Reviewer's report

Title: Change in basic motor abilities, quality of movement and everyday activities following an intensive physiotherapy program in a group setting for children with cerebral palsy

Version: 1 Date: 22 May 2009

Reviewer: Doreen DJ Bartlett

Reviewer's report:

A strength of this manuscript is incorporation of Joanne Valvano's concept of activity-focused intervention. The manuscript is very well supported by appropriate references. Multiple outcomes, across a range of constructs, are reported, using well-accepted measures in pediatric rehabilitation (for use with children with cerebral palsy). Appropriate training of data collectors was conducted. Appropriate emphasis was placed on the importance of implementing practical ideas in the children's everyday environments.

Results relating to the use of the PEDI as a tool to increase parents' awareness of their children's capabilities are interesting. The repeated measures design does control - at least to some extent - for effects of maturation, and is a clinically feasible design to implement. The line of research currently being implemented by this team is very relevant to pediatric rehabilitation. The tables, figures and Appendix all support the manuscript well.

In my view, two major limitations exist. First, there is a lack of consideration of the clinical significance of the results. Are the statistically significant results clinically significant? This warrants discussion. Second, the issue of "readiness" of the children was not considered. Were all children "ready" for intervention at the same time?

This potentially precludes the utility of group work.

- Major Compulsory Revisions

The author must respond to these before a decision on publication can be reached. For example, additional necessary experiments or controls, statistical mistakes, errors in interpretation.

ABSTRACT

1. use of term "intensive physiotherapy" in the title and abstract: need to be more specific re: type and nature of physiotherapy intervention

2. in methods of abstract: need to provide timing of two follow up assessments (one immediately after the three weeks, and specify the timing of the others)

3. Statistical results are given in the abstract, but not the clinical significance of
the magnitude of the change.

4. Conclusion indicates reduction in caregiver assistance, but this was not provided in the results.

5. Please provide a rationale for selection of the mean change in GMFM-66 score of 2.5 points. Is this considered clinically significant?

6. The first time "medication" appears is on the top of page 12. The methods should contain a description of how these data were collected. Was it only about medication for spasticity management? Did it include medication for epilepsy or other co-morbidities? What is the rationale for collapsing across all medication categories, if this was done?

7. Top of page 12 - reference 49 seems to be incorrect (I think you mean to reference number 50 here re: treatment of missing values). And at the top of page 15 ref 50 should be 51 (PLEASE CHECK ALL REFERENCE NUMBERING FROM 49 ON, but 52 and 53 are clearly correct).

- Minor Essential Revisions

The author can be trusted to make these. For example, missing labels on figures, the wrong use of a term, spelling mistakes.

1. page 4: please indicate what is meant by "traditional training"

2. page 7 - please provide a brief description of the children's "ordinary physiotherapy program"

3. on page 8 - please provide results of the fidelity checks on the intervention (i.e. "supervision" of the therapists on three occasions)

4. Page 11 - unclear what is meant by "Performances of the selected activities for GAS were videotaped at 3. pretest and at 2. post-test"...

Unable to reconcile with table.

- Discretionary Revisions

These are recommendations for improvement which the author can choose to ignore. For example clarifications, data that would be useful but not essential.

1. references are provided for all of the outcome measures used. It would be "nice" for readers to see a table with a summary of the psychometric properties of these measures (including sensitivity to change and responsiveness)

2. Interesting to note (from page 12) that some children were already receiving service twice a week - which would be considered intensive in some geographic regions!

3. page 13 - with the GMPM - isn't it possible to score only if the GMFM score
was 2 or 3, rather than > 0? How can quality of movement be evaluated with "just
initiates"? Suggest removing the part about "a tendency of improved quality of
movement". I'd also suggest removing, on page 14, the "tendency" to improve on
the QUEST. (and delete from discussion - most researchers would consider this
an over-interpretation)

Please note that both the comments entered here and answers to the questions
below constitute the report, bearing your name, that will be forwarded to the
authors and published on the site if the article is accepted.

Level of interest: An article of importance in its field

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

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.