

## EDITORIAL

# Is COVID-19 Infection A Great Risk for Children?

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Coronavirus Disease 2019 (COVID-19) outbreak began in Wuhan, China, and has spread rapidly around the world, making it the biggest public health problem in human history. The WHO declared COVID-19 as a pandemic on the 11th of March 2020. In Bangladesh children are less infected and the mortality rate is low till date. In this situation, children's wellbeing has been jeopardized, they can't go to school, play or visit their mates. The living conditions, family income, schooling are the key determinants for the wellbeing of children which are affected due to this pandemic.<sup>1</sup> The children are getting nervous, some frightened or tired of the unknown pandemic due to the various social distancing laws, wearing masks or washing hands, sometimes infected close relatives or parents.<sup>2</sup> The Centers for Disease Control and Prevention (CDC) of the USA confirmed that children who have developed severe illness from COVID-19 infection have underlying medical conditions. One significant finding is kawasaki like multisystem inflammatory syndrome in children (MIS-C). Children are suffered from recurrent fever and variety of clinical symptoms which may involve multiple organs and elevated proinflammatory markers as MIS-C, and have developed mild or clinically asymptomatic infection few weeks after. In addition, other variety of cutaneous manifestation has been reported like adult.<sup>3</sup>

The greatest mystery is the degree to which children are responsible for the spread of COVID-19 infection. Lee et al<sup>4</sup> studied with 40 children in Geneva University Hospital and confirmed that children can get infected by COVID-19 virus frequently like adult and found responsible for the COVID-19 transmission.

However, other researchers have shown different findings, Heald-Sargen et al<sup>5</sup> found that children under the age of five with mild to moderate COVID-19 infection have higher levels of SARS-COV 2 viral RNA in their nasopharynx relative to older children and adults. These children with high viral load are more likely to transmit to others when physical activity in schools is resumed or public health restrictions are withdrawn. In a study of 47 children, Jones et al<sup>6</sup> showed that their nasopharyngeal swab for SARS-COV-2 viral load was similar to those of older age, indicating that children could be as infectious as adults. The SARS-COV 2 virus infected children are so often mildly symptomatic, may have weaker and less frequent cough, releasing infectious fever particles into the surrounding environment. Thus, children require to confine in their home and not allowing them to go to school.

The number of COVID-19 cases among children in the USA increased to 90% in a month and 90 infected children died in a few months after easing restriction and opening schools. This rise in COVID-19 cases is attributed to increased testing and child activity. Between the 9<sup>th</sup> of July and 6<sup>th</sup> of August, COVID-19 infection among children has raised 45% and reached 380174 in USA. As of August 6, gross hospitalization and mortality have increased to 0.5-5.3% and 0-0.47%, respectively.<sup>7</sup> Infants are also affected by COVID-19 virus. Several research found that the COVID-19 infection is transmitted from the mother to infant after birth.<sup>8</sup>

In Bangladesh, it is difficult to estimate the infection with COVID-19 in pediatric patients due to low testing, home containment and fear of going with

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their child to the test center. The latest study indicates that about 7-8% are infected in the pediatric age group with mortality rate of about 0.5-1%.<sup>9</sup> If the preventive measure is not taken, then the future situation for children will be catastrophic.

According to UNICEF, more than 28,000 under five children may die in six months due to the indirect result of the COVID-19 pandemic.<sup>10</sup> Article published on July 13, 2020 in the Financial Express online stated that child labor will rise as a result of the economic situation. According to the Global Immunization news July 2020, immunization has dropped about 22% in May 2020 in Bangladesh.<sup>11</sup>

In this catastrophic scenario, adequate measures require to be taken for the reduction of significant adverse social, developmental and health effects that our children will have to experience before effective treatment or vaccination is produced and administered or faced before we achieve herd immunity. Along with Government/Non-government Organizations, politicians and parents should come forward to fight against this pandemic. Healthcare providers should work with families to keep children up-to-date with all recommended vaccination.

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