



Work productivity in a population based cohort of patients with Spondyloarthritis

Emma Haglund, PT, MSc^{1,2}, Ann Bremander, PT, PhD^{1,2,3}, Stefan Bergman, MD, PhD^{1,2}, Lennart TH Jacobsson, MD, PhD^{4,5}, Ingemar F Petersson, MD, PhD^{2,6}

¹ Research and Development Centre, Spenshult Hospital for Rheumatic Diseases, Halmstad, Sweden, ² Dept. of Clinical Sciences, Lund, Section of Rheumatology, Lund University, Lund Sweden, ³ School of Business and Engineering, Dept. of Exercise Physiology, Biomechanics and Health, Halmstad University, Halmstad, Sweden, ⁴ Section of Rheumatology & Inst. of Clinical Sciences Malmö, Lund University, Lund, Sweden, ⁵ Dept. of Rheumatology & Inflammation Research, Inst. of medicine, The Sahlgrenska Academy, University of Gothenburg, Sweden, ⁶ Musculoskeletal Sciences, Dept. of Orthopedics, Clinical Sciences Lund, Lund University, Lund, Sweden

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INTRODUCTION

Work productivity has been shown to be affected in patients with ankylosing spondylitis (AS)¹ both in terms of absenteeism (as sick-leave/disability pension)² and presenteeism (reduced productivity at work) but been less studied for the whole spondyloarthritis (SpA) group.

Thus our aim was to study work productivity and associated factors in patients with SpA.

PATIENTS AND METHODS

- Cross-sectional study.
- 1773 patients seeking health care for SpA, identified by a health. care register.
- Aged 18-67 years.
- Presenteeism defined as reduced productivity at work (0-100%, 0=no reduction), answered by 1447 patients in a questionnaire survey in 2009.
- Absenteeism defined as register based sick leave.
- Tentative associated factors were health related quality of life (EQ-5D), disease activity (BASDAI), physical function (BASFI), anxiety (HAD-a), depression (HAD-d), self-efficacy (ASAS pain and symptom), disease duration, physical activity and education level.
- The Pearson's correlation coefficient, univariate analyses with ANOVA and t-test were used for all individuals and also stratified for age, gender and disease subgroup.

Work productivity is reduced in patients with SpA and more reduced in women.

Quality of life, disease activity, physical function, lower self-efficacy and higher degree of depression were all associated to reduced productivity at work (presenteeism) in patients with SpA, regardless of age, gender and disease subgroup.

CONCLUSIONS

Simple self-reported instrument can help the health care provider receive indications of whether the patient is on risk for a reduced productivity at work. Thus, the results can be used to provide a more individual counseling in the clinical praxis.

We also find that reduced productivity at work (presenteeism) and register based sick leave (absenteeism) may be related to different dimensions of the patients and their disease.

RESULTS

55% (802 patients of 1447), reported no reduced productivity at work (presenteeism), while mean reduced productivity was 20% (95% CI 18-21).

Women reported higher degree of reduced productivity at work than men (mean impairment 23 vs. 17, p<0.001) but no statistically significant differences were found between the SpA subgroups.

28% (504 patients of 1773) were registered for any sick leave (absenteeism > 14 days) where the net days was mean 66 days (95% CI 63-68).

Worse outcome in quality of life, disease activity, physical function and anxiety all

correlated to higher reduction of productivity at work (presenteeism) ($r > 0.5$, $p < 0.001$).

Experiencing worse outcome in EQ-5D (β -est -9.6, $p < 0.001$), BASDAI (β -est 7.8, $p < 0.001$), BASFI (β -est 7.3, $p < 0.001$), ASAS pain (β -est -0.5, $p < 0.001$) and HAD-d (β -est 3.4, $p < 0.001$) associated with lower productivity at work regardless of age, gender and disease subgroup.

ASES symptom, HAD-a and education level <12 years were all associated with lower productivity but were not significant in all strata for age, gender and disease subgroup.

PRESENTEEISM

| (n=1282*-1773) | n=1447 | p-value |
|------------------|--------------|---------|
| Age | 0.09 | 0.001 |
| EQ-5D | -0.52 | <0.001 |
| BASDAI* | 0.56 | <0.001 |
| BASFI | 0.57 | <0.001 |
| ASES pain | -0.37 | <0.001 |
| ASES symptom | -0.39 | <0.001 |
| HAD anxiety | 0.66 | <0.001 |
| HAD depression | 0.42 | <0.001 |
| Disease duration | -0.03 | 0.248 |
| Sick leave | -0.002 | 0.935 |

Table 1. Correlation coefficient (r) and p-value between different measures and reduced productivity at work (presenteeism)
EQ-5D score 0-1: higher scores indicate better HRQL; BASDAI score 0-10: lower scores indicate less disease activity; BASFI score 0-10: lower scores indicate better physical function; ASES pain and symptom score 0-100: higher scores indicate better self-efficacy; HAD anxiety and depression score 0-21: lower scores indicate less symptom.

PRESENTEEISM IN DIFFERENT SUBGROUPS

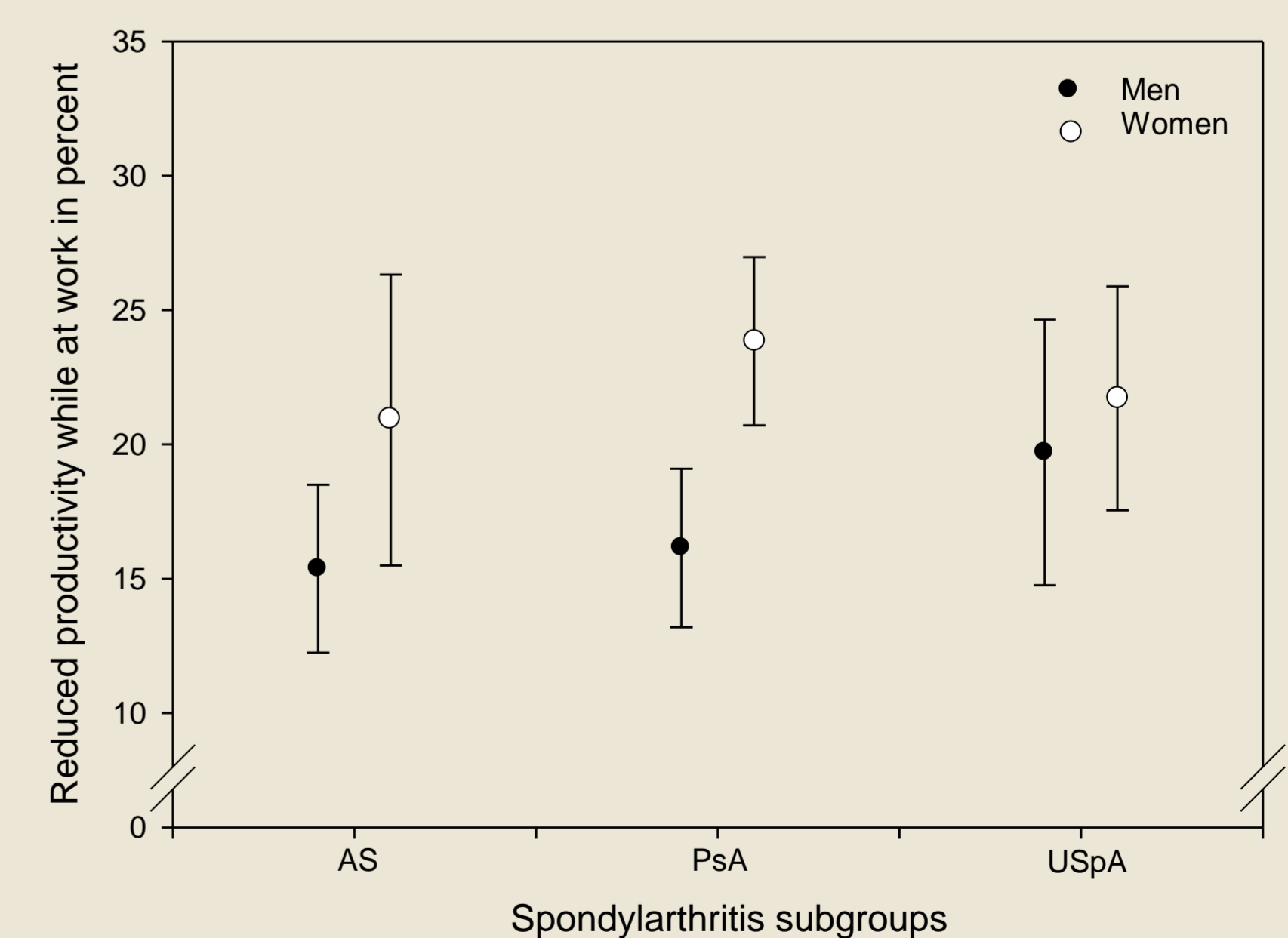


Figure 1. Self-reported productivity at work in women and men in the different disease subgroups of spondyloarthritis, AS, PsA and USpA. Presented as mean and 95% CI

