Results: The Sparks CHARMS JIA Website for Parents has been developed. Its content includes information about JIA and its treatment, including medication and therapies, as well as support and techniques to help parents manage the challenges of their child’s JIA. These techniques include pain management, assisting with adherence, helping their child manage at school, family relationships and maintaining their own wellbeing.

Conclusion: A comprehensive website for parents of children with JIA has been systematically developed and the next step will be to evaluate its efficacy in an RCT.

Disclosure statement: The authors have declared no conflicts of interest.

ABSTRACT 24  BSPAR130

ARRIVED SAFELY? AUDIT OF DOCUMENTATION OF SUCCESSFUL TRANSFER INTO ADULT CARE OF YOUNG PEOPLE ATTENDING PAEDIATRIC RHEUMATOLOGY CLINICS

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Introduction: Concerns regarding the transfer of information at the paediatric–adult interface have been raised. Although tracking of patients into adult services is recommended, lapse of care at this time is reported, including a departmental audit in 2007 showing the latter occurred in 25% of patients.

Aims: To determine the success of transfer to adult care from a paediatric rheumatology service.

Method: Retrospective case note review of all transferred patients from 2007–12.

Results: Preliminary data (2009 –12) reveals 92 patients were transferred to 25 adult rheumatologists. Of patients transferred, the mean age at diagnosis was 10 years (2–16) and mean age at transfer was 17 years (16-19, 63% (n = 58) were female and 32% (n = 29) were non-caucasian. 65% (n = 60) had Juvenile idiopathic arthritis. 57% (n = 52) were on a DMARD/biologic during transfer. 38% (n = 36) had a co-morbidity. The median (mean, range) duration between final paediatric and first adult appointment was 98 days (11.84, 17 –457). Three patients were lost to follow up. Successful transfer, defined by receipt of a letter from the first and/or second adult appointment occurred in 97% (n = 90) and 62% (n = 52) of cases respectively. Seven were currently being transferred and not included. Referral letter, transfer summaries, and copy letters were sent to the adult team in 72% (n = 66) of cases, and copied to 73% (n = 48) of patients.

Conclusion: Although improvement in transfer organization is evident since 2007, variation within this service exists with significant lapses of care occurring for some patients. The potential impact on care will be discussed.

Disclosure statement: The authors have declared no conflicts of interest.

ABSTRACT 25  BSPAR132

LABORATORY INVESTIGATION OF THE ROLE OF TOLL-LIKE RECEPTORS ON KIDNEY CELLS IN PATHOGENESIS OF LUPUS NEPHRITIS

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Introduction: LN is a serious complication of JSLE. Previous studies have suggested a role for toll-like receptor 7 (TLR7) and TLR9 in SLE pathogenesis. Podocytes are specialized cells in the glomerular filtration barrier. Biopsies from LN patients have demonstrated higher TLR7 and TLR9 expression in glomeruli compared with controls.

Aims: To examine the role of TLR7 and TLR9 in podocytes to identify potential targets for more effective therapies of LN.

Method: Conditionally immortalized human podocytes were cultured. Quantitative PCR and Western blotting were used to detect TLR7 and TLR9 expression at the mRNA and protein level respectively. The effects of lipopolysaccharide (LPS), an inflammatory stimulus, imiquimod (TLR7 agonist), CpG (TLR9 agonist) and dexamethasone were examined. Phosphorylation of NFκB was assessed with Western blotting and a cell proliferation assay used to estimate cell survival.

Results: Treatment of podocytes with LPS was associated with increased expression of TLR7 at the protein level with comparatively little change in TLR9. Exposure to imiquimod or CpG increased phosphorylation of NFκB. There was preliminary evidence of less phosphorylation of NFκB when cells were treated with dexamethasone prior to TLR agonists. Initial results from the cell proliferation assay suggested lower levels after imiquimod or CpG treatment for 24 h.

Conclusion: This study suggests that podocytes express TLR7 and TLR9. Agonists of these receptors have effects on intracellular signalling. If confirmed, the TLR-NFκB pathway in kidney cells may be a potential target for novel therapies in LN.

Disclosure statement: The authors have declared no conflicts of interest.

ABSTRACT 26  BSPAR133

MEASLES IMMUNITY IN PAEDIATRIC RHEUMATOLOGY PATIENTS ON IMMUNOSUPPRESSIVE CHEMOTHERAPY

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Introduction: There have been 105 confirmed cases of measles since the start of 2013 in Greater Manchester. Highest numbers are in unimmunized children aged 10–14, reflecting the national picture and the poor historic levels of MMR uptake in this group.

Aims: To audit paediatric rheumatology patients on immunosuppressive chemotherapy to see how many have been vaccinated, how many MMR vaccinations they had received and how many of our patients were deemed susceptible to measles on serology testing.

Method: A retrospective collection of vaccination status of all paediatric rheumatology patients on immunosuppressive chemotherapy with prospective data collection of immune status via blood serology. Variables included MMR status and antibody status.

Results: We have 249 patients on immunosuppressive chemotherapeutic agents. 146 of them have been screened for measles immunity. 129 patients have a result. 107 patients have measles IgG detected and are therefore considered to have adequate measles immunity. 20 patients have no measles IgG detected and are therefore considered susceptible to measles. Of these 20 patients considered susceptible 4 patients have not received any MMR vaccination whilst 9 patients received 2 MMR vaccinations.

Conclusion: Of at least 41 patients who have received two MMR vaccinations, a quarter of them are immune. Immunity cannot be assumed from vaccination status alone. All patients who require immunosuppressive chemotherapy should have their measles antibody status checked prior to commencing therapy.

Disclosure statement: The authors have declared no conflicts of interest.

ABSTRACT 27  BSPAR134

SPELLING OF MEDICATION NAMES IN YOUNG PEOPLE’S BLOGS ABOUT JUVENILE ARTHRITIS

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Introduction: There are a significant number of adults in the UK who struggle to cope with the context-specific demands on their literacy: medication poses specific challenges. For young people with juvenile
arthritis (JA), building their knowledge of basic information about medicines is important for future self-management. Previous work has shown that young people struggle to find effective search terms to use online.

**Aims:** To explore young people’s proficiency in spelling the names of medication used to treat juvenile arthritis.

**Method:** Young people with JA were recruited from rheumatology clinics at a UK hospital. Participants were invited to register with a bespoke blogging website, with a unique login ID, and to create an individual blog for 8 weeks.

**Results:** Twenty-one young people (11–15 years) registered with the site and completed at least one blog, collectively contributing 161 entries (range 1–36 per person). Medicine names did not occur in the majority of entries (18/161). The spellings of medicine names that were mentioned varied widely (Table 1).

**Conclusion:** Most of the spellings suggested a phonetic approach that might result from the name being heard, but not read. In consultations where medicines are discussed, prescribers and pharmacists should build medication literacy by ensuring that young people have seen the medicine name in writing.

**Disclosure statement:** The authors have declared no conflicts of interest.

### Table 1

<table>
<thead>
<tr>
<th>Medicine name</th>
<th>Mentions</th>
<th>Mistakes</th>
<th>Alternative forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enbrel</td>
<td>9</td>
<td>7</td>
<td>Enbro, embrel</td>
</tr>
<tr>
<td>MTX</td>
<td>7</td>
<td>3</td>
<td>methotrexate, methatrex eight</td>
</tr>
<tr>
<td>Ibuprofen</td>
<td>6</td>
<td>2</td>
<td>Ibuprofen, ibifren</td>
</tr>
<tr>
<td>Feldene</td>
<td>2</td>
<td>1</td>
<td>Feldine</td>
</tr>
</tbody>
</table>

**ABSTRACT 28** **BSPAR135**

**CONTEXT IS EVERYTHING: SUPPORTING YOUNG PEOPLE TAKING MEDICATION FOR ARTHRITIS**

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**Introduction:** Young people with juvenile arthritis (JA) may have medicine regimens that do not fit with their ideas of normal.

**Aims:** To describe the psychosocial context of medicine-taking for young people living with arthritis.

**Method:** Young people (aged 11–15) with JA recruited from rheumatology clinics at a UK hospital wrote blogs on a bespoke Arthritis website over a 2-month period. These anonymized personal blogs included thoughts about identity, their condition, medication, and the use of health services. Qualitative data were subjected to directed content analysis.

**Results:** Twenty-one young people took part, collectively contributing 161 blog entries. Contextual factors described in the blogs included the family, relationships with peers, and school life. Young people had help with many aspects of medication use; mothers often helped with getting supplies, setting routines, and giving medication. Family relationships sometimes affected decisions about medicines. These partnerships were viewed positively. In school, there were reports of unwanted absence, resulting from pain and swollen joints, side-effects of medicines, or scheduled appointments. For many young people, arthritis was a hidden condition, where medicine-taking was a defining element of its existence. Young people thought carefully about disclosure, especially to peers. The rheumatology team was the primary source of information. Pharmacists were not mentioned as a resource.

**Conclusion:** Consultations with young people must take account of the psychosocial context in which they take medicines. The influence of families, school life, and peer relations and the role of community pharmacy all merit detailed exploration.

**Disclosure statement:** The authors have declared no conflicts of interest.