India's COVID-19 Testing Strategy: Why Pediatric Hospitals Need to Focus More on ILI than SARI?

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To the Editor: India reports total and state wise tally of coronavirus disease (COVID-19) cases daily, but epidemiology and clinical characteristics in children remain unclear. Revised testing strategy (ICMR_v5) emphasized on influenza like illness (ILI) in addition to severe acute respiratory illness (SARI). This approach does not differentiate between patients of different age groups. Globally, COVID-19 incidence in children is lower. In China, Italy and USA, children <18 y represented 2.4%, 2.1% and 1.7% cases respectively [1–3]. Data from India is not accessible, however report from Tamilnadu, a highly affected state, revealed 6% (747 out of 12,448) cases in 0–12 y age group. The illness severity also seems milder in children. Hospitalization (5.7–20%) and intensive care (0.6–2%) needs were low in USA [2]. Of 731 Chinese children, asymptomatic (12.9%), mild (43.1%) upper respiratory illness (URI) and moderate (41%) disease without dyspnea/hypoxemia accounted the most. Very few had severe (2.5%) or critical (0.4%) illness [3]. Hospitalization rate in India is unknown, but even if available can be misleading, as most children were admitted along with the adult family members as containment measure irrespective of illness severity.

Hospital-based SARI surveillance showed that among 5911 patients across 41 sites, only 104 (1.8%) were positive for COVID-19. Test positivity increased from 0% before March 14, to 2.6% by April 2, 2020, however it was 0.2% (2 out of 757) in children ≤19 y [4]. In our tertiary Pediatric Emergency Unit, of 141 consecutive children with SARI tested between April 03 and May 17, 2020, one (0.7%) was positive. As India is under extended lockdown with suspension of

schools and outdoor activities, primary source of contact for children would be an infected adult family member. Hence testing children as a part of family cluster would remain most appropriate. Hospital-based SARI testing in children is associated with poor pre-test probability due to lower infection rate and higher prevalence of mild symptoms. As URI constitutes about 50% of symptoms, screening children with ILI would be a more prudent approach besides continuing to screen SARI. Pooled sample testing can also be explored for ILI cases at larger hospitals as it is a more judicious approach in using precious laboratory resources [5].

Compliance with Ethical Standards

Conflict of Interest None.

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