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OP0214

BASILINE COMORBIDITIES AND OVERWEIGHT PREDICT FUNCTIONAL STATUS AND HEALTH-RELATED QUALITY OF LIFE 9 YEARS LATER – A LONGITUDINAL COHORT STUDY OF 428 PATIENTS WITH RHEUMATOID ARTHRITIS RECEIVING STANDARD CARE

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Background: Health-related quality of life (HRQOL) and functional status are markedly reduced in patients with rheumatoid arthritis (RA) leading to a significant societal and individual burden. Comorbidities and sociodemographic factors are associated with reduced HRQOL and functional status in cross-sectional studies of RA,¹ but their predictive value is largely unknown as longitudinal studies are lacking.

Objectives: To investigate whether comorbidities and sociodemographic factors predict HRQOL and functional status 9 years later in real-world patients with RA.

Methods: Consecutive patients with RA were recruited from a university hospital outpatient clinic between July 2008 and July 2007. Data regarding sex, age, disease duration, disease activity score of 28 joints and CRP (DAS28), number of comorbid conditions, marital status (married/cohabiting vs living alone), smoking (ever, previously or currently), exercise ($\geq$ once a week vs not regularly), body mass index (BMI), educational level (elementary, training or higher), functional status (the health assessment questionnaire (HAQ)) and HRQOL (Euroqol 5 dimensions (EQ-5D)) were registered in the clinical database DANBIO; patients then continued routine care.

EQ-5D includes 5 dimensions of health (mobility, self-care, usual activities, pain/discomfort, anxiety/depression), each divided into three levels of severity, yielding 243 possible health states. A validated algorithm converts each health state into an index score between 0 (death) and 1 (perfect health).²

HAQ and EQ-5D scores at the most recent follow-up visit were retrieved from DANBIO on Sept 30th 2017. Two linear regression models were built with scores for HAQ and EQ-5D at follow-up as outcomes, respectively, all baseline variables were entered as possible explanatory variables and stepwise backward selection was employed. Sex, age, disease duration and baseline HAQ/EQ-5D were forced into the models.

Results: 564 patients with RA were recruited (81% women, median (IQR) age: 60^{49–68} years, disease duration: 7 (3–16) years, DAS28: 2.9 (2.1–3.7), HAQ: 0.63 (0.25–1.25), EQ-5D: 0.74 (0.66–0.82) and followed in routine care for a median of 9^{5–10} years. 428 and 256 patients had complete HAQ and EQ-5D scores, respectively at follow-up (HAQ: 0.75 (0.25–1.4), EQ-5D: 0.78 (0.69–0.86)). Patients without complete HAQ and EQ-5D scores at follow-up were older at baseline (10 and 6 years, respectively, $p < 0.0001$), while sex, disease duration, DAS28, HAQ and EQ-5D scores were similar.

High HAQ, BMI 26–30 kg/m², and 3 or more comorbid conditions at inclusion were all independently associated with poorer functional status and low EQ-5D 9 years later (table 1). The models with HAQ or EQ-5D as outcome explained 51% and 31% of the variation (Adj R²), respectively.

Abstract OP0214 – Table 1 Multivariable linear regression model with HAQ and EQ-5D at follow-up as outcomes.

Explanatory variables	HAQ at follow up			EQ-5D at follow up		
	Coefficient	95% CI		Coefficient	95% CI	
Women	0.19	0.06	0.33	-0.03	-0.08	0.02
Age (50–75 yrs)	0.06	-0.05	0.18	0.03	-0.01	0.07
Age (>75 yrs)	0.03	-0.22	0.28	0.01	-0.10	0.11
Disease duration (3–10 yrs)	0.10	-0.03	0.23	-0.01	-0.06	0.04
Disease duration (>10 yrs)	0.12	-0.02	0.25	-0.02	-0.07	0.03
Baseline HAQ (per unit increase)	0.72	0.63	0.81	-0.10	-0.14	-0.05
Baseline EQ-5D (per unit increase)	NS	-	-	0.13	-0.05	0.30
BMI (<18.5 kg/m ²)	0.27	-0.08	0.62	-0.09	-0.23	0.04
BMI (26–30 kg/m ²)	0.22	0.10	0.33	-0.09	-0.13	-0.04
BMI (>30 kg/m ²)	0.16	0.01	0.32	-0.03	-0.08	0.03
One comorbid condition	0.13	0.01	0.26	-0.02	-0.07	0.02
Two comorbid conditions	-0.03	-0.18	0.12	0.03	-0.03	0.08
≥ 3 comorbid conditions	0.30	0.14	0.47	-0.14	-0.20	-0.08
Constant	0.39	0.07	0.72	0.79	0.64	0.94

Adjusted R²: HAQ: 0.51, EQ-5D: 0.31.

Reference groups: male, age: <50 years, disease duration: 0–2 years, BMI: 18.5–25 kg/m², comorbid conditions: none.

Conclusions: Potentially modifiable factors (overweight and comorbidities) were independently and consistently associated with worse functional status and HRQOL at follow-up 9 years later in patients with RA receiving standard care. The findings suggest that focus on lifestyle and comorbidities in patients with RA may improve important long-term outcomes.

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Musculoskeletal pain; feeding the opioid epidemic

OP0215

TIME-RELATED TRENDS IN OPIOID PURCHASES AMONG PATIENTS WITH EARLY INFLAMMATORY ARTHRITIDES

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Background: Treatment outcomes in inflammatory arthritis (IA) have improved during the past decades; however, pain management remains a great challenge. There has been a concern of overprescription of opioids during recent years.

Objectives: The aim of this study was to explore the frequency of opioid users in patients with newly-onset IA in comparison with the general Finnish population and discover the proportion of long-term opioid users.

Methods: From the nationwide register maintained by the Social Insurance Institution of Finland we collected all incident adult patients with the five most common IAs between 2010–14. For each case, three eligible controls were randomly selected and individually matched according to age, sex, and place of residence. Opioid purchases between 2009–2015 were obtained from the drug prescription register and evaluated one year before and after the index date (decision of special reimbursement for antirheumatic drugs), further dividing the observation time into 3 month periods. Long-term use was defined as opioid purchases at least in three of these periods per year. All opioids from mild to strong were included.

Results: Data on different diagnosis groups are presented in table 1. The proportion of opioid purchasers among IA patients and their controls are shown in figure 1A–E. Also, odds ratio for long-term opioid use after the index date is shown in figure 1F.