PREVALENCE OF RHEUMATIC PATOLOGY IN CHILDREN IN THE CENTRAL FEDERAL DISTRICT OF THE RUSSIAN FEDERATION, STRUCTURE OF MORBIDITY AND THERAPY

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Background: Analysis of the incidence of rheumatic diseases in children can help to evaluate the real needs in treatment provision and improve medical service.

Objectives: To analyse the prevalence, structure of morbidity, and therapy of rheumatic pathology in children in the Central Federal District of the Russian Federation.

Methods: Statistical, sociological methods and content analysis were used. The study included generalised information on 3940 patients aged 1-17 years with various rheumatic diseases living in the 13 regions of the Central Federal District of the Russian Federation. The data is provided by the main paediatric rheumatologists of the regions.

Results: 5,999,124 children aged 0 to 17 years live on the territory of 13 regions of central Russia. In these regions, 3,940 patients with rheumatic diseases are observed. Our data allowed us to calculate the prevalence of rheumatic diseases per 100,000 children from 0 to 17 years. The prevalence of juvenile idiopathic arthritis (JIA) is 62.2 per 100,000 children from 0 to 17 years old.

HPR measuring health (development and measurement properties of PROs, tests, devices)
or inflammatory parameters (ESR, CRP). Patients on sick-leave had more tender joints median (min-max) 9 (2-18) vs. 4 (0-20) and 3 (0-10), p=0.013. Workers reported higher intensity of pain, though not significant. Retired patients fulfilled MVPA criteria to a higher rate (86%) than workers (42%) or patients with sick-leave (40%), p=0.010. 

The qualitative content analysis resulted in three categories. Reasons to being physically active in patients with early RA were; limitations (pain, physical function, stiffness, limited strength and fatigue), awareness as motivation (fear of movement and health benefits) and external environment (weather, transports to activity, economy and time, especially for workers).

Conclusion: Knowledge of reasons to being physically active in patients with RA is important to facilitate and support the patients. Joint pain seems to be an issue for patients with sick-leave. This could be associated to fear of movement and in this aspect these patients need to be supported. Time could be a limiting issue for working patients, which need to be highlighted and solved for these patients.

Disclosure of Interests: None declared

**SAT0706-HPR**

THE RELATIONSHIP BETWEEN SUBJECTIVE AND OBJECTIVE METHODS FOR MEASURING PHYSICAL ACTIVITY STATUS OF AXIAL SPONDYLOARTHRITIS PATIENTS: QUESTIONNAIRE VERSUS ACCELEROMETER

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Background: Physical activity is getting more attention for the appropriate management of both disease itself and co-morbid conditions in patients with axial spondyloarthritis (axSpA). Many different tools are available for determining physical activity status. Although subjective tools such as questionnaires are quick and easy for gathering data, objective tools such as accelerometers might provide more accurate information.

Objectives: To investigate the relationship between a subjective physical activity questionnaire (International Physical Activity Questionnaire Short Form: IPAQ) and an accelerometer (Actigraph wGT3X-BT) for measuring physical activity status of axSpA patients.

Methods: Thirty-nine patients with axSpA (age 37.9±11.3 years, body mass index 26.9±5.3 kg/m², disease activity: 3.3±2.3 according to Bath Ankylosing Spondylitis Disease Activity Index, functional status: 2.9±2.8 according to ASAS criteria) were included in this study. The accelerometer (Actigraph wGT3X-BT) was used to measure physical activity time, which was classified according to Bath Ankylosing Spondylitis Functional Activity Index and the IPAQ. The patients were asked to complete the IPAQ. The IPAQ inquires the physical activity performed during previous week in minutes and categorizes it into three sections as vigorous, moderate activity, and walking. The walking section in IPAQ was accepted as equal to light physical activity in Actigraph. The relationship between measurements was determined by using Spearman’s Rank Correlation Coefficient.

Results: No significant correlations were determined between subjective and objective methods (p>0.05), except the time spent during moderate physical activity (rho: 0.457, p<0.05). It was also observed that IPAQ were underestimating the physical activity times for all types of physical activity (Table 1).

![Abstract Table 1](image)

<table>
<thead>
<tr>
<th>Objective Measurement</th>
<th>Subjective Measurement</th>
<th>Spearman’s Correlation</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Physical Activity (min)</td>
<td>Moderate Physical Activity (min)</td>
<td>Vigorous Physical Activity (min)</td>
<td>Total Physical Activity (min)</td>
</tr>
<tr>
<td>2270.26±1016.70</td>
<td>243.97±167.9</td>
<td>7.23±18.61</td>
<td>2521.46±1094.40</td>
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<tr>
<td>331.03±552.75</td>
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<td>248.72±84.93</td>
<td>670.00±1183.30</td>
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<tr>
<td>0.037</td>
<td>0.457</td>
<td>0.184</td>
<td>0.271</td>
</tr>
<tr>
<td>0.825</td>
<td>0.003</td>
<td>0.914</td>
<td>0.095</td>
</tr>
</tbody>
</table>

Conclusion: According to our results, IPAQ short version may not be an appropriate tool for determining physical activity status in axSpA patients. It seems that we need disease specific tools in axSpA.

REFERENCES

Disclosure of Interests: Deniz Bayraktar: None declared, Tugce Yuksel-Karsli: None declared, Derya Ozer Kaya: None declared, Dilek Solmaz: None declared, Gokhan Kabadadi: None declared, Idol Kurut: None declared, Servet Akar Grant/research support from: MSD, Abbvie, Roche, UCB, Novartis, Pfizer, Amgen, Consultant for: MSD, Abbvie, Roche, UCB, Novartis, Pfizer, Amgen, Speakers bureau: Pfizer

**SAT0707-HPR**

PATIENT AND CLINICIAN PERSPECTIVES USED FOR SURVEY DEVELOPMENT TO INVESTIGATE THE NATURE, EXTENT AND IMPACT OF FOOT PROBLEMS IN PEOPLE WITH PSORIATIC ARTHRITIS

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Background: Despite recognition that hallmark features of psoriatic arthritis (PsA), such as enthesitis, are predominant and persistent in the foot and ankle [1], limited research has focused on the foot. Few published studies have used RA-specific outcome measures unlikely to capture the dermatological impact in PsA and there has been little incorporation of the patient perspective [1]. The importance of patient and clinician involvement as a central component of research design has been identified in PsA [2, 3], and provides a basis for defining what should be measured to represent comprehensively the experience of people with PsA-related foot problems and important domains of impact.

Objectives: To develop a survey based on the views of people with PsA and clinicians on foot problems, their impact and the foot care needs.

Methods: Interviews of people with PsA-related foot problems and focus groups with clinicians on their understanding of the patient experience were undertaken in Sydney, Australia and Auckland, New Zealand. A representative sample from public and private sector, from lower and higher socioeconomic geographical areas, as well as clinicians with different professional backgrounds was sought. Based on the themes from the qualitative interviews, previous research [1, 3] and clinical experience, survey items were generated by the research team using a consensus based approach. The survey was pre-tested using a 4-stage method that comprised; cognitive de-briefing of people with PsA, expert review panels of subject and survey design experts, cultural sensitivity assessment and pilot testing. All focus groups and interviews were audio-record, transcribed verbatim and survey items were revised based on comments made.

Results: The final 60-item self-administered survey was developed based on feedback from each of the 4-stages, which related to wording, comprehensiveness, timescales, content, repetition, number of survey items and overall survey design. Key survey domains included demographic (10%) and socioeconomic data (10%), global disease information (18%), foot and ankle characteristics (18%), and the impact of foot problems on daily life.