

## Pediatric Dentistry Condition- A Mini Review

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### Abstract

Tooth decay is the most common chronic childhood disease and the World Health Organization has identified it as a worldwide problem with 60-90% prevalence among school-age children. Dental caries is a topical contagious infectious disease that affects people of all ages and in any area of the world. Oral hygiene is a part of public health and oral and dental diseases affect different aspects of quality of life. DMFT is one of the indicators that the World Health Organization has introduced to determine the severity and prevalence of caries. One of the goals of the World Health Organization is to keep the DMFT index of students at less than 2. Different factors are effective in occurrence of dental and interdental caries that we discuss about them in this mini review.

**Keywords:** Decay Missing Filled Index, Dental Caries, Oral Hygiene, Tooth Decay

**Abbreviations:** WHO: World Health Organization; DMFT: decay-missing-filled index; BSS: Basic Screening Survey

### Introduction

Tooth decay is the most common chronic childhood disease and the World Health Organization [WHO] has identified it as a worldwide problem with 60-90% prevalence among school-age children [1]. According to statistics in European countries, 6.1% of children aged 6-12 have at least one decayed or missed tooth, and due to the prevalence of tooth decay in all social classes, this disease can impose heavy costs on society [2]. Also, according to the statistics in Iran, decay-missing-filled index [DMFT] was 0.2% among 6 to 9-year-old children and 0.9% to 1.5% among 12-year-old children. Also, DMFT was 1.7% in 3 to 6-year old children and 3.3 to 4.8% in 9-year old children [3]. Four important factors: host, germs of the oral environment, food and time, has a role in tooth decay, without each of which, tooth decay will not occur [4]. Therefore, oral hygiene is very important in preventing it. Prevalence of dental caries in 6 to 12-year old children is one of the most important health problems. This can directly and indirectly impair the health of children and teenagers, and this problem is common among low-income groups and groups that do not comply with oral hygiene standards, such as not using toothbrushes and floss, dental caries is much more severe and acute [5].

### Dental Caries

Dental caries is a topical contagious infectious disease that affects people of all ages and in any area of the world. Oral hygiene is a part of public health and oral and dental diseases affect different aspects of quality of life [6,7]. DMFT is one of the indicators that the World Health Organization has introduced to determine the severity and prevalence of caries. Nowadays, general dental health programs are usually only concerned with determining the prevalence of dental caries. Therefore, to measure the prevalence of dental caries and to determine oral health status in the society, especially in teenagers, appropriate indicators have been introduced by reputable authorities such as the Association of State and Territorial Dental Directors [2011]. This indicator is called Basic Screening Survey. The main purpose of using this indicator is to provide a framework for obtaining cheap and easy oral health information. On the basis of this indicator, people are classified into two parts, and it is ultimately determined whether or not they have caries [8,9].

### Dental caries in Iranian students

One of the goals of the World Health Organization is to keep the DMFT index of students at less than 2. There are many studies

on the calculation of DMFT in Iran, including Hamisi et al. which studied 323 students in Qazvin and showed that the prevalence of non-caries was 14.3% and their DMFT was 12.1%. [10]. Also, in a study on 12-year-old children in Tehran and Isfahan, DMFT was 11.2, which was the highest rate of caries [11]. In another study, the rate of DMFT in children in Isfahan was reported 3.41, and the conclusion of this study was that it showed a high proportion of DMFT in decay [12]. A study in Sirjan [a city in Kerman province] showed that the prevalence of non-caries state in 12-year-old students was 34.1%, which means that about 60% of 12-year-old students in this city due to various reasons, particularly not using toothbrush and floss, had dental and interdental decay [13]. Also, in the U.S Department of Health and Human Services in New Hampshire, a large evaluation of oral health status among public school students was done using the BSS index and it showed that approximately 2.3% of students had dental caries [14].

### Are There Any Differences Between Girls or Boys in Caries Status?

The results of some studies show that there is no significant relationship between the prevalence of caries in male and female students. Among these studies, we can mention Nabipour et al., Who did not report a significant difference in caries status between male and female students [15]. However, in some studies, such as the study by Boroumand et al., Caries in 3-6-year-old boys was less than that of girls [16]. However, in some studies, such as the study by Boroumand et al., Caries in 3-6-year-old boys was less than that of girls [16]. Also, Loyola-Pontigo et al. and Rosado-Casanova et al. reported a higher incidence of caries in girls than boys [17,18].

### Some Other Effective Factors of Children's Caries Status

Another factor affecting dental and interdental caries is the level of parents' education. In a study by Campus et.al, there was a significant relationship between parents' education and lower incidence of caries in children [19]. Ismail and Sohn also stated in their study that children whose parents had a college education had significantly lower dental caries than children whose parents had lower educational level [20]. Also, the differences in socioeconomic status of families can lead to a different status of caries in children, as Primosch in a study in this regard observed a changing status of caries in families with different structures and concluded that this difference may be the result of the different socio-economic status of families, which may affect children's dietary habits as well as hygiene [21].

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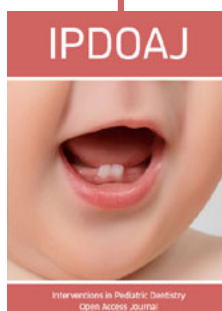
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