Reviewer's report

Title: Fulfillment of patients' and surgeons' expectations in total hip arthroplasty: a 1 year follow up study

Version: 4 Date: 11 December 2013

Reviewer: Ola Rolfson

Reviewer's report:

Thanks for the opportunity to review this interesting paper on fulfillment of expectations following total hip replacement. I have previously reviewed it as it was first submitted to Arthritis Research & Therapy. After review the editor of Arthritis Research & Therapy found it more suitable for BMC Musculoskeletal Disorders. I was then asked to re-review the paper.

The manuscript has been thoroughly revised and the authors have provided answers to my questions and comments. I now better understand the regression models they have built. However, this new information arise questions and criticism.

Major revisions

1. At this point, my main concern is the association between predictors and outcomes. Fulfillment of expectations following hip replacement, changes in disease-specific and generic PROMs and satisfaction with the results of the intervention are all outcomes that are expected to correlate. In particular, a strong relation between satisfaction and fulfillment of expectations is intuitive. I understand the authors aim to investigate how fulfillment of expectations influences satisfaction, and if so, draw the conclusion that efforts should be made to infuse patients with realistic expectations in order to receive high satisfaction. However, the construction of regression models with outcome variables as predictors is problematic. The basic principle for a regression model is that the predictors must be measured or known before the exposure. This concern must be addressed properly.

2. It could be helpful if the authors provide a direct acyclic graph (DAG) to illustrate relationships between predictors, exposure and outcomes.

3. A factor not studied is how mismatch between surgeons and patients preoperative expectations predict outcomes. Results presenting associations between mismatch of expectations and outcomes could potentially be very useful.

4. The first objective is adequately defined but the second objective is unclear. Needs to be redefined.

5. The title does not adequately convey what has been found although it conveys what has been studied.

Minor revisions
1. The two first sentences in the strengths and limitation section do not really discuss particular strengths of the study and I suggest these sentences should be removed. The result per se is not a strength.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I have no financial conflicts of interest. Even though I don't consider it a conflict of interest with respect to the present work, I declare I hold a part-time employment by the Swedish Hip Arthroplasty Register.