

Opportunities for Rotavirus vaccine introduction in Asia

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Rotavirus (RV) is the most common cause of diarrhoea and one of the leading causes of under 5 child-mortality. Each day, RV kills more than 260 children under 5 in Africa and more than 170 in Asia. Safe and effective WHO prequalified vaccines exist to protect children against RV which is one of the important interventions to prevent morbidity and mortality due to severe rotavirus gastroenteritis (RVGE).

According to a recent IVAC report 2017, an estimated 62% of the world's infants (83.8 million) live in countries or subnational regions within countries that have not yet introduced RV vaccine into their National Immunization Program (NIP). Only 92 countries out of total 194 have introduced RV vaccine till March 2017, nearly 25 countries are in planning phase to introduce but a major proportion i.e. 73 countries are still not clear about introduction of RV vaccine.

Asia is home to 1/3 of the world's RV related mortality and despite this a large number of Asian countries have not opted for RV vaccine in their NIP. The reasons for delayed vaccine introduction in Asia are many and likely differ by country, with multiple stages along the pathway to implementation posing hurdles, including - evidence gathering, decision-making, planning, and introduction. The drivers for introduction may also differ; for e.g., perceived health benefits may be the primary reason in one area, and economic benefits may be more important in another. Some policy makers from Asian countries have been slow to introduce RV vaccine due to a misconception that the vaccine is not cost-effective. The limited data from low-resource populations across Asia, which are needed to provide evidence of the clinical protection against severe diarrhoea due to RV vaccination, have also likely stalled the uptake.

Remarkable benefits of the RV vaccine introduction are visible in countries like Austria, Belgium, and Finland as they observed decreases of up to 80% in the annual rate of RV hospitalizations following vaccine introduction. Herd Immunity has been well demonstrated in Australia, Austria, Belgium, Brazil, El-Salvador & Finland following RV vaccine introduction in infants, with RVGE hospitalizations decreased by up to 89%.

With the full support of GAVI, Rota Council and development partners, Asian countries have the opportunity to learn from peer countries that have successfully reduced the morbidity and mortality burden related to rotavirus. Vaccine efficacy data from few Asian countries is also an encouraging factor which will help many decision makers to adopt the RV vaccine in their respective NIP. As of March 2017, 43 GAVI supported countries have introduced RV vaccine into their NIP, with India and Pakistan having introduced in a phased manner. GAVI supported countries in Asia thus have an excellent opportunity to accelerate the process of RV vaccine introduction in their respective countries. As per Rota Council recommendations, GAVI technical and co-financing model can support eligible Asian countries to speed up their efforts to introduce RV Vaccine introduction at the earliest and for non-GAVI eligible countries, governments & funding agencies should continue to support research & development of new, low-cost rotavirus vaccines using public, social business, & public-private models for introduction.

Thus, with nearly half of all rotavirus deaths occurring in Asia, there is an urgent need for action in the region.

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