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**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2019-eular.7571

### FRI0712-HPR EFFICACY OF GRADED ACTIVITY WITH AND WITHOUT DAILY-MONITORED-WALKING ON SELECTED CLINICAL ATTRIBUTES OF PATIENTS WITH CONCOMITANT LOW-BACK PAIN AND TYPE-2 DIABETES

Opeyemi Idowu<sup>1</sup>, Ade Adeniyi<sup>2</sup>. <sup>1</sup>University of Benin, Department of Physiotherapy, Benin City, Nigeria; <sup>2</sup>University of Ibadan, Department of Physiotherapy, Ibadan, Nigeria

**Background:** Graded Activity (GA) is efficacious in managing clinical attributes of patients with Low-Back Pain (LBP) in the general population [1,2]. It is unknown whether GA is efficacious in managing these clinical attributes in patients with concomitant LBP and Type-2 Diabetes (T2D) or additional daily-monitored-walking as a form of physical activity will be required.

**Objectives:** The objectives of this study were to investigating the effects of GA with and without daily-monitored-walking, and also to compare the efficacy of the two treatment modes on selected clinical attributes of patients with concomitant LBP and T2DM.

**Methods:** A single-blind controlled trial involving 58 patients (mean age: 48.3±9.4 years, 64.7% females) with concomitant LBP and T2D who received treatment twice weekly for twelve weeks was conducted. Participants were randomized into GA or GA with daily-monitored-walking (GAMW) groups. Pain Intensity (PI), Back Extensors Endurance (BEE), Abdominal Muscular Endurance (AME) and Glycaemic Control (GC) was assessed using Visual Analogue Scale, Biering-Sorensen test, flexor endurance test and HBA1c analyser respectively at baseline, 4th, 8th and 12th week. Data were analysed using repeated measures ANOVA, medians, Mann-Whitney U and Unpaired t-tests at  $\alpha = 0.05$ .

**Results:** At baseline, treatment groups were not significantly different in their physical and clinical characteristics. There were within-group significant differences on PI, AME and BEE in each of GA and GAMW groups across the time points of the study. Within group difference on GC was significant for GAMW (6.3±0.9%, 5.7±0.7%) but not GA (6.3±0.9%, 6.3±0.9%) groups. There were no significant difference between the effects of GA and GAMW on PI at week 4 (Median=-0.78, IQR=0.06; Median=-0.78, IQR=0.08), week 8 (Median=-1.72, IQR=0.06; Median=-1.71, IQR=0.18) and week 12 (Median=-1.46, IQR=0.10; Median=-1.53, IQR=0.18) of the study. Further there was no significant difference between the effects of GA and GAMW on AME at weeks 4 (6.64±0.15; 6.65±0.09), 8 (7.01±0.16; 7.03±0.1) and 12 (5.16±0.05; 5.19±0.09) of the study. Graded activity with daily-monitored-walking had higher improvements than GA alone on BEE (7.34±0.1, 7.25±0.1) at week 8, but not at week 4 (2.37±0.08; 2.36±0.1) or 12 (4.5±0.06; 4.53±0.08) of the study. The GAMW participants also had significant improvement on glycaemic control than GA participants (-0.5±0.2%, -0.6±0.5%) at week 12. Graded activity relieves back symptoms via the development of a sense of control over pain, elimination of pain avoidance as well as by improving overall physical fitness/function [3].

**Conclusion:** Graded activity with daily-monitored-walking produced positive effects on GC and yielded better improvement on BEE.

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**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2019-eular.724

### FRI0713-HPR COMPARISON OF BIOPSYCHOSOCIAL STATUS OF PATIENTS WITH ANKYLOSING SPONDYLITIS WITH AND WITHOUT ANTI-TNF TREATMENT

nur banu karaca<sup>1</sup>, Edibe Ünal<sup>1</sup>, Sedat Kiraz<sup>2</sup>. <sup>1</sup>Hacettepe University Institution of Health Science, Faculty of Physical Therapy and Rehabilitation, Ankara, Turkey; <sup>2</sup>Hacettepe University Faculty of Medicine, Department of Rheumatology, Ankara, Turkey

**Background:** It is known that anti-TNF therapy is given to patients with persistently high disease activity despite conventional treatments according to the ASAS recommendations (1). Although biopsychosocial symptoms were well known, biopsychosocial assessments are insufficient in the literature.

**Objectives:** The aim of this study was to compare the biopsychosocial status between patients with AS who were decided to be treated with anti-TNF treatment and patients with AS who did not receive any anti-TNF treatment. Also, it was aimed to investigate the effectiveness of 3 months anti-TNF treatment on biopsychosocial status.

**Methods:** 74 AS patients who are decided to receive anti-TNF treatment and 38 AS patients, who didn't, were included in the study. Socio-demographic informations of patients were collected. The mean age of the patients (n = 112) was 41,9±19,8 years. Health Assessment Questionnaire (HAQ) was used to assess functional status and daily living activities. The Hospital Anxiety and Depression Scale (HADS) was used to assess anxiety and depression levels. Biopsychosocial status of the patients was evaluated by the BETY-Biopsychosocial Questionnaire (BETY-BQ) (2,3). The same evaluations were repeated after 3 months in 36 patients using anti-TNF.

**Results:** A statistically significant difference was observed in BETY-BQ, HADS anxiety and HAQ scores, when the groups were compared. There was no statistically significant difference in HADS depression scores (Table 1). The difference after 3 months of anti-TNF treatment was significant in all parameters (Table 2).

**FRI0713HPR Table 1.** Difference between the patients who decided to receive anti-TNF and who did not.

	Anti-TNF Decided Group (n=74)	Non-receiving Anti-TNF Group (n=38)	p- value*
HAQ	14,33±10,1	5,46±10,7	,000
HADS - Anxiety	10,24±5,0	7,58±5,0	,011
HADS - Depression	8,38±4,3	6,45±4,3	,053
BETY-BQ	59,32±24,1	46,74±25,8	,032

\*Mann-Whitney U

**FRI0713HPR Table 2.** First and 'After 3 months' measurements in patients who received anti-TNF treatment.

N=36	1st measurement	'After 3 months' measurement	p-value*
HAQ	14,99±11,1	5,36±10,6	,000
HADS - Anxiety	10,33±5,3	7,72±4,7	,001
HADS - Depression	8,89±4,7	5,78±4,7	,000
BETY-BQ	59,33±25,1	44,28±23,2	,000

\* Wilcoxon Test

**Conclusion:** It was observed that the patients who were decided to be received anti-TNF treatment had worse functionality, anxiety, and biopsychosocial status than the patients who did not receive anti-TNF treatment. Anti-TNF treatment was found to be effective in three months period in terms of these biopsychosocial symptoms that the patients had.

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**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2019-eular.7955

**FRI0714-HPR A PILOT NURSE-LED TELEPHONE TRIAGE LINE OF PATIENTS WITH RHEUMATOLOGIC RARE DISEASES IN A TERTIARY CENTER**

Eva Kis<sup>1,2</sup>, Gabriela Ciursa<sup>1</sup>, Bianca Jurju<sup>1</sup>, Ileana Filipescu<sup>1</sup>, Laura Muntean<sup>1</sup>, Siao-Pin Simon<sup>1</sup>, Simona Rednic<sup>1</sup>, Laura Damian<sup>1</sup>. <sup>1</sup>*Emergency Clinical County Hospital Cluj, Rheumatology, Cluj-Napoca, Romania;* <sup>2</sup>*Emergency Clinical County Hospital Cluj, Quality Insurance, Cluj-Napoca, Romania*

**Background:** The general rheumatology outpatient clinics are facing an increasing workload. The patients already in evidence with rare or complex inflammatory diseases, such as inflammatory myopathies, systemic lupus erythematosus, mixed connective tissue diseases, systemic sclerosis, Sjogren's syndrome, relapsing polychondritis, systemic vasculitides and other collagen-vascular diseases are being scheduled for outpatient or hospital assessment at the current visit. However the patients may need earlier appointments, given the possibility of flares or other issues.

**Objectives:** To assess the role of a nurse-led telephonic triage line in patients with rare rheumatologic diseases.

**Methods:** The nurses accepting to be enrolled in the programme answered the phone for the patients already in the department's and their follow-up with rare or complex inflammatory rheumatic diseases. A 2-hours training programme with attending physicians was completed. Respecting confidentiality agreement regulations, the calls were registered with the name, diagnosis and phone number on a standard form. The calls reasons were recorded: appointments scheduling, medical issues or others. The alarming symptoms and signs requiring doctor advice or earlier appointments were checked on a short form: aggravating dyspnea, dysphagia, weakness or Raynaud's phenomenon, ulcerations, etc. Other issues, such as lumbar pain, joint pain, nausea, heartburn, etc requiring counselling, were registered as well.

**Results:** Over 2 months, 280 calls from patients with rare rheumatologic diseases were received, out of which 171 (61%) were for scheduling or changing appointments. The rest were for medical advice regarding minor ailments, medication side effects, regular blood tests or other investigations performed after the last visit, issues regarding travelling etc. The triage nurses referred the patients to Emergency in 2 cases (0.7%), to the General Practitioner in 28 cases (10%) or planned an early appointment to the attending rheumatologist for medical issues in 20 cases (7.3%), briefed the attending physician in 94 cases (33%) and offered counselling in the other cases (49%), which included: medication side effects, analyses to be repeated, diet and promoting self-care.

**Conclusion:** Telephonic calls, managed by experienced nurses, documented by standardized forms, are valuable additional tools in the management of rare inflammatory diseases. The pilot phone triage procedure improve patient's access to healthcare services. Periodic specialty training regarding rheumatologic emergency and communication skills increase the quality of this approach in rare diseases.

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**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2019-eular.7942

**FRI0715-HPR FACTORS WHICH IMPACT COMPLETION AND NON-COMPLETION OF PHYSICAL ACTIVITY INTERVENTIONS FOR PEOPLE WITH RHEUMATOID ARTHRITIS: A SYSTEMATIC REVIEW**

Louise Larkin. *University of Limerick, Limerick, Ireland*

**Background:** Rheumatoid arthritis (RA) is a systemic inflammatory condition which results in pain, fatigue, joint stiffness and an increased risk of cardiovascular issues. Physical activity (PA) has been proven to help reduce the severity of these symptoms and the risk of cardiovascular disease [1]. However, recent literature has shown that people with rheumatoid arthritis do not meet PA guidelines [2]. The systematic review aims to determine the factors which affect the completion rates of adults with RA in PA interventions.

**Objectives:** 1) Review the effect of the frequency, intensity, time and type of exercise (FITT principle) on participation rates. 2) Review the reasons for dropping out of an intervention and consider how this can be avoided in planning future interventions. 3) Examine the effect of behaviour change techniques used on completion rates. 4) Explore the effect of adverse outcomes on completion rates.

**Methods:** A systematic review of the literature was carried out in February 2018. Inclusion criteria were: detailed intervention information, completion rates reported, published between 1998-2018 and published in English. Included papers were assessed using the Cochrane risk of bias tool by two assessors. The relevant data was then extracted, compared and conclusions were drawn.

**Results:** Nine studies with varying levels of quality were included in this review. Reasons for not completing an intervention could be divided into modifiable and non-modifiable factors; modifiable factors include the FITT principle, the behaviour change component and controlling for adverse outcomes. Non-modifiable factors included the environment, illness/flare-up and accidents. The results found that when people with RA had an individualised PA program that started at a low-moderate intensity they had higher participation rates than those who followed a generalised program, with no behaviour change component. Altering the intervention in response to patient's pain levels improved completion rates of the intervention.

**Conclusion:** When designing PA programs for people with RA, the EULAR PA guidelines for people who have inflammatory arthritis [3] should be followed. However, it should be noted that engagement and participation in PA interventions is increased when the intervention is of low impact PA and starts at a low-moderate intensity. Individualising the activity to the person and applying behaviour change techniques have also been found to improve participation.

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**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2019-eular.2811

**FRI0716-HPR FACTORS WHICH IMPACT COMPLETION AND NON-COMPLETION OF PHYSICAL ACTIVITY INTERVENTIONS FOR PEOPLE WITH RHEUMATOID ARTHRITIS: A SYSTEMATIC REVIEW**

Niamh Reynolds, Louise Larkin. *University of Limerick, Limerick, Ireland*

**Background:** Rheumatoid arthritis (RA) is a systemic inflammatory condition which results in pain, fatigue, joint stiffness and an increased risk of cardiovascular issues. Physical activity (PA) has been proven to help reduce the severity of these symptoms and the risk of cardiovascular disease [1]. However, recent literature has shown that people with rheumatoid arthritis do not meet PA guidelines [2]. The systematic review aims to determine the factors which affect the completion rates of adults with RA in PA interventions.

**Objectives:** 1) Review the effect of the frequency, intensity, time and type of exercise (FITT principle) on participation rates. 2) Review the