

Letter to Editor

Realizing the need of inclusion of rotavirus vaccine in expanded program on immunization in Sindh, Pakistan

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The basic goal of the expanded program on immunization (EPI) is to assure the proper immunization services that aids in preserving and promoting the health of children. The foundation of EPI in Pakistan was prompted and initiated by the World Health Organization (WHO) in 1978¹. The current EPI of Pakistan has vaccines for Tuberculosis, Poliomyelitis, Diphtheria, Tetanus, Pertussis, Hepatitis B, Haemophilus Influenza-b (Hib) Pneumonia, Meningitis, and Measles. However, it doesn't include the most important Rotavirus vaccine which is internationally included in EPI of other 90 countries. Despite the advent of Rotavirus vaccine a decade ago, it is the most common cause of severe childhood diarrhea. Globally it results in more than half a million deaths among children of less than 5 years of age per annum¹. In 2006 first rotavirus vaccine was introduced in Finland (US) in 2 forms, Rotarix and Rotteq. Both had the maximum potential effect if given before 8 months of age². In the United States, studies depicted that after the introduction of the vaccine in 2006 mortality has reduced by more than two thirds³. According to WHO, diarrhea has the 3rd highest rates of mortality in children amongst all infectious diseases⁴.

In Pakistan, people are hesitant to vaccinate their child due to a lack of awareness regarding these vital vaccines as well as due to social, religious & cultural taboos. Moreover, the

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Rotavirus vaccine is costly and only available in private healthcare facilities being one of the reasons for its low compliance. According to an estimate 29,000 children in Pakistan could be saved annually if the vaccine is included in the routine immunization program⁵ since 2013 no action at government level was taken to include rotavirus vaccine in EPI. According to EPI management, the vaccine is expensive and requires special arrangements.

In a recent study done in Indonesia in the year 2013 to 2016, it was found that Rotavirus vaccine (RV3-BB) is 94% effective at 9 months of age and 75% effective at 18 months of age in minimizing the gastroenteritis burden in infants⁶. Another study in 2017 concluded that the new vaccine namely Bovine Rotavirus Pentavalent Vaccine (BRV-PV) is heat stable and bears more than 65% efficacy in treating severe infant gastroenteritis caused by Rotavirus in Niger⁷. BRV-PV vaccine implementation in developing countries will generate positive results as it's economical and adaptable since it's a heat tolerant vaccine⁷. It has been found that the Rotavirus vaccine has commendable results in the reduction of infant mortality rate due to gastroenteritis. It should be included in the EPI program of Pakistan so that every risk provoking child is prevented. The quicker the vaccine is introduced; the prompt reduction in the mortality rate of children will be evident.



Conflicts of Interest

None.

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