## **CORRESPONDENCE**



## Telemedicine for Asthma Follow-up in Children During COVID-19 Pandemic

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Received: 10 May 2021 / Accepted: 15 June 2021 / Published online: 28 July 2021 © Dr. K C Chaudhuri Foundation 2021

To the Editor: Asthma management is a continuous cycle of assessment, treatment, and review by a trained person [1]. However, the coronavirus pandemic has disrupted this continuum of asthma care [2, 3]. Telemedicine can provide successful follow-up care for respiratory illnesses in children [4]. We present a retrospective study on telemedicine follow-up of children with asthma at a tertiary care center from western India.

A total of 156 children (boys: 103) with asthma [mean (SD) age 10.6 (3.4) y] were followed up with telemedicine services from April 15 to October 31, 2020. Out of them, 111 (71.2%) children continued their regular inhaled corticosteroids (ICS); 42 (37.8%), 56 (50.5%), and 13 (11.7%) were on step II, III, and IV therapy, respectively, as per the Global Initiative for Asthma [1]. The remaining 45 (28.8%) children had stopped taking regular ICS; the reasons were no current symptoms (30; 66.6%), unavailability of medication due to lockdown (6; 13.3%), migration of parents (1; 2.2%), and economic issues (1; 2.2%). In contrast, 7 (6.4%) children were taking ICS intermittently.

Asthma symptoms were well-controlled, partly controlled, and uncontrolled in 137 (87.5%), 13 (8.5%), and 6 (3.9%) children, respectively. Asthma exacerbation occurred in 13 (8.3%) children; 10 (6.4%) responded with only inhaled short-acting  $\beta$ -2 agonist, while 3 (1.9%) children also required oral steroids. Video-calling through Whats-App was performed to assess the inhalation technique in children with partly and uncontrolled asthma (19; 12.1%), in which 16 (84.2%) children had good technique, while 3 (15.7%) had poor technique. Simultaneously, feedback for the correct inhalation technique was given. Partly controlled and uncontrolled asthma was more common in children with poor compliance to therapy [16 (84.2%) vs. 3 (15.8%);

p < 0.001]. Treatment was restarted in 27 (17.3%), stepped up in 2 (1.3%), and stepped down in 6 (3.8%) children. Only 86 (55.1%) children were on regular ( $\ge 2$ ) telemedicine follow-up.

In conclusion, this study has shown that telemedicine is a potential tool in the follow-up of children with asthma that can bridge the gap in the continuum of asthma care during this ongoing pandemic.

## **Declarations**

Conflict of Interest None

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