Reviewer’s report

Title: Trends in use of neonatal CPAP: a population-based study

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Reviewer: Baldvin Jonsson

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Roberts and co workers present a population based study that describes the trends in CPAP use for neonates in New South Wales Australia between 2001 and 2008. During the period they find an increase in the use of CPAP, and a concomitant decrease in the use of mechanical ventilation. The increase in CPAP is greatest for infants >32 weeks gestation in non-tertiary care hospitals. The largest increase in CPAP use seems to occur after the results of the Buckmaster trial became available in 2007. They also describe a change in CPAP practice in the original Buckmaster trial centers with more infants receiving CPAP and confirm less need for transfer to tertiary care centers.

1. Major compulsory revisions: None
2. Minor essential revisions: None
3. Discretionary revisions:

   The main limitations of this work can be seen as the lack of data regarding morbidities related to the change in treatment strategies. Thus the question of safety is mostly unanswered. If it were available, the inclusion of outcome data describing mortality, pulmonary diagnoses and treatment failures, would be a welcome addition.

However, the article is well written and the authors highlight the need for CPAP guidelines, further studies and discuss limitations when interpreting the findings.

Level of interest: An article whose findings are important to those with closely related research interests

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'