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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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In the manuscript titled "The Global Polio Eradication Initiative has done well to introduce 3 doses of the Inactivated Poliovirus Vaccine in Afghanistan", the authors discuss the advisability of implementing the polio vaccination schedule using the IPV vaccine and withdrawing the OPV in Afghanistan. They think that this vaccine could eradicate polio in this country and in Pakistan, which are the last where cases of the wild strain are still present, and that its application would eliminate the risk of the emergence of viruses derived from the OPV vaccine. They comment on the difficulties of vaccinating the entire target population, due to the political, cultural, and violence-related conditions in different regions of the country. Therefore, from my point of view, I believe they should add comments such as the need for the government to carry out persuasive campaigns to encourage the population and political groups to accept the vaccine, and, if possible, for the government to implement mandatory vaccination. Regarding the advisability of incorporating IPV into a hexavalent vaccine, it should be noted that in some countries this combination is already used in hexavalent vaccines containing IPV (Infanrix hexa® y Vaxelis®). These are administered in a four-dose schedule at 8, 12, 16, and 24 weeks of age, with a booster dose at 18 months in healthy children, while children born to mothers infected with the hepatitis B virus also receive two additional doses of the hepatitis B vaccine. Induction of polio antibodies by both vaccines ranges from 97% to 100% in those countries. One or both of these hexavalent vaccines could be manufactured domestically to meet the conditions set by regional political groups, thus enabling its prompt implementation and aiming for at least 80% coverage. This would ensure that the threshold for achieving herd immunity is surpassed and that the wild poliovirus, which still circulates in these two countries, is eradicated. These hexavalent vaccines

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have several advantages over the use of the three-dose IPV (fractional dose) needle-free injection device. Additionally, some grammatical corrections are necessary in this manuscript for publication.

Declarations

Potential competing interests: No potential competing interests to declare.