PM11

TRENDS OF RESEARCH RELATED BRAZIL PUBLISHED IN ISPOR MEETINGS: A BIBLIOGRAPHIC ANALYSIS FROM 1998 TO 2014
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OBJECTIVES: This study aims to analyze, within a systematic and comprehensive perspective, the evolution of published works in the ISPOR meetings, in order to identify the main research areas and the theme of the discussions presented in these meetings, through the analysis of the literature published between 1998 and 2014, which may be classified according to study characteristics (topic and subtopic), sponsorship and methodology. METHODS: A search in the ISPOR Scientific Presentations Database was performed, using the term “Brazil” as a keyword in “Abstract” field, evaluating all results between 1998 and 2014. Abstracts were classified according to study characteristics (topic and subtopic), sponsorship and methodology. RESULTS: The total number of abstracts classified according to ISPOR presentation database, only 716 (2.4%) mentioned the term “Brazil” in the abstract, of which 109 (23.6%) the first author was not from Brazil and 325 studies (45%) were sponsored by pharmaceutical companies. Up to 2006, scarce publications were found. The majority of the studies (62.6%) was published from 2012 to 2014. The most studied diseases were cancer (16.9%), infection (5.9%), GI disorders (3.9%) and diabetes (3.1%) and 14.5% classified as “no specific disease”. In addition, 57.3% of the analyses were classified according to study characteristics (topic and subtopic), sponsorship and methodology. CONCLUSIONS: The major topic of studies observed over this period indicates an increase in importance of health economics as a support for health policies decision and development making process.

PM12

TABAGISMO EM UNIVERSITÁRIOS: UM REVISÃO SISTEMÁTICA DA LITERATURA
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OBJECTIVES: to characterize prevalence and tobacco consumption in universities in the period of the review, with a systematic review of the literature, during the period of 2003 to 2013.

A busca de artigos publicados foi feita nas bases de dados eletrônicos LILACS, MEDLINE e SCIELO com os descritores tabagismo e universitários. A metodologia PRISMA foi preferida em relação a outras revisões e aquisições de dados foram realizadas para a realização de um estudo metodológico, mas estavam inter-relacionados sobre os aspectos: tabagismo e universitários da área da saúde (9); tabagismo e universitários de diversos cursos de saúde (10); tabagismo e universitários (12); tabagismo e atividade física em universitários (6); universitários e medidas educativas sobre tabagismo (6) e prevalência do tabagismo em universitários (4).

PRISMA: o tabagismo é um tema atual e relevante pois apresentou um número de artigos no último ano; entretanto, estas publicações relatam divergências entre a prevalência e o consumo de produtos derivados do tabaco por universitários.

RESEARCH ON METHODS – Modeling Methods

PM13

PERFIL DEL GASTRO DE BOLSILLO EN MEDICAMENTOS ESENCIALES EN PANAMÁ, 2014
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OBJECTIVES: Obtain the socioeconomic profiles that characterize the access to the medicines, with base in the ability access, availability and use of medicines. METODOLÓGIA: Diseño muestral estratificado, con selección aleatoria en 6 dominios en el ámbito nacional, cubriendo zonas urbanas, rurales e indígenas. Encuesta multipropósito de línea de base. La muestra fue de 2.696 individuos de 15 años y más. El instrumento recogió información sobre las características socioeconómicas, condiciones de salud, gasto, financiación, acceso, disponibilidad y uso racional de los medicamentos. El análisis estadístico, se realizó con el software SPSS. Los coeficientes indígenas son más altas por sobre la distribución del ingreso en el primer quintil, 41,9% en la Ngaá Buglé y 62,7% en Madugandí. Las enfermedades crónicas (circulatorias y diabetes) y las infecciones (diarrea, infecciones y malesgastriales), son las principales morbilidades. El gasto promedio general fue USD 83,25, siendo en diabetes USD 96.81 en las diarreas, infecciones y malestares estomacal con USD 96.80. El 43,3% financia parcialmente la compra con sus ingresos y 13,0% no cuenta con los mismos, 50% de los participantes tienen disponibilidad en una única medida, lo cual se considera insuficiente. Mientras tanto, 29% consumen medicamentos sin receta, siendo mayor en las comarcas Ngäbe Buglé con 59% y Madugandí con 35%. La elasticidad ingreso resultó de 0.20 (t=2.577, p=0.010) indicando que los medicamentos son productos necesarios, con relación a la edad, por cada año adicional, el gasto en medicamentos se incrementa en 2%(-3.779, p=0.000). Respecto a la tenencia de seguro social la población que comparte medicamentos se reducen en -0.201 o un riesgo relativo de compra de 0.818 (Wald=4.241, p=0.039). CONCLUSIONS: Existe una mayor vulnerabilidad de la población indígena, respecto al acceso a medicamentos. Se hace necesario desarrollar estrategias e intervenciones sanitarias para mejorar el acceso, disponibilidad y costo de medicamentos en Panamá.

PM14

CALIBRATION OF PIECEWISE MARKOV MODELS USING A CHANGE-POINT ANALYSIS THROUGH AN ITERATIVE CONVEX OPTIMIZATION ALGORITHM
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OBJECTIVES: Meta-analysis is useful for drawing general conclusions from a variety of studies. However, proper study and model selection are important to ensure the correct interpretation of results. Basic meta-analysis models are fixed-effects, random-effects and meta-regression.

RESEARCH ON METHODS – Statistical Methods

PM15

APPLIED COMPARISON OF META-ANALYSIS TECHNIQUES
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OBJECTIVES: Meta-analysis is an approach that combines findings from similar studies. The aggregation of study level data can provide precise estimates for outcomes of interest, allow for unique treatment comparisons, and explain the differences arising from conflicting study results. Proper meta-analysis includes five basic steps: identify relevant studies, extract summary data from each paper, compute study effect sizes, perform statistical analysis; and interpret and report the results.

This study aimed to review meta-analysis methods and their assumptions, apply three different meta-analysis techniques to a dataset looking at the effects of the bacille Calmette-Guerin (BCG) vaccine on tuberculous meningitis (TBM). RESULTS: We applied our method to model relative survival for stage 3 colorectal cancer patients 75 years old and younger. The estimated change points were at months 9 and 37. We compared our piecewise calibration method to a single-segment Cox model, the single-segment converged faster, the piecewise method improved the goodness of fit by 50%. CONCLUSIONS: By estimating the change points in the relative survival we were able to find the optimal calibration parameters against the piecewise Markov model. This model allowed us to impose a particular structure defined by the progression of the disease. We propose a piecewise calibration method that produces more accurate solutions compared to a single-segment approach.

PM16

CHOLIC ACID DECREASES THE DISTRIBUTION COEFFICIENT OF SIMVASTATIN: A POTENTIAL FOR INCREASING SIMVASTATIN BIOAVAILABILITY
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OBJECTIVES: Distribution coefficient is used as a quantitative measure for assessing a drug molecule affinity for the biological membranes. Since bile acids are known for their ability to penetrate cell membranes, it was the aim of this study to was estimate the influence of cholic acid (CA) on the distribution coefficient of simvastatin (SV) which is a highly lipophilic compound with various effects, including antiplatelet aggregation and anticoagulant effects. Distribution coefficients and logD of SV with or without CA were measured by shake-flask method in n-octanol(buffer systems at pH 5 and pH 7.4. SV concentrations in aqueous phase were determined by HPLC-DAD. In order to analyse theoretically complexation of CA, package in the Chem3D Ultra program has been applied.

RESULTS: Upon addition of CA, statistically significant decrease of logD was observed at both selected pH values (from 4.70±0.01 to 4.41±0.13 at pH 5, and from 4.59±0.06 to 4.40±0.04 at pH 7.4). Analysing the molecular aggregates of SV with CA, it was observed that new complexes were formed.

RESEARCH ON METHODS – Study Design