

Doctors question efficacy of rotavirus vaccine

This is the latest move to arrest hospitalisation and deaths due to diarrhoea

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NEW DELHI: The Union Health Ministry has announced a series of measures to intensify its effort towards attaining 'zero' deaths due to childhood diarrhoea. And bringing in rotavirus vaccine for children is the latest move to arrest hospitalisation and deaths due to diarrhoea.

"Diarrhoea caused by rotavirus kills nearly 80,000 children each year, resulting in up to 10 lakh hospitalisation, pushing many Indian families below the poverty line. It also imposes an economic burden of over Rs.300 crore each year on the country," noted Union Health Ministry Harsh Vardhan.

Being brought in as a solution is the "indigenously developed and licensed" rotavirus vaccine.

"This has been developed under a public-private partnership by the Ministry of Science and the Ministry of Health and Family Welfare, and in India, we will introduce this vaccine in a phased manner," noted the Minister.

While the move has received support from several

**DELINKING
DIARRHOEA
FROM DEATH**

206,000

children under 5 die due to diarrhoea every year

THIS MEANS

564

deaths every day

23

deaths every hour

ONLY TIMELY IMMEDIATE TREATMENT CAN PREVENT THIS

MAIN REASONS FOR DIARRHOEAL ATTACKS AMONG CHILDREN



Contamination of water or food



Inadequate sanitation, especially lack of safe drinking water and toilet facilities



Poor hygiene, especially lack of hand washing before eating food and after defecation



Malnutrition -- Diarrhoea is common in children with malnutrition. Also repeated diarrhoeal episodes result in weight loss and malnutrition



Lack of immunisation, especially against measles and rotavirus infections

SIMPLE STEPS TO PREVENT DEADLY EFFECT OF DIARRHOEA



Immediate initiation of ORS and zinc



Continued feeding, including breast-feeding



Rational use of antibiotics if required



Safe and hygienic sanitation practices

Source: UNICEF

quarters, world renowned physician Dr. Maturam Santosham from Johns Hopkins School of Public Health, United States and others claim that "this prescription appears seriously flawed".

"Dr. Santosham has noted that on an average the cost of hospitalisation for each

episode of rotavirus diarrhoea is Rs.3,000. However, a paper published in the *Lancet* states that the vaccine that has now been licensed in India has so little efficacy that 55 babies will have to be given the vaccine (costing about Rs.180/child) to prevent diarrhoea in one child," noted Dr. Jacob Puliyeel, a well-

known paediatrician and a member of the National Technical Advisory Group on Immunisation, Government of India.

"The cost of vaccine to vaccinate 55 children (to prevent one case of diarrhoea) will be Rs.9,900. It is obvious that it is cheaper for the Government of India

to pay the full cost of all children admitted with rotavirus diarrhoea (Rs.3,000/case of diarrhoea) than it is to try and control diarrhoea with this poor efficacy vaccine (Rs.9,900 per case of diarrhoea avoided)," he noted.

He further explained that according to the *Lancet* paper there is a risk that one child in every 2,000 babies vaccinated will develop intussusceptions — a condition where the intestine telescopes into itself and leads to intestinal obstruction and bleeding from the gut.

"In rural India where there are no paediatric surgeons or radiologists to diagnose the problem or treat it, it has a mortality of up to 40 per cent. The chance of developing intussusceptions with this new vaccine is actually five times greater than the rotavirus vaccine that was withdrawn from the international market because of this risk," said Dr. Puliyeel.

Cautioning against the move, he added: "The anxiety of public health experts in the country cannot be brushed aside without better evidence about the safety of the rotavirus vaccine."