Reviewer's report

Title: Sunflower oil and Mustard oil: Skin barrier function in newborns via a community-based, cluster randomized trial

Version: 0 Date: 21 Jul 2019

Reviewer: Raegan D. Hunt

Reviewer's report:

- This is a large randomized community based study comparing skin outcomes in both premature and term neonates undergoing traditional infant skin massage with two different plant-based oils: mustard oil and sunflower oil. The randomized groups seem comparable statistically. It was not possible to blind the subjects or the researchers as these oils are distinguishable. This limitation is well addressed. The increase in TEWL in both groups as infants aged over time seems surprising, but the manuscript correctly points out that the high relative humidity in the homes may have impacted this measurement. More standardized lower humidity settings are typically recommended for measurement of TEWL.
- The manuscript mentions that the infants were monitored for infection. In the Sunflower oil group, the pH lowered faster, suggesting more rapid formation of acid mantle. I did not see a specific comparison of skin infections observed between the two groups in the manuscript. Please consider adding clarification.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
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Yes

Are the conclusions drawn adequately supported by the data shown?
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Yes

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