

The potential of typhoid conjugate vaccines in Burkina Faso

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 2019, there were more than 9 million typhoid cases and more than 110,000 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. Typhoid conjugate vaccines (TCVs) are licensed, prequalified by the World Health Organization (WHO), and have advantages over earlier typhoid vaccines. TCVs provide longer-lasting protection, require only one dose, and are safe and efficacious for children over 6 months.

Three large Phase 3 efficacy studies conducted in Bangladesh, Malawi, and Nepal showed that TCV prevented 85, 84, and 79 percent of typhoid cases in children 9 months to 16 years old, respectively. These results demonstrate that TCV is protective across diverse settings in Africa and Asia.

WHO RECOMMENDATION AND GAVI SUPPORT

In March 2018, WHO recommended TCV as the preferred typhoid vaccine because of its improved performance and suitability for younger children. WHO recommends the introduction of TCV be prioritized in countries with the highest burden of typhoid disease or a high burden of drug-resistant typhoid. WHO encourages routine administration to be accompanied by catch-up vaccination campaigns for children up to 15 years of age, where feasible and supported by data. Gavi, the Vaccine Alliance has provided financial support for eligible countries to introduce TCVs since 2018. Several countries have



According to GBD estimates, Burkina Faso had 356 typhoid cases per 100,000 population in 2019—the highest typhoid incidence rate in Africa and the second highest in the world.

already introduced TCV into their routine immunization programs including Liberia, Nepal, Pakistan, Samoa, and Zimbabwe. Nearly 50 million children have been vaccinated with TCV globally.

AN OPPORTUNITY FOR BURKINA FASO

TCVs could have a substantial benefit in Burkina Faso, where typhoid inflicts a significant health and economic burden. The GBD study estimates that, in 2019, Burkina Faso had:

- **80,672 typhoid cases** or **356 cases per 100,000 population**, 69 percent of which were among children under 15 years of age; and
- **1,530 typhoid deaths**, 84 percent of which were among children under 15 years of age.¹

A recent modeling study³ shows that a catch-up campaign up to 15 years of age followed by routine immunization is the preferred strategy and likely to be cost-effective in Burkina Faso.*

*At a willingness-to-pay threshold of 100% per capita GDP or more to avert one disability-adjusted life-year (DALY).



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Tybar TCV® was prequalified by the World Health Organization in December 2017. A second TCV, TYPHIBEV, was prequalified in December 2020.



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9-month-old Ibrahim was the first child vaccinated as part of the TyVAC safety and immunogenicity study in Burkina Faso, December 2018.

TCV can also be safely co-administered to children with yellow fever, meningococcal A, and measles-rubella vaccines.^{4,5}

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