

**Methods:** A population-based case-control study using incident cases of RA was performed in Sweden, and the study population in this report was restricted to include never smokers (589 cases, 1764 controls). The incidence of RA among never smokers who had been exposed to passive smoking was compared with that of never smokers who had never been exposed, by calculating the odds ratio with a 95% confidence interval employing logistic regression.

**Results:** No association was observed between exposure to passive smoking and RA risk (OR 1.0, 95% CI 0.8–1.2 for ACPA positive RA, and OR 0.9, 95% CI 0.7–1.2 for ACPA negative RA). No suggestion of a trend between duration of passive smoking and RA risk was observed.

**Conclusions:** No association was observed between exposure to passive smoking and RA risk, which may be explained by a threshold below which no association between smoke exposure and RA occurs.

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# SAT0722-HPR FAMILIAL RISKS OF RHEUMATOID ARTHRITIS: EVIDENCE FROM THE MALAYSIAN EPIDEMIOLOGICAL INVESTIGATION OF RHEUMATOID ARTHRITIS CASE-CONTROL STUDY

C.L. Too<sup>1,2</sup>, L.K. Tan<sup>3</sup>, A.F. Nurul Ain<sup>3</sup>, S. Salsabil<sup>3</sup>, H. Heselynn<sup>4</sup>, S. Wahinuddin<sup>5</sup>, I.S. Lau<sup>6</sup>, S.C. Gun<sup>7</sup>, S. Nor-Shuhaila<sup>4</sup>, M. Eashwary<sup>4</sup>, M.S. Mohd-Shahrir<sup>8</sup>, M.-M. Aionon<sup>9</sup>, R. Azmillah<sup>6</sup>, O. Muhaini<sup>10</sup>, C. Bengtsson<sup>11</sup>, L. Padyukov<sup>2</sup>, L. Alfredsson<sup>11</sup>, L. Klareskog<sup>2</sup>, M. Shahnaz<sup>12</sup>.  
<sup>1</sup>Allergy and Immunology Research Center, Institute for Medical Research, Kuala Lumpur, Malaysia; <sup>2</sup>Department of Medicine, Rheumatology Unit, Karolinska Institutet and Karolinska University Hospital, Stockholm, Sweden; <sup>3</sup>Institute for Medical Research, Kuala Lumpur; <sup>4</sup>Department of Medicine, Putrajaya Hospital, Putrajaya; <sup>5</sup>Faculty of Medicine, Universiti Kuala Lumpur Royal College of Medicine Perak, Ipoh; <sup>6</sup>Department of Medicine, Selayang Hospital, Selayang; <sup>7</sup>Department of Medicine, Hospital Tunku Ja'afar Seremban, Seremban; <sup>8</sup>Faculty of Medicine, Universiti Kebangsaan Malaysia Medical Center, Kuala Lumpur; <sup>9</sup>Department of Medicine, Tengku Ampuan Afzan Hospital, Kuantan, Pahang; <sup>10</sup>Department of Medicine, Hospital Raja Perempuan Bainun, Ipoh, Perak, Malaysia; <sup>11</sup>Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden; <sup>12</sup>Ministry of Health, Level 12th, Block E7, Parcel E, Federal Government Administrative Center, Putrajaya, Malaysia

**Background:** Family history of rheumatoid arthritis (RA) is a surrogate for an individual's genetic and partly environmental risk of developing RA. It is assessed daily in clinical practice and its magnitude and pattern of distribution may provide information on the RA etiology.

**Objectives:** We investigated the association between family history of RA and the risk of anti-citrullinated peptide antibody (ACPA)-positive and ACPA-negative RA in the Malaysian population.

**Methods:** Data from the Malaysian Epidemiological Investigation of Rheumatoid Arthritis (MyEIRA) population-based case-control study involving 1,055 early RA cases and 1,055 age, sex and residential area-matched controls were analyzed. Information from interview-reported family history of RA or rheumatic stiff back among first degree relatives was used to estimate the risk of developing ACPA-positive and ACPA negative RA. The odds ratio (OR) with 95% confidence interval (CI) was calculated.

**Results:** In this study, 64% of the RA patients were ACPA-positive and 40% of the overall RA carried HLA-DRB1 shared epitope (SE) alleles. Family history of RA was significantly associated with an increased risk of developing RA in the Malaysian population (RA versus controls, 17.0% vs. 7.7%, OR 2.4, 95% CI 1.8–3.2,  $p < 0.0001$ ). The association between positive family history and risk of RA was uniformly observed for the ACPA-positive RA (OR 2.5, 95% CI 1.8–3.3,  $p < 0.0001$ ) and ACPA-negative RA (OR 2.3, 95% CI 1.6–3.2,  $p < 0.0001$ ) subsets, respectively. A dramatically increased risk for ACPA-positive RA was seen in individuals who both were having positive family history of RA and carried HLA-DRB1 SE alleles (OR 14.7, 95% CI 7.7–27.8). We also observed a lesser risk magnitude in the ACPA-negative RA patients (OR 5.7, 95% CI 2.7–11.9).

**Conclusions:** Our data demonstrate that family history of RA remains an important clinical risk factor for RA. In addition, positive family history of RA was associated with an increased risk of developing both the ACPA-positive and ACPA-negative RA in the Malaysian population, suggesting that the two RA subsets are similar in genetic risk factors that overlap with these diseases.

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# HPR patients' perspectives, functioning and health (descriptive: qualitative or quantitative)

## SAT0723-HPR GENDER DIFFERENCES IN COPING STRATEGIES AND ILLNESS ACCEPTANCE IN PATIENTS WITH INFLAMMATORY ARTHRITIS – A NATIONWIDE CROSS-SECTIONAL STUDY

B.A. Esbensen<sup>1,2</sup>, C. Flurey<sup>3</sup>, K.V. Jensen<sup>1</sup>, L. Andersen<sup>1</sup>, N.M. Hammer<sup>1</sup>.  
<sup>1</sup>Rigshospitalet - Glostrup, COPECARE, Centre for Rheumatology and Spine Diseases & Research Unit, Glostrup; <sup>2</sup>Department of Clinical Medicine, Faculty of Health and Medical, University of Copenhagen, Copenhagen, Denmark; <sup>3</sup>Rheumatology Unit, Bristol Royal Infirmary, West England, Bristol, United Kingdom

**Background:** There is an increasing focus on how patients with inflammatory arthritis (IA) manage living with arthritis. There are a preponderance of women with RA (70%), thus previous research has overall focused on female patients and their management. Research in other long term conditions suggests men need their own health strategy<sup>1</sup>, thus it is important to investigate whether there are gender differences in coping strategies and illness acceptance within chronic IA.

**Objectives:** To explore gender differences in IA as reflected by coping strategies and illness acceptance. Furthermore, to identify factors associated with high degree of illness acceptance.

**Methods:** The study was conducted as a nationwide cross-sectional study using online survey during 2016. Patients >18 with rheumatoid arthritis (RA), psoriatic arthritis (PsA) and axial spondyloarthritis (axSpA) were invited to contribute through: The Danish Rheumatism Organization, local arthritis networks, diagnosis networks, and rheumatology departments across the country. The self-report online questionnaire comprised Socio-demographics, Diagnosis, Symptoms (pain, fatigue, global), Medications, Disease Activity, Functional Status, Coping (i.e. confrontation, avoidance and acceptance-resignation) and Illness Acceptance. As recommended by EULAR 2 patients with RA (KJV & LA; male and female, respectively), were included as equal research partners in all phases of the study. Descriptive statistics were applied to explore gender differences, and logistic regression analyses were performed to test for factors associated with illness acceptance.

**Results:** In total, 664 (85% women) were included in the study; RA 53%, PsA 27% and axSpA 20%. More men (40%) than women (30%) were treated with biological DMARDs ( $p=0.048$ ). No significant gender differences were found in disease activity, symptoms and functional status. Overall, the total sample had high degree of illness acceptance and no significant difference was found between males and females. Regarding illness coping, women with IA tend to use avoidance as a coping strategy significantly more than men ( $p=0.015$ ). In the final multivariable regression model, higher education (OR=1.46; 1.02–2.11), longer time diagnosed (OR=1.21 per 1-yr. increase; 1.01–1.05), lower physical disability (OR=0.76; 0.69–0.85), better coping with fatigue (OR=1.13; 1.05–1.22), less avoidance (OR=0.93; 0.87–0.99) and acceptance-resignation (OR=0.62; 0.62–0.75) as coping strategies were significantly associated with high degree of illness acceptance.

**Conclusions:** No significant differences were found in illness acceptance among women and men with IA. However, women tended to use avoidance as a coping strategy more than men. High levels of illness acceptance may be explained by high education, longer disease duration, and better physical function, better coping of fatigue and less use of passive coping strategies.

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## SAT0724-HPR GOTHENBURG NURSE LED TIGHT CONTROL STUDY – GOTNET. PATIENTS' EXPERIENCES OF NURSE-LED CARE AND TIGHT CONTROL. A QUALITATIVE STUDY OF PATIENTS WITH RHEUMATOID ARTHRITIS

U. Bergsten<sup>1,2</sup>, A.-S. Sjö<sup>1</sup>. <sup>1</sup>Rheumatology Department, Sahlgrenska University Hospital, Gothenburg; <sup>2</sup>Department of Research, Development and Education, Region Halland, Varberg, Sweden

**Background:** Rheumatoid arthritis (RA) is a chronic inflammatory illness, using both pharmacological and non-pharmacological therapies. Some patients experience good treatment, knowledge about their illness and situation. For other patients, it might look different depending on how much they know about their illness. Earlier research has primarily focused on patients in remission. In order to strengthen and support patients with RA that are not feeling well, to give them more knowledge about their situation, one strategy could be that they have access to a nurse-led rheumatology clinic with person-centered care (PCC).