

EDITORIAL

Do we need to consider Universalising Hepatitis A Vaccine in Kerala, India?

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Kerala, a state in southern India, has achieved improvements in material conditions of living. Despite having a low per capita income, its indicators of social development are comparable to those of many developed countries.¹

Several outbreaks of hepatitis A have been reported from Kerala State in recent years.²⁻⁵ Hepatitis A outbreaks involving more than 100 people at a time have been reported from majority of districts of Kerala in last decade.⁵⁻⁹ As per State's official disease surveillance system, there were at least 22 deaths due to hepatitis A in past 24 months and majority of the deaths were in the age group of 30-45 years.⁵

Though Hepatitis A is a self-limiting viral disease, it causes significant morbidity. People affected with Hepatitis A Virus (HAV) may take a few months to return to work, school, or daily life. Hence being infected with Hepatitis A can lead to economic losses and have social consequences in the community setting. A report showed that average out of pocket expenditure, to a family due to one of its member affected with hepatitis A in Kerala to be INR 24025 (SD INR 8315).¹⁰

In Kerala, with a comparatively better sanitation and hygiene and a better standards of living, children often escape infection in early childhood. Ironically, these improved economic and sanitary conditions led to a higher susceptibility in older age groups and higher disease rates, as infections occur in adolescents and adults. The HAV antibody sero prevalence rates reported from Kerala was <10% in children below five years when compared to 60-80% from many other parts of the country.¹¹⁻¹⁴ These findings along with age distribution of cases during

hepatitis A outbreaks in the State suggest that a substantial proportion of individuals in Kerala would not be exposed to HAV until adulthood. These findings reiterate the fact that huge outbreaks of hepatitis A may be expected in the State in coming years.

World Health Organisation (WHO) recommends vaccinating against hepatitis A as the best way to prevent hepatitis A.¹⁵ Several studies have documented good immunogenic potential and excellent efficacy in pre-exposure prophylaxis of hepatitis A vaccine.¹⁶ Many country experiences have shown that the disease incidence, not only in the vaccinated cohorts but also in the whole population, have come down within a few years of the start of mass vaccination. There is also convincing evidence that the vaccine confers herd immunity if the main spreaders of the virus are targeted for immunization.¹⁷

Currently there is no Government recommendation for use of Hepatitis A vaccine in India. The epidemiological transition should force Kerala to modify the views in relation to use of hepatitis A vaccine. Cost is a major concern for universalising hepatitis A vaccine. But, considering the out of pocket expenditures due to hepatitis A, the health system cost for treating the patients and the public health system cost to deal with the outbreaks, the cost for universalising hepatitis A vaccine in Kerala might be justified. Whether to choose universal vaccination to all children as part of routine immunisation or selective immunisation strategy to avoid outbreaks of HAV among susceptible population need to be decided based on cost factors and sero-prevalence patterns.

We feel that it is high time for Kerala to start thinking of hepatitis A vaccination. Filling the data gaps in sero-prevalence and economic data is important to help guide policy decisions. Studies addressing the cost-effectiveness of HAV prevention strategies to determine the feasibility of vaccination programmes in Kerala need to be initiated. Vaccination efforts should be supplemented by public health efforts to improve sanitation, hygiene practices, and water quality and food safety.

Conflict of Interest: None declared

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