this study is to determine the cost-effectiveness of a PCV13 vaccination program versus no program in high risk adults 18 years old and over with a coverage of 100% and in healthy adults 65 years old with a coverage of 90%, in the Chilean Health System. METHODS: A cost/utility study was performed using a Markov model [population data for a time horizon of 10 years]. Utilities and epidemiologic data were gathered from literature and the consequences of pneumococcal disease were obtained from Chilean, Latin American and international published literature. Vaccine's efficacies were taken from literature for PPSV23 and from the Community Acquired Pneumonia Immunization Trial in Adults (CAPITI) for PCV13. Direct and indirect costs were considered and were obtained from FONASA, the Chilean Public Health Insurance. Vaccine's costs and quality-adjusted life of years (QALYs) were determined and compared. RESULTS: With a PCV13 vaccination program, 107 of cases of bacteremia, 13 of meningitis, 6,706 of inpatient pneumonia, 4,509 of outpatient pneumonia and 1,189 deaths were avoided compared with PPSV23 program. The total cost over the year 2010 period studied, and for the total population of 12,773,697 people was $1,994,404 for PCV13 and $2,065,510 for PPSV23. For PCV13, QALYs were 11,484,554 and for PPSV23, QALYs were 11,479,124, thus the Incremental Cost Effectiveness Ratio (ICER) was dominant for PCV13, and these results do not vary with sensitivity analysis on high impact variables. CONCLUSIONS: A PCV13 vaccination program over a PPSV23 program, and a vaccination program with PCV13 would save public health expenses and reduce morbidity, mortality and disability in Chilean adults over 18 years old. These results appear to be robust under a variety of sensitivity analysis.

INFECTION – PATIENT-REPORTED OUTCOMES & PREFERENCE STUDIES

PIN78 PREDICTING HUMAN IMMUNODEFICIENCY VIRUS VETERANS’ ADHERENCE TO ANTIRETROVIRAL THERAPY: THE USE OF OPTIMAL DATA MINING

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OBJECTIVES: Human immunodeficiency virus (HIV) treatment guidelines recommend target adherence levels of 95% and suggest that treatment be postponed in patients at risk of poor adherence. Little objective guidance is provided to clinicians for identifying such patients. We applied an optimal analysis tool (ODA) paradigm to create predictive models for adherence in a national cohort of United States veterans using electronic medical records (EMRs) by maximizing predictive accuracy. METHODS: Quarterly adherence to antiretroviral agents were calculated as the proportion of days covered (PDC) with 3 or more antiretroviral agents from 2 or more drug classes. A hierarchical decision tree was built to predict patient adherence at different adherence thresholds of 75%, 80%, 85%, 90% and 95%. Selected variables included demographics, sociopolitical characteristics. Three rules were applied to pick the predictors: 1) at each decision point, the attribute with the lowest Fisher’s exact p-value was selected; 2) leave-one-out jackknife analysis was performed to select a stable attribute; and 3) dividing a branch of decision tree was stopped if the branch had less than 15 patients. RESULTS: 3864 HIV patients newly initiated highly active antiretroviral therapy in 1998-2006. The mean age of the cohort was 56.3±9.4 year old for males and 59.1±8.6 year old for females. A third (33.2%) of the patients were TM and ART concomitant users. Most frequently used TM were Alumum sativum (34%) and Ocimum lamifolia (28%); mainly for the purpose of managing HIV/AIDS related symptoms (61.2%). Most (68.7%) of the patients were using TM without consulting health professionals. Factors independently associated with concomitant TM and ART use were perceived quality of service in art clinics (poor vs good, AOR 2.3, 95% CI 1.7-3.8), number of ART side effects reported (≥3 vs ≤ 1, AOR 2.61 95%CI 1.53-4.7) and self-perceived health status (poor vs good, AOR 2.3, 95% CI 1.62-3.4). Combining these ART use had statistically significant association with poor ART adherence (AOR 3.15; 95% CI 3.2-6.32). CONCLUSIONS: The study revealed that many patients used TM concomitant to ART. Since TM use among the patients was found to impact their ART adherence and because of the possibility of interaction, patients should be advised to consult their health care providers when they need to take TM while on ART.

PIN81 USE OF HEALTH BELIEF MODEL TO UNDERSTAND KNOWLEDGE, ATTITUDES AND BEHAVIORS OF PEOPLE TOWARDS THE EBOLA OUTBREAK

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OBJECTIVES: Since the first case of Ebola in United States in 2014 has been the largest in history, affecting multiple countries in West Africa and cases were diagnosed within the United States as well. This study uses the framework of the Health Belief Model and aims to understand the perceptions of a cohort of individuals in Houston, Texas towards this out- break and the prevention measures. METHODS: This is a cross-sectional survey design with an anonymous, self-administered survey based on the constructs of the Health Belief Model. Individuals aged 18 or older were requested for their participation by convenience sampling at public places in Houston, Texas between 4th November and 28th December 2014. The variables measured were perceived susceptibility, perceived severity, perceived threat, knowledge about Ebola, self-efficacy and existing health belief. For statisti- cal analysis, mean and standard deviations were calculated as the likelihood. RESULTS: A total of 283 participants aged 18 to 84 years completed survey. Of the Health Belief Model constructs tested for, perceived susceptibility (p = 0.0366), perceived threat (p = 0.0001), educational level (p = 0.0470), actively following the news (p = 0.0015) and owning a health belief (p = 0.0081) were predicted to help the study participants to perform preventive health behaviors. CONCLUSIONS: The Health Belief Model adequately predicted public perception regarding their belief about the threat of the disease and susceptibility towards the disease. Educating the public about the actual risks of Ebola in United States through various media can elicit appropriate behavior in any future cases of outbreak within the United States.

PIN82 KNOWLEDGE GAPS ABOUT PNEUMONIA IN OLDER ADULTS: BASELINE RESULTS FROM THE PHARMACISTS’ PNEUMONIA PREVENTION PROJECT

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OBJECTIVES: We sought to identify pneumonia knowledge among participants in the Pharmacist’s Pneumonia Prevention Project (PPP), a community-based education and vaccination program administered to older Philadelphians in 2014. METHODS: Participants were aged 65+, cognitively intact, English speaking and recruited from senior centers and churches with a predominantly black population in Philadelphia. This analysis reports baseline data which were collected prior to delivery of PPP. Knowledge and awareness of pneumonia was assessed with a 27-item question- naire encompassing the following domains: susceptibility to infection, symptoms of disease, severity of illness, and vaccination with an emphasis on vaccine efficacy, safety and contraindication; individuals were considered to be unvaccinated (HU) if they were not previously vaccinated or vaccinated within the past 2 years (HU) or if they demonstrated a lack of knowledge described it as an infection in the lungs. When asked about the best way to prevent pneumonia, 47% of participants reported answers other than vaccination. Compared to women, more men were unaware of the individuals who were at risk of getting pneumonia (p = 0.03) and thought that the risk of getting the disease (vs. 56% of women; p = 0.032). Additionally, 76% of men were una- ware that patients with a low immune system were at risk for pneumonia (vs. 39% of women; p = 0.002). CONCLUSIONS: Findings revealed critical knowledge gaps about pneumonia, underscoring the need for educational approaches which resonate with