Reviewer's report

**Title:** Pain, motor function and health-related quality of life in children with cerebral palsy as reported by their physiotherapists

**Version:** 2  
**Date:** 17 February 2014  
**Reviewer:** Noémi Dahan-Oliel

**Reviewer's report:**

**Minor essential revisions**

**Introduction:** in the first paragraph, use "in children with CP" and not "CP children" and throughout the text as well.

**Method:** 4th line "to determine" instead of "to determinate"

p.5 line 2: Most of participants had bilateral spastic- replace with "most participants had bilateral spastic diplegia"

p.5 line 4: Most of CP participants needed- replace by "most participants needed".

**Overall impression:** It is my understanding that the authors of this paper evaluated pain, motor function and quality of life of children and youth with CP by clinician-report (PT in this case). These findings may have important implications on the pain management of these children and may indicate the important role the PT may play in pain management and promoting quality of life.

Having said this, three things come up-

1st. It is mentionned under design and procedure that "Physiotherapists who were treating children and adolescents with CP were asked to participate in the study and to answer three questionnaires concerning pain and HRQOL and to determinate the level of motor function for each child or adolescent with CP they were treating"- so the PTs were the ones completing the 3 questionnaires. In the results section, it is said: "Pain, defined as persistent physical pain perceived during the last four weeks, was reported by 51.4% of children and adolescents with CP." This confuses me as to who reported the pain- if it is indeed the PTs, then results should state exactly that and not give the impression that the patients themselves reported on pain outcome. Furthermore, in the measures section it is mentionned that the PTs completed a semi-structured interview - please specify with whom the interview took place (family?).

As an aside, I am not clear as to what the Chi-Square in that first results section is referring to- I have a feeling you want to compare whether the PT's reports of no pain, mild, moderate and severe pain is significantly different than expected value (in this case would be random allocation 25% in each). But to make sure, please clarify this in the text as it is not mentionned in the data analysis section which appears just above.

2nd. No where in the text or tables are the quality of life results and pain (as per...
PT report) presented. It would be interesting to have those descriptions.

3rd. in table 2 for correlations, could you add a note explaining that higher pain scores signify worst pain (more severe pain) and higher motor function scores imply worst motor function so that readers not necessarily accustomed to the measures used may still understand the direction of the correlations and its implications.

This sample of children and youth with CP were seen by PT over the past few months- was this because of regular follow-up or after an orthopedic intervention? eg rhizotomy, hip derotation surgery, other... Children who undergo orthopedic interventions may indeed experience higher pain than children who do not undergo such procedures, whether they have CP or not... Could you please address the possible source of bias in this convenience sample. This also has implications for pain management, and understanding the cause of the pain is the first step towards proper pain management. Worth considering: Penner M, Xie WY, Binepal N, Switzer L, Fehlings D. Characteristics of pain in children and youth with cerebral palsy. Pediatrics. 2013 Aug;132(2):e407-13

Several reports have found that health care professionals rate their patients as having worst quality of life than parents and children themselves. One example is Saigal S, Stoskopf BL, Feeny D, Furlong W, Burrows E, Rosenbaum PL, Hoult L. Differences in preferences for neonatal outcomes among health care professionals, parents, and adolescents. JAMA. 1999 Jun 2;281(21):1991-7. I would just caution that although the professional's views may be important to consider, but do not replace the parent's and child's perspectives. I apologize if you have already mentioned this in the text.

I couldn't agree more with your conclusion that "...the importance of assessing and providing interventions for pain from an early age in persons with cerebral palsy" and I think that the PT's role in addressing pain - either by observing the child, talking with the family and consulting the medical and nursing team may be emphasized in your discussion to give more weight to the clinical implications of your findings.

Thank you for your interesting and clinically important work.

**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'