EDITORIAL



Current clinical research in pediatric dentistry

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Introduction

Children oral diseases constitute a public health issue [1, 2]. Although more attention has been posed to preventive measures, there is the strict necessity to act an early time [3, 4]. Life oral health conditions in the first years are a good predictor of the oral health status in adolescence, adulthood and elderly people [5, 6]. Clinicians treating pediatric patients should identify the presence of unhealthy habits as well as to inform parents and family members about the consequent risks [7–9]. This has the goal of reducing the incidence or the severity of dental caries [10-12], erosive tooth wear (ETW), hypomineralization and malocclusions [13-16]. Additionally in case preventive measures fail, minimally invasive approaches and innovative restorative materials are now available for pediatric dentists to treat such conditions [17–20].

In 2023, the Journal of Clinical Pediatric Dentistry has collected many clinical research articles dealing with different aspects of pediatric dentistry. Community dentistry has been a field of research encompassing different topics, like oral habits and caries in schoolchildren and adolescent (contributions 1 and 2), special health care needs (contribution 3), preventive measures in scholars (contributions 4 and 5), tooth erosion (contribution 6), acceptance and awareness of private practice pediatric dentists of fluoride-free toothpastes (contribution 7), and knowledge of orthodontic and craniofacial growth amongst Italian Pediatric Medical Residents for early diagnosis in growing patients (contribution 8).

One of the widest field of research has been represented by pediatric restorative dentistry, encompassing pulp therapy in both primary and permanent teeth (contributions 9 to 13) and stainless-steel crowns (contributions 14 and 15). Additionally, craniofacial morphology and clinical orthodontic themes have been extensively investigated covering different aspects like dental and skeletal arch forms in children (contributions 16

to 21), growth status in children with non-syndromic oral clefts (contribution 22), tooth development (contribution 23), orthodontic retreatment (contribution 24), management of impacted teeth and supernumerary teeth (contributions 25 and 26), lingual and labial frenectomy (contribution 27), as well as barriers and challenges faced by orthodontists in providing orthodontic care and implementing new innovative technologies (contribution 28). Sleep apnea and temporomandibular disorders in children have been also covered (contributions 29 and 30).

Other research articles have explored pain and anxiety experiences by pediatric patients and options to manage and reduce them (contributions 31 to 37), dental treatments performed under general anesthesia (contributions 38 and 39), the effect of children parents' emotional states and attitudes (contributions 40 to 43), and the frequency of missing data in clinical records in pediatric dentistry (contribution 44).

Finally, a corpus of research has been focused on the interdisciplinary aspects between pediatric dentistry and general medical conditions, like dental anomalies in cancer survivors (contribution 45), the orthodontic treatment needs in patients with β -thalassemia major and sickle cell disease (contribution 46), enamel developmental defects following perinatal HIV (Human immunodeficiency virus) exposure (contribution 47), oral findings in pediatric patients with allergic rhinitis and asthma (contribution 48), the effects of long-term antibiotic therapy in sickle cell disease associated with molar-incisor hypomineralisation (contribution 49), and the association of genetic mutations with dental anomalies (contribution 50).

On the basis of these considerations, the Authors would like to thank all Researchers and Clinicians who contributed both with their clinical research studies to the Journal of Clinical Pediatric Dentistry hoping that this could be of interest for further dental researchers and professionals. Authors also hope that the present Collection could be the basis for the progres-



sion of pediatric dental research exploring new frontiers in this field, and in particular posing more and more attention on the interdisciplinary aspects relating pediatric dentistry with other medical specialties [21]. Finally, new technologies that are changing dental workflow should be clinically explored: from computer controlled devices and mobile apps [22–24] to artificial intelligence [25–28] should be considered for future clinical trials toward new exciting research perspectives.

AVAILABILITY OF DATA AND MATERIALS

The data are contained within this article.

AUTHOR CONTRIBUTIONS

AS—performed conceptualization, data extraction and manuscript review. PZ—wrote the draft text. Authors equally contributed to the present research. All authors read and approved the final manuscript.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Not applicable.

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CONFLICT OF INTEREST

The authors declare no conflict of interest. Andrea Scribante is serving as the Editor in Chief of this journal, and Paolo Zampetti is serving as the Editorial Board member of this journal.

LIST OF CONTRIBUTIONS

- 1. Yang R, Tang T, Wu S, Wu L, Lei L, Li H. Self-reported oral health habits, knowledge and conditions of schoolchildren and adolescents in mainland China. J Clin Pediatr Dent. 2023 May; 47(3): 96–102. https://doi.org/10.22514/jocpd.2023.017.
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