

PATIENT REPORTED OUTCOMES IN SPONDYLOARTHRITIS PATIENTS IN EUROPE: A SYSTEMATIC REVIEW OF THE LITERATURE

PMS71

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INTRODUCTION

- Spondyloarthritis are inflammatory rheumatic diseases, clinically characterized by inflammatory back pain, radiological spondylitis and pathological enthesitis. Ankylosing spondylitis (AS) and psoriatic arthritis (PsA) are the most important representatives of them¹. These diseases have a significant negative impact on patients' functioning and health related quality of life (HRQoL) with important consequences on their daily activities including work productivity².
- The use of patient reported outcomes (PROs) in clinical practice could lead to improve patient management.

OBJECTIVE

- To assess patient reported outcomes in European Spondyloarthritis population.

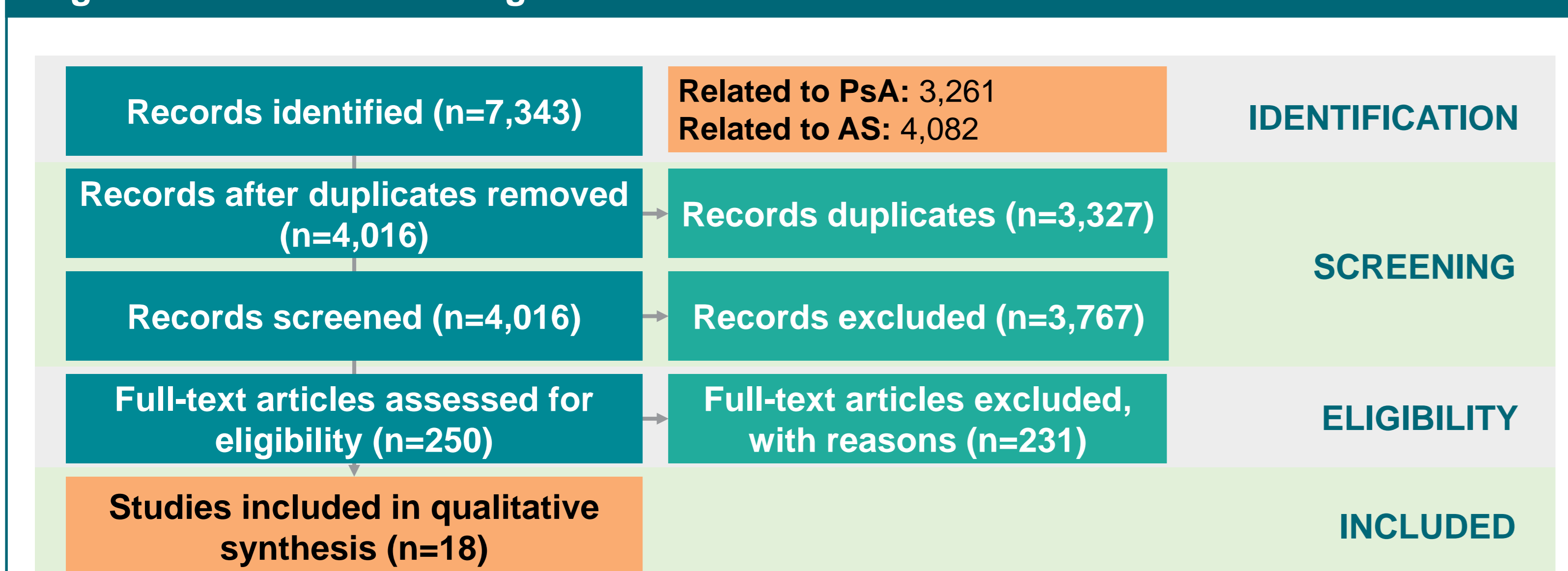
METHODS

- A systematic literature review of the literature was conducted in order to identify studies written in English or Spanish on PROs regarding Spondyloarthritis [PsA and AS] published in Europe until September 2015.
- Electronic databases (PubMed, ISI-WOK, Cochrane Library, ISI-Wok, Scopus) and grey literature (Google Scholar) were searched. Bibliographic references of the reviewed papers were hand searched.
- Editorials, letters, commentaries, opinion papers and studies related to specific treatments were excluded.
- The methodological quality of the studies was appraised by assigning a level of evidence and recommendation based on Centre for Evidence-Based Medicine (CEBM) criteria³.

RESULTS

- The search strategy resulted in 7,343 records, 3,261 related to PsA and 4,082 related to AS. Of them 7,094 were excluded as duplicates or clearly not relevant. After full-text reading and inclusion/exclusion criteria application, 18 studies were included (Figure 1).

Figure 1. PRISMA Flow-Diagram



PRISMA: Preferred Reporting Items for Systematic Reviews and MetaAnalyses; PsA: Psoriatic Arthritis; AS: Ankylosing Spondylitis

- One systematic review and seventeen observational studies were retrieved (n=12 cross-sectional, n=4 prospective, n=1 retrospective) (Table 1, Table 2 and Table 3).
- Six studies were related to PsA, 8 to AS, and 4 to both. Thirteen publications analyzed patients' HRQoL, 4 assessed patients' persistence to treatment and 1 study examined patients' attitudes related to treatment decision-making (Table 1, Table 2 and Table 3).
- Most studies (n=12) had a 2c level of evidence and a CEBM recommendation grade B, which represents moderate evidence (Table 1, Table 2 and Table 3).

Table 1. Characteristics of the studies related to AS

Author, year, (level of evidence)	Country	Study design	Evaluated PROs	Instruments used to assess PROs
Hyphantis et al. 2013 (2c) ¹⁰	Greece	Cross-sectional	HRQoL	WHOQOL-BREF
Kucharz et al. 2013 (3b) ¹¹	Poland	Cross-sectional	HRQoL	Study specific questionnaire
Kristensen et al. 2010 (2c) ¹²	Sweden	Prospective	Adherence/ Persistence	Continuation rate Drug survival rate
Ariza-Ariza et al. 2009 (2c) ¹³	Spain	Cross-sectional	HRQoL	EQ-5D
Fernández de las Peñas et al. 2006 (2c) ¹⁴	Spain	Cross-sectional	HRQoL	SF-36
Ariza-Ariza et al. 2003 (2c) ¹⁵	Spain	Cross-sectional	HRQoL	SF-36 / EQ-5D
Chorus et al. 2003 (2c) ¹⁶	Netherlands	Cross-sectional	HRQoL	SF-36
Challier et al. 2001 (2c) ¹⁷	France	Prospective	HRQoL	Specific questionnaire: AS-AIMS2

AS: Ankylosing Spondylitis; HRQoL: Health-Related Quality of Life

Table 2. Characteristics of the studies related to PsA

Author year (level of evidence)	Country	Study design	Evaluated PROs	Instruments used to assess PROs
Bremader et al. 2015 (2c) ⁴	Sweden	Cross-sectional	HRQoL	EQ-5D
Kotsis et al. 2012 (2c) ⁵	Greece	Cross-sectional	HRQoL	WHOQOL-BREF
Renzi et al. 2011 (2c) ⁶	Italy	Cross-sectional	Patients' attitudes and satisfaction with decision-making	Study specific questionnaire
Saad et al. 2010 (2c) ⁷	UK	Prospective	HRQoL	SF-36 SF-6D
Brodsky et al. 2010 (2c) ⁸	Hungary	Cross-sectional	HRQoL	PsAQoL EQ-5D
Saad et al. 2009 (2c) ⁹	UK	Prospective	Persistence	Drug survival rate

HRQoL: Health-Related Quality of Life; PsA: Psoriatic Arthritis

Table 3. Characteristics of the studies related to PsA and AS (both pathologies)

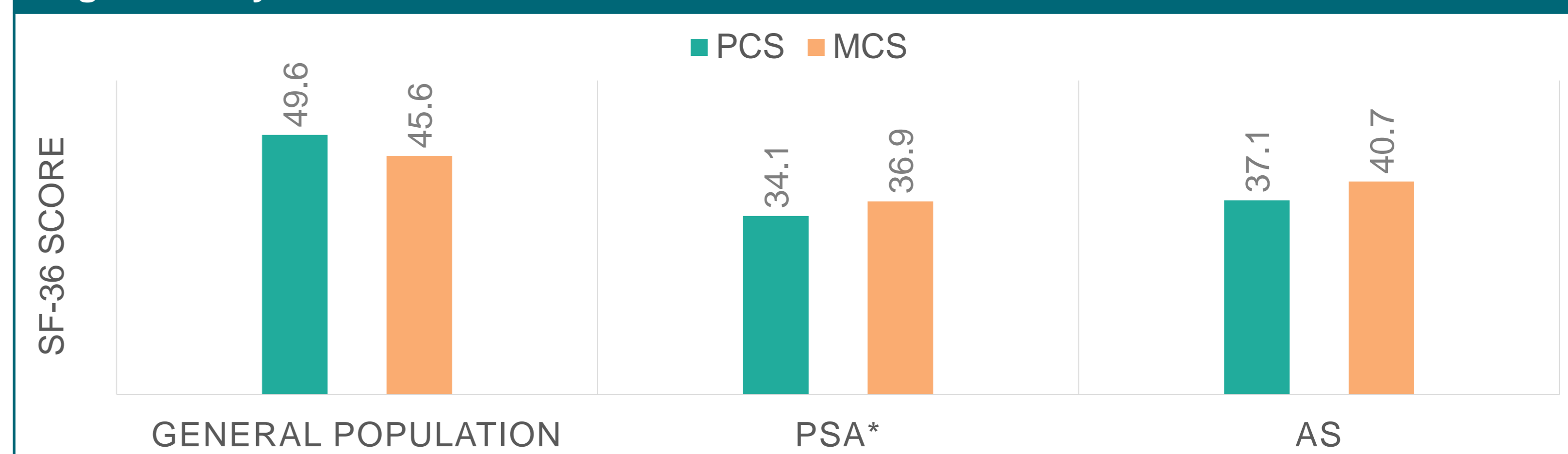
Author year (level of evidence)	Country	Study design	Evaluated PROs	Instruments used to assess PROs
Lyu et al. 2016* (2c) ¹⁸	Germany	Retrospective	Persistence	Drug survival rate
López-González et al. 2015 (2a) ¹⁹	Spain	Systematic review	Adherence	Continuation rate Drug survival rate
Jajic et al. 2012 (2c) ²⁰	Croatia	Cross-sectional	HRQoL	SF-36
Salaffi et al. 2009 (2c) ²¹	Italy	Cross-sectional	HRQoL	SF-36

*Published online Aug, 2015; AS: Ankylosing Spondylitis; HRQoL: Health-Related Quality of Life; PsA: Psoriatic Arthritis

HRQoL in spondyloarthritis patients

- Compared to general population, patients with PsA and AS have poorer HRQoL, mainly the physical component (PCS: 49.6 vs. 34.1 & 37.1; MCS: 45.6 vs. 36.9 & 40.7) (Figure 2).

Figure 2. Physical and mental score



*Referred to patients with peripheral PsA; AS: Ankylosing Spondylitis; MCS: Summary scores of mental component; PCS: Summary scores of physical component; PsA: Psoriatic Arthritis;

- For PsA patients, level of functional ability (HAD rho>0.5; p<0.05), disease activity (rho>0.5; p<0.05), pain ($\beta=0.270$; p<0.05), anxiety ($\beta=0.283$; p<0.05) and severity of psoriatic lesions (PASI; p<0.05) were significantly (p<0.05) associated with poor HRQoL.
- In AS patients, a significant association was found between patients' functionality (BASFI), disease activity (BASDAI) and HRQoL (r=-0.35 to -0.75; p<0.05).

Treatment persistence and adherence in spondyloarthritis patients

- Among PsA and AS patients treated with subcutaneous biologic agent, treatment persistence at 12 months was relatively low (57.9% and 48.1%, respectively).
- The main predictive factors on adherence and persistence of biologic treatment were age, sex, comorbidity, poorer functionality and HRQoL.

PsA patients' attitudes of and satisfaction with decision-making

- Most patients with PsA (71.9%) wished to be involved in decision-making and play a more relevant role in managing their disease.
- Information on treatment side-effects (OR=5.11; 95% CI 2.5-15.0; p<0.001) and treatment options (OR=3.15; 95% CI 1.4-7.1; p<0.01) were significantly associated with overall satisfaction with decision-making.

CONCLUSIONS

- HRQoL in spondyloarthritis patients is compromised. Physical domain is more impaired than mental. Patients' functionality and disease activity are the main factors determining HRQoL. Persistence among PsA and AS is low. Improving HRQoL and patients' functionality can lead to an increase of persistence rates.

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