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VALIDITY OF THE GERMAN VERSION OF BOTH THE PARENT ADHERENCE REPORT QUESTIONNAIRE (PARC) AND THE CHILD ADHERENCE REPORT QUESTIONNAIRE (CARQ) - DATA OF THE INCEPTION COHORT OF NEWLY DIAGNOSED PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS (ICON)

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Background: Juvenile idiopathic arthritis (JIA) is the most common chronic inflammatory rheumatic disease in childhood. A multimodal treatment is needed to reduce pain, control inflammation and maintain joint functioning. Adherence to prescribed therapies is necessary for an optimal outcome. Measuring adherence in children with JIA and their caregivers by a validated questionnaire provides important information about benefits and problems with treatment.

Objectives: To evaluate adherence in JIA patients and to validate the German version of both the parent adherence report questionnaire (PARQ) and the child adherence report questionnaire (CARQ).

Methods: The PARQ and CARQ were translated from its original English version into German and cross-culturally adapted. Parents and children completed the PARQ and CARQ 4 years after enrolment in the Inception cohort ICON. These questionnaires measure child ability (by VAS 0-100, 100 = best) related to i) general level of difficulty in following treatment, ii) frequency of following treatment, iii) negative reactions in response to treatment [i-iii] summarized to child ability total score, iv) perceived helpfulness of treatment, and 4 categorical questions on errors in medication behavior. Reliability was tested by re-administering the questionnaire after a mean of 13 days. Reproducibility was analysed using intra-class correlation coefficients (ICC). VAS scores were correlated with the Pediatric Quality of Life Inventory (PedsQL) treatment scale items for convergent validity, and with sociodemographic parameters for discriminant validity.

Results: 481 parents and 465 children completed the PARQ and the CARQ, respectively, 56 parents and 37 children took part in the re-test. The mean age at assessment was 10.1±3.7 years, mean disease duration was 4.7±0.8 years. The majority of patients suffered from oligoarthritis (49%), followed by rheumatoid-factor negative polyarthritis (30%). Treatment with a DMARD received 60% (MTX 46%), 28% received a biological drug, 16% both. Disease activity measured by the clinical juvenile arthritis disease activity score-10 (cJADAS-10) was 2.6 ± 3.4 (range 0 - 30, best = 0), functional status was good (mean CHAQ 0.2 ± 0.4). Exercise and splints were prescribed to 57% and 21% of patients, respectively.

PARQ/CARQ mean child ability total scores for medication were 73.1 ± 23.3/76.5 ± 24.2, for exercise: 85.6 ± 16.5/90.3 ± 15.0, for splints: 72.9 ± 24.2/82.9 ± 16.5. About a third of parents and children reported any error in medication behavior. Perceived helpfulness was highest for medication (PARQ/CARQ 87.4 ± 20.6/83.6 ± 26.1) and lowest for splints. (PARQ/CARQ 80.8 ± 28.4/73.5 ± 33.6).

ICCs related to medication indicated good to excellent concordance (PARQ ICC = 0.69 - 0.96; CARQ ICC = 0.53 - 0.75), to exercise moderate (PARQ ICC = 0.28 - 0.45; CARQ ICC = 0.67 - 0.93) and to splints disparate concordance (PARQ ICC = 0.01 - 0.90, CARQ ICC = 0.86 - 0.93).

Scores for medications (PARQ: r 0.06 - 0.38, CARQ: 0.06 - 0.49), exercise (PARQ: r 0.03 - 0.30, CARQ: 0.01 - 0.34) and splints (PARQ: r 0.09 - 0.52, CARQ: 0.11 - 0.62) showed a fair to good correlation with the PedsQL scales. Gender and socioeconomic status were not associated with the level of adherence.

Conclusion: The German version of the PARQ and CARQ appears to be a valuable tool to measure adherence in patients with JIA and to evaluate helpfulness of treatments.

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IMPACT OF INDIVIDUAL SYMPTOMS OF PSORIATIC ARTHRITIS ON PHYSICAL COMPONENT SCORE AND MENTAL COMPONENT SCORE OF SF-36 AS A MEASURE OF HEALTH RELATED QUALITY OF LIFE (QOL): AN OBSERVATIONAL COHORT STUDY

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Background: Patients with Psoriatic Arthritis (PsA) experience diverse symptoms including skin and nail psoriasis, swollen and tender joints, enthesitis, and fatigue that have shown to impair health related quality of life (QoL). We hypothesized that different elements of disease influence SF-36 physical (PCS) and mental (MCS) component summary scores differently.

Objectives: The objective of the study was to assess the interaction between change in disease activity (DAS28CRP), PsA symptoms (psoriasis [PsO], nail PsO, enthesitis, fatigue, pain, and physical function) with changes in PCS and MCS scores in a PsA patient cohort exploring effect of treatment on clinical manifestations and patient-reported outcome (PRO).

Methods: Data were obtained from the PIPA cohort (1) at baseline and after 4 months of treatment. Patients' characteristics were described as medians with inter-quartile ranges (IQRs) and numbers with percentages. Data were presented as

Figure 1. Association between disease activity, individual symptoms and PCS/MCSPCS; physical component summary (green regression plane), MCS; mental component summary (blue regression plane). Arrows indicate the positive improvement vector. SF-36: short form-36, CI: Confidence Interval, DAS28CRP: disease activity score with 28 joints and c-reactive protein, PASI: Psoriasis Area Severity Index, SPARCC: Spondyloarthritis Research Consortium of Canada enthesitis index, VAS: visual analogue scale, PsAid: Psoriatic Arthritis Impact of Disease, HAQ: Health Assessment Questionnaire