POS0151

A PRACTICAL GUIDE FOR THE ASSESSMENT OF PSORIASIS BURDEN IN PATIENTS WITH PSORIATIC ARTHRITIS

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Background: Rheumatologists play an important role in the management of patients with Psoriatic Arthritis (PsA). With PsA being a multifaceted disease, it can be challenging to assess the impact of psoriatic skin symptoms, next to the musculoskeletal complaints. We have previously shown that a dermatology-specific Health-related Quality of Life (HRQoL) questionnaire provides insight into the burden of skin symptoms, in contrast to a general HRQoL questionnaire.¹ When treating PsA patients, specific questions on skin symptoms are necessary in order to assess the burden of psoriasis.

Objectives: To create a set of questions that can easily identify PsA patients with a high psoriasis burden in daily rheumatology clinical practice.

Methods: Data from patients receiving usual care were used from the Dutch south west Psoriatic Arthritis (DEPAR) cohort, consisting of newly diagnosed PsA patients included between July 2013 and March 2020. The two dermatology-specific HRQoL questionnaires used were the Skindex-17 and Dermatology Life Quality Index (DLQI), both with a one-week recall period.

First, an exploratory principal component analysis (PCA) with varimax rotation was performed on both questionnaires combined, to identify underlying latent traits. Subsequently, items were dichotomized on their median frequencies. And a 2-parameter logistic (2PL) model was fitted for each latent trait. Item characteristic curves were plotted for each latent trait. Item selection took place based on the discrimination and difficulty of the items. Per latent trait, we selected 2 to 3 items distributed far apart across the latent trait. A flowchart was made with the selected questions.

Results: In total, 413 patients with completed Skindex-17 and DLQI questionnaires at baseline were included. Mean (sd) age was 50.3 (13.4) years and median (IQR) Psoriasis Area and Severity Index (PASI) score 2 (0.5-4.2). The PCA gave the best fit with two underlying clusters of questions, namely psychosocial (n=20) questions and questions regarding physical symptoms (n=7). Three questions were selected to assess psychosocial impact and two for impact of physical symptoms (Figure 1). Questions should be asked in chronological order.

Cluster 1: Psychosocial*

The first question is if the patient was embarrassed by their skin condition. If answered with "never", the patient experienced the lowest burden. When answered with "rarely/sometimes" or "often/always", continue to the second question. Ask the patient if they tended to stay at home because of their skin condition. If answered with "never", they experienced a higher burden. If answered with "rarely/sometimes" or "often/always", continue to the last question. Ask the patient if their skin condition has prevented them from working or studying. If not, the

*Questions are to be asked in chronological order

Figure 1. Flowchart of questions assessing psoriasis burden.

patient experienced a higher burden and if answered with "yes", they experienced the highest burden in this domain.

Cluster 2: Physical symptoms

First ask the patient how itchy, sore, painful or stinging their skin was. If they answer with "not at all", they experienced the lowest burden. If answered with "a little/a lot/very much", continue to the second question. Ask if their skin was irritated. If answered with "never/rarely/sometimes", they experienced a higher burden. If answered with "often/always", the patient experienced the highest burden in this domain.

Conclusion: We have created a practical guide for rheumatologists to distinguish PsA patients with a high psoriasis burden from those with a lower burden. With a minimum of two and a maximum of five questions, both psychosocial burden of psoriasis and burden of physical symptoms can be easily identified in daily clinical practice.

REFERENCES:

- [1] Kasiem FR, Kok MR, Tchertverikov I, Wervers K, Hazes J, Luime J, et al. AB0786 Impact of psoriasis severity on Health-Related Quality of Life in early psoriatic arthritis: results from real world data, the DEPAR study. *Annals of the Rheumatic Diseases*. 2020;79:1691-2.

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HPR - Adapting and individualising care

POS0152-HPR

REMOTE CLINICAL MANAGEMENT: INCORPORATING ELECTRONIC ASSESSMENT OF PATIENTS WITH RHEUMATIC DISEASES INTO STANDARD CLINICAL PATHWAYS DURING THE COVID-19 PANDEMIC: A PILOT STUDY

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Background: Many patients with rheumatic disease require immunosuppressive medication putting them at high risk of COVID-19 infection. Reduced staffing in rheumatology due to redeployment to COVID-19 work, limited out patient capacity and patient vulnerability have had a major impact on our ability to review our patients to assess their condition and treatment (by face-to-face, video or telephone consultations). Novel strategies are essential to safely and effectively treat patients with rheumatic disease whilst minimising their risk of exposure to COVID-19 infection.

Objectives: The objective was to develop a digital solution to help deliver safe, efficient and effective care for patients with rheumatic diseases. The aim was to produce a system that allowed us to integrate data recorded directly by patients with information held in our electronic health records to provide a virtual review of care.

Methods: An online questionnaire was used to collect clinical information, including validated disease activity measures, to conduct a remote assessment in 175 patients awaiting follow-up appointments. This assessment was integrated within our electronic health records (EHR). The questionnaire contained measures of disease activity (DAS28 or BASDAI); patient reported outcomes; patient preferences regarding the urgency and type of appointment; any recent problems or changes in medication. This information was imported into a database for clinician review, together with previous clinical records and results of relevant investigations, to inform clinical decisions and to decide on the safest and most appropriate timing for follow-up. Report letters were sent to the patient and their primary care providers.

Results: Of the 175 patients (149 with RA and 26 with AS), 108 patients (89/149 [60%] with RA [mean age=64; female=65%] and 19/26 [73%] with AS [mean age=45; female=54%]) submitted responses over a 6-week period based on which clinical decisions were made. The mean questionnaire completion time was 19 minutes for RA responders and 16 minutes for AS responders. Non responders (67/175 [mean age=61; female=63%]) remained on our list of patients awaiting follow-up arrangements to be made. Sixty-nine responders (64%) had stable disease therefore did not require any changes to their treatment and were offered an appointment within the next 6 months, of whom 12 (11%) requested face-to-face follow-up. Of the remaining 39 – with less stable disease – requiring more rapid follow-up assessment, 22 patients (56%) required a face-to-face consultation to consider treatment change. So far 9 of these patients have had follow-up, of whom 6 necessitated treatment escalation (Methotrexate increase n=2; anti-inflammatory increase n=2; intramuscular steroid n=1; anti-TNF escalation n=1). Thirty-nine patients (36%) provided feedback on the process of completing the questionnaire, 85% of whom used a mobile phone and the remainder used a computer or tablet. The majority (70%) found it "extremely easy" or "somewhat

easy" to complete; remaining responses: "neutral" 20%, "somewhat difficult" 10%, "extremely difficult" 0%.

Conclusion: We have created and tested a system of remote clinical management for patients with RA and AS. Amongst the 108 responders, just 31% required a face-to-face appointment, with treatment changes made accordingly. With a backlog of 3,800 awaiting allocation to follow-up appointments, remote clinical management will allow us to safely and efficiently prioritise patients requiring urgent follow-up for treatment optimisation. We will integrate this system into our standard care pathway beyond the COVID-19 pandemic to streamline our service, deliver effective care and provide evidence to support the use of costly biologic drugs.¹ We plan to investigate the barriers for non-responders.

REFERENCES:

- [1] Holroyd CR, Seth R, Bukhari M, et al. The British Society for Rheumatology biologic DMARD safety guidelines in inflammatory arthritis. *Rheumatology*. 2019; 58 (2): e3–e42.

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POS0153-HPR IDENTIFYING TARGETS FOR BEHAVIOURAL INTERVENTIONS IN FIBROMYALGIA: PHYSICAL ACTIVITY BEHAVIOUR

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Background: There has been much interest in the efficacy of exercise and physical activity interventions in people with Fibromyalgia. This has resulted in guidelines recommending exercise as the first line of management (Macfarlane et al., 2017). Notwithstanding the efficacy of exercises, adherence to structured exercise and interventions aiming to increase physical activities remains a considerable challenge in this population. Exploring behavioural factors that may hinder exercise and physical activity participation in people with Fibromyalgia may help to identify targets for interventions to improve adherence and engagement with physical activities and support self-management.

Objectives: To explore people with Fibromyalgia's perspectives on the personal, social and contextual factors impacting their physical activity behaviour and pain perception.

Methods: Twelve participants with Fibromyalgia were recruited from Social Media, Fibromyalgia charities, organisations and associations across the UK. Semi-structured, one-to-one in-depth telephone interviews were conducted with each participant. Interviews were audio-recorded and transcribed verbatim. Qualitative data analysis was conducted by two researchers independently, using Thematic Analysis. Critical Realism framework was employed to inform the interpretation of the findings.

Results: Four main themes emerged from the data: (i) Lack of guidance on physical activity: most participants expressed increased pain intensity following a vigorous physical activity which, have led to spending more time on sedentary behaviour to recover from pain. (ii) Participants expressed fear of fatigue as a barrier to physical activity participation: This also led to increased sedentary and protective behaviours. (iii) Impact of treatments on physical activity: Participants who received multimodal therapies and patient education reported better coping strategies e.g., pacing physical activities and less pain. (iv): Impact of social support on physical activity participation: Participants felt that a lack of understanding from employers, their family and friends and the wider society has negatively impacted their physical activity behaviours, access to workplace support and psychological wellbeing.

Conclusion: A multimodal approach, incorporating patient education with behavioural components is essential to increase adherence to and engagement with exercise and physical activity interventions to support self-management of Fibromyalgia. There is a need to improve the public perception of this syndrome to increase social and workplace support.

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POS0154-HPR FACTORS FACILITATING THE SELF- AND SHARED-MANAGEMENT OF JIA BY CHILDREN, YOUNG PEOPLE, THEIR FAMILIES, AND PROFESSIONALS INVOLVED IN THEIR CARE: A REALIST EVALUATION

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Background: Juvenile idiopathic arthritis (JIA) is a long-term condition, often requiring some element of lifelong management. Therefore, it is logical that children and young people are empowered to become competent at self-managing their health and wellbeing, while families are supported in their shared-management role during childhood, relinquishing control at age- and developmentally appropriate periods in their child's development. However, there are limited theoretical foundations underpinning optimal self- and shared-management support for children, young people and families living with JIA.

Objectives: To explain the factors facilitating the self- and shared-management of JIA by children, young people, and their families, with professional support from healthcare professionals, third sector organisations, and education professionals.

Methods: Guided by the Individual and Family Self-management Theory and the Shared Management Model, a three-stage realist evaluation was undertaken: 1) initial JIA self- and shared-management question theories were elicited from a document review, integrative review, and stakeholder insights [1]; 2) seven initial question theories were tested using qualitative research methods with 20 participants (young people, families, healthcare professionals, education professionals, and third sector representatives); 3) analysis of findings using a theory-driven approach to thematic analysis, in order to identify demi-regularities to extend or refute the initial question theories. The analysis drew on deductive, inductive, and retroductive reasoning.

Results: There were six refined JIA self- and shared-management question theories: 1) meaningful and bespoke self-management support across the life course for children and young people with JIA; 2) recognised and valued shared-management support for the families of children and young people with JIA, with autonomy in mind; 3) individual healthcare plans as a shared management communication tool to facilitate optimal management of JIA; 4) consistent recognition, value, and encourage of self- and shared-management support from the paediatric rheumatology multi-disciplinary team and associated professionals; 5) child, young-person, and family-focused paediatric rheumatology care and support services across the lifecourse; and 6) bespoke and inclusive approaches by education providers to enable children and young people with JIA to feel safe, supported, and able to fulfil their potential.

Conclusion: There is an increasing recognition of the importance of self- and shared-management of JIA. However, there is a lack of an overall, cohesive approach to self- and shared-management between healthcare providers, education providers, and the third sector. Findings from this study illuminate the factors facilitating JIA self- and shared-management at individual, interpersonal, institutional and infrastructural levels. Further work is required to empirically test these refined question theories with interventions designed to enhance JIA care, education, and support.

REFERENCES:

- [1] Stones et al. (2020). A realist approach to eliciting the initial programme theories for the self- and shared-management of juvenile idiopathic arthritis by children, young people, families and professionals involved in their care. *Pediatric Rheumatology* 18(Suppl 2): O062.

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POS0155-HPR DIAPHRAGMATIC BREATHING RELAXATION TECHNIQUE TO DECREASE ANXIETY DURING JOINT INFILTRATION: A RANDOMIZED CONTROLLED TRIAL

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Background: Joint infiltration is the injection of therapeutic substances directly into a joint. It may be a stressful experience for patients as imagined different from other usual injections. Several techniques are used to manage anxiety and pain during such a procedure.

Objectives: To evaluate the effectiveness of diaphragmatic breathing relaxation on reducing anxiety and pain during joint infiltration.

Methods: Patients scheduled for a joint infiltration at the rheumatology department's daycare unit were recruited. All infiltrations were performed using steroids without anesthetic therapy except for the hip. Patients were randomized into two groups (cases=38, controls=34). Cases learned from a trained health agent diaphragmatic breathing relaxation technique to perform it immediately before and during the procedure while controls received the usual procedure. We used the Visual Analogue Scale (VAS) to assess self-estimated both anxiety (VAS-Anx) and pain (VAS-Pain) as evaluated on pre and post-joint infiltration. VAS-Pain was evaluated as expected then as experienced respectively on pre and