Reviewer’s report

Title: The CRADLE Vital Signs Alert: qualitative evaluation of a novel device designed for use in pregnancy by healthcare workers in low-resource settings

Version: 0 Date: 10 Nov 2017

Reviewer: Deborah Billings

Reviewer’s report:


This is a clearly written manuscript that documents the use and utility of a low-cost device that can be used in settings throughout the world. The comments I include below aim to clarify certain concepts and statements made in the document.

Overall, the study was carried out in primary and tertiary-level settings in four different countries. Please indicate why no data collection was carried out in secondary level settings. Was this an issue of deciding that CRADLE would not be useful in such settings or an issue of where the research could be carried out most efficiently or something else?

The Three Delays Model is used as one framework to understand the importance of the device. Please summarize what this model is and states, for readers who are not familiar with it.

p. 5: the authors mention mHealth technology- can the data collected through the CRADLE device be easily transmitted to or through a cell phone? Cell phones are more ubiquitous throughout the world and it would be interesting to better understand the interface or possible interfaces between the device and phones.

Methods: were the same healthcare workers (HCWs) who were interviewed also included in the focus groups? How did the participants overlap (if at all)?

P8: what type of process or assessment was used to be able to state that "coding agreements between the researchers was high"?

P9: The authors state "A large sample size was needed…" What was the final sample size and how was this determined? Please indicate the separate "needed" sample sizes for interviews and focus groups, by country and compare to actual sample sizes. This would best be presented in a table.

P11: minor spelling error, line 58-"…every ones BP" should be changed to "…everyone's BP…"

P14: the quote, lines 43-53: the authors use this quote to illustrate a negative view that HCWs have of the device, but the last line also denotes something very positive in terms of the impact
on care- the nurse now has time to "speak to the patient to find out how the patient is doing…" This is significant; how many other HCWs had the same observation? If this is not an isolated comment, this is certainly an important theme.

P16: findings seem to show that the device helps women and their families become more aware of the importance of vital signs and thus seems to increase their own involvement in their care (at least to a limited extent). This is a theme that I would suggest highlighting in the abstract and in the discussion. Any advancements that can be made in empowering patients with more information and deeper understanding of their own health and health care are indeed important. (p21, lines 1-8 refer to how the device can also address the first delay. This is an excellent and important finding.)

P17, line 1: slight spelling error, change "My husband like it.." to "My husband liked it…"

DISCUSSION

The authors point out that having two phases of data collection allowed for temporal variations to be explored. Temporal variations were not presented in the Results section. The authors either should add findings regarding such variation or delete this sentence from the Discussion.

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An article of importance in its field

Quality of written English
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