

**Conclusion:** SpA conditions have a negative impact on QOL and are a burden causing patients to constantly assess their situation, worry about tomorrow and adjust different aspects of their lives. Results confirmed every aspect of life is impacted, both physically and mentally, leaving people feeling hopeless and without a purpose. Many can no longer work or do their favorite hobbies which leads to emotional and mental difficulties. People struggle with maintaining social and intimate relationships, intensifying social isolation and low self-confidence. Many indicated that their loved ones have difficulties understanding chronic pain and illness, making patients feel like a burden. This may be attributed to general lack of knowledge about SpA. The unpredictability of the disease impacts QOL leaving patients hesitant to make social plans in advance. Even those who are undergoing successful treatment and have improved QOL worry about the future. QOL can be improved with proper treatment, management and support.

Many expressed frustrations of being limited by their disease and indicated that it is often the chronic pain that causes these limits. It is clear that by living with less pain, patients can improve all aspects of their lives and be happier.

The CSA is committed to educating, supporting and advocating on behalf of Canadians impacted by SpA to improve health outcomes and QOL.

It doesn't have to be visible to be real. Together we are stronger!

Footnotes:

\*SpA conditions include: Ankylosing Spondylitis, Psoriatic Arthritis, non-radiol SpA, Axial and Peripheral Spondyloarthritis, Enteropathic Arthritis, Reactive Arthritis and Juvenile Onset Arthritis

\*\*The Canadian Spondylitis Association (CSA) is a national non-profit patient association supporting and advocating for those living with SpA.

**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2021-eular.1615

## Arthritis research

AB0924-PARE

### EXPERIENCES AND PERCEPTIONS OF PATIENTS WITH PSORIATIC ARTHRITIS PARTICIPATING IN A TRIAL OF FAECAL MICROBIOTA TRANSPLANTATION: A NESTED QUALITATIVE STUDY

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**Background:** Patients' first-hand experiences of faecal microbiota transplantation (FMT) performed in a rheumatological care-setting have yet to be elucidated. **Objectives:** The objectives were to explore participants' perceptions of being part of an FMT trial thereby identifying potential trial participation effects and enlightening the patient perspective on the outlook for future FMT trials in rheumatic diseases.

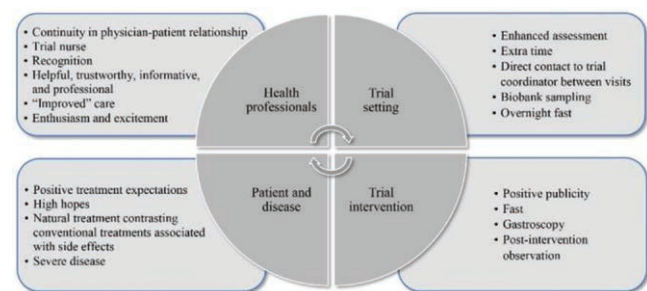
**Methods:** In a qualitative study nested within a double-blind, randomised, placebo-controlled trial (RCT) testing FMT as a potential new anti-rheumatic treatment,<sup>1</sup> semi-structured telephone interviews were conducted following the trial participants' final 26-week visit. The RCT was conducted at a Danish rheumatology university outpatient clinic with nationwide inclusion. The qualitative study included ten patients with psoriatic arthritis (PsA) who completed the final 26-week trial visit and were unaware of their treatment allocation (one gastroscopic-guided FMT or sham transplantation into the duodenum), see table 1. Qualitative researchers, who did not take part in the RCT, performed the interviews and the primary analysis. The experiences explored related to the conduct of the RCT and changes in the participants' everyday life. The analysis was carried out using a thematic approach. There was sufficient repetition of ideas in data to conclude data saturation.

**Table 1. Characteristics of the participants.**

Characteristic	Total (n = 10)
Female sex, no. (%)	7 (70%)
Age, yr.	53.9 (11.3)
Time since diagnosis, yr. <sup>a</sup>	7.4 (4.2, 12.8)
Rheumatoid factor IgM negative, no. (%)	10 (100%)
Anti-citrullinated peptide antibody negative, no. (%)	10 (100%)
HLA-B27 negative, no. (%)	8 (80%)
C-reactive protein, mg/L	4.5 (3.6)
HAQ-DI <sup>b</sup>	1.09 (0.40)
Swollen joint 66 count	7.4 (3.8)
Tender joint 68 count	22.8 (7.9)
SPARCC enthesitis index <sup>c</sup>	
Score ≥1, no. (%)	10 (100%)
Score in patients with a score ≥1	8.7 (4.0)

Data are mean (SD) or n (%) unless otherwise stated. <sup>a</sup> Time since diagnosis of psoriatic arthritis is presented as median and interquartile range (IQR). <sup>b</sup> Scores on the Health Assessment Questionnaire Disability Index (HAQ-DI) range from 0 to 3, with higher scores indicating greater disability. <sup>c</sup> Spondyloarthritis Research Consortium of Canada (SPARCC) Enthesitis Index range from 0 to 16, with higher scores indicating more severe disease.

**Results:** Participation in the RCT influenced the patients' understanding of PsA and induced positive changes in their everyday life. Renewed hopes for the future in addition to a feeling of enhanced care contributed to significant trial participation effects.<sup>2</sup> We identified several factors related to the RCT that may have promoted these effects (figure 1). FMT was deemed acceptable and safe, and all participants supported more research into the field of microbiota-targeted interventions in rheumatic diseases.



**Figure 1.** Factors related to the RCT that may have promoted trial participation effects.

**Conclusion:** Discrepancies between the clinical and the research setting should be considered when discussing the clinical relevance of the results of the RCT. Overall, patients with PsA who have participated in an RCT testing FMT find the treatment acceptable and safe encouraging more research into the field of microbiota-targeted interventions in rheumatic diseases. Further research into the potential beneficial and adverse effects of FMT in addition to exploring the magnitude and mechanisms behind FMT trial participation effects in the rheumatological setting are highly needed.

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**Acknowledgements:** The authors thank the patient advisers and all the participants who shared their experiences with us.

**Disclosure of Interests:** Maja Skov Kragssnaes Grant/research support from: Novartis 2017 (unrestricted research grant) to cover 3 months PhD salary in relation to the study., Shaun Theodor Sodergren: None declared, Jens Kjeldsen: None declared, Hans Christian Horn: None declared, Heidi Lausten Munk: None declared, Jens Kristian Pedersen: None declared, Camilla Schufri Klinkby: None declared, Maarten de Wit: None declared, Nanna Gram Ahlmark: None declared,

Tine Tjørnhøj-Thomsen: None declared, Torkell Ellingsen Grant/research support from: Novartis 2017 (unrestricted research grant)

DOI: 10.1136/annrheumdis-2021-eular.2076

AB0925-PARE

# A NARRATIVE REVIEW ASSESSING THE ROLE OF DIETARY SALT AS AN ENVIRONMENTAL RISK FACTOR FOR THE ONSET AND SEVERITY OF RHEUMATOID ARTHRITIS

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**Background:** The role of dietary salt consumption in the etiopathogenesis of Rheumatoid Arthritis (RA), and autoimmune disease in general, has received renewed interest. This has been fueled by the increased prevalence of autoimmune disease worldwide correlating with western diets and heightened consumption of salt rich foods and also studies at the cellular level demonstrating induction of IL 17 producing T helper cells (Th17) by dietary salt.

**Objectives:** To conduct a narrative review of observational studies and clinical trials on the role of dietary salt as an environmental risk factor for the onset and development of RA.

**Methods:** A comprehensive search was done of the literature from 2010 to 2021, using the search terms dietary salt and RA; the native interfaces EBSCO and Ovid were used. Databases searched included Pubmed, Embase, EMCare, Medline and CINAHL using a Population, Exposure and Outcome framework; the MESH terms RA, risk factors, nutrition and salt were used. Data was extracted by an independent reviewer.

**Results:** Out of the 72 studies initially identified, 50 were included in this review. Studies in murine models have demonstrated that high concentrations of sodium chloride promote the differentiation of T helper lymphocytes, via the serum- and glucocorticoid- inducible kinase 1 (SGK1) mediator towards the proinflammatory Th17 driven immune response. Six studies were carried out in human subjects. Study design ranged from cross sectional observational to nested case control studies. Sodium intake amongst participants characterized as having high intake, or being placed in the higher quartiles, ranged from 4.5-5grams per day. 5 out of 6 studies demonstrated that increased dietary salt consumption is associated with earlier onset RA. One study suggested an association between high salt intake and erosive disease at diagnosis and the development of anti-citrullinated protein antibodies (ACPA), although evidence was weak and from a single study only. Another study found that increased consumption of salt was only associated with risk of RA in smokers, highlighting the need to explore confounding variables further.

**Conclusion:** This narrative review of the literature provides some evidence that supports a role of excess dietary salt consumption as a risk factor for the onset and severity of RA.

**Disclosure of Interests:** None declared

DOI: 10.1136/annrheumdis-2021-eular.2972

## Psychosocial support

AB0926-PARE

# IMPACT OF COVID 19 PANDEMIC ON TUNISIAN SPA PATIENTS: PSYCHOLOGICAL STATE AND TREATMENT ADHERENCE

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**Background:** The challenge posed by the COVID-19 pandemic may represent an overwhelmingly stressful event for ankylosing spondylitis (SpA) patients and impact their treatment adherence. In response to the COVID-19 pandemic, Tunisia, have adopted community containment to manage the spread of the virus. However, COVID-19 restrictions can alter psychological wellbeing and limit access to treatment for SpA patients.

**Objectives:** This study aimed to evaluate the impact of COVID-19 pandemic on psychological health and treatment adherence on Tunisian SpA patients.

**Methods:** This is a cross sectional study including patients with SpA (ASAS criteria). A survey comprising questions about adherence to stay home warnings; the obligation to go outside for work; satisfaction with the medical support or information received for COVID-19; showing up to medical check-ups, proper use of the medications; medications that the patient stopped taking.

Anxious and depressive symptoms were assessed using the Arabic version of Hospital Anxiety and Depression Scale (HADS) questionnaire.

**Results:** We included thirty patients. the average age was: 39,7 years-old and the sex ratio was: 13,3. 75 % of patients were married. The SpA was axial in 25%, peripheral in 20%, and both in 55 %. Most patients had a moderate activity and the mean activity scores were: BASDAI = 2.60, ASDAScrp:2.65

38% of patients were on biologics, 36 % on sulfasalazine and NSAIDs and 26 % on NSAIDs only.

It seemed that significant number of patients strictly adhered to stay home warnings (> 89%) only 11% were obliged to go out for work during general lockdown while only 24 % adhered to it after general lockdown.

Most of the patient 78 % were not satisfied with the medical support or information about COVID 19. 88% of patients requested information from TV while 10 % requested it from social media and 2 % from relatives and friends working in health care field.

After the outbreak, 23% of the patients who had a scheduled check-up visit attended the appointment as it was before. The remaining either 'did not want to come' (43%), wanted to come but could not contact anyone in the hospital (11%), was advised to postpone their visits (10%), or couldn't find means of transport (13%). A significant number of patients decreased or skipped their dose (69%), while only 13% continued their medications and 16% stopped taking NSAIDs.

Biological DMARDs (anti-TNF agents) were the most frequent drugs which patients decreased their dose, skipped or stopped taking 33%. sulfasalazine and NSAIDs were least likely 17% to be skipped or stopped.

43% of patients Had a HADS anxiety level more than or equal to 11: 87 % women and 13 % men. The highest anxiety scores were found among patients aged less than 45 years old (87%) married with children. 32% of patients had a HADS depression level more than or equal to 11: 54 % women and 44 % men. the highest depression scores were found among patients aged less than 45 years old married with children.

No significant relationship was found between anxiety and depression levels regarding biologic treatment.

**Conclusion:** Our results suggest that patients with SpA were less likely to comply strictly to 'stay home' restrictions, most probably due to the male predominance and relatively younger age. Additionally, we noticed that SpA patients treated with anti-TNF agents were the patients that regular drug use had been considerably disrupted.

COVID 19 pandemic has heightened the need to care for patients with SpA in an increasingly virtual environment.

Additionally, we found that being female, having a lower level of education, having a child, living in a crowded family is correlated to higher levels of anxiety and depression.

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**Acknowledgements:** I would like to express my special thanks of gratitude to Rheumatology department of Hedi Chaker Hospital Sfax.

**Disclosure of Interests:** None declared

DOI: 10.1136/annrheumdis-2021-eular.3950

## Work and rehabilitation

AB0927-PARE

# WORK PRODUCTIVITY AND ACTIVITY IMPAIRMENT IN PATIENTS WITH SAPHO SYNDROME

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**Background:** Synovitis, acne, pustulosis, hyperostosis, and osteitis (SAPHO) syndrome is a rare disease, characterized by osteoarticular and cutaneous manifestations. Osteitis and hyperostosis are regarded as the core pathophysiological changes of SAPHO syndrome [1], which may lead to bone pain and loss of motor function. The Work Productivity and Activity Impairment (WPAI) questionnaire is an instrument to measure the impact of the disease on work productivity and activity, subsequently adapted for ankylosing spondylitis [2], rheumatoid arthritis [3], irritable bowel syndrome [4], and other chronic diseases [5]. However, no study has investigated the work productivity of patients with SAPHO syndrome.

**Objectives:** The purpose of this study is to give an overview of work productivity loss in SAPHO patients through the work productivity and activity impairment (WPAI) questionnaire and investigate the relationship between the WPAI and other disease-related indicators.