

12.5 million). **CONCLUSIONS:** Colombian decision makers in health could largely benefit by controlling relapses for these types of patients. This study is one of the first approaches at quantifying the impact of the disease and its relapse. Policy measures should consider this data for addressing mental health in a systematic and conjoint approach.

RESPIRATORY-RELATED DISORDERS – Clinical Outcomes Studies

PRS1

EVALUATION ANALYSIS OF SMOKING POPULATION IN ULAANBAATAR

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OBJECTIVES: 1. To study health effect of smoking by questionnaires and tests. 2. To study by comparing smoking population's function of the lung with non-smoker's function of the lung. **METHODS:** 1201 people has participated for the research study and they were 20-39 years of age, and older than 40 years old, also study has taken in Ulaanbaatar at the same time. Research study included 79 questions from "Adult core questionnaire" study of chronic respiratory diseases in the Asia-Pacific and spirometer analysis has done too. **RESULTS:** The smoking population by age and gender in Ulaanbaatar. AGE Male Smoking%/ Female Smoking%/ 20-29 194 75.5 161 19.4 30-39 121 79.3 134 28.4 40-49 153 78.4 152 24.4 **CONCLUSIONS:** Research study shows that 49.4% of total population and 76.9% of males, 21.4% of females have been smoking for their lives with some circumstances in Ulaanbaatar. Also study shows that 30-39 years old, 70 years old females are smoking more than other ages particularly. For males smoking is in equal level for all ages. Function of lungs has changed depending on smoking and total years of smoking.

PRS2

FLUTICASONE PROPIONATE VERSUS BUDESONIDE OR BECLOMETHASONE AS MONOTHERAPY TREATMENT FOR ASTHMA PATIENTS - A SYSTEMATIC REVIEW

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OBJECTIVES: compare the efficacy and the safety of fluticasone propionate in the management of moderate to severe asthma in adults and children to the inhaled corticosteroids currently available in the public health care system in order to present an alternative therapy to the Brazilian government. **METHODS:** a systematic review of the MEDLINE, the Cochrane Library and Centre for Reviews and Dissemination (CRD) databases was conducted until September 2014, including randomized clinical study and systematic reviews about comparison between fluticasone propionate and budesonide or beclomethasone, not associated with other medications. There was no age limit and the assessed endpoint was pulmonary function through morning and evening Peak Expiratory Flow Rate, Forced Expiratory Volume in one second, exacerbation and adverse events. The quality of the studies was measured by Grades of Recommendation, Assessment, Development and Evaluation. **RESULTS:** there were 788 articles identified in MEDLINE, 231 in The Cochrane library and 46 in CRD, among all of these, 259 were duplicates, remaining 806 to title analysis. In the final analysis, 21 articles were included – 3 systematic reviews and 18 randomized clinical studies. All systematic reviews showed a strong recommendation in favor of the new technology and high methodological quality. Among the clinical studies, 9 of them compared fluticasone propionate to beclomethasone and the others 9 to budesonide. The study results showed no statistically significant difference between the compared medicines. According to the results, fluticasone propionate is effective and well tolerated for the treatment of moderate to severe asthma, in adults and children, as well as beclomethasone and budesonide. **CONCLUSIONS:** from this perspective, the inclusion of fluticasone propionate in the Brazilian Clinical Protocol and Therapeutic Guidelines could represent an extension of the therapeutic arsenal, especially, for the pediatric population that have few options of treatment. Funding for this study was provided by GlaxoSmithKline, study HO-14-15763.

PRS3

OUT HOSPITAL DRUG CONSUMPTION IN THERAPY OF OBSTRUCTIVE PULMONARY DISEASE IN SERBIA IN THE PERIOD FROM 2007 TO 2012

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OBJECTIVES: Non infectious chronic diseases become one of the most frequent cause of morbidity all around the world and they are results of interactions between man and his environment. This group of diseases includes also chronic obstructive pulmonary disease (COPD), which explains why medications for the treatment of this disease take a large part in the consumption. The aim of this study was to analyze the consumption of medications in COPD in Serbia and in Norway in period from 2007 to 2012. **METHODS:** The data about the use of medications in Serbia were taken from the Agency for Drugs and Medical Devices of the Republic of Serbia. The data about the use of medications in Norway were taken from official website of the Norwegian healthcare system. **RESULTS:** Total consumption of medications for the treatment of respiratory diseases in Serbia from 2007 to 2012 was lower than the consumption of the same medications in Norway in the same time of period. The utilized medications of R group in both countries was very uneven in this period of time. Between the subgroups, the most frequently used medications were those for the chronic obstructive pulmonary disease (R03). **CONCLUSIONS:** The consumption of medications in Serbia from 2007 to 2012 was higher than in Norway. While analysing the consumption of medications we can make conclusion that the structure of the utilized medications in Serbia is not appropriate and is not similar to the pharmacotherapeutic practice in well developed Norway. This research was supported by Provincial

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RESPIRATORY-RELATED DISORDERS - Cost Studies

PRS4

PUBLIC HEALTH AND ECONOMIC IMPACT OF 13-VALENT PNEUMOCOCCAL CONJUGATE VACCINE (PCV13) IN PUBLIC AND PRIVATE SYSTEM VERSUS PPSV23 AND NO VACCINATION IN OLDER ADULTS

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OBJECTIVES: Pneumococcal disease is a public health concern worldwide. This study evaluates the public health and economic impact of 13-valent pneumococcal conjugate vaccine (PCV13) vaccination in Brazilian adults aged ≥ 50 years. **METHODS:** A cohort model with a Markov-type process depicting expected risk, consequences and costs of pneumococcal disease was developed. PCV13 effectiveness was based on data from CAPIta; the 23-valent polysaccharide vaccine (PPSV23) effectiveness was based on published literature. Pneumococcal disease rates were based on data from DATASUS. Outcomes, direct and indirect costs (in BRL) were evaluated from a Brazilian public (n= 20,228,045) and private (n=11,396,682) payer perspective over a 5 year time horizon. **RESULTS:** From a public payer perspective, vaccination with PCV13 versus PPSV23 avoided 676,031 PD cases, 853 deaths with BRL 2,32 million cost saving. An expected 696.970 PD cases and 29.644 deaths would be avoided for PCV13 versus no vaccine 2,16 million cost savings. From a private payer perspective, vaccination with PCV13 versus PPSV23 avoided 410,302 PD cases and 1,074 deaths with a 1.27million cost-savings. An expected 420,159 PD cases and 18,482 deaths would be avoided for PCV13 versus no vaccine with a 1.69 million cost-savings. **CONCLUSIONS:** PCV13 prevents more pneumococcal disease cases and deaths than PPSV23 or no vaccine and is expected to save economic resources (direct and indirect) from a private perspective, and cost-effective from a public perspective.

PRS5

COSTO DE TUBERCULOSIS EN LOS ESTABLECIMIENTOS DE SALUD DEL PERÚ

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OBJECTIVOS: Estimar los costos de la Tuberculosis (TBC) en los establecimientos del Ministerio de Salud del Perú. **METODOLOGÍAS:** Se realizó una evaluación económica parcial de tipo costo de enfermedad (CE). La población de estudio fue una cohorte hipotética de pacientes afiliada al Seguro Público de Salud (Seguro Integral de Salud) en el Perú. Los costos se estimaron desde la perspectiva del financiador tomados para el año 2014. La definición de los esquemas de manejo clínico (procedimientos médicos y medicamentos para el diagnóstico, tratamiento y seguimiento de la enfermedad) provienen de las Condiciones Asegurables del Plan Esencial de Aseguramiento en Salud (PEAS). Cada esquema de manejo clínico se ha estimado con la metodología de costeo estándar. El costo total fue ajustado por factores de oferta, demanda y adherencia. **RESULTADOS:** La cohorte hipotética de TBC es de 13,808 personas para el año 2014 (Incidencia de TBC Pulmonar: 0.11%, incidencia de TBC Extrapulmonar: 0.02%, incidencia de TBC con complicaciones: 0.01%, incidencia de TBC Multidrogoresistente: 0.0036%). El costo total para TBC es de 27,443,865 dólares correspondiendo para TBC Pulmonar 23,666,252 dólares, TBC Extrapulmonar 1,501,742 dólares, TBC con complicaciones 935,552 dólares y para TBC Multidrogoresistente es de 1,340,319 dólares. El costo total correspondiente a diagnóstico es 1,302,884 dólares (4.7%), tratamiento 24, 205,776 dólares (88.2%) y para seguimiento 1,935,206 dólares (7.1%). El costo fijo correspondió a 12,538,706 dólares (45.7%) y el costo variable a 14,905,159 dólares (54.3%). **CONCLUSIONES:** El costo anual total para Tuberculosis en el Perú se estimó en 27,443,865 dólares. Este monto representa el 14.1% del presupuesto ejecutado el año 2014 en el Programa Presupuestal 016 TBC-VIH/SIDA.

PRS6

COST OF ILLNESS (OUT OF POCKET COSTS PAID BY PATIENT) FOR T.B IN QUETTA CITY, PAKISTAN

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OBJECTIVES: The objective of study is to measure the cost of illness (out of pocket costs paid by patients) for T.B in Quetta city, Pakistan. **METHODS:** Cross sectional study was performed on TB patient in Fatima Jinnah chest hospital Quetta. The TB patients who were registered in hospital were interviewed to determine the out of pocket cost paid by TB patients by using standardized data collection tool. The descriptive statistics was used to present the data. All analyses were performed using SPSS 20.0. **RESULTS:** The total of 70 TB patients were agree to participate in the study. Majority (62%, n=44) were females with rural residency 51.4%, n=36). Majority of patients had monthly income were 8000-15000. The total average out of pocket cost was Pk. Rs. 11,685 per month for an individual patient. In addition, it was calculated that a patient spend Pk. Rs. 292 for diagnostic tests including chest x-ray, additional medicine purchased were of Pk. Rs. 1465, travel cost were Pk. Rs. 3,485 , special food cost were Pk. Rs. 2,128 rupees accommodation cost were Pk. Rs. 3,825 rupees, & the other cost were Pk. Rs. 490. It is worth mentioning here that all the medication and other treatment cost is paid by the government. **CONCLUSIONS:** The study concluded that although government paid all the medication and other treatment cost for TB patients, yet patient had to bear a high amount of money from his pocket which put additional burden to the poor patient suffering with a disease like TB.