ECONOMIC BURDEN OF PRENATAL CARE FOR WOMEN WITH RHEUMATIC DISEASES

Keywords: Health Services Research, Pregnancy and reproduction, Quality of life

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Background: Autoimmune rheumatic diseases (ARDs) affect childbearing women. To prevent adverse maternal and fetal outcomes, multidisciplinary attention is needed, leading to increased costs of pregnancy attention[1]. The financial burden that pregnant women with ARDs have, is still unexplored.

Objectives: This study aims to estimate the total cost of prenatal care in pregnant women with ARDs in Northeast Mexico.

Methods: A cross-sectional and descriptive study was carried out at the University Hospital “Dr. Jose E. Gonzalez,” offering affordable care to uninsured patients. We estimated the direct costs of prenatal care for women with rheumatoid arthritis (RA), systemic lupus erythematosus (SLE), and Sjögren’s syndrome (SS) from the ACR/EULAR perspective[2,3]. National standards were used to determine the regular prenatal care requirements[4]. To calculate the total expense, prices declared by the University Hospital in 2021 were used. The used currency is USD, considering an equivalence of USD 1 = 20.28 MXN. Calculating indirect costs, such as transportation, medication, or other interventions, was not performed. No sociodemographic data from patients was used.

Results: The itemized costs for medical appointments, ultrasounds, laboratory tests and vaginal delivery or cesarean section for women without ARDs, with SS, RA and SLE are in Table 1. Prenatal care total costs for women without ARDs, with SS, RA and SLE are exposed in Figure 1. Our findings reported an average cost per trimester in women with ARDis compared to women without ARDs (USD 386.52 vs 783.72). Limitations include the variability of service prices and the absence of indirect cost calculations.

Conclusion: In conclusion, ARD-affected women had a high economic burden secondary to prenatal costs. In this vulnerable population, creating programs for prenatal care that consider the patient’s financial status should be a priority for public health officials and institutions.

REFERENCES:

Table 1. Prenatal care costs by unit and mean total expenditure for women with ARDs

<table>
<thead>
<tr>
<th>Clinical assessment and laboratory tests</th>
<th>Cost (USD)</th>
<th>Frequency</th>
<th>Total (USD)</th>
<th>Cost per trimester</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rheumatology *</td>
<td>12.32</td>
<td>Per trimester</td>
<td>36.96</td>
<td>142.15</td>
<td>426.44</td>
</tr>
<tr>
<td>Osteoarthritis</td>
<td>23.00</td>
<td>At least 5</td>
<td>69.00</td>
<td>without ARD</td>
<td>173.37</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>53.74</td>
<td>Per trimester</td>
<td>161.22</td>
<td>49.30</td>
<td>49.30</td>
</tr>
<tr>
<td>Genetics</td>
<td>49.30</td>
<td>If necessary</td>
<td>49.30</td>
<td>49.34</td>
<td>49.34</td>
</tr>
<tr>
<td>Psychology</td>
<td>39.44</td>
<td>If necessary</td>
<td>39.44</td>
<td>49.30</td>
<td>49.30</td>
</tr>
<tr>
<td>Nutrition</td>
<td>4.93</td>
<td>If necessary</td>
<td>4.93</td>
<td>4.93</td>
<td>4.93</td>
</tr>
<tr>
<td>Complete blood count</td>
<td>8.87</td>
<td>Per trimester</td>
<td>26.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood chemistry</td>
<td>38.46</td>
<td>Per trimester</td>
<td>115.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-hydroxy vitamin D</td>
<td>59.17</td>
<td>Per trimester</td>
<td>177.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thyroid profile*</td>
<td>16.27</td>
<td>Per trimester</td>
<td>48.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT, TTP</td>
<td>36.40</td>
<td>Per trimester</td>
<td>109.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRP and ESR*</td>
<td>25.11</td>
<td>Per trimester</td>
<td>75.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US studies</td>
<td>5.92</td>
<td>Per trimester</td>
<td>14.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV and VDRL test</td>
<td>29.09</td>
<td>Once</td>
<td>29.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood type with Rh</td>
<td>10.35</td>
<td>Once</td>
<td>10.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tests</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunological tests</td>
<td>38.94</td>
<td>Women</td>
<td>913.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for SS</td>
<td>with SS</td>
<td></td>
<td>1,006.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunological tests</td>
<td>97.12</td>
<td>Women</td>
<td>971.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for RA</td>
<td>with RA</td>
<td></td>
<td>1,065.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunological tests</td>
<td>454.60</td>
<td>Women</td>
<td>1,328.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for SLE</td>
<td>with SLE</td>
<td></td>
<td>1,422.52</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PT: Prothrombin time, PTT: Partial thromboplastin time, ESR: Erythrocyte sedimentation rate, CRP: C-reactive protein

Appendix 1

Table A. Pregnancy interventions

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Number of Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultrasound</td>
<td>20</td>
</tr>
<tr>
<td>Laboratory</td>
<td>10</td>
</tr>
<tr>
<td>Immunological</td>
<td>5</td>
</tr>
</tbody>
</table>

| Minimum clinical assessment | 100% | Laboratory tests | 50% | Immunological Tests | 50% |

*Figures are mean values.

Acknowledgements: NIL.

Disclosure of Interests: None Declared.

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HPR Interventions (educational, physical, social and psychological)

REVAMAS – A PODCAST FOR PEOPLE WITH RHEUMATIC DISEASES WHO ARE PLANNING A PREGNANCY OR ARE PREGNANT

Keywords: Patient information and education, Pregnancy and reproduction

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Background: A survey distributed by patient organisations in rheumatology in 2019 have uncovered an unmet need for high quality and accessible patient information on pregnancy and rheumatic diseases. Previous publications have presented the same results (1, 2). During the pandemic, we have seen a shift from healthcare with physical consultations to digital follow-up of the inflammatory rheumatic disease. The Norwegian National Advisory Unit on Pregnancy and Rheumatic Diseases (NKSFR) primary task is to spread updated knowledge, including patient information, regarding different aspects of pregnancy and rheumatic diseases. To reach out to the target population in this digital era, NKSFR have started using social media, such as Facebook and Instagram, in addition to YouTube to spread patient information. As a natural next step we wanted to establish a podcast on different topics related to pregnancy and rheumatic diseases so patients and partners could have easy access to high quality reliable information at all times and for all of Norway.

Objectives: To develop a podcast with different topics related to pregnancy and rheumatic diseases. The podcast is primary aimed at people with inflammatory rheumatic disease and their partners, but is also relevant for healthcare professionals.

Methods: Based on webinars published on YouTube from NKSFR during the pandemic, we edited and published six podcast episodes. We had help from the department of communications to adjust the podcast for publication. We chose a platform for podcasts without fees and easy access to make sure it was available for everyone.

Results: We published six podcast episodes as season one. A multidisciplinary team with rheumatologist, nurse, midwife, patient representatives, partner and occupational therapist participated in the podcast. The episodes have the following topics: Planning a pregnancy, preparing for birth, patient experience, fatigue and everyday activities with small children, partners perspective and men and anti-rheumatic medications. The episodes lasts from 16 to 27 minutes. The podcast is available on the most used platforms for podcast listeners in Norway. We used NKSFR platforms in social media to spread the word about the podcast.

Conclusion: Using podcast as a platform to spread high quality and knowledge based patient information can be effective to increase accessibility of patient information. The episodes are available on demand, regardless of where you live. People with rheumatism can stream the short episodes whenever convenient, for example in the car, one the buss to work, when walking the dog or when doing chores. Planning of season two has already begun.
improve the grip strength and functionality of the hand in individuals with PsA.

There is no scientific study that applies a hand-focused home exercise program to hand strength, dexterity, coordination and functionality compared to their healthy peers. (Recent European League Against Rheumatism) recommends physical therapy in progressive. This structural damage causes worsening of the functional status of PsA patients, structural damage occurs in the joints as the process is chronic and patients have peripheral arthritis involvement. In addition to peripheral arthritis with peripheral arthritis, dactylitis, enthesitis and spondylitis. Majority of PsA ease accompanied by psoriasis in the spondyloarthritis group and often progresses.

**Background:** Psoriatic arthritis (PsA) is a chronic inflammatory musculoskeletal disease accompanied by psoriasis in the spondyloarthritis group and often progresses with peripheral arthritis, dactylitis, enthesitis and spondylitis. [1] Majority of PsA patients have peripheral arthritis involvement [2]. In addition to peripheral arthritis in PsA patients, structural damage occurs in the joints as the process is chronic and progressive. This structural damage causes worsening of the functional status of the patients [3]. Worsening functionality reduces patients’ quality of life. Also EULAR (Recent European League Against Rheumatism) recommends physical therapy in inflammatory arthritis including PsA [4]. It is known that individuals with PsA have lower hand strength, dexterity, coordination and functionality compared to their healthy peers [5]. There is no scientific study that applies a hand-focused home exercise program to improve the grip strength and functionality of the hand in individuals with PsA.

**Objectives:** The aim of this study was to examine the effect of hand exercises on grip strength, functionality, disease activity, and quality of life in patients with PsA.

**Methods:** 37 PsA patients (29 female, 8 male) with an average age of 50.32± 9.12 were included in this study. Patients were randomized into intervention (group 1) and control (group 2) groups. Group 1 received hand home exercises for 4 days a week for 8 weeks. Group 2 was on the waiting-list and they received the same exercises when the study was finished. The Disease Activity Index for Psoriatic Arthritis (DAPSA) was used to evaluate the disease activity. Hand Dynamometer and pinchmeter was used to evaluate the hand grip and pinch strength. Duruoz Hand Index (DHI), Michigan Hand Outcomes Questionnaire (MHQ), Hand Functional Index (HFI), Nine Peg Hole Test (NPHT) were used to evaluate the hand functionality. Psoriatic Arthritis Quality of Life was used to evaluate the quality life. All evaluations were performed at baseline and at the end of the 8th week.

**Results:** When the groups were compared before training, there was no significant difference (p> 0.05). In post-training comparisons, there was a significant difference in MHQ, hand grip and pinch strength in hand exercises group. The Pain Management for Inflammatory Arthritis QIP Tool has a high internal validity as shown by the Kappa scores generated by results from two independent reviewers. To overcome the low Kappa scores on individual questions; additional guidance on how to answer specific questions may need to be provided to those filling out the questionnaire.

**REFERENCES:**


**Disclosure of Interests:** None Declared.

**AC1774-HPR** INVESTIGATION OF THE EFFECT OF HAND EXERCISES ON GRIP STRENGTH, FUNCTIONALITY, DISEASE ACTIVITY AND QUALITY OF LIFE IN INDIVIDUALS WITH PSORIATIC ARTHRITIS: A RANDOMIZED CONTROLLED TRIAL

**Keywords:** Randomized control trial, Psoriatic arthritis, Physical therapy/ Physiotherapy

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**Background:** Psoriatic arthritis (PsA) is a chronic inflammatory musculoskeletal disease accompanied by psoriasis in the spondyloarthritis group and often progresses with peripheral arthritis, dactylitis, enthesitis and spondylitis. [1] Majority of PsA patients have peripheral arthritis involvement [2]. In addition to peripheral arthritis in PsA patients, structural damage occurs in the joints as the process is chronic and progressive. This structural damage causes worsening of the functional status of the patients [3]. Worsening functionality reduces patients’ quality of life. Also EULAR (Recent European League Against Rheumatism) recommends physical therapy in inflammatory arthritis including PsA [4]. It is known that individuals with PsA have lower hand strength, dexterity, coordination and functionality compared to their healthy peers [5]. There is no scientific study that applies a hand-focused home exercise program to improve the grip strength and functionality of the hand in individuals with PsA.

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**REFERENCES:**


**AB1774-HPR** ASSESSING THE INTERNAL VALIDITY OF THE BSR PAIN MANAGEMENT FOR INFLAMMATORY ARTHRITIS QIP TOOL

**Keywords:** Patient reported outcomes, Inflammatory arthritis, Pain

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**Background:** Pain management is an important component of many Inflammatory Arthritis consultations. The BSR Pain Management for Inflammatory Arthritis Quality Improvement Tool uses 11 questions and 38 sub questions that assess three domains; background information (3 questions), pain management in the consultation (5 questions) and pain management in previous consultations (3 questions) [1]. The questions are based on the EULAR Guidelines for Pain Management in Inflammatory and Osteoarthritis [2]. The tool is free to use, produces results in real time in anonymised PDF form. The project is sponsored by Cambridge University Hospitals NHS Foundation Trust Audit Department (Number 2200).

**Objectives:** To assess the internal validity of the Pain Management for Inflammatory Arthritis Quality Improvement Tool 2020.

**Methods:** Two independent researchers (A & B) reviewed appointment/clinic notes from 33 patients who had attended Rheumatology appointments at Addenbrooke’s Hospital. 20 of these patients were found to experience pain during the consultation and the QIP tool questionnaire was used to assess their pain management. To assess the internal validity of the QIP tool; results from each reviewer were compared to generate a Cohen’s Kappa Score for each question.

**Results:** The overall Kappa Score for the QIP tool was 0.75, with 570 congruent results and 190 incongruent results. The congruence was found to be high across the majority of questions. 87/190 (46%) of the incongruent scores were from just 6/38 questions. The QIP tool questions can be modified to improve clarity. There was systematic bias in the questions with lower kappa scores (A answering “yes” and B answering “no”).

**Conclusion:** The Pain Management for Inflammatory Arthritis QIP Tool has a high internal validity as shown by the Kappa scores generated by results from two independent reviewers. To overcome the low Kappa scores on individual questions; additional guidance on how to answer specific questions may need to be provided to those filling out the questionnaire.

**REFERENCES:**


**AB1780-HPR** FIBROMYALGIA PATIENTS’ EXPERIENCES AFTER ONE-WEEK SELF-MANAGEMENT PROGRAMME FOUR TO TEN MONTHS AFTER DISCHARGE: A QUALITATIVE STUDY

**Keywords:** Fibromyalgia, Qualitative research methods, Self-management

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**Background:** The European League Against Rheumatism (EULAR) emphasizes in its guidelines for the treatment of fibromyalgia (FM) that Health professional should aim to improve health-related quality of life, which often requires a combination of non-pharmacological and pharmaceutical treatment methods. Non-pharmacological approaches have been shown to be effective in this study, a multidisciplinary self-management programme (SMP) was used to treat patients with FM.

**Objectives:** To investigate and understand the experiences of individuals with FM who participated in a one-week SMP.

**Methods:** A qualitative study using semi-structured interviews was used to investigate the participants’ experiences. A total of 22 women and 2 men with...