

Rotavirus vaccination in a level V hospital in Kenya reveals poor compliance rate

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Background

Rotavirus gastroenteritis is an important cause of childhood morbidity and mortality in Kenya. In July 2014, Kenya introduced the rotavirus vaccine into her national immunization program but surveillance data has never been collected in semi urban and rural areas of the country.

Method

Although immunization compliance is crucial in assessing the real-world impact of this vaccine, variability in the vaccine compliance in the country is likely to occur. In view of this, we estimated the extent of compliance for the optimized 2-dose rotavirus vaccine between February 2018 and February 2019 at Embu Level V Hospital using the monthly administrative data.

Results

Disparities in vaccine compliance was observed for Rotarix™ dose 1 and dose 2 and, thus, necessitate the need to closely monitor immunization systems to facilitate vaccine delivery compliance. Of the 1597 children that received the first dose of the vaccine, only 1351 (84.6%) showed up for the subsequent dose. Overall, the hospital recorded high vaccine dropout (15.4%), suggestive of poor utilization, inconvenient clinic hours or clinic distance, fear of vaccine and criticism for previously missed appointment and ultimately poor compliance of the vaccine. In this regard, increased social mobilization is needed to encourage compliance and to enhance tracking of vaccine defaulters.

Conclusion

Our data provides the real-world compliance rate of the vaccine and will guide the Kenyan government to upscale enforcement of compliance. While efforts to improve the accuracy of the compliance estimates are crucial, identification of specific factors, relating to rotavirus vaccine compliance is imperative in Kenya. Effort is underway in this direction.