Reviewer's report

Title: Impact of juvenile idiopathic arthritis on schooling

Version: 2 Date: 23 August 2012

Reviewer: Matthew Stoll

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Major compulsory revisions

1. In case case-control study, it is essential that the two groups (cases and controls) be highly similar, but for the disease status, in this case JIA. Thus, the characteristics of the controls should have been included in Table 1, for comparison purposes. In particular, it appears that having an illiterate mother was a major risk factor for school failure; the percentage of children in both groups (JIA patients and controls) with illiterate mothers should have been included in Table 1.

2. Along the same lines, it seems odd that several of the children with JIA were illiterate, but none of the controls. Unless this is a consequence of the disease itself, this needs to be addressed. Please provide additional information on the illiterate children. It is known whether they were always illiterate, or is this thought to be a consequence of the disease (e.g. from uveitis?) Were any of the controls illiterate?

Minor essential revisions

1. Presumably, the authors set age cut-offs for this study; i.e. the child would have had to be at least age 5 or 6, since younger children wouldn't be expected to be in school. This should be spelled out in the materials section, for both cases and controls.

2. Materials, bottom of 2nd paragraph. "The most common being nonsteroidal anti-inflammatory drugs, corticosteroid..." This sentence belongs in the results section.

3. Results, characteristics of the study patients. The first sentence makes it sound like they only included males. They might rephrase as, "33 patients with JIA were included, of whom 18 (54%) were male."

4. Discussion, first paragraph, line 4. The word "ad" should be included, to make it "such as JIA."

5. Discussion, second paragraph, line 2. Please replace "a" with "per", to make school days per year.

6. Discussion, second paragraph, line 2. The authors discuss the study by Sturge et al., but did not cite it here, as they did elsewhere.
7. Discussion, second paragraph, line 11. The authors state that the authors of reference # 26 "assessed the effects of absenteeism on cognitive skillis index and various achievement indicators;" please also summarize the findings.

8. Discussion, third paragraph, line 4. The word "complete" can be omitted.

9. Table 1. In the subtypes section, the number of patients sunms to 40, yet only 33 were included.

10. Table 1. The BASDAI was only given to children with juvenile spondyloarthritis, and only one child had ERA. How is there a median and a range?

11. Table 1. Please re-write 1,61 and 2,75 as 1.61 and 2.75, respectively.

12. Table 2. Please clarify what B and IC stand for.

Discretionary revisions

1. I would suggest revising the discussion to spend less time discussing the association of absenteeism with chronic illnesses (which is also mentioned in the introduction) and more time speculating on the reason for the link between JIA and school absenteeism. Is it due to difficulty grasping a writing implement (as the authors suggest), difficulty walking between classes, pain, stiffness, depression?

2. The information in Figures 1 and 2 does not require a Figure and may be summarized in the text.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests' below. If your reply is yes to any, please give details below