Results: A total of 2847 publications were retrieved, including 2636 articles and reviews. Before 2000, there were only 15 relevant papers, which were not included in the specific analysis. It is clear that the number of publications on PRP related OA study is increasing every year, a total of 398 articles or reviews were published in 2020. The United States is the leading country in this field, with a number of 932 publications (35.4%), followed by Italy (304 publications, 11.5%) and China (294 publications, 11.2%). The most prevalent areas of PRP related OA research were orthopedics (1013 papers, 38.4%), sports science (651 papers, 24.7%) and surgery (475 papers, 18.0%). The top 3 journal that published the most PRP related OA study is American Journal of Sports Medicine (153 papers, 5.8%), Arthroscopy: The Journal of Arthroscopic & Related Surgery (95 papers, 3.6%), Journal of Orthopaedic Research (83 papers, 3.1%). The Harvard University (96 papers, 3.6%), Hospital for Special Surgery (83 papers, 3.1%) and University of London (75 papers, 2.8%) is the top 3 institution that published the most articles or reviews. Filardo G from Italy published the most articles or reviews (52, 2.0%) in this area, followed by Maffulli N from the UK (49 publications, 1.9%) and Kon E from Italy (46, 1.7%). PRP related OA study can be divided into five categories: intra-articular treatment study, clinical trials related study, soft tissue repairment study, gene and molecular biology study, regeneration and implantation study.

Conclusion: Publications on PRP related OA study is increasing according to the analysis on current global trends. The United States is now the leading country in this field, with the largest number and the highest quality of publications. Among the five cluster of PRP related OA studies, "intra-articular treatment study" and "regeneration and implantation study" are considered to be the current research hotspots in the PRP related OA field.

REFERENCES:

- [1] Foster T E, Puskas B L, Mandelbaum B R, et al. Platelet-rich plasma: from basic science to clinical applications.[J]. American Journal of Sports Medicine, 2009, 37(11):2259-2272.

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AB0871-HPR WOMEN IN RHEUMATOLOGY: BARRIERS, LIMITATIONS, AND GENDER INEQUALITY

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Background: In the last decades there has been a great progress towards gender equality in medicine, and this can be reflected in the proportion of women in Rheumatology, which has been on the rise recently. However, there continues to be a need for women to be able to succeed on equal opportunities with men (1).

Objectives: The aim of this study was to recognize the professional limitations and barriers that Mexican female rheumatologists must face.

Methods: Female rheumatologists were invited to participate. An online survey was applied anonymously, consisting of questions regarding demographic characteristics, professional, academic and research activities, as well as perceptions of gender discrimination and limitations of their profession.

Results: A total of 127 female rheumatologists voluntarily answered the electronic survey. Most of them were aged between 30 and 35 years (40.9%) and had 1-5 years of professional practice (40.2%) (Table 1); 52% have children and 42.4% of them consider that motherhood has had a negative impact on their professional life; 75.6% of female rheumatologists do not work on research activities and only 20.5% have participated in international congresses in the last 5 years; 80.5% report not participating in medical colleges (as leaders or board members). The three main reasons female rheumatologists refer as limitations on their profession are: having other priorities (34.6%), lack of time (32.3%) and lack of support from their peers/bosses (23.6%). Almost half women (45.7%) consider not being discriminated because of their gender in their profession, while the rest of them consider that they are or may be.

Table 1. Demographic characteristics.

Age, n (%)	
Younger than 35 years	52 (40.9%)
From 35 to 40 years	29 (22.8%)
From 40 to 45 years	16 (12.6%)
From 45 to 50 years	12 (9.4%)
Older than 50 years	18 (14.2%)
Marital status, n (%)	
Married	66 (52%)
Single	38 (29.9%)
Free union	13 (10.2%)
Divorced	8 (6.3%)
Widowed	2 (1.6%)
Years of professional practice, n (%)	
From 1 to 5 years	51 (40.2%)
From 5 to 10 years	31 (24.4%)
From 10 to 15 years	16 (12.6%)
From 15 to 20 years	10 (7.9%)
More than 20 years	19 (15%)

Conclusion: We found that most female rheumatologists are young and with a few years of professional practice, which coincides with the recent increase in the proportion of women in Rheumatology; and perhaps this is the reason why there is low participation in research activities and medical colleges. It is relevant that almost half of them perceive their gender as a reason of discrimination in their professional life. We consider that initiating the conversation of gender equality in Rheumatology, in national and international forums, and to actively search for a strategy to support and encourage our colleagues, are priorities at this moment.

REFERENCES:

- [1] Andreoli L, Ovseiko PV, Hassan N, et al. Gender equity in clinical practice, research and training: Where do we stand in rheumatology? *Joint Bone Spine* 2019;86(6):669-72. doi: 10.1016/j.jbspin.2019.05.005.
- [2] Colunga-Pedraza IJ, Arvizu-Rivera RI, Serna-Peña G, et al. Women's journey in Mexican rheumatology. Comment on 'Gender gap in rheumatology: speaker representation at annual conferences' by Monga et al. *Ann Rheum Dis* 2020 doi: 10.1136/annrheumdis-2020-218541.

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HPR Interventions (educational, physical, social and psychological)

AB0872-HPR IMPACT OF COVID-19 ON A PHYSICAL ACTIVITY FEASIBILITY PILOT STUDY: THE PIPRA EXPERIENCE

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Background: The PIPRA (Physiotherapist-led Intervention to Promote Physical Activity in Rheumatoid Arthritis) project is a feasibility project examining the impact of a physical activity behaviour change intervention in people who have rheumatoid arthritis (RA). The PIPRA study recruitment commenced in October 2019, with participant assessment and intervention commencing in November 2019. In the Republic of Ireland people who have RA are categorised as high risk category for Covid-19, due to immunosuppression [1], although this categorisation contrasts with EULAR's provisional recommendations [2].

Objectives: To examine the impact of the Covid-19 pandemic and public health restrictions on a pilot randomised controlled feasibility study in 2020.

Methods: Participants (aged 18 years+, diagnosis of RA, independently mobile and low levels of physical activity [3]) were recruited from a rheumatology clinic at an urban hospital. Target recruitment was four participants per month for one year (N=48). Assessments were planned at baseline, eight and twenty-four weeks (N=144). Participants were randomised to intervention group or control group. The intervention group received four 1:1 sixty minute sessions with a physiotherapist (N=96). The intervention was delivered over eight weeks. Intervention and control groups received a physical activity information leaflet.

Results: The Covid-19 pandemic and associated public health restrictions forced the study to be formally paused in April 2020 and the study formally resumed

in August 2020. N=48 participants were recruited between October 2019 and March 2020 (six months). N=20 participants have commenced in the study, N=16 are awaiting baseline assessment, N=6 withdrew and N=6 were lost to follow-up prior to baseline. Trial protocol planned for the delivery of N=55 assessments and N=36 intervention sessions for participants who had commenced in the study. N=22 assessments and N=26 intervention sessions were delivered between November 2019 and March 2020. N=5 assessments and N=6 intervention sessions were conducted between August and October 2020. No assessment or intervention delivery occurred in November-December 2020 due to participant hesitancy in attending for assessment and/or intervention with increased public health restrictions. The impact of Covid-19 restrictions resulted in N=33 (60%) deviations from assessment protocol and N=10 (27%) deviations from intervention delivery protocol (Figure 1).

Figure 1. Deviations from assessment and intervention protocol in the PIPRA study

Conclusion: The Covid-19 pandemic has had a significant impact on the delivery of the PIPRA study. Feasibility study outcomes, including participant retention rate, and study delivery as per protocol, have been affected due to the Covid-19 pandemic. Participant reluctance to attend face-to-face sessions demonstrates the need to consider alternative methods of delivery, e.g. virtual delivery of interventions, where attending in person is not acceptable to participants [4], in future studies.

REFERENCES:

- [1] Health Service Executive. (2019). *People at higher risk from COVID-19*. Accessed 5th Jan 2020 <https://www2.hse.ie/conditions/coronavirus/people-at-higher-risk.html>.
- [2] Landewé RB et al (2020). EULAR provisional recommendations for the management of rheumatic and musculoskeletal diseases in the context of SARS-CoV-2. *Annals of the Rheumatic Diseases* 79:851-858.
- [3] Godin, G. (2011). The Godin-Shephard leisure-time physical activity questionnaire. *The Health & Fitness Journal of Canada*, 4(1):18-22.
- [4] Inan, OT et al. (2020). Digitizing clinical trials. *npj Digit. Med.* 3:10.

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AB0873-HPR

EFFECTIVENESS AND COST-EFFECTIVENESS OF LONGSTANDING EXERCISE THERAPY VERSUS USUAL CARE IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS OR RHEUMATOID ARTHRITIS: THE PROTOCOLS OF TWO PARALLEL RANDOMIZED CONTROLLED TRIALS

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Background: Axial SpondyloArthritis (axSpA) and Rheumatoid Arthritis (RA) are chronic rheumatic diseases with an often progressive course, defined by

chronic inflammation. With respect to exercise therapy, in axSpA and RA, multiple systematic reviews concluded that supervised exercise therapy is an effective and safe treatment option, resulting in small to modest improvements in pain, disease activity, functional ability and axial mobility. In general, most of the studies included in these reviews concerned programs of a relatively short duration (<12 weeks) and the studies mostly concerned patients with stable disease, without co-morbid conditions and relatively favorable functional ability (1-5). The group of patients with active disease, irreversible joint damage, multiple joint replacements and/or severe comorbidity hampering participation in exercise therapy programs and in need for individualized, longstanding therapy is therefore likely to be underrepresented in research so far. Consequently, cost-effectiveness studies on longstanding physical therapy are also lacking in these specific subgroups.

Objectives: We aim to evaluate the effectiveness and cost-effectiveness of longstanding exercise therapy compared to usual care in the subgroup of patients with axSpA or RA and severe limitations in functioning.

Methods: In two separate, parallel randomized controlled trials, the effectiveness and cost-effectiveness of longstanding, active exercise therapy (52 weeks) compared with usual care (1:1) will be evaluated (Figure 1). The longstanding, active exercise therapy will focus on improving individual limitations in daily activities and participation, and will be given by a trained physical therapist in the vicinity of the participant. For each diagnosis, 215 patients with severe limitations in activities and participation will be included. Assessments are performed at baseline, 12, 26, and 52 weeks. The primary outcome measure of effectiveness is the individual level of functioning (activities and participation), as measured with the Patient-Specific Complaints instrument at 52 weeks. For cost-effectiveness analyses, the EuroQol (EQ-5D-5L) and questionnaires on healthcare use and productivity will be administered. The economic evaluation will be a cost-utility analysis from a societal perspective. After 52 weeks, the patients in the usual care group are offered longstanding, active exercise therapy as well. Follow-up assessments are done at 104, 156 and 208 weeks.

Figure 1. Study flowchart

Results: The results of these studies will provide insights in the effectiveness and cost-effectiveness of longstanding exercise therapy in the subgroup of axSpA and RA patients with severe functional limitations.

REFERENCES:

- [1] Mewes J, de Bekker P, Bossen D, Steuten L. 2016. Systematic review of supervised physical exercise therapy for patients with rheumatoid arthritis. *Panaxea*.
- [2] Mewes J, de Bekker P, Bossen D, Steuten L. 2016. Systematic review of supervised physical exercise therapy for patients with ankylosing spondylitis. *Panaxea*.