

Review of: "Acceptance of Childhood Rotavirus Vaccine Among Mothers at The Point of Rotavirus Vaccine Introduction: A case study from Awka Anambra State Nigeria"

Veronica Denti¹

¹ Gavi

Potential competing interests: I am responsible for GAVI's Rotavirus vaccine programme.

The objective of this study is very relevant, and more studies of this kind are needed to take the pulse of caregivers' understanding and drivers or barriers to vaccination in the settings of lower-income countries.

I offer the following detailed suggestions with humbleness and a constructive spirit.

In the Abstract:

- In addition to the technical support, it may be relevant to also reflect the financial support. This introduction is financially supported by GAVI (I work for GAVI and disclosed my interest in my declarations).

- Mention that a literature review was conducted and what was found
- Add the timeframe: the introduction was in Aug 22, the survey in Feb-March 2023
- Clarify the source of "50,000 child deaths from the disease annually." It differs significantly from this public source that models potential 12,000-20,000 deaths averted from rotavirus in Nigeria annually: <https://montagu.vaccineimpact.org/2021/visualisation/>

In the paper:

- Correct grammar, typos, and duplications (check accuracy of tradenames spelling, "sample number" vs "number of samples", remove duplicate paragraph in the section on "Attitude towards Vaccines")
- Rather than say that the vaccine "will be given free of cost to all infants at the age of 6, 10 and 14 weeks," consider saying **starting at** 6, 10, 14 weeks, because the vaccine can be given later, too, if children do not show up at the health facility on time.
- Study site: Given the scope, the characteristics of the hospital are less relevant than the characteristics of the population in its catchment areas. Please describe this more: How many newborn children? What is the vaccination coverage rate for Pentavalent?
- Was the questionnaire in English or the local language? Was it on paper? How were participant responses collected? Recorded, written, mobile tool? Did participants fill in the responses themselves? ("The questionnaire was administered

to the participants.")

- Responders:
 - Were mothers and fathers respondents? The language in the paper varies.
 - A 100% response rate is unusual. As per the exclusion criteria, this implies that every person approached consented and took the questionnaire. Was it actually so, or does the respondents number only reflect the number of people who agreed to participate? There may be selection bias in this group compared to the group that may have disagreed to participate, so it is important to have a measure of how many they were.
- How many questionnaires were only partially completed?
- Would it be possible to explain where the term "Happy Rotavirus Vaccine" comes from?
- Suggest to clarify:
 - *"Similarly, some other researchers in Nigeria, Babatola et al.,^[8] reported poor awareness of rotavirus and the AGE caused by it, as only 14% of their study participants".* This seems in contrast with the previous findings that showed high awareness. Please clarify further.
 - *"The respondent's knowledge of the virus and vaccination, significantly increased with educational level and this finding is in keeping"* - is the education level related to the knowledge level, rather than a factor that increases it?
 - *"being married ($p=0.001$), etc were significantly related to accepting the vaccine because it is safe"* seems an incorrect conclusion: The majority of respondents were married, which is possibly typical of mothers in Nigeria, so marriage may not be a relevant differentiating criterion.
 - What could be the reasons why the respondents in this study had good knowledge? Could you elaborate on how the study could more effectively measure and report the potential selection bias among participants?
 - Conclusions could also mention this finding to inform future vaccination strategy: ***In all these studies, many of the respondents who were not willing to accept the vaccine expressed a very strong desire to receive more information about the vaccine.***

Thank you for the opportunity to review.