

## **Epidemiology, prevention and control of oral diseases in pediatric subjects**

### *Pediatric Dentistry*

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Caries and periodontal diseases are a neglected epidemic by millions of Italians who suffer unnecessarily from them. Both diseases are preventable and the combination of high prevalence, high morbidity and relative inattention from the National Health Service (NHS), makes caries and periodontal disease a significant public health problem. In this perspective, the World Health Organization and the University of Milan have promoted a national epidemiological study aimed at a sample of 4, 6 and 12-years-old students from schools in the North, Central and South of Italy. The study provides for the administration of a questionnaire to parents and a dental examination carried out at school by dentists trained by the WHO.

In our town the epidemiological study planning and the survey were carried out by professors of the School of Specialization in "Pediatric Dentistry" (Prof. G. Giuliana and Prof. G. Pizzo) supported by specialist dentists from the same School, calibrated according to the WHO methodology.

The survey was carried out between 2017 and 2019 involving 2701 children attending schools in the 8 districts of the town.

The parents were sent a letter which explained the nature of the survey and contained a pre-printed form for the issue of informed consent to participate in the survey with a questionnaire regarding the family nuclear, the oral hygiene and eating habits of the minor and the child's previous dental experiences.

The ICDAS (International Caries Detection and Assessment System) was used to detect the prevalence of carious lesions. The dentist used for each child visited a dental mirror and the CPI (Community Periodontal Index) index for periodontal assessment.

Preliminary results showed that 25.3% of 12-years-old students had gingival bleeding and 41.1% had tartar.

The caries index (ICDAS) shows us that as early as 4 years, 20% of children have initial carious lesions, 37% have dentine caries and that 34.38% have highly destructive caries.

At 12 years, 34.95% had initial carious lesions, 46% had cavities that already affected dentin and that 42.44% had highly destructive cavities.

The exigence to implement a program of prevention / early treatment of caries / gingivitis in pediatric subjects living in Palermo, since the first months of child's life, was born from the data analysis. The project "Un sorriso per



tutti i bambini", carried out at the U.O. of "Pediatric Dentistry" of Policlinico Paolo Giaccone in Palermo, was therefore finalised in order to

1) improve efficiency and effectiveness in the promotion of the oral health of minors, through the creation of a preventive / assistance route of significant social health impact;

2) assess the effectiveness of the preventive methodologies adopted.

#### **REFERENCES:**

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