Together We Can
Take on Typhoid

Potential of typhoid conjugate vaccines in Fiji

Typhoid, a serious enteric fever spread through contaminated food and water, is a substantial public health issue that disproportionately impacts children and marginalized populations in Asia and sub-Saharan Africa. The Global Burden of Disease (GBD) study estimates that, in 2016, there were nearly 12 million typhoid cases and more than 128,000 typhoid deaths worldwide.[1] Additionally, strains of drug-resistant typhoid are spreading, causing global concern.[2]

TYPHOID CONJUGATE VACCINES

Typhoid vaccination can reduce the need for antibiotics, slow expansion of drug-resistant strains, and save lives. Newly licensed and World Health Organization (WHO)-prequalified typhoid conjugate vaccines (TCVs) have several advantages over earlier typhoid vaccines. They:

- provide longer-lasting protection;
- require only one dose; and
- are suitable for young children over 6 months.

These qualities will allow better protection for younger children and expanded coverage through inclusion in routine childhood immunization programs.

WHO RECOMMENDATION

In March 2018, WHO recommended that typhoid-endemic countries introduce prequalified TCVs into routine childhood immunization programs as a single dose for infants and children over 6 months of age, accompanied by catch-up vaccination campaigns for children up to 15 years of age, where feasible. Additionally, WHO recommended prioritizing countries with a high burden of disease and/or a growing burden of drug-resistant typhoid, and in response to confirmed typhoid outbreaks.

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AN OPPORTUNITY FOR FIJI

TCVs could have a substantial benefit in Fiji, where typhoid inflicts a significant public health burden. The GBD estimates that, in 2016, Fiji had:

- **862 typhoid cases** or **100 cases per 100,000 population**, 48 percent of which were among children under 15 years of age; and
- **8 typhoid deaths**, 57 percent of which were among children under 15 years of age.[1]

Studies also show that the rate of typhoid fever in Fiji is increasing.[3] In addition, typhoid likely imposes an economic burden. Analyses from other settings in the region found that families often bear a significant cost, especially for cases in young children.[4] Available global modeling data predict that routine TCV vaccination plus catch-up would be more cost-effective compared with routine vaccination only. Routine TCV vaccination alone is also predicted to be cost-effective compared with no vaccination in many countries.

References

1. Global Burden of Disease. *The Lancet*. 2017.
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3. Thompson CN, Kama M, Acharya S, et al. Typhoid fever in Fiji: A reversible plague? Tropical Medicine & International Health. 2014;19(10):1284-1292.
4. Poulos C, Riewpaiboon A, Stewart JF, et al. Cost of illness due to typhoid fever in five Asian countries. *Tropical Medicine & International Health*. 2011;16(3):314-323.

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