



HEALTHCARE

Healthy, Wealthy & Wise



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The year 2017 is proving to be a busy one for India's public health professionals. In February, five states — Assam, Tripura, MP, Rajasthan and Tamil Nadu — added the rotavirus vaccine to their childhood immunisation programs. This was after four states — Haryana, Himachal, Andhra Pradesh and Odisha — included the vaccine in the Universal Immunisation Programme (UIP) in 2014.

This month, following on the heels of a central government-led campaign to immunise 35 million children against measles and rubella, five states — Goa, Karnataka, Lakshadweep, Puducherry and Tamil Nadu — will incorporate the measles-rubella (MR) vaccine into their routine immunisation programs. And over the next three years, starting with five states — HP, Bihar, UP, Rajasthan and MP — India is expected to begin delivering a potent vaccine against pneumococcal disease.

These are all prudent decisions from a health perspective. Childhood immunisations provide excellent defence against infectious diseases. Many of these immunisations are among the most cost-effective health investments available to policymakers. The rotavirus, MR and pneumococcal conjugate vaccines are safe and highly effective. Each targets a disease that heavily burdens India's children. Pneumonia, for example, is a leading cause of child mortality across the country, responsible for nearly 30% of deaths of children aged 1-59 months.

In addition to providing direct health benefits to immunised individuals, vaccines also provide some indirect

benefits. For example, by reducing infection rates among immunised children, the pneumococcal vaccine also reduces the risk of infection among non-immunised individuals — most notably other children and the elderly. Utilisation of the pneumococcal vaccine also helps reduce reliance on antibiotics. In doing so, it helps slow the progression of antimicrobial resistance. The intrinsic value vaccination creates in terms of better health and longer lives provides a compelling rationale for devoting resources to childhood immunisation. But making the argument for immunisation on health grounds alone neglects an important part of the story. The case also rests on the proposition that health creates wealth.

The history of global development provides abundant evidence that healthier populations grow their incomes and escape from poverty more quickly. At the individual level, healthier children enjoy better cognitive development and perform better in school, missing fewer days and staying enrolled longer.

As these children enter the workforce, they tend to be more productive and earn more. Furthermore, when children have better survival prospects, couples tend to have fewer kids. This allows parents to invest more in each individual child. In addition, at the aggregate level, it relieves the economic pressure potentially created by high levels of youth dependency and makes it possible for national economies to realise a sizable boost to income growth

in the form of a 'demographic dividend'.

There are many reasons to be optimistic about India's ongoing expansion of its childhood immunisation programmes. It is, however, important to recognise that continued progress against infectious disease will require sustained effort. Public hesitancy and misinformation about vaccines have proven major obstacles to expanding immunisation and sustaining coverage. Indeed, fictitious concerns over vaccine safety spread via WhatsApp and Facebook have slowed the uptake of MR vaccine.

Further challenges are posed by the threat of emerging infectious diseases — of which the World Health Organization (WHO) has identified eight with high epidemic potential — and by the corresponding urgent need for vaccine research and development. The list of pathogens that threatens India is expansive.

Fortunately, India appears poised to confront these challenges. As a founding member of the Coalition for Epidemic Preparedness Innovations (CEPI), India will help guide international efforts to address essential gaps in vaccine development and production. The selection of Vijay Raghavan, secretary of India's department of biotechnology, as interim chair of CEPI signals the lead role the country will play in the organisation.

India also houses a growing biotech sector, which includes one of the world's largest vaccine producers, the Serum Institute of India. This lends credence to India's status as a global pharmaceutical hub and an emerging leader in the fight against infectious disease. The current effort to expand access to rotavirus, MR and pneumococcal conjugate vaccines will greatly benefit the health of Indian society's youngest members, providing a sturdy foundation for economic growth in the years to come.



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No, immunisation is something else

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