

Guidelines from Osteoarthritis Research Society International (OARSI) advise that nonpharmacologic treatment of hip and knee OA include the following: patient education; heat and cold; weight loss; exercise; physical therapy; occupational therapy; unloading in certain joints (eg, knee, hip).

Objectives: The aim of this study was to investigate the importance of exercise and TENS (Transcutaneous electrical nerve stimulation) therapy in patients with OA of the hip on the pain and functional status.

Methods: This was a prospective clinical study involving 20 patients with primary hip OA treated stationary at the Center for Physical Medicine and Rehabilitation during 2016. On receipt of all the respondents filled out the social survey, quantification of pain was conducted by visual analogue scale (VAS) and function was evaluated through measurement of the range of motion in hip joint. After that, they received physical therapy (exercise and TENS therapy) for 21 days. TENS was applied once a day for 30 minutes on both hip joints, with the frequency of 85 Hz and with short-term pulses (4 ms) (appliance TENS-2, Electronic Design Medical, Serbia). Exercise was applied once a day for 30 minutes, according to individually customized protocol; active and active-assisted exercises were used to the point of pain for strengthening the muscles of the lower extremities and to increase range of motion in the hip joints. One month after the inspection we tested functional status and pain.

Results: There was 100% of women, mean age 64.15±4.06 years. The most represented were retirees, 60%, followed by workers and unemployed 10% and 30%. BMI was 27.3±4.22 kg/m². After a month there was a statistically significant reduction in pain measured by VAS (at the beginning it was 6.7; at the end 3.2; $p < 0.001$). At the end of the study there was a statistically significant increasing range of motion for active flexion ($p < 0.05$) and active abduction ($p < 0.05$), while there was no statistically significant increasing for active extension, adduction, internal and external rotation in the hip joint ($p > 0.05$).

Conclusions: The ACR strongly recommends the following nonpharmacologic measures for patients with knee or hip OA: cardiovascular or resistance land-based exercise, aquatic exercise, weight loss, for overweight patients. TENS may be another treatment option for pain relief. Our study showed that exercise and TENS therapy led to a statistically significant reduction in pain as measured by VAS pain scale and improving range of motion in hip joint.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.3465

THURSDAY, 15 JUNE TO SATURDAY, 17 JUNE 2017

Patient information and education

PARE0004 PATIENT REPORTED LONG TERM EFFECTS OF SIX WEEK PROGRESSIVE RESISTANCE TRAINING PROGRAMME FOR RHEUMATOID ARTHRITIS

R. Tekkatte¹, A. Suarez¹, B. Berntzen², D. Collins¹, E. Price¹, L. Williamson¹.
¹Rheumatology; ²Physiotherapy, Great Western Hospital NHS Foundation Trust, Swindon, United Kingdom

Background: We introduced six week physiotherapy led progressive resistance training (PRT) programme for Rheumatoid arthritis (RA) patients to improve physical function and prevent the muscle loss (rheumatoid cachexia). Six week data showed improvement in body composition, physical function and fatigue scores¹. There is little published data about the longer term benefits of short exercise interventions and therefore we wished to study longer term effects on exercise behaviour in our patient group.

Methods: We surveyed 79 RA patients who had completed the six weeks PRT programme between 2013 and 2016 using two methods: Anonymous postal questionnaire; Direct telephone questionnaire. Patients were asked the same following questions: 1. Describe the best you feel at present following the exercise programme? Same/ Better/ Worse. 2. Have you continued with progressive resistance exercises? Yes/ No. 3. Do you feel the programme was worthwhile? Yes/No. 4. Did you feel the programme was too long, just right or too short?

Results:

| Patient | Continued PRT | Not continued PRT | Continued PRT | Not continued PRT |
|---------|---------------------------|------------------------|----------------------------|----------------------------|
| | 75% (27/36) (Postal) | 25% (9/36) (Postal) | 51% (22/43) (Telephone) | 49% (21/43) (Telephone) |
| Better | 81% (22/27) ($p=0.006$) | 33% (3/9) | 77% (17/22) ($p=0.009$) | 38% (8/21) |
| Same | 15% (4/27) | 56% (5/9) | 18% (4/22) | 19% (4/21) |
| Worse | 4% (1/27) | 11% (1/9) | 5% (1/22) | 43% (9/21) |

Postal questionnaire: 45% (36/79) patients returned the postal questionnaire. Time from PRT programme completion to postal questionnaire was: range (mean) 12–36 (26) months. 69% (25/36) still felt better; 25% (9/36) felt the same; 3% (1/36) worse since the programme. 91% (33/36) felt the programme was worthwhile. 75% (27/36) continued PRT exercises. 81% (22/27) of these still felt better, compared with 33% (3/9) who have not continued PRT ($p=0.006$). The duration of the programme was just right for 69% (25/36) and too short for 30% (11/36).

Telephone questionnaire: 54% (43/79) patients were contactable by telephone. Time from PRT programme completion to telephone questionnaire was: range (mean) 14–38 (26) months. 58% (25/43) still felt better; 18% (8/43) felt the same;

23% (10/43) worse since the programme. 95% (41/43) felt the programme was worthwhile. 51% (22/43) continued PRT exercises. 77% (17/22) still felt better, compared with 38% (8/21) who have not continued PRT. ($p=0.009$). 49% (21/43) had not continued PRT exercises, of whom 43% feel worse at present. The duration of the programme was just right for 47% (20/43) and too short for 53% (23/43).

Conclusions: Over 90% of patients who responded found the six week PRT programme worthwhile. More than half (51–75%) of the patients continued a PRT exercise programme. Patients who continued exercises felt better compared with those who did not continue exercises.

References:

[1] Berntzen et al A Six-Week Progressive Resistance Training Class Improves Function and Fatigue in RA Patients: *Annals of the Rheumatic Diseases* 75 (S2):254 2016.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.5840

PARE0005 EDUCATIONAL PROGRAM FOR OLDER ADULTS WITH KNEE OSTEOARTHRITIS

M.R. Espanha¹, P.P. Marconcin^{1,2}, P.L. Campos², F.G. Yázigi³. ¹Portuguese League Against Rheumatic Diseases; ²Department of Sports and Health; ³Department of Sports & Health, Faculty of Human Kinetics, University of Lisbon, Lisboa, Portugal

Background: Osteoarthritis is the commonest cause of disability at older ages and it is a huge burden on primary care (Peat, McCarney, & Croft, 2001). The knee joint is one of the most affected in elderly, influencing directly physical function and affecting physiological and social parameters. Therefore, it is imperative to development strategies that help individuals to change the way the disease affect their lives. International recommendations reinforce educational and exercise programs as the core of non-pharmacological approaches to enhance physical function and relieve pain and others osteoarthritis symptoms.

Objectives: The purpose was to assess the effectiveness of three months educational program for older adults with knee osteoarthritis (KOA).

Methods: Participants recruitment was done in the community using various marketing strategies. Forty individuals with 60 years or more, bilateral or unilateral KOA diagnosed according to clinical and radiological criteria of the ACR (1) and independently mobile and literate participated in the program. Educational sessions regarding exercise and joint protection strategies were offered. Telephone calls were done 15 days after each educational session. Patients received a book (2), with a core exercise section. Patients in the first attendance session were taught to do registration in an exercise training diary. Self-reported measures were pain, other symptoms, activities of daily living (ADL), and quality of life assessed by Knee Injury and Osteoarthritis Outcome Score (KOOS) questionnaire (3), Patient Global Impression of Change Scale (PGICs).

Results: Final sample included 32 adults (age: 67.8±5.3 years; bilateral KOA: 93.8%; female, 59.4%; BMI: 30.1±5.3 kg/m²). Eight participants did not complete the program (3 due to health problems and 5 for personal reasons). KOOS pain improved 10% ($p=.042$), and other symptoms 8%. Improvement in KOOS ADL (-8.7±13.6) and quality of life (-8.2±18.0) were also observed. 47% of the participants reported significant changes (scores 5–7) after intervention and a decrease in medication use of 31.3%.

Conclusions: The educational program can be an effective and suitable way for osteoarthritis management and to improve pain and health-related quality of life, leading individuals with KOA to better control their pathology and consequently living better.

References:

[1] Altman, R., Asch, E., Bloch, D., Bole, G., Borenstein, D., Brandt, K., Brown C, Cooke TD, Daniel W, Feldman D, et al. (1986). Development of criteria for the classification and reporting of osteoarthritis. Classification of osteoarthritis of the knee. Diagnostic and Therapeutic Criteria Committee of the American Rheumatism Association. *Arthritis Rheum*, 29(8), 1039–1049.

[2] Espanha, M., Priscila, M., Yázigi, F., Marques, A., Machado, M., Campos, P., & Carrão, L. (2015). Guia para viver em PLENO: com menos dor e mais qualidade de vida. Lisboa: FMH-ULisboa, Lab. de Biomecânica e Morfologia Funcional.

[2] Roos, E. M., & Lohmander, L. S. (2003). The Knee injury and Osteoarthritis Outcome Score (KOOS): from joint injury to osteoarthritis. *Health and Quality of Life Outcomes*, 1, 64–64. doi: 10.1186/1477-7525-1-64.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.6642

PARE0006 PATIENT INVOLVEMENT IN BASIC RESEARCH: A PILOT STUDY

Y. Neijland¹, C. van den Ende¹, F. van den Hoogen¹, P. van der Kraan², F. van de Loo², M. Lieon³. ¹Sint Maartenskliniek; ²Experimental Rheumatology, Radboud University Medical Centre; ³Patient Representative, Sint Maartenskliniek, Nijmegen, Netherlands

Background: Although the potential value of patient involvement in clinical research has been recognized [1], involvement of patient representatives (PRs) in non-clinical research is uncommon.

Objectives:

- Mapping beliefs of researchers and PRs about the potential value of patient involvement in basic research.
- To document experiences of both patient representatives and researchers of a pilot project of PRs participating in basic research.

Methods: The method of participatory action research has been used. This is a research approach that emphasizes both participation and action [2]. In this case two working groups were involved. The coordinator participated in meetings of the working groups, made notes during these meetings about the nature and degree of participation, evaluated the meetings with the participants and kept a diary. At the start and at the end of the pilot 6 researchers of the working groups were interviewed by the coordinator. The findings of the interviews were categorized and summarized. During 6 months, 5 PRs were invited to attend once a month, in one of the working group meetings. In the first meeting expectations of both researchers and PRs were exchanged. In the following meetings one researcher presented a lay version summary of his/her work. There was room for PRs to ask questions.

Results: Prior to the pilot, some researchers had doubts about the added value of PRs, others were more positive and even curious. All PRs were open minded about the pilot, although none of them had experience with involvement in basic research.

At the end of the pilot, researchers expressed positive statements, such as: "(very) nice, good initiative and interesting discussions." Positive experiences included: exercise in explaining their work to lay persons; stimulation in developing a more holistic (helicopter) view of their research, and getting a better insight in problems in daily life that patients encounter.

The PRs experienced the atmosphere during meetings as open and pleasant; they felt that the degree of participation was limited, but worthwhile.

The coordinator observed that interaction between the researchers and PRs mainly consisted of asking questions for clarification. Besides, the coordinator observed after presentations exchanges between PRs and about research-related issues such as the availability of human tissues for research and conversations about personal experiences.

Critical comments were made about the difficulty in understanding the complex matter for PRs and the chosen method (researcher presents, PRs listened) that does not encourage interaction.

Conclusions: There is a potential value of patient involvement in basic research. A first result is that junior researchers develop a more holistic view of their research subject.

An open atmosphere and low expectations may contribute to success. Continuation of this pilot with modifications, including more research groups and PRs, are needed to find ways to increase patient involvement in basic research.

References:

- [1] Hsiao B., Fraenkel L., Incorporating the patient's perspective in outcomes research. *Wolters Kluwer Health* 2017 Number 00, volume 29.
- [2] Wikipedia. https://en.wikipedia.org/wiki/Participatory_action_research.

Disclosure of Interest: None declared

DOI: 10.1136/annrhumdis-2017-eular.4898

PARE0007 HOPES AND FEARS OF PATIENTS WITH AXIAL SPONDYLOARTHRITIS IN SPAIN. THE VALUE OF PATIENT OPINION: RESULTS FROM THE SPANISH ATLAS

M. Garrido-Cumbrera^{1,2}, P. Plazuelo-Ramos², A. Costa³, O. Brace¹, J. Chacón-García¹, D. Gálvez-Ruiz¹. ¹Universidad de Sevilla, Seville; ²CEADE, Madrid; ³Novartis, Seville, Spain

Background: Not much attention has been paid to listening to the opinions of patients in most scientific studies on Spondyloarthritis, despite their opinions playing an increasingly important role in decision-making alongside clinical and public health criteria.

Objectives: To assess the opinions of patients with Axial Spondyloarthritis (ax-SpA) using qualitative information.

Methods: A sample of 680 patients diagnosed with ax-SpA was interviewed during 2016 as part of the Spanish Atlas, which aims to promote early referral and improve healthcare and the use of effective treatments in patients with ax-SpA. The Atlas is a CEADE initiative (Spanish Coordinator of Patients with ax-SpA in Spain) developed by the University of Seville and Max Weber Institute in collaboration with GRESSER (Spanish Rheumatology Society spondyloarthritis study group). Responses to qualitative items about patients' hopes and fears for their disease and their personal aims regarding their treatment were analysed.

Results: 53% were females, mean age 46 years and 77.1% were HLA-B27+. The five main hopes of patients are: stopping the disease, dream of a cure, elimination of pain, improve their quality of life and live without limitations. Additionally, patients have expectations on the medical research outcomes. Thus, 81% of patients hope that the research will make possible to find the cause and a cure for ax-SpA, developing more efficient biologic therapies (11%), and finding new techniques or medication (8%).

The following stand out among drug treatment-related concerns: having more effective treatments (32%), sustaining the results of biologic therapies (29%), being able to start on biologics (8%), the public health system funding non-drug treatments for AS (8%), eliminating secondary effects (15%), reducing prices (4%), and correct use (4%).

With respect to their fears, patients stated that their main concern was mobility loss (31%), followed by loss of independence (23%), disability (22%), stiffness (12%), structural damage (3%), organ damage (3%), other illnesses and diseases related (3%), physical decline (3%), and sight loss (1%).

Patients who expressed fear regarding their disease listed their greatest concern was that they would not overcome or tolerate pain (56%), followed by the fear that the disease would develop (32%), along with apprehension about flare-ups (7%), and tiredness (5%).

With respect to patients' personal objectives in terms of their treatments, they highlighted the wish that their treatment would, first, help them to reduce and eliminate pain, increasing their in mobility, improved quality of life, the avoidance of structural damage and the disease eventually being cured.

Conclusions: Analysis of patient opinion using qualitative information has enabled the identification of important concerns for patients such as discovering the cause of the disease, reducing pain and structural damage, loss of self-sufficiency and disability.

Acknowledgements: This project has been supported by Novartis.

Disclosure of Interest: None declared

DOI: 10.1136/annrhumdis-2017-eular.6771

THURSDAY, 15 JUNE TO SATURDAY, 17 JUNE 2017

Best practice campaigning

PARE0008 TRANSITION: PARTICULARLY DIFFICULT TIME FOR YOUNG PEOPLE WITH AR

U.G. Viora¹, E. Fusaro², S. Martino³, D. Montin³. ¹Anmar Italia; ²SC Reumatologia; ³SS Immunoreumatologia pediatrica, Città della salute e della scienza, Torino, Italy

Background: Transition is a multifaceted process involving medical, psychosocial, educational needs of the teenager who must move from a pediatric care to adult care system.

The pediatric paradigm focuses on the family, it focuses on aspects of growth and development, often neglecting, to acknowledge the increasing independence and autonomy of the patient as an individual.

The culture of adult medicine implies to have as a partner a patient independent and autonomous in the management of the disease, including aspects of playing, ignoring the issues related to the growth, development and relations with the family.

Objectives: to drive the patient along the transition, getting him finding the new treating as a continued assistance, more mature and personalized in sharing issues related to the disease; to create a best practice of transition service.

Methods: promoted by AMaR Piemonte - regional expression of ANMAR - and thanks to the availability and sensitivity of the doctors of the Pediatric Rheumatology Service (responsible Prof. Silvana Martino) and the UOA Rheumatology (director dr. Enrico Fusaro), located in two different buildings of the same "Città della Salute e della Scienza di Torino" hospital, it was possible to organize a transition pathway for teenagers since eighteen, structured as follows:

- first telephone contact between Pediatrician Rheumatologist and Rheumatologist
- sharing of clinical and personal information about the young patient
- introduction to the new care giver: during the routine consultation Pediatrician Rheumatologist presents his colleague, anticipating the different types of examinations and departmental activities and highlighting the peculiarities and sensitivity of his colleague
- meeting with parents: on the fringes the two specialists meet parents, preparing them for their future role and announcing that in the next visit they will be excluded
- transition examination: directly scheduled, it is a joint examination by the two rheumatologists to the young patient, who is directly involved discussing his health state and the decisions to be taken to continue therapies or monitoring the disease (if in remission). A second one may be scheduled if the young patient shows severe psychological problems.

A collegial meeting between patient, rheumatologists and physiatrist/rehabilitator will be programmed if a special rehabilitation is needed

- taking care: the new rheumatologist takes care of the young patient

All the pathway takes end in a period of time not exceeding one month, with a maximum of three consultations.

Results: 52 patients (79% female, 21% male) taken in care by "adult" rheumatology since 2012 to 2016. No patient reports he lived the transition as a trauma and 10%, even saying to have found in the new rheumatologist a sure and affordable referral, stay in contact with the pediatric rheumatologist "because of emotional issues". 58% remains under treatment with DMARDs and biologics; in 32% of patients an extra-articular manifestation occurs even in the absence of clinical parameters indicative of medium-high disease activity. The remaining 10%, in remission, continues the control.

Conclusions: Transition is an educational and therapeutic process, not an event; it requires collaboration between the teenager, family and caregivers.

Disclosure of Interest: None declared

DOI: 10.1136/annrhumdis-2017-eular.3111