Reviewer's report

Title: Monitoring Health Related Quality of Life in paediatric practice: an innovative web-based application

Version: 1 Date: 18 August 2010

Reviewer: Lutz Goldbeck

Reviewer's report:

This paper describes an approach to implement quality of life assessment into the clinical routine of four special clinics for juvenile arthritis via a web-based program that support the communication between physicians and patients. It is a good example for an innovative application of modern E-health technology, dedicated to the improvement of the patients’ quality of life. The authors report some preliminary results regarding the feasibility and acceptance of their method by patients and physicians. In general, this is a well written paper which is of interest for clinicians who are interested in practical applications of quality of life measurement. However, the paper might be improved by clarification of some details of this practice model and by adding data on the practicability, such as required time for assessment, interpretation and discussion of the results in clinical practice. Based on the few data presented in this paper I would stay more cautious in recommending this method for clinical practice with different patient groups. First, a more thorough evaluation is needed, especially regarding the usefulness of individual QoL diagnosis on a quantitative level.

In detail, I would suggest to reconsider the following aspects:

1. In the introduction, the constructs PROs, HRQoL, and patient satisfaction are mixed. PRO is a very generic term comprising a lot of different variables that might be reported by patients, such as symptoms, well-being, functioning, adverse effects of treatments, satisfaction with different aspects of the treatment and with the course of the disease, etc. The authors should clearly state which major outcomes they focused on. It seems that they concentrated on repeated assessment of HRQoL. Moreover, the authors refer repeatedly to psychosocial issues of chronic diseases. The link between HRQoL and psychosocial adaptation should be clarified, especially as the authors state that QoL assessment is not appropriate to identify maladapted patients.

2. The use of the terms “effective” and “efficiency” is confusing and inconsistent, e.g., p 3 line7, p 4 line7, p 6 line 12. Please clarify, how repeated assessment of HRQoL might be effective in which direction?

3. I do not understand the sentence “In the developmental context PROs can be valuable.” (p 3). Please explain!

4. If the authors assume that children have more difficulties to express themselves verbally than adults, why should it be an advantage to administer them verbally bound questionnaires? (p 3)
5. The training program for pediatricians seems an interesting idea. However, more information about the training would be valuable, especially about the duration of training, contents and objectives, and standards of interpreting individual QoL data. I would doubt that a normative approach referring to healthy peers is appropriate in counselling children with chronic diseases – this would obviously focus on the deficits due to the disease and treatment burden. Moreover, disease specific QoL measures which are recommended for pediatric populations cannot be compared to healthy children.

6. In general, the readers of the paper would be interested to learn about possible consequences of individual QoL results. Maybe case examples would be helpful to illustrate the usefulness and the evidence base of individual QoL diagnosis. What does an individual QoL score tell us about the child with a chronic condition?

7. The response rate of 73% is encouraging and indicates a good acceptance. Anyway, reasons for refusals in the remaining patients should be reported.

8. More information is needed, how the individual results were discussed with the patients. What was considered a “HRQoL problem”? It is unclear why only 6 patients of the intervention group received the extended discussion (p 8). What was the time frame for patient counselling, and how were parents involved?

9. The normative approach of interpreting QoL data is also questionable because norms based on paper-pencil applications of questionnaire may not be valid for computer-administered versions of the same questionnaires. There are studies demonstrating response differences by method of administration.

10. The time required for assessment, interpretation and discussion of the results during the clinical visits should be reported, based on empirical findings. In the discussion the authors mention that in other studies no additional time effort was needed, but it remains unclear how much time was invested by the clinicians in the current KLIK project, in addition to standard care.

11. The discussion should try to disentangle the effects of implementing the web-based tool from general effects of a physicians’ training in communication skills. It might be that improved communication alone is responsible for the high satisfaction of patients and physicians.

12. As the authors compared an intervention group and a control group, data comparing both groups in terms of satisfaction should be available. So far, it remains unclear why the authors used a control group design.

Minor comment

13. There is an inconsistent capitalization of words in the title.

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

**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.