

Depression is more common in patients with ankylosing spondylitis compared to the general population seeking healthcare

JJL Meesters¹, AB Bremander², IF Petersson^{1,2,3}, S Bergman², M Englund^{1,3}

¹Epi-centre Skåne, Skåne University Hospital, Lund ²Dpt. of Clinical Sciences Lund, Section of Rheumatology ³Dpt. of clinical Sciences Lund, Section of Orthopedics, Lund University, Sweden

Conclusions

- ✓ The rate of doctor-diagnosed depression was increased about 40% in AS patients compared to the general population.
- ✓ The future challenge is to identify and treat AS patients with depression as early as possible.

Background

Ankylosing spondylitis (AS) affects physical function and HRQoL. Depression has been reported to be frequent in AS patients.

Epidemiological data are limited, estimates of the potential increase in risk are lacking.

Objective

To compare the rate of doctor-diagnosed depression in a well-defined cohort of AS patients to the general population seeking health-care.

Methods

Registers

The Skåne Health Care Register comprises data from each single healthcare consultation in Skåne, Sweden (population 1.2 million).

Data include information about date of consultation and all ICD-10 diagnoses.

From the Swedish Population Register data regarding death and residency was added.

Patients

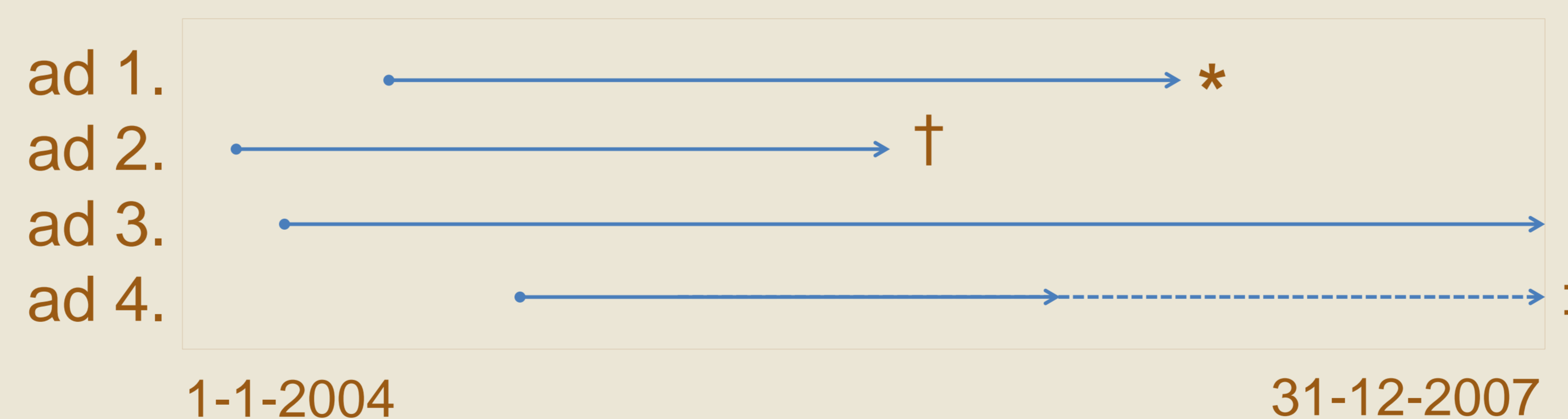
All patients registered with an AS diagnosis (ICD-10 M45) at least once during 4 calendar years (2004 to 2007).

Reference population is the general population from Skåne seeking care, stratified: age, gender.

Person-time

To obtain depression rates we calculated each subject's person-time from the date when fulfilling AS criteria until one of the following 4 events occurred in order of priority:

1. Occurrence of depression(*): ICD-10 F32 or F33
2. Death (†)
3. End of the observation (still a resident)
4. No longer a resident (‡); halftime from 1st diagnosis until end observation



Standardized depression rate (DR) ratio

Rate >1 equals higher rate of depression among AS patients.

$$\frac{\text{observed DR in AS}}{\text{expected DR in the reference population}}$$

Results

We identified 1374 patients diagnosed with AS, 60.2% men, mean age (SD) 52.4 (16.4) years. The reference population consisted of 761 210 subjects.

During the 4-year observation period:

- **6.8%** (n=94) of the AS cohort had a doctor-diagnosed depression compared to
- **4.8%** (n=66) to be expected based on data from the reference population.

The standardized depression rate ratio in men (1.41) and women (1.43) with AS were both significantly elevated in the same order of magnitude (see table).

	Observed			Expected		Absolute rate Δ	Rate ratio	95% CI
	Person time (yrs)	No. of cases ^a	Depression rate ^b	No. of cases	Depression rate ^b			
Men	1942	48	2472	34	1752	720	1.41	1.04, 1.87
Women	1131	46	4068	32	2840	1227	1.43	1.05, 1.91
Total	3073	94	3059	66	2153	907	1.42	1.15, 1.74

^a AS patients diagnosed in 2004-2007 with depression (ICD-10 F32/F33), ^b per 100 000 person-years, 95% CI: 95% Confidence Interval, Δ: difference