Introducing Rotavirus Vaccine to LMICs: establishing sustainable immunization program in Palestine

Rennert WR¹, Abu-Awwad FM¹, Ramlawi A²

¹Rostropovich Vishneskaya Foundation (RVF), ²Palestinian Ministry of Health (MoH)

Background

The Rostropovich Vishneskaya Foundation (RVF) has created a model to allow MoH in LMICs to introduce sustainable immunization programs using an incremental financing model shifting economic support of the program from the private foundation partner to the public partner over a three-year period.

Methods

During the initial phase of the program, RVF provides funding for vaccine, training, shipment, and program management assistance. In the middle phase, MoH contributes 50% of program costs. During the final phase MoH takes over the program, while RVF conducts quality control and impact studies. MoH approached RVF in 2015 to introduce Rotavirus vaccine (RVV) to the Palestinian Territories. The project was introduced in 5 phases: i) RVF negotiated pricing for Rotarix and established transportation, management and training needs (2016); ii) RVF provided free vaccine, while MoH implemented vaccination throughout Gaza and West Bank (2016 – 2018); iii) MoH contributed to the financial support of the program (2018); iv) RVF facilitated switch from Rotarix to Rotavac supporting program sustainability (2018); v) MoH has successfully rolled out national immunization program using Rotavac. RVF conducts economic and clinical impact studies with PATH and Gates Foundation (2019).

Results

Within 12 months of program initiation in 2016 98% of eligible children throughout the Palestinian Territories received RVV. In Gaza all-cause diarrhea cases in children younger than 5 dropped from monthly pre-vaccination average of 4964 (2015) to 4223 (2016) (CI 95% 180 – 1301), 3367 (2017) (CI 95% 293 – 1419) and 2447 (2018) (CI 95% 559 – 1281). Early results from 2019 indicate further drop of gastroenteritis since the transition to Rotavac. During the same period Rota+ samples dropped from 35.8% (2015) to 13.8% (2018) in stool samples of children with diarrhea, a significant decrease of 67.3% overall.

Conclusion

RVF has developed a model for a public-private partnership that allows LMIC MoH to introduce sustainable national vaccination programs through competitive vaccine pricing, assisted funding, and the collaboration in training, management and technical assistance needs.