Reviewer’s report

**Title:** The role of osmotic agents in children with acute encephalopathies: a systematic review

**Version:** 1 **Date:** 17 December 2009

**Reviewer:** Malinee Laopaiboon

**Reviewer’s report:**

The review is interesting and will be good evidence in the pediatric field. However, I would suggest the authors to consider PRISMA statement in reporting their review. There are issues that need to be added or updated as followings:

Method section:
1) The authors need to report what data, following PICOS, was collected from each study.
2) The data of this review could not be combined so the sentence of ‘Quantitative studies were considered for pooling for statistical meta-analysis using the JBI-MAStARI.’ in the subheading of assessment of studies need to be skipped.

Results section:
3) Adding flow diagram of study selection as suggested in PRIMA would be good for readers to understand the review selection process.
4) Methodological validity of included studies was mentioned in the method but results of the consideration were not reported. This need to be added.
5) The authors report that 10 studies presented mortality. At most 9 of them could show results in forest plot of figure 1. But it is unclear why the figure shows only 5 lines of data. In addition each line was labeled only its comparison interventions. The figure is unclear if each line represents data of each study. Labeling study for each line is more information to readers.

Discussion section:
6) The discussion is good. However, if the authors add the methodology limitation of the finding according to most included studies were observational studies, it would be better.

**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.