and Hausman specification test. Differences in ED visit by MPR and adherence group(poor=MPR<80%, Good=MPR>80%) were analyzed by Cox proportional hazards model with a linear transformation. RESULTS: Patients with good adherence were significantly older than poor adherent patients(52 years vs. 48 years, p<0.05) and had significantly higher proportion of mail prescription order as well as medication copy. Every 1% increase in MPR was associated with a risk of approximately 4% of having an ED visit(β=0.003) and had significantly higher risk for bivariate variable MPR increased from 79% to a two-fold while controlling for gender, age, and comorbidities(β=2.03, p<0.001). Only one instrument of prescription order was accepted as the valid instrument and the results demonstrated that the effect on increase in MPR was significantly associated with 4.9% of risk in utilizing ED while holding other covariates constant(β=0.001). CONCLUSIONS: We found a risk association between high adherence and ED utilization in newly diagnosed asthma patients with LABA+ICS.

PR34
THE BURDEN OF ASTHMA IN BRAZIL FROM THE PATIENT’S PERSPECTIVE

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OBJECTIVES: Asthma is a prevalent condition world-wide, but little is known of the awareness and impact of the condition among Brazilian adults. The current study assessed awareness of asthma and whether asthma is associated with decreased health-related quality of life (HRQoL) among Brazilians aged 18 years and older. METHODS: Data were taken from the 2011 Brazil National Health and Wellness Survey (IBGE) for a representative sample of the Brazilian adult population (≥18 years). In the screener module, individuals were asked if they had a doctor’s diagnosis of asthma at some point in their life. Of those with asthma, the full version was completed. The instrument used to assess health-related quality of life (HRQoL) was the Short Form-36 (SF-36). RESULTS: Of the 7,446 respondents, 218 (3.0) reported having asthma. Respondents with asthma reported a lower physical component summary score (17.6 vs. 19.7; p=0.014) and a trend toward lower mental component summary score (35.7 vs. 37.0; p=0.066). CONCLUSIONS: Asthma is a prevalent condition among Brazilian individuals and is associated with decreased HRQoL.