
TYPHOID CONJUGATE VACCINE: A SOLUTION TO PROTECT FROM TYPHOID FEVER

Inayat ur Rehman
Dean

Wazir Muhammad Institute of Paramedical Technology, Peshawar

Typhoid fever results from enteric infections caused by salmonella typhi, which is a gram-negative, rod-shaped flagellated bacteria. Humans are the only host for salmonella typhi thereby causing typhoid fever, which is a progressively rising, life-threatening fever with a cluster of clinical symptoms. It mostly occurs in low resource communities leading to severe illness and dissemination via poor hygienic conditions like contaminated food and water, person to person contact and poor sanitation. The Southeast Asian countries are more frequently affected by typhoid and are more common in children. The year 2016 outbreak in the province Sindh of Pakistan affected more than 12000 people in which more than 70% of all typhoid related deaths were reported in children less than 15 years of age¹. Recent data indicates that around 21 million people develop typhoid annually with 161,000 cases ending in fatality². The peoples of Pakistan particularly those residing in the provinces of Sindh and Punjab are at high risk of developing typhoid out of all 16 Asian countries where the disease is prevalent. The circulating strain of extensive drug-resistant Salmonella typhi in Pakistan is the H58 haplotype, which is a multidrug resistant strain³. An outbreak of extensive drug-resistant strain first reported in the province Sindh and then in the province Punjab and the federal capital Islamabad affected more than 12000 people but the introduction of typhoid conjugate vaccine into the routine immunization program in these areas greatly reduced the extensive drug-resistant cases⁴. The governments of KPK and Balochistan have also decided to include the conjugate anti-typhoid vaccine in the EPI program from the year 2022. However, the campaign will cover the big cities only in the initial phases. The success of efforts to curtail outbreaks rests on the consistent quality of campaigns and immunization service delivery to both urban and rural areas. Moreover, proper storage facilities for vaccines and comprehensive plans for the training of EPI staff are equally important for effective immunization. Practical recommendations to curtail the local outbreak include adequate sanitation measures and widespread immunization by the government. Starting an awareness program about XDR typhoid and the significance of good hygiene habits are the need of the day.

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