

**DO WE STILL FEAR THAT NEXT WAVE OF COVID-19 WILL AFFECT CHILDREN MORE?****Rishabh Kumar Rana<sup>1</sup>, Surendra Singh<sup>2</sup> and Dewesh Kumar<sup>\*3</sup>**<sup>1</sup>Department of Preventive and Social Medicine, Shaheed Nirmal Mahto Medical College (erstwhile Patliputra Medical College and Hospital), Dhanbad, Jharkhand.<sup>2</sup>Department of Community Medicine, Veer Chandra Singh Garhwali Government Institute of Medical Science and Research, Srinagar, Pauri Garhwal, Uttarakhand.<sup>3</sup>Department of Preventive and Social Medicine, Rajendra Institute of Medical Sciences, Ranchi, Jharkhand.**\*Corresponding Author: Dr. Dewesh Kumar**

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**ABSTRACT**

After the massive ravaging in second wave of COVID 19 pandemic, speculations about third and subsequent waves were made by the experts in India and abroad based on the various assumptions and evidences. And the most important one is the infection amongst children and their outcome. Although the severity in children is contemplated to be rare due to various factors playing their role in its immunity. But as the unlocking happens, it is believed that transmission will increase due to complacency in the general population regarding COVID appropriate behavior. So it is utmost important to be prepared for impending subsequent waves in terms of health care infrastructure, trained manpower, vaccination and engagement of all stakeholders.

**KEYWORDS:** Pandemic, COVID 19 waves, children, COVID 19 vaccines.**Main Text**

As the fear of subsequent waves loom large over India, there is a growing apprehension that without vaccination, children are more susceptible to COVID-19. This case may be true as during the second wave the younger age group were also affected with severe disease in comparison to first wave. However, factoring in evidence from a previous sero-survey (Dec 2020, Jan 2021)<sup>[1]</sup> and more recently by a joint study conducted in five states of India by AIIMS and WHO<sup>[2]</sup>, both showed that the percentage of previously infected children in the pediatric age group was same as adults.

The general consensus is that severe disease and mortality are relatively rare in children.<sup>[3]</sup> Zimmerman and Curtis having comprehensively reviewed the evidences underlying the proposed mechanisms of age related difference between children and adults in the severity of COVID-19. They broadly classify the various factors explaining this contrast into a) those that put adults at higher risk and b) those that protect the children from COVID-19; and after meticulously laying down the evidence either in support of or against the possible role of these individual factors; concludes that “compared with other respiratory viruses, children have less severe symptoms when infected by SARS-CoV-2” and though yet not understood the most probable mechanism could be age related changes in immune, endothelial/clotting function and presence of ACE-2 receptors in lungs.<sup>[4]</sup>

Similarly, Indian Academy of Paediatrics (IAP) has allayed any fears of COVID-19 infection being predominant or exclusive in children in impending waves suggesting that almost 90% of infections in children were mild/asymptomatic.<sup>[5]</sup>

The second wave of the pandemic had caught us off guard. We need to remain vigilant about COVID-19 infection especially amongst children during the subsequent waves if at all, we witness in future due to any mutation in the present circulating strains. Uniform management guidelines for COVID in children need to be put in place, and health care workers and parents should be sensitized and educated regarding illness and warning signs.<sup>[5]</sup> Specialized COVID wards for children including HDUs, ICUs should be made available. Good practices and robust health care delivery in unison will bolster our response to the third wave whenever it may occur. It will also bode well for the health sector infrastructure development in the future. Training of manpower for identification of COVID-19 will further help the cause of healthy India as most common childhood ARIs present with similar manifestations and are more severe. Vaccination of children against COVID-19 is a feasible option and trials have been completed in regards to safety and efficacy of their use in children. The pandemic also gives us an opportunity to increase our engagement with the stakeholders, whether it be the parents who will be directly involved in the care

of their children or policymakers who will be responsible for making the most important decisions.

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