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Incidence of Dental Caries in Children During the COVID-19 Pandemic

Incidencia de caries dental en niños durante la pandemia de COVID-19

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Due to the high incidence of infections and the measures proposed by the authorities in charge to cope with the current COVID-19 pandemic (1-3), repercussions were identified in terms of oral health, such as an increase in the appearance of caries. This for different reasons (distance from dental consultations, change in diet, increase in cariogenic foods, etc.); therefore, the objective of this letter is to address the incidence of dental caries as a consequence of the context generated by the COVID-19 pandemic.

The confinement established by the different countries as a preventive measure against COVID-19, had as a consequence the distancing of preventive dental care in children (4). If we add to this the high consumption of sugars in the diet that exists today, coupled with poor oral hygiene, favorable environments are created for the increase in the number of children who can develop dental caries.

The restrictions imposed by the pandemic have meant that children are locked up at home most of the time, therefore, they have adapted to a sedentary lifestyle and their diet has been altered (either due to anxiety, the desire junk food, time in front of the computer). These are some of the factors that are being related to the increased incidence of dental caries in children (5). It is known that if they are not treated over time they can evolve into larger cavities and lead to a more complicated treatment.

Among the most important risk factors for caries formation in children are the increased consumption of cariogenic diets, poor oral hygiene, dental crowding, and parental education. All of them cause changes in dental structures, starting with white lesions at the enamel level and can lead to more serious lesions (6). Dental caries that is not treated in time can cause discomfort in the teeth, malnutrition due to reduced food consumption due to pain, affect self-esteem due to physical appearance and non-acceptance among peers, to possible cognitive impairment and have sleep disorders (7).

All these factors were already present before the confinement due to the pandemic caused by COVID-19; however, they have been reinforced given the measures, which is why studies tried to prove whether being confined at home increased the incidence of dental caries, resulting in children brushing their teeth daily; however, they did not floss after each meal and most do not floss (only 12% of the children surveyed used it), it was also proven that the increase in cariogenic meals was between 4 to 5 per day between meals, which, added to the aforementioned risk factors, produces an increased risk of suffering from caries (1).

What is complicated with dental caries is that, due to its subclinical progression, it is not reported by children and in this case the parents are not even aware of it, which increases the possibility that when they go to the dental office a more advanced disease will present (7), either due to painful symptoms, changes in the color of the teeth and inflammation of the gingiva that surrounds the affected pieces. Parents are the ones who should try to prevent and be aware of changes in the mouth of infants, however, the education of parents and the economic level of each family are recurrent factors in the development of this disease in children (1,8) Stress and psychological tension also negatively influenced the oral health of infants, as well as the rest of their family (3).

Although the factors associated with the development of dental caries in children are known, these, added to the situations to which families were exposed during the confinement caused by the COVID-19 pandemic, increased the incidence of dental caries in infants during the last two years, in addition to other manifestations such as injuries, oral conditions and respiratory problems in general. That is why the role of the dentist in this slow return to oral health consultations and centers is essential because they are trained to educate, promote oral health and prevent dental caries in children and in general. As well as encouraging parents and children to improve their oral hygiene measures, have a healthy lifestyle and attend dental visits every so often.

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