

examined. As rheumatologists aim to improve quality of care, RISE will, by design, allow participants to measure, benchmark, and continuously monitor performance improvement.

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OP0069 THE BURDEN OF ANKYLOSING SPONDYLITIS: A POPULATION BASED STUDY

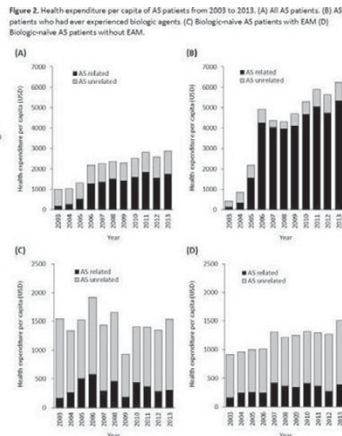
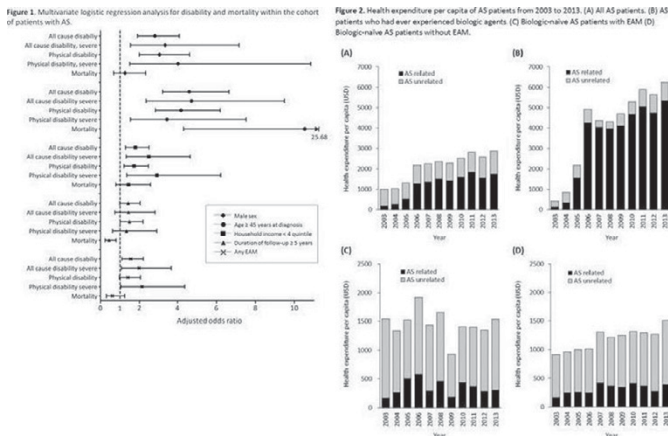
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Background: Ankylosing spondylitis (AS) is an inflammatory rheumatic disease with musculoskeletal and systemic manifestations. Because AS is typically diagnosed before the age of 40 years and follows a chronic progressive course, its impact on the patient is life-long. In addition to the burden on the individual patient, that on the society is also increasing cumulatively every year [1]. The burden of AS is not confined to healthcare cost spent due to back pain and stiffness of the disease itself [2-4], but also encompass extra-articular manifestation (EAM), comorbidities, disability, and mortality contributed from AS [5].

Objectives: This study aimed to evaluate the disability, mortality, and healthcare cost for quantifying the burden of AS.

Methods: We conducted a nationwide population-based study based on national health insurance data in Korea. The patients with incident AS (n=1111) were identified with controls (n=5555) who were matched by age, sex, income, and geographic region from the year 2003 to 2013. EAMs, comorbidities, mortality and type and severity of disabilities were presented as incidence rate and compared to the controls as incidence rate ratios (IRRs). Annual health expenditure per patient was analyzed by the year and relation to AS.

Results: During the follow-up, 28% of patients in this cohort experienced any kind of EAM. More comorbidities with Charlson comorbidity index ≥ 3 (OR 2.18, 95% CI 1.91 to 2.48) were significantly associated. Disability rate was higher than controls regardless of causes and severity (OR 2.94, 95% CI 2.48 to 3.48). Crude IRRs for mortality was not significantly increased, but by multivariate analysis, older age at diagnosis (≥ 45 years old) (OR 10.53, 95% CI 4.31 to 25.68) was most strongly related to increased disability and mortality rates (Fig.1). Biologic agents elevated annual health expenditures of AS but decreased AS unrelated costs (mean 1112 vs 877 USD, p=0.0068) (Fig.2).



Conclusions: Along with demographic factors, systemic consequences such as EAMs and other comorbidities were associated with increased disabilities and healthcare expenditures in AS. Older age at diagnosis was significantly associated with increased mortality rates.

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OP0070 THE ROLE OF INDIVIDUAL AND COUNTRY-LEVEL SOCIO-ECONOMIC FACTORS IN WORK PARTICIPATION IN PATIENTS WITH SPONDYLOARTHRITIS ACROSS 22 COUNTRIES WORLDWIDE: RESULTS FROM THE COMOSPA STUDY

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Background: Spondyloarthritis (SpA) carries substantial financial costs, including direct costs (use of medical services and treatments) and indirect costs (loss of work productivity). While disease related factors have been repeatedly shown to be associated with work outcomes, information on the role of educational attainment and the economic wealth of the patients' country of residence is scarce.

Objectives: To explore the role of individual and country level socio-economic (SE) factors on employment, absenteeism and presenteeism across 22 countries.

Methods: Patients with a clinical diagnosis of SpA, fulfilling the ASAS SpA criteria and in working age (≤ 65 years old) from COMOSPA were included. Outcomes explored were employment-status, absenteeism and presenteeism according to the Work Productivity and Activity Impairment Specific Health Problem (WPAI-SHP) questionnaire. Absenteeism and presenteeism were assessed in employed patients. Multilevel logistic (for work status) and linear (for absenteeism and presenteeism) regression models with random intercept for country were constructed. Independent contribution of individual (education) and country level socio-economic factors (country healthcare expenditures and gross domestic product (GDP) (all low vs medium/high tertiles) were assessed in models adjusted for clinical factors.

Results: In total 3,114 patients from 22 countries were included (mean (SD) age 40.9 (11.8) years; 66% males; and 63% employed). Of these, 89% had axial SpA and 11% a peripheral SpA. Unadjusted employment rates ranged from 28% (Colombia) to 83% (Canada). After adjustment for relevant socio-demographic and clinical variables, differences between countries in work status persisted (Figure).

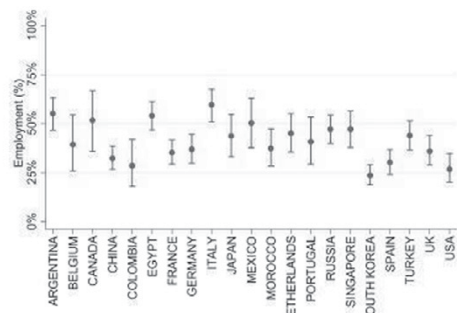


Figure – Adjusted estimates of employment rate (and 95%CI) by country derived from final multivariable, two-level model for work status, adjusted for health expenditure per capita (in USD), socio-demographic and clinical

Table – Impact of individual and country SE factors on work outcomes, in two-level models adjusted for socio-demographic and clinical variables

Independent predictors	Outcome		
	Work status (employed vs not) (N=2,897) OR (95% CI)	Absenteeism (0-100%) (N=1,497) β (95% CI)	Presenteeism (0-100%) (N=1,497) β (95% CI)
Country health expenditure per capita (US dollars)	2.42 (1.53;3.81)	-3.42 (-13.07;6.23)	-4.53 (-8.90;-0.17)
Age (years)	0.98 (0.97;0.99)	-0.04 (-0.17;0.09)**	-0.20 (-0.31;-0.10)
Gender (ref: Female)	2.26 (1.88;2.72)	-4.38 (-7.28;-1.49)	-4.30 (-6.59;-2.01)
Education (ref: Primary school or less)			
-Secondary	2.35 (1.77;3.11)	-5.42 (-10.45;-0.40)	-3.09 (-7.03;0.85)
-University	3.90 (2.91;5.24)	-7.25 (-12.33;-2.27)	-7.48 (-11.44;-3.51)
Marital status (ref: single)			
-married/living together;	2.28 (1.83;2.85)		
-divorced	2.37 (1.54;3.67)	Y	E
-widower	2.00 (0.84;4.73)		
RDCI (0-9)	0.83 (0.84;0.91)	Y	2.43 (1.21;3.66)
ASDAS-CRP	Y	3.83 (2.17;5.50)	7.43 (6.12;8.74)
BASFI (0-10)	0.98 (0.98;0.98)	0.13 (0.05;0.20)	0.45 (0.39;0.51)

RDCI=Rheumatic Disease Comorbidity Index; ASDAS-CRP= Ankylosing Spondylitis Disease Activity Score; BASFI=Bath Ankylosing Spondylitis Functional Index;

Y Not selected during multivariable regression analysis (p ≥ 0.05).

E Not selected during univariable analysis (p > 0.20)