

# Review of: "Relevance of Medical Ethics in Public Health: Case Study of Polio Eradication"

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This is a relevant paper that can stimulate a debate among vaccine and public health experts, policy makers, journalists and the general public, considering the public health implications of the (imperfect) strategy of polio eradication and the general implications for the relationship between ethics and public health. In this regard, some concepts could be better elucidated considering that non specialists may have some difficulty in following all the presented arguments. I would specifically suggest:

- including a key messages box;
- including a table synthesizing pros and cons of different strategies based on doses of OPV (bivalent or trivalent), IPV or heterologous approach, also considering efficacy data, epidemiology and possible motivations and barriers for the choice of either strategy (see also Lancet 2020;395:1163-66);
- including, in the "beginning and progress of Global Polio Eradication Initiative" paragraph, a clearer outlook of the current situation with the latest developments in different countries.

I would also suggest that the perception that public health can do no harm to individuals (end of page 2) may be not so widespread. Rather - even if quite obvious, but for the sake of a wider discussion including non specialists - I would highlight that the ethics and "public good" of eradication can be considered as such if the benefit at the population level translates into the likelihood of a (directly or indirectly) favourable benefit-risk balance for each individual as well (provided that each eligible individual is vaccinated). This would imply that the best alternative strategy should be chosen in order to maximize this individual balance (a case in this regard could be made for selective vaccination policies that may be justified in some circumstances, see also <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9188377/pdf/phab028.pdf> - but this is aside from the specific example of polio eradication). Ethical issues arising from using OPV or IPV in different periods may derive from this delicate balance. Discussing whether OPV may have (or may have not) provided a favourable benefit-risk balance in some periods comparing to IPV (so that benefits for the community reflect a reduced risk and a likely favourable balance for each member of that community) would provide a clearer picture.

I think the case for compensation for injury due to OPV is a deserving point. An internationally recognised ethics review board (not just economists) should provide recommendations in this regard for all vaccine derived polio cases associated with those OPV campaigns deemed as unethical.

Finally, I would not limit application of medical ethics when vaccines or pharmaceutical substances are at stake. I would

broadly consider health interventions (see controversies around lockdown or mask wearing policies).

I think the authors should be commended for this paper and especially for making the point that “future public health projects of any international organization including WHO should be reviewed by an ethics review board”.