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Peer Review

Review of: "The Global Polio Eradication Initiative has done well to introduce 3 doses of the Inactivated Poliovirus Vaccine in Afghanistan"

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Title: *The Global Polio Eradication Initiative has done well to introduce 3 doses of the Inactivated Poliovirus Vaccine in Afghanistan*

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General Comments

This manuscript discusses the importance of introducing three doses of Inactivated Poliovirus Vaccine (IPV) in Afghanistan and argues that IPV may be a more effective strategy than Oral Polio Vaccine (OPV) for achieving global polio eradication. The topic is timely and relevant because wild poliovirus type-1 continues to circulate in Afghanistan and Pakistan, and the emergence of circulating vaccine-derived polioviruses (cVDPVs) remains a public health concern. The manuscript provides a historical perspective on polio eradication strategies and highlights the potential advantages of IPV-based immunization.

Strengths

The manuscript addresses an important global health issue and contributes to ongoing discussions about strategies for polio eradication.

The authors provide a clear historical overview of the use of OPV and IPV in global eradication efforts.

The discussion on vaccine efficacy differences between OPV and IPV in low- and middle-income countries is informative.

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The practical recommendations regarding integrating IPV with the pentavalent vaccine as a hexavalent formulation are useful and programmatically relevant.

Major Comments

Balance and Objectivity:

The manuscript strongly criticizes the Global Polio Eradication Initiative (GPEI) for its reliance on OPV. While the authors present important concerns, the discussion would benefit from a more balanced perspective acknowledging the historical advantages of OPV, such as ease of administration, low cost, and the ability to induce mucosal immunity that helps interrupt virus transmission.

Evidence Support:

Some key statements, particularly regarding the "very low vaccine efficacy of OPV in tropical LMICs" and the claim that OPV was "not science-supported," require stronger evidence and additional references. Including more recent empirical studies would strengthen these arguments.

Overgeneralization:

The manuscript tends to generalize the limitations of OPV without sufficiently addressing contexts where OPV has played a critical role in reducing polio incidence globally. A more nuanced discussion would improve scientific rigor.

Operational Feasibility:

The recommendation to replace OPV with IPV (or a hexavalent vaccine) in LMICs requires further discussion of cost, supply, cold chain requirements, and implementation challenges, particularly in resource-limited settings.

Minor Comments

The language could be moderated in some sections where the tone appears overly critical or subjective.

Some statements would benefit from clearer data presentation or quantitative evidence.

Minor grammatical and typographical errors should be corrected during revision.

The abstract could be slightly shortened and focused more clearly on the key findings and recommendations.

Conclusion-

Overall, the manuscript addresses a significant public health issue and presents a compelling argument for greater use of IPV in polio eradication strategies. However, revisions are recommended to improve balance, strengthen evidence support, and expand discussion on operational feasibility. With these improvements, the manuscript could provide a valuable contribution to the literature on global polio eradication.

Recommendation: Minor to Moderate Revision.

Declarations

Potential competing interests: No potential competing interests to declare.