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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.2472

OP0143-HPR **DISABILITY IN THE FEET RELATED TO PARTICIPATION IN DAILY LIFE IN PATIENTS WITH EARLY RA – AN INTERVIEW STUDY IN THE SWEDISH TIRA PROJECT**

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Background: Pain, stiffness and deformity of the feet are related to reduced mobility and participation restrictions in daily activities in patients with established rheumatoid arthritis (RA). The new biological medications are effective and reduce disease activity, but not disability to the same extent. Foot problems are assumed to be related to participation restrictions also in patients with early RA, diagnosed after the introduction of biological medications, hindering for example physical activity. Hence, there is a need for more knowledge about foot problems in order to identify possible needs for rehabilitative interventions.

Objectives: To explore disability related to foot problems in women and men with early rheumatoid arthritis and its relation to participation in daily life.

Methods: 59 patients (58% women, 20–63 years) with early RA were interviewed about participation dilemmas in daily life related to RA, using Critical Incident Technique. The interviews were audio-recorded and transcribed. Data related to foot problems were extracted and analysed thematically. A research partner with RA validated the retrieved categories. The study was approved by the Regional Ethics Committee.

Results: More than 2/3 of the patients mentioned that they had participation restrictions related to foot problems. The analysis revealed 5 categories concerning foot problems and the relation to participation restrictions: 1) foot problems as an early indicator of the disease, 2) hindrance in managing the daily routine and house hold activities, 3) struggling to be mobile, 4) difficulties in doing a job at work and 5) difficulties in participating in recreation and leisure activities. Both women and men shared many experiences, as difficulties to be physically active. Several women expressed difficulties to use the shoes they wanted. Being able to move on uneven ground in, for example, the forest was something that many men expressed as difficult.

Conclusions: Patients with early RA with access to effective medications and multi professional interventions based on their individual needs still experience a wide range of foot related disability in major life arenas as work, in the household and during leisure time. This indicates a need to pay attention also in today's early RA patients to foot problems in the multi professional rehabilitation to prevent further disabilities and enable physical activity for men and women with RA.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.3294

OP0144-HPR **"IT CAN'T BE ZERO": A QUALITATIVE STUDY OF PATIENTS' PERSPECTIVE ON PATIENT GLOBAL ASSESSMENT IN RHEUMATOID ARTHRITIS**

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Background: Patient Global Assessment (PGA) plays an important role in disease activity assessment and treatment decisions in rheumatoid arthritis (RA). However, the meaning of PGA is open to patient interpretation and this may affect the validity and reliability of clinical assessments.

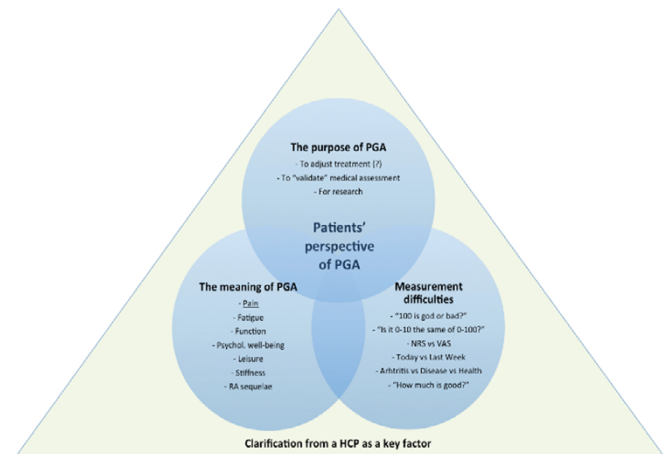
Objectives: We aimed to explore: (i) patients' perspective on PGA and its different formulations (ii) how patients' perspective may be improved by a brief explanation from a health care professional (HCP).

Methods: This was a qualitative study including consecutive patients with RA attending a day hospital and an outpatient department of a university hospital in Portugal. Data collection included 4 focus-groups (FGD) and 3 individual interviews to determine patients' perspectives. To help the discussions, patients completed 3 different PGA formulations consecutively and then a HCP explained what information was expected to inform their PGA. The 3 PGA formulations and their implications were then discussed between the patient and the HCP. Data from the FGDs and the interviews were transcribed verbatim and inductive content analysis was undertaken by two independent researchers. Data were coded and categorised in themes, which were agreed upon with patients, HCP and patient research partners.

Results: Fourteen patients (12 women) with RA participated. Their age ranged from 49 to 72 years, disease duration 4 to 30 years and 11 were on biologic DMARDs. Four main themes emerged (Figure 1): (1) The purpose of PGA. Some

patients did not know whether PGA affects their treatment decisions in the same way as the objective measures do: "if the answer is not in somehow according to the exams we make (...) obviously they might ignore me". Some believed that PGA was only used for research purposes. (2) The meaning of PGA. Pain was by far the main meaning of PGA, but also fatigue, function and other dimensions including RA sequelae; (3) Measurement difficulties. Many of these difficulties arose from the presentation of the three different PGA formulations, anchor points and their presentations: "I always think that 100 is great: you feel 100%", "Usually the scale is 0 to 10, here I can see 0 to 100"; "Usually it has the numbers, I answer 2, it's not like a straight line like this one"; "Today is different (...) when they ask the last week, we have to go back in time and the pain isn't the same anymore". Also cultural issues and the subjectivity of the concept were expressed: "We, the patients, can't really assess the intensity of the pain, what could be a 9 for her, for me it might be a 5"; "I can never answer 0, because I always have something that affects me". (4) Clarification from a HCP as a key factor for global understanding: ["Sometimes I just give a random number. (...) now maybe I will think more carefully and try to be as accurate as possible".

Figure 1. Main themes of Patients' perspective of PGA



Conclusions: Our results suggest that patients' interpretation of PGA is diverse and may reflect different symptoms such as pain or psychological well-being and comorbidities. Standardization of PGA is warranted and dedicated patient debriefing is likely to improve the reliability of this assessment.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.6214

OP0145-HPR **RHEUMATOID ARTHRITIS PATIENTS' SUPPORT NEEDS REGARDING MEDICATION USE AND THEIR PERSPECTIVES ON THE APPLICABILITY OF EHEALTH INTERVENTIONS TO ADDRESS THOSE NEEDS: A FOCUS GROUP STUDY**

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Background: Patients with rheumatoid arthritis (RA) encounter various problems with their medication use, including poor knowledge about disease-modifying antirheumatic drugs (DMARDs)¹, concerns about potential adverse consequences of their medication use² and struggles with opening the medication's packaging³. Additional support might decrease those problems by targeting RA patients with (eHealth) interventions that address their needs. To date, no studies have explored RA patients' support needs regarding medication use from their own perspectives, and it remains largely unknown if, and to what extent, they perceive a need for eHealth interventions.

Objectives: The objective of this study was twofold: 1) to explore RA patients' support needs regarding medication use; and 2) to gain insight into their perspectives on the applicability of eHealth interventions to address those needs.

Methods: Three focus groups with 28 RA patients (mean age: 65 years, mean disease duration: 19 years) were conducted. All focus groups were audio-recorded and subsequently transcribed verbatim. Two researchers independently conducted an inductive, thematic analysis on the transcripts.

Results: Three themes that described RA patients' support needs regarding medication use were identified: 1) Informational support; 2) Practical support; and 3) Emotional and behavioral support. Informational support refers to the provision of knowledge and facts, including advice, suggestions and feedback from healthcare providers. Practical support includes the strengthening of technical skills (e.g. administering subcutaneous injections), as well as the provision of goods and services. Emotional and behavioral support refers to the interventions enabling RA patients to better cope with their medication use. Their perspectives on the applicability of eHealth interventions to address those needs were also identified. RA patients recognized potential advantages of eHealth interventions, such as being less time consuming and easily accessible. However, concerns

on matters such as privacy, the quality and trustworthiness of information and personal interaction with healthcare providers prevailed.

Conclusions: For most RA patients, informational support regarding medication use is the most important (unmet) need. High-quality, unambiguous information about their medication use was emphasised. Moreover, this information should be provided by healthcare providers on an ongoing basis and tailored to their personal situation. Eliminating RA patients' concerns regarding eHealth interventions should be a first priority before such interventions are applicable to address these informational needs. These findings need to be confirmed in a sample of younger RA patients.

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.6344

THURSDAY, 15 JUNE 2017

RA: really a systemic disease?

OP0146 DECREASE IN CARDIOVASCULAR EVENT EXCESS RISK IN RHEUMATOID ARTHRITIS SINCE 2000: A META- ANALYSIS OF CONTROLLED STUDIES

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Background: Compared with the general population, patients with rheumatoid arthritis (RA) have an increased risk of cardiovascular disease or events (CE): stroke, Myocardial Infarction (MI), Congestive Heart Failure (CHF) and Cardiovascular Mortality (CVM). Systemic inflammation is the cornerstone of both RA and atherosclerosis. Over the past fifteen years, new treatment strategies such as tight control, treat to target, methotrexate optimization, biologic DMARDs use has allowed a better control of this inflammation.

Objectives: The aim of this systematic review was to assess the excess risk of presenting a CE in RA patients as compared to general population, before and after the 2000s.

Methods: We systematically searched literature (via Pubmed, Cochrane and abstracts from recent ACR and EULAR congresses) up to March 2016 for observational studies providing data about the occurrence of a CE (among stroke, MI, CHF, CVM) in patients with RA and in a control group. A meta-analysis of the relative risk (RR) concerning patients with RA in relation to the control group was performed for each cardiovascular event and for each period (before and after the 2000s).

Results: Out of 5714 screened references, 28 studies were included. For studies published before 2000, an increased risk of CEs was observed in RA patients:

- RR=1.12 [95% CI 1.04; 1.21], p=0.002 for stroke
- RR=1.25 [1.14; 1.37], p<0.00001 for CHF
- RR=1.21 [1.15; 1.26], p<0.00001 for CVM
- RR=1.32 [1.24; 1.41], p<0.00001 for MI.

For all studies published after the year 2000, the increased risk was not retrieved for CHF (RR=0.58 [0.11; 3.55], p=0.52) and CVM (RR=1.07 [0.74; 1.56], p=0.71). The excess risk of MI was reduced in comparison with the period before 2000: RR=1.18 [1.14; 1.23], p<0.00001. The excess risk of stroke was stable: RR=1.23 [1.06; 1.43], p=0.006.

Discussion: This meta-analysis confirms an increased risk of CEs among people with RA relative to the general population. It also appears that this excess risk is less prevalent than prior to 2000s. This might have two explanations: a better management of the cardiovascular risk in patients with RA and a better control of chronic systemic inflammation thanks to new therapeutic strategies.

Conclusions: The cardiovascular excess risk of RA patients relative to the general population has decreased since 2000s. This suggests that the recent improvements in RA management may have a positive impact on cardiovascular comorbidities.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4415

OP0147 TRENDS IN MORTALITY, CO-MORBIDITY AND TREATMENT AFTER ACUTE MYOCARDIAL INFARCTION IN PATIENTS WITH RHEUMATOID ARTHRITIS 1998-2013

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Background: Rheumatoid arthritis (RA) patients have increased mortality due to cardiovascular disease (CVD). Case fatality after an acute myocardial infarction (AMI) has been reported to be increased. Whether the prognosis after AMI has changed over time in RA is unknown.

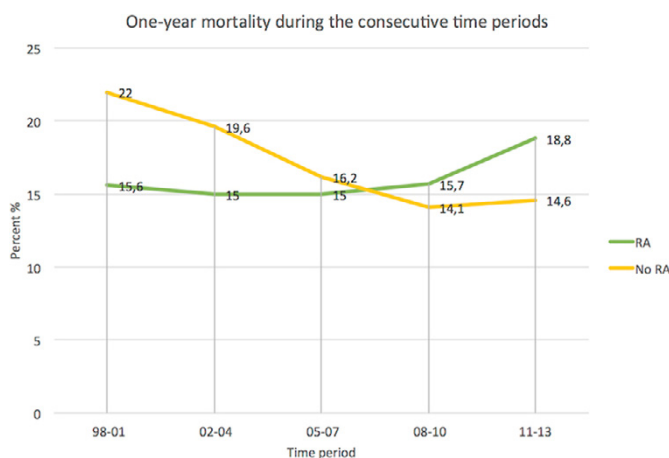
Objectives: To study the one-year mortality after a first AMI in RA versus non-RA patients during the time period 1998–2013. To identify time trends in mortality, co-morbidities and secondary preventive treatments and to explore any characteristics associated with mortality.

Methods: We identified all patients with a first time AMI in the Swedish Register of Information and Knowledge about Swedish Heart Intensive Care Admissions (RIKS-HIA) between 1998–2013. We used the National Patient Register (NPR) to identify AMI patients with RA (RA defined as ≥ 2 visits to a Rheumatology or Internal Medicine department with a diagnosis of RA). In total 245376 AMI patients were identified, 4268 of them had RA. To study trends over time, the study period was divided into five consecutive time periods. Multivariate Cox regression analysis was used to identify variables associated with mortality.

Results: The one-year mortality in RA patients was stable and lower compared to non-RA patients during the first time periods but thereafter increased above the non-RA patients. In non-RA patients, mortality decreased over time and stabilised during the last time period (Figure). In RA patients the mean age at admission increased from 69 to 73 years, whilst in non-RA patients it was unchanged, 71 years. Atrial fibrillation (AF) was initially more common in non-RA patients but the prevalence decreased over time (from 19.2% to 17.5%). In RA patients, AF increased over time from 15.6% to 21.4%. The prevalence of congestive heart failure (CHF) during hospitalisation decreased markedly more in non-RA (from 41.5% to 22.7%) than in RA patients (from 36.0% to 29.2%). The most important secondary preventive treatments were similar in RA and non-RA patients. In a multivariate Cox model including data from the last time period, 2011–2013, age, CHF during hospitalisation, ST-elevation AMI (STEMI), AF, prior diabetes mellitus, a diagnosis of RA and oral anticoagulation were significantly associated with higher one-year mortality (Table).

Multivariate Cox analysis for the last time period 2011–2013

		P<0,05	95% CI
Age	1,042	0,000	1,039–1,046
CHF	2,101	0,000	1,998–2,220
STEMI	1,848	0,000	1,738–1,965
Prior diabetes	1,370	0,000	1,294–1,450
AF	1,321	0,000	1,248–1,398
RA diagnose	1,257	0,012	1,051–1,502
Oral anticoagulation	1,120	0,000	1,096–1,145



Conclusions: The marked decrease in one-year mortality after AMI seen over time in non-RA patients was not applicable in RA patients. Our finding might to some extent be explained by an increased age at AMI onset and unfavourable trends for AF and CHF in RA. However, RA *per se* was significantly associated with a worse prognosis during the last years of the study period. Secondary preventive treatment was similar in RA and non-RA patients. Further analyses including RA treatments are necessary to gain further insight into reasons behind the discrepant prognosis in RA vs. non-RA patients.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4481