Author’s response to reviews

Title: Effect of nipple shield use on milk removal in mothers with pain: a mechanistic study.

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Author’s response to reviews:

8 December 2019

Parvin Abedi, PhD
Editor
BMC Pregnancy and Childbirth

Dear Dr Abedi

Thank you for providing feedback from the reviewers and yourself, and for the opportunity to resubmit a revised version of our manuscript PRCH-D-19-01209 titled ‘Effect of nipple shield use on milk removal: a mechanistic study’. Please see below responses to the feedback provided.

Editor Comments

1. The main concern about this study is; two groups were not similar. One group did not have any difficulties with breastfeeding and one group had pain. Pain may cause a difference with milk flow other than using the nipple shield.

We intentionally recruited one group of breastfeeding mothers with pain (pain group) and one group with no pain or breastfeeding difficulties (control group) as we anticipated that there may be differences in milk flow and/or removal between mothers with and without pain. Our findings indicated that while the volumes and percentages of available milk removed from the pain group were lower than that of the control group, the differences were not statistically significant both with and without nipple shield use (Table 1). Regardless, it is important that research findings for breastfeeding women with and without pain are considered separately as it is possible that the impacts of pain, stress and possible mechanical trauma may impact breastfeeding outcomes.
2. Because authors measured breast pain during the pumping, it is better to mention this matter in the title of the manuscript. The title has now been amended to “Effect of nipple shield use on milk removal in mothers with pain: a mechanistic study.”

3. Please use the abbreviated form for the name of journals in the reference list. The reference list has now been amended – see pages 15-16.

4. The information about method especially how and where nipple shields were applied are needed. Did mothers do it at home or in the unit? We have provided further details (in italics) regarding the use of nipple shields in the Methods section; Lines 147-148, page 4: PG inclusion criteria: breastfeeding mothers with persistent nipple pain despite professional lactation advice that were routinely using a nipple shield. The location of the study is reported at line 158, page 4: “A within-subject study was conducted in a laboratory at The University of Western Australia…” The method of application of a new nipple shield for each study session has been clarified at Lines 183-184, page 5: “For each nipple shield study session we provided a new nipple shield that was placed centrally over the nipple.”

5. In my opinion this manuscript is more appropriate for “short Communication”. We have significantly reduced the word count of this research paper to present a shorter paper as requested.

Reviewer 1
6. Accept without revision. Well written manuscript. Acceptable in present form.
I recommend additional statistical review.
Extensive consultation and planning was undertaken in the design of this study, and statistical analysis performed by two university-based consulting statisticians; Dr Alethea Rea, a lecturer and research fellow in the school of mathematics and statistics, and Dr Kevin Murray, an expert applied biostatistician. We therefore believe that a statistical review is not warranted.

Reviewer 2
7. Accept without revision. Interesting, well designed and well written work.
(no response required)

Thank you for considering our revised manuscript for publication in BMC Pregnancy and Childbirth.

Sincerely,

Dr Sharon Perrella, RN RM IBCLC