Use of Internet in Adolescents and Young Adults with JIA, Philomine A. van Pelt1, Constance H.C. Drossaert2, Radboud JEM Dolhain3, A.A. Kroize4, Jaap Huismann4 and Nico Wulffraat1. 1Erasmus MC, Rotterdam, Netherlands, 2University of Twente, Enschede, Netherlands, 3Erasmus MC University Medical Center, Rotterdam, Rotterdam, Netherlands, 4University Medical Center Utrecht, Utrecht, Netherlands, 5Wilhelmina’s Children Hospital UMC Utrecht, Utrecht, Netherlands.

Background/Purpose: Internet-use is increasing since it is an efficient way to find information. Information obtained via Health Related Internet (HRI) sites, or online peer support groups might increase knowledge and self-management in adolescents and young adults with Juvenile Idiopathic Arthritis (JIA). This study evaluates the frequency of use and perceived relevance of HRI use and its association with demographic, disease-related and psycho-social variables.

Methods: In a cross-sectional study, all consecutive JIA patients from the outpatient clinic (age 10 – 27 years) who gave informed consent were asked to complete a self-reported questionnaire. Frequency of using HRI-sites (regarding information about JIA, medication-use and aspects of JIA related to social life) as well as having online contact with fellow patients were evaluated. Perceived relevance of HRI use and contact with fellow patients were also investigated. Demographic variables, disease activity, medication and emotional behavior and coping were assessed as possible predictors.

Results: 142 patients were included and 98% had access to internet. 71% had used internet to search general information on JIA, but specific topics such as medication, were less searched for (6–35%). Most favorite sites to look for information were www.reumaforum.nl (Dutch Arthritis Foundation; 20%); www.google.com (16%); www.jong-en-reuma.nl (UMCU hospital site for rheumatic diseases; 14%) and www.prinet.it (Pediatric Rheumatology European Society information site; 3%). One in four adolescents had ever visited a forum or had online contact with peers. Most favorite discussion fora were www.reumaforum.nl (peer support for general rheumatic diseases; 14%); www.jeugdreuma.com (parents of children support forum; 5%) and www Thông tin văn hóa (peer support information and forum for 16–30 year old patients; 5%). Whereas most had used the internet to find information about JIA, the perceived relevance of HRI-sites and of opportunities for online peer contact was rated low (medians respectively 2.0 and 1.0 on a scale 0–10).

Female gender was positively associated with HRI use (P<0.01), other demographic and disease related factors were not associated with HRI use. Coping styles “confrontation” and “reassuring thoughts” were associated with increased HRI use, but only in males. Internalizing and externalizing problem behavior were not significantly associated.

Conclusion: Frequency of Health Related Internet use in young people with JIA was less than expected and considered of low relevance. Besides behavior were not significantly associated.

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Patient Reported Outcomes Following Total Knee Arthroplasty in Rheumatoid Arthritis and Osteoarthritis, Anand Dusad1, Sofia Pedro2, Kevin Garvin1, Curtis Hartman1, James O’Dell1, Ted R. Mikuls1 and Kaleb Michaud1. 1University of Nebraska Medical Center, Omaha, NE, 2National Data Bank for Rheumatic Diseases, Wichita, KS, 3University of Nebraska Medical Center and National Data Bank, Omaha, NE.

Background/Purpose: Due to the progressive and debilitating nature of knee arthritis, total knee arthroplasty (TKA) is the ultimate outcome. TKA is an effective surgical intervention for relieving pain and restoring function in patients with end-stage knee arthritis. Even though the beneficial impact of TKA is well documented, its effect on patient reported indices of pain and health related quality of life (HRQoL), especially in the RA population, are scarce. We examined the effects of TKA on pain and HRQoL in RA and OA patients.

Methods: Rheumatologist-diagnosed RA (n=834) and OA (n=315) patients undergoing primary TKA during 1999–2012 were identified. Measures of pain, function and HRQoL were obtained in three consecutive 6-month intervals: pre-operative (baseline), peri-operative and post-operative (recovery). Descriptive statistics and one-way ANOVA were used to compare TKA outcomes by diagnosis. Effect sizes were calculated between baseline and recovery period for each measure and graphs were plotted to follow these over time (≥3 years of TKA), for both RA and OA patients.

Results: Patients with RA and OA were similar in age (65 vs 68 years, respectively) and elapsed time [baseline sampling to TKA and TKA to recovery] (4.4 vs. 4.5 and 10.4 vs. 10.3 months). Post TKA, significant improvements were observed for most domains of pain, function and HRQoL indices within both disease groups (p<0.001). The beneficial effects of TKA were more profound in OA patients, as compared to RA, for all measures of pain and HRQoL indices except for RADAI-total joint count [RA (~0.42 vs. OA (~0.30)] and EQ-5D [RA (0.07) vs. OA (0.06)]. By effect size, maximum significant (p<0.001) improvement was shown in index knee pain (RA -1.69 vs. OA -1.85). Beyond pain outcomes, EQ-5D and SF-36 PCS were the most responsive HRQoL measures in detecting post-TKA improvement in RA and OA (p<0.001 in both groups), respectively (Table 1). For all measures examined, improvements were greatest in the first post-operative year, showing gradual declines thereafter.

Conclusion: TKA is highly effective in reducing clinically relevant index knee pain to a greater extent than other subjective HRQoL indices in patients with RA, although this improvement is less marked than that observed in OA patients. Gains observed in pain, function, and HRQoL are most striking in the first 12 months following TKA, paralleling levels reported often years prior to joint replacement. From our results, TKA acts as a “time machine” by which a patient returns to a reduced pain and less disabled lifestyle, before the arthritic process catches up, which is strikingly faster in RA.

Table 1. Mean change (SD) and effect size between baseline and recovery period

<table>
<thead>
<tr>
<th>Measure</th>
<th>RA</th>
<th>Effect size</th>
<th>OA</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA - OA index knee pain</td>
<td>-1.47</td>
<td>0.08</td>
<td>-1.47</td>
<td>0.07</td>
</tr>
<tr>
<td>RA - OA VAS Pain (0–10)</td>
<td>-1.12</td>
<td>0.67</td>
<td>-0.42</td>
<td>0.67</td>
</tr>
<tr>
<td>RA - OA RADAI-total joint count</td>
<td>-0.40</td>
<td>0.40</td>
<td>0.08</td>
<td>0.07</td>
</tr>
<tr>
<td>RA - OA RADAI-total joint score</td>
<td>-1.41</td>
<td>0.48</td>
<td>-1.14</td>
<td>0.48</td>
</tr>
<tr>
<td>RA - OA EQ-5D score (0–10)</td>
<td>-0.09</td>
<td>0.59</td>
<td>-0.14</td>
<td>0.59</td>
</tr>
<tr>
<td>RA - OA SF-36 PCS (0–100)</td>
<td>3.59</td>
<td>0.58</td>
<td>0.37</td>
<td>0.58</td>
</tr>
<tr>
<td>RA - OA SF-36 PCS (0–100)</td>
<td>0.40</td>
<td>0.20</td>
<td>0.40</td>
<td>0.20</td>
</tr>
</tbody>
</table>

# and @ represent indices with significantly (p<0.05) less and more severe scores, respectively, in RA (vs. OA) patients undergoing TKA at baseline. Bold numbers represent significant (p<0.05) values between baseline and recovery within the respective groups.

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Knee Arthroscopy in an International Training Centre: An Audit of Safety and Impact on Work Days, Carl Orr1, Paul MacMullan1, Phil Gallagher1, Mairaed Murray1, Madeline O’Neill1 and Douglas J. Veale1. 1Dublin Academic Medical Centre, St. Vincent’s University Hospital, Dublin, Ireland, 2St. Vincent’s University Hospital, Dublin, Ireland, 3St. Vincent’s University Hospital, Dublin 4, Ireland.

Background/Purpose: The utility of synovial biopsy has been confirmed as an important research tool in increasing our understanding of the pathogenesis of RA, evaluating new treatments and identifying potential therapeutic targets (1, 2). More rheumatology units are introducing arthroscopy as part of their research programs.(3). In 2004, we published data showing that complication rates are very low (4), however it is critically important to continue to monitor safety and audit our outcomes.

All procedures are performed under local anaesthesia in a state of the art, built-for-purpose facility.

We collected and analysed the experience reported by patients following arthroscopy in our unit, examining parameters such as overall tolerability, pain, time out of work post-arthroscopy and complications.

Methods: Consecutive patients returning to the arthroscopy programme since July 2013 completed a questionnaire including 16 questions, three visual analogue scales (VAS 0mm-100mm), as well as binary questions.

Results: 136 (47 male) respondents are included, age 20–82 years (mean 53.76, SD 13.86).

91.2% (124/136) of patients felt they had received adequate information before the procedure. 84.6% (115/136) reported that the procedure matched