

Peer Review

Review of: "Oral Polio Vaccine Is Unsafe for the World and Should Be Replaced with Inactivated Poliovirus Vaccine Globally"

Guillaume Ngoie Mwamba¹

1. University of Kamina, Kamina, Democratic Republic of the Congo

Peer Review: Oral Polio Vaccine Is Unsafe for the World and Should Be Replaced with Inactivated Poliovirus Vaccine Globally

****Overall Rating:**** 4.0 / 5.0

****Clarity:**** 4.5

****Novelty:**** 3.0

****Impact:**** 4.0

General Comments

This is a well-researched and assertive commentary that challenges the continued reliance on OPV in the global polio eradication effort. The authors offer a strong historical and scientific case for the transition to IPV, underscoring the ongoing risks associated with vaccine-associated paralytic polio (VAPP) and circulating vaccine-derived polioviruses (cVDPVs).

The argument is built on a foundation of rigorous epidemiological reasoning, historical case studies, and molecular virology evidence. The article makes a compelling case that the current global reliance on OPV not only impedes eradication but may in fact perpetuate polio outbreaks.

Strengths

- Comprehensive Historical Analysis: Provides a detailed and informative historical context for vaccine choices and their consequences.
- Virological Detail: The molecular explanation of vaccine virus reversion is clearly presented and relevant to policy discussions.

- Global Relevance: The call to action is highly pertinent given the current state of poliovirus outbreaks in cVDPV-endemic countries.
- Ethical Framing: The piece raises valid ethical questions about continued OPV use and the role of WHO and GPEI accountability.

Recommendations for Improvement

1. Tone and Framing:

- While the article is passionate, certain terms such as 'reckless' or 'unwise' might be replaced with more diplomatically neutral phrases to maintain scientific objectivity and appeal to a broader policy audience.

2. Practical Path Forward:

- The article stops short of outlining actionable transition steps. Suggest briefly including:
 - Examples from countries that successfully transitioned to IPV (e.g., India, Brazil).
 - Strategic options to support LMICs with cost, cold chain, and supply challenges.

3. Balance and Acknowledgment of Past Successes:

- Recognizing OPV's critical role in reducing global polio incidence in the late 20th century would provide a more balanced and historically grounded perspective.

4. Data Transparency:

- Some claims—such as the estimation of VAPP or the scope of underreported cVDPV cases—would benefit from direct citations or the inclusion of data tables in an appendix.

Conclusion

This commentary is a much-needed and provocative contribution to the polio eradication discourse. It delivers a bold thesis with strong evidence and could catalyze serious dialogue if revised slightly to enhance balance, acknowledge practical challenges, and suggest a pathway forward. I support publication following minor revisions.

Attachments: available at <https://doi.org/10.32388/YLUIU9>

Declarations

Potential competing interests: No potential competing interests to declare.