

# The Oral Health of Cerebral Palsy Patients in Pakistan: A Neglected Domain

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Dear Editor,

Cerebral palsy (CP) is an irreversible neurological disorder that affects movement, posture, and muscle tone due to a static encephalopathy acquired during the fetal, infancy, or early childhood developmental period. Apart from motor functions, CP may also affect balance, cognition, communication, hearing, and oromotor functions<sup>1</sup>. CP is more common in males (58.2%) as compared to females (41.7%)<sup>2</sup>. CP-inflicted patients may have a higher risk of several dental problems which can affect their quality of life<sup>3</sup>. There are several challenges to keep adequate oral health in CP-inflicted patients due to difficulty in brushing, drooling, dry mouth due to medications and breathing through the mouth, hyper or hypoactive gag reflexes, oral hypersensitivity, and positioning<sup>3</sup>. Due to oromotor challenges, most CP-inflicted patients consume starchy foods, leading to dental caries. The provision of oral care to such patients requires adaptation of the standard procedures.

Oral health is essential for everyone not only CP-inflicted patients. Oral health encompasses several conditions including periodontal disease, orodental trauma, mouth cancer, tooth decay, tooth loss, and birth anomalies such as cleft lip. Different types of oral health care providers treat gums, mouth, and teeth but in Pakistan, there is partial knowledge about oral health in public. A study reported that 42.5% of study participants visited the dentist in the last six months and 56.1% visited for dental pain<sup>4</sup>. It depicts that dentists are consulted only in emergencies and not for regular dental check-ups or scaling.

We searched literature from different databases (NCBI-PubMed, Scopus/Elsevier electronic, Cochrane database, and Google search engine) with no publication date limitation and identified that there were very limited studies on the oral health of CP-inflicted patients in Pakistan. Malik et al. reported that CP children are likely to acquire dental caries in 33% of cases<sup>5</sup>. Jawed et al., reported the presence of dental caries in 58.2% of disabled children attending private and public special needs schools in Karachi city<sup>6</sup>. These studies along with others are not sufficient to determine the burden of oral health problems in CP-inflicted patients in Pakistan.

We anticipate that there may be a high burden of undiagnosed oral health problems in CP-inflicted patients. Oral healthcare providers shall pay attention to the formation of an integrated electronic or manual database to track records of reported oral health problems in CP-inflicted patients in Pakistan. We are optimistic that data gathering will enable health workers and researchers to identify oral health problems in the context of incidence and risk factors to plan adequate preventive plans for such patients. We also suggest an early beginning and a better organization of the oral healthcare system to cater to these patients. The whole dental community shall come forward to educate the community about oral health problems in mentally and physically challenged people.

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**CONFLICT OF INTEREST**

All authors agreed to the publication of this manuscript.

**AUTHORS' CONTRIBUTION**

AR and HR had given the conception of the idea, performed the literature search, manuscript drafting, and reviewed it. SS and ZS also contributed to the literature search and manuscript drafting.

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