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# Vaccinating 60 Million Dogs Annually or 25 Million Newborns – Indian Dilemma

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## E D I T O R I A L

India accounts for one-third of the global rabies cases, resulting in approximately 20,000 deaths annually. India is striving hard to achieve the World Health Organization (WHO) goal of dog-mediated rabies-free status by 2030. To this end, the National Action Plan for Dog-mediated Rabies Elimination (NAPRE) from India by 2030 has been prepared by the National Centre for Disease Control (NCDC), Ministry of Health & Family Welfare, Government of India.<sup>1</sup> WHO advocates dog vaccination as the main weapon to eliminate rabies from the country, and vaccinating 70% of dogs can achieve this objective of rabies control in a given geographical area.

In India, we are faced with the dilemma of vaccinating an ever-growing population of stray dogs, estimated to be about 60 million, and then revaccinating them annually. On the other hand, it is clear that the provision of only Post Exposure Prophylaxis (PEP) would not solve the problem.<sup>2</sup> We may have to simultaneously go in for Pre-Exposure Prophylaxis (PrEP) vaccination of Indian Children under the Universal Immunization Programme (UIP), which constitutes a cohort of about 25 million children born each year. India, being a diverse population, cannot rely on one strategy and needs to attack the problem in multiple ways that include all types of strategies put together to achieve the “0 by 2030” objective. A recent study from India justifies the inclusion of the rabies vaccine in the UIP as a cost-effective measure, with incremental DALYs averted per million population with the implementation of PrEP ranging between 451 and 85,069 in 2020.<sup>3</sup>

India has now witnessed a moon mission and can afford very costly vaccines like pneumococcal conjugate (PCV) vaccines. The high cost of new vaccines such as PCV will necessitate higher spending by the Indian government as partner support is reduced. This is reflected in cMYP 2018–22, which projects a 111% increase in expenditures on vaccines and an 80% increase in total immunization expenditures between 2017 and 2022.<sup>4</sup> Rabies, being vaccine-preventable, needs a very minuscule budget in comparison with the PCV vaccine already introduced in UIP. Since the rabies vaccine is manufactured in India and exported, we don't have any burden to import rabies vaccines. Therefore, a very low budget spent on rabies PrEP would not only

save the lives of Indian children but also make rabies prevention more cost-effective.

It is the need of the hour that we focus on dog vaccination, PEP, and PrEP as a multipronged strategy to control rabies by 2030. Moreover, the advocacy of WHO to start PrEP if the dog bite incidence is 5% may not hold good for India, which spends on costlier vaccines to be given in UIP. Also, when international travelers are advised to have PrEP to visit rabies-endemic countries like India, how can Indian children be denied the right to preventive rabies vaccination, as rabies is vaccine-preventable?

Soentjens et al. advocate that there is a moral imperative to change the current paradigm where PrEP is available for international travellers to endemic regions but not to local individuals at risk.<sup>5</sup> Let's save our children from rabies.

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