**OBJECTIVES:** There are no studies to our knowledge assessing, whether there are racial disparities related to total ankle arthroplasty (TAA) utilization and outcomes. Our objective was to study the racial disparities in total ankle arthroplasty (TAA) utilization and outcomes. **METHODS:** We used the Nationwide Inpatient Sample (NIS) to study the time-trends. Race was categorized as White and Black. Utilization rates were calculated for the U.S. general population per 100,000. Hospital length of stay, discharge disposition and mortality after TAA were assessed. We used the Cochran Armitage trend test to assess time-trends from 1998 to 2011 and chi-square test to compare TAA utilization. We used analysis of variance or chi-squared test to compare the characteristics of Whites and Blacks undergoing TAA and logistic regression to compare mortality, length of stay and discharge to home vs medical facility. **RESULTS:** The mean ages for Whites undergoing TAA were 62 years and for Blacks was 52 years. Significant racial disparities were noted in TAA utilization rates (/100,000) in 1998, 0.14 in Whites vs. 0.07 in Blacks ($p<0.0001$; 2-fold) and in 2011, 1.17 in Whites vs. 0.33 in Blacks ($p<0.0001$; 4-fold). Racial disparities in TAA utilization increased significantly from 1998 to 2011 ($p<0.0001$). There was a trend towards statistical significance in the length of hospital stay in Blacks vs. Whites (52.9% vs. 44.3% with length of hospital stay higher than the median; $p=0.08$). Differences in the proportion discharged to an inpatient medical facility after TAA, 16% Blacks vs. 13% Whites, were not significant ($p=0.47$) **CONCLUSIONS:** This study demonstrated significant racial disparities with lower TAA utilization and suboptimal outcomes in Blacks compared to Whites. Further studies are needed to understand the mediators of these disparities and to assess whether these mediators can be targeted to reduce racial disparities in TAA.

### PMS17
### PREVALÊNCIA DA ESPONDILITE ANQUILOSANTE: UMA REVISÃO SISTEMÁTICA

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**OBJETIVOS:** estimar a prevalência da espondilite anquilosante para subsidiar para avaliações econômicas sobre a doença. **MÉTODOS:** realizou-se uma revisão sistemática com estratégia de busca nas bases de dados Medline, via PUBMED, e The Cochrane Library no mês de março de 2014. A leitura dos títulos foi realizada em pares e as divergências dirimidas por consenso. Não foram aplicadas restrições quanto a idiomas e datas, sendo excluídos estudos que não eram transversais e àqueles que não apresentavam desfechos relacionados à prevalência da doença. A extração dos dados foi realizada por meio de formulário específico e revisada por um par antes de sua inclusão. A análise estatística foi realizada com auxílio do programa R 3.1.0. e para tal foi desenvolvido um gráfico de forest plot. **RESULTADOS:** foram encontrados 1.646, que após leitura de títulos foram selecionados 146, dos resumos 26 e textos completos 14 estudos, sendo todos realizados fora do Brasil. A maioria desses trabalhos (85,7%) foi desenvolvido em ambiente hospitalar. A amostra total foi de 266.194 participantes e a média ponderada obtida da prevalência foi de 0,5649% ($p< 0.001$; IC: 95%), variando de 0,08% a 1,4%. Vale destacar que os métodos utilizados para coletar a prevalência, assim como, os critérios de classificação da doença, foram bastante variados. Devido a essa grande heterogeneidade entre os estudos adotou-se, na análise estatística, a medida de efeito aleatório por ser mais apropriada e conservadora para esses casos. **CONCLUSÕES:** De acordo com dados do estudo foi identificada elevada prevalência e dispersão da doença na população mundial, que impactam os orçamentos dos sistemas públicos de saúde. Considerando a importância da doença, e o impacto orçamentário de novos medicamentos são necessários mais estudos, especialmente no Brasil e na América do Sul uma vez que não foi detectado nenhum artigo que aborde o tema nesses países.

### PMS18
### EFFECT OF EDUCATIONAL INTERVENTION ON OSTEOPOROSIS KNOWLEDGE AMONG UNIVERSITY FEMALE STUDENTS IN QUETTA, PAKISTAN

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**OBJECTIVES:** The study intended to assess the impact of educational intervention on knowledge of osteoporosis among female university students of Quetta. **METHODS:** This interventional study was conducted on female university students by using convenience sampling technique. A total of 163 female students were enrolled for the study, these are those female students who did not heard about the disease named as osteoporosis. These subjects were provided with a self-explanatory brochure that contain basic information regarding osteoporosis. The intervention was completely theoretical in nature. After two days interval participants were contacted again and asked to complete a pre-validated questionnaire containing 20 questions related to osteoporosis knowledge. Descriptive analysis was used to demonstrate the demographic characteristics of the study population. Inferential statistics (Mann-Whitney U test and Kruskal Wallis tests and Wilcoxon mean rank test, $p< 0.05$) were used to assess the significance among study variables and to assess the impact of educational intervention on knowledge. **RESULTS:** Average score of knowledge was 14.18±2.7 (20 max). The educational intervention had a significant effect on knowledge scores of the respondents (Wilcoxon rank test $p< 0.005$) (considering the pre-intervention knowledge score as zero). Certain demographic characteristics (academic degree and living status) does affect knowledge scores of the study respondents. **CONCLUSIONS:** Although adequate improvement of osteoporosis knowledge scores were reported after educational intervention, yet efforts should be made to bring change in the attitudes and practices of the female student by the help of intensive educational programs based on specified behavioral learning theories for better disease knowledge and prevention.

### PMS19
### DESARROLLO DE UNA GUIA DE INTERVENCION PSICOLOGICA PARA ARTRITIS REUMATOIDE EN COLOMBIA

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**OBJECTIVOS:** El manejo de la artritis reumatoide (AR) implica grandes retos para los sistemas de salud, especialmente en países en vía de desarrollo, ya que exige la implementación de programas de atención integral para reducir el desgaste gradual, la complicación de síntomas y el impacto económico tanto a nivel familiar como del Estado. El objetivo del estudio fue construir una guía de intervención psicológica basada en la evidencia que facilite el ejercicio de psicólogos en la atención integral de pacientes diagnosticados con AR en Colombia. **METODOLOGÍAS:** Se realizó una revisión sistemática de literatura y se formularon recomendaciones para el abordaje de factores psicológicos y sociales de la enfermedad a partir de la evidencia empírica hallada sobre la intervención psicológica para pacientes diagnosticados con AR. La inclusión de tales recomendaciones en la guía se logró a través de reuniones de consenso no estructurado con el grupo desarrollador; también fueron consideradas en el proceso las opiniones de expertos y de pacientes. Las recomendaciones fueron calificadas según los lineamientos de la Scottish Intercollegiate Guidelines Network (SIGN). **RESULTADOS:** Las prácticas recomendadas en esta guía se consolidaron en siete apartados: 1) psico-educación; 2) apoyo social; 3) estado de ánimo; 4) adherencia al tratamiento; 5) autoeficacia; 6) autocontrol - automanejo; y 7) manejo de dolor. La guía se encuentra lista para iniciar su validación e implementación en el ámbito clínico. **CONCLUSIONES:** Por primera vez, Colombia cuenta con una guía de intervención psicológica basada en la evidencia para la atención de pacientes con AR y el propósito final es que sea adoptada por el Sistema Nacional de Salud. El siguiente paso en el proceso de construcción de esta guía es su validación con expertos clínicos, pacientes, el Ministerio de Salud y otros actores del sistema de salud colombiano para hacer posible su diseminación y puesta en marcha.

## NEUROLOGICAL DISORDERS – Clinical Outcomes Studies

### PND1
### RATES OF ADVERSE EVENTS AND MULTIPLE SCLEROSIS RELAPSES BEFORE AND AFTER INTRODUCTION OF A PURPORTED GENERIC GLATIRAMER ACETATE IN MEXICO: RESULTS FROM A LARGE PATIENT SUPPORT PROGRAM IN MEXICO

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**OBJECTIVES:** To assess adverse events (AEs) and relapse rates in multiple sclerosis (MS) patients on Glatiramer Acetate (GA) treatment before and after the introduction of a purported generic GA (pgGA) in Mexico. **METHODS:** A pgGA was introduced in Mexico in January 2013. The dispensation decision of branded versus pgGA was made by each Pharmacy based on a predetermined national quota (40% pgGA in 2013, 50% in 2014) and availability, allowing the same patient to receive both treatments over time. Patient-reported data on AEs, relapses and pgGA or branded GA use were collected through branded GA's Patient Support Program. Differences in outcomes during 2012 when only branded GA was available, and during February–May of 2014 when mostly branded GA was dispensed (due to pgGA hold) were compared with outcomes in 2013 and during February–May in 2013, respectively (when both products were dispensed). **RESULTS:** The total number of MS patients in the program during 2012, 2013 and 2014 were 1618, 1552, and 1755, respectively. The total number of AEs and relapses reported in 2013 were significantly higher ($P<0.05$) than 2012. The total number of AEs and relapses in each month in 2013 (except in 1) was higher (AEs – 11 to 92, relapses – 1 to 13) than each of the corresponding 2012 months (AEs – 4 to 26, relapses – 0 to 2). Comparing number of relapses adjusted by number of patients during February–May of 2014 to the same period in 2013, showed a decrease in relapses in this period in 2014 vs. 2013 ($P<0.035$). Further research is needed to fully elucidate the underlying causes for the marked differences reported. **CONCLUSIONS:** The observed increase in AEs and relapses in MS patients in Mexico raise questions about the interchangeability and comparability of pgGA to branded GA on treatment safety and efficacy.

## NEUROLOGICAL DISORDERS – Cost Studies

### PND2
### ESTIMATING THE OPPORTUNITY COSTS OF TREATING MENINGITIS IN SELECTED COUNTRIES OF LATIN AMERICA

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**OBJECTIVES:** Neisseria meningitidis is a leading cause of bacterial meningitis and septicemia in infants, young children and adolescents, with considerable morbidity and mortality and health system costs. We synthesized available data to estimate the cost associated with meningococcal disease in Brazil, Chile, Colombia, and Panama from the societal perspective. **METHODS:** National treatment guidelines were considered to establish treatment practices of meningococcal disease in each country. A combination of retrospective data collection techniques was used in the study, including structured interviews to physicians and primary caregivers, and review of patient medical records, and medical registers of hospitals, health centers and laboratory centers. All cost components were based on 2014 prices and were converted to US dollars using the official exchange rate. **RESULTS:** The economics of meningococcal disease is complex and multifaceted. The country that reported the highest treatment cost of meningococcal disease was Panama, taking up 62% of the total cost across the three countries. This was followed by Colombia and Chile with both taking up to 22% and 16% of the total costs of meningococcal disease, respectively. Direct medical costs and, more specifically, hospital care costs took up the biggest proportion of the total cost of meningococcal disease in all three countries, ranging from 63% to 72%, reflecting on the level of disease severity. Loss of productivity