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LETTER TO THE EDITOR

"Oral Health Status of Hearing Impaired Children: Experience of the Impact of COVID-19 in Hyderabad, India"

Dear Editor,

Globally, Coronavirus disease (COVID-19) has created chaos since December 2019 disrupting elective and emergency healthcare services. Individuals with non-COVID health problems waited longer and underwent several rounds of testing to rule out COVID-19 before accessing care. One such health problem was seeking oral health care and dental treatment during the pandemic. Among all occupations, dentists were at highest risk of acquiring and transmitting COVID-19.[1] Therefore, dental services were restricted to emergency services[2] until significant reduction in COVID-19 transmission rates as advised by World Health Organization (WHO).[3] As an effort to curb the spread of COVID-19, the American Dental Association (ADA) issued guidelines categorizing dental procedures as either emergencies or non-emergencies. Severe dental pain, abscess or localized pain and swelling, dental trauma with tooth avulsion/luxation, defective restorations causing pain are most common conditions particularly among children that require emergency Dental Treatment (DT). Non-emergency DT includes routine dental cleaning, elective orthodontic procedures, extraction or restoration of asymptomatic carious teeth.[4,5] Radical treatment planning is needed in patients among whom acute restorative care does not suffice.[6] Children with Disabilities (CwDs) particularly experienced dual burden of the pandemic exaggerating their pre-existing oral health problems and challenges to access oral health services.[7,8] CwDs face difficulties to maintain their oral hygiene and have conditions leading to dental emergencies causing additional systemic diseases.[9] Anxiety of the parents with problems associated with their child's disabilities often delayed seeking oral health care leading to development of significant oral disease.[10] In India, the pandemic anxiety among parents further delayed the dental treatment.[11,12]

Hearing-Impaired Children (HIC) are particularly most vulnerable among CwDs deprived of good oral health due to their inherent challenges. The pandemic mandate of wearing face masks covering the mouth and nose (WHO advisory during COVID-19) posed further challenge. A comparative study through dental screening among 13–18 year HIC ($n = 110$) and Non-Hearing-Impaired Children (NHIC; $n = 105$) was conducted in Hyderabad, India. The study findings revealed 42.7% HIC needed emergency dental treatment compared to 14.3% among NHIC (Figure 1). The need for any DT among HIC was at 89.1% as compared to 43.8% of NHIC. A few studies in India had reported that NHIC had comparatively less DT needs than HIC.[13,14] In another study, ultrasonic scaling (50.3%) _a non-emergency DT_ was identified as a major treatment need among school children in Hyderabad.[15]

Globally, there are few studies specific to oral health among CwDs during the pandemic.[7,8] A few studies among children in India provide evidence of high rate of emergency DT needs.[16,17] A study in New Delhi in India during COVID lockdown found 60.8% of parents reporting the need for DT of their children.[16] Another study among children in Tamil Nadu, India reported higher Emergency DT need due to the hampered oral healthcare service.[17] A study in Turkey found 70.2% of parents practiced self-medication for their child's dental problems during the pandemic.[18] A study in China reported significant change in distribution of dental problems pre-COVID and during COVID with increase in proportion of patients with dental infections.[19]

Postponed medical/dental care, rescheduled appointments, discontinued medication regimes and lack of access to dental consultations during pandemic have led to increase in oral health problems for CwDs who have complex needs.[2] The Indian government issued unified guidelines for dental care during the pandemic.[20] However, the focus on oral healthcare of CwDs is scant and the dual challenges faced specifically by HIC were not addressed. The pre-existing oral health inequities of HIC exacerbate based on the degree of hearing loss along with the COVID-19 protocol and norms impacting their social, physical and mental health.[21] Every child has the right to enjoy highest attainable standard of health and treatment facilities as per the United Nations Convention on the Rights of the Child. The theme for International Day of Persons with

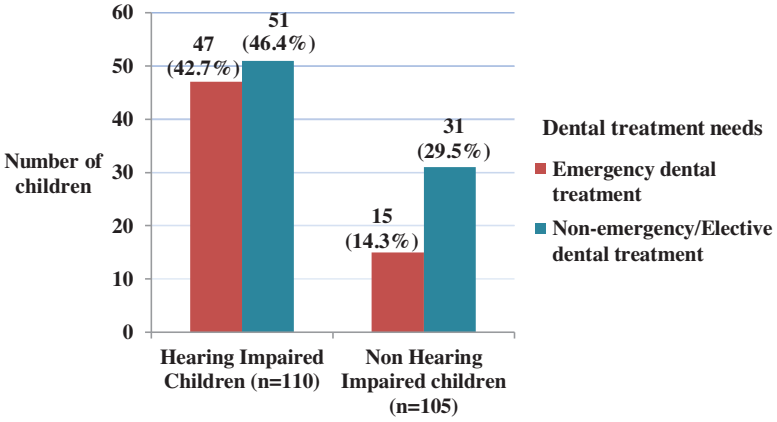

FIGURE 1 Dental treatment needs among children (13–18 years) with and without Hearing Impairment (HI) ($p \leq .05$) [Color figure can be viewed at wileyonlinelibrary.com]

Disabilities (IDPD, 3rd December) observed by United Nations for the years 2020 and 2021 had focus on disability inclusive, accessible and sustainable post COVID-19 World.[22] As the rate of COVID-19 infection and risk reduces, it is important to provide DT for HIC with emergency and non-emergency needs. Reassurance, accurate professional advice and appropriate DT and care provision has to be guided by a broader empathy scale to address the needs of HIC that go beyond standard practice.[2] There is a research gap on influence of the pandemic on access to dental care among HIC in India. Validated data about oral health status among HIC helps in delivering quality dental care. Amidst the pandemic, strategies in line with communication capabilities of HIC are important in creating a healthy consultation environment with the dental care provider. Globally, there is a need to focus on policies promoting oral health equity and care of CwDs during as well as post-pandemic.

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CONFLICTS OF INTEREST

The authors declare there are no conflicting interests with regards to the research and authorship.

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REFERENCES

1. Banakar M, Bagheri Lankarani K, Jafarpour D, Moayedi S, Banakar MH, MohammadSadeghi A. COVID-19 transmission risk and protective protocols in dentistry: a systematic review. *BMC Oral Health*. 2020;20(1).
2. Dziedzic A, Tanasiewicz M, Tysiąc-Miśta M. Dental care provision during coronavirus disease 2019 (COVID-19) pandemic: the importance of continuous support for vulnerable patients. *Medicina*. 2020;56(6):294.
3. World Health Organization. Considerations for the provision of essential oral health services in the context of COVID-19: Interim guidance. 2020.
4. American Dental Association. ADA develops guidance on dental emergency, nonemergency care: Recommendations part of dentists' response over COVID-19 concerns. https://www.ada.org/en/publications/ada-news/2020-archive/march/ada-develops-guidance-on-dental-emergency-nonemergency-care. Published March 18, 2020.
5. Long RH, Ward TD, Pruett ME, Coleman JF, Plaisance MC. Modifications of emergency dental clinic protocols to combat COVID-19 transmission. *Spec Care Dentist*. 2020;40(3):219-226. https://doi.org/10.1111/scd.12472.
6. Picciani BLS, Bausen AG, Michalski dos Santos B, et al. The challenges of dental care provision in patients with learning disabilities and special requirements during COVID-19 pandemic. *Spec Care Dentist*. 2020;40(5):525-527. https://doi.org/10.1111/scd.12494.
7. Phadraig CMG, van Harten M, Diniz-Freitas M, et al. The impact of COVID-19 on access to dental care for people with disabilities: a global survey during the COVID-19 first wave lockdown. *Medicina Oral Patología Oral y Cirugia Bucal*. 2021:e770. https://doi.org/10.4317/medoral.24742.

8. Machado BA, Moro JS, Massignam C, Cardoso M, Bolan M. Fear, changes in routine and dental care for children and adolescents with autism spectrum disorder in the COVID-19 pandemic: a survey with Brazilian parents. *Spec Care Dentist*. 2021. https://doi.org/10.1111/scd.12683.
9. Kwak EJ, Kim J, Perinpanayagam H, Kum KY. Guidance for dental treatment of patients with disabilities during COVID-19 pandemic. *J Dent Sci* 2020;16(1):540-543. https://doi.org/10.1016/j.jds.2020.08.003.
10. Wasnik M, Chandak S, Kumar S, George M, Gahold N, Bhattad D. Dental management of children with cerebral palsy—a review. *J Oral Res*. 2020;12(1):7.
11. Samuel SR, Kuduruthullah S, Khair AMB, Shayeb MA, Elkaseh A, Varma SR. Dental pain, parental SARS-CoV-2 fear and distress on quality of life of 2 to 6 year-old children during COVID-19. *Int J Paediatr Dent*. 2021;31(3):436-441. https://doi.org/10.1111/ipd.12757.
12. Dhawan P, Sharma P, Rajpal S, Knowledge BhatA. Attitudes, and perception of parents toward dental treatment of children during the COVID-19 outbreak. *Int J Clin Pediatr Dent*. 2021;14(5):693-699. https://doi.org/10.5005/jp-journals-10005-2041.
13. Kar S, Kundu G, Maiti SK, Ghosh C, Bazmi BA, Mukhopadhyay S. A comparative evaluation of dental caries status among hearing-impaired and normal children of Malda, West Bengal, evaluated with the caries assessment spectrum and treatment. *J Indian Soc Pedod Prev Dent*. 2016;34(4):306-309. https://doi.org/10.4103/0970-4388.191407.
14. Sharma A, Todkar M, Pandya H, Panwar M, Das M. Comparison of oral health status and DMFT score of special children and normal children in Burhanpur city. *Int J Appl Dent Sci* 2019;5(1):219-222.
15. Reddy ER, Rajababu P, Patil PU, Sultana S, Reddy PP, Ramprasad SV. A study on the dental health of urban government school children in Telangana. *Int J Contemp Med*. 2019;6(4):D20-D24.
16. Goswami M, Grewal M, Garg A. Attitude and practices of parents toward their children's oral health care during COVID-19 pandemic. *J Indian Soc Pedod Prev Dent*. 2021;39(1):8.
17. Samuel SR, Mathew MG, Suresh SG, et al. Pediatric dental emergency management and parental treatment preferences during COVID-19 pandemic as compared to 2019. *Saudi J Biol Sci*. 2021;28(4):2591-2597. https://doi.org/10.1016/j.sjbs.2021.02.002.
18. Sen Tunc E, Aksoy E, Arslan HN, Kaya Z. Evaluation of parents' knowledge, attitudes, and practices regarding self-medication for their children's dental problems during the COVID-19 pandemic: a cross-sectional survey. *BMC Oral Health*. 2021;21(1). https://doi.org/10.1186/s12903-021-01466-7.
19. Guo H, Zhou Y, Liu X, Tan J. The impact of the COVID-19 epidemic on the utilization of emergency dental services. *J Dent Sci*. 2020;15(4):564-567. https://doi.org/10.1016/j.jds.2020.02.002.
20. Guidelines for Dental Professionals in Covid-19 pandemic situation – Ministry of Health and Family Welfare, Government of India. 2020. https://www.mohfw.gov.in/
21. Garg S, Deshmukh C, Singh M, Borle A, Wilson B. Challenges of the deaf and hearing impaired in the masked world of COVID-19. *Indian J Community Med*. 2021;46(1):11. https://doi.org/10.4103/ijcm.IJCM_581_20.
22. United Nations. International Day of Persons with Disabilities – 3 December. https://www.un.org/development/desa/disabilities/international-day-of-persons-with-disabilities-3-december.html