

## Preventative Measures in Paediatric Dentistry in Patients with Down Syndrome

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**Introduction.** Children who have special health care needs have been defined (SHCN) as “those who have or are at increased risk for a chronic physical, developmental, behavioural, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.” Those with Down syndrome (DS) fall under this umbrella (*Sadof & Nazarian, 2007*). Down syndrome is a chromosomal disorder with an expected prevalence of 1 in 1,000 to 1 in 1,100 live births worldwide (WHO, 2017). The life expectancy of individuals with DS has increased from the age of 25 in 1983 to 60 years of age today (NDSS, 2017). This increase in life expectancy is linked to the development of research and healthcare provided to this population, dental healthcare included (*Bertapelli et al., 2017*).

**Aim, Materials and Methods.** The aim of the study was to investigate preventative measures in paediatric patients with Down syndrome.

The article provides a hypothesis that the preventative measures with optimal results for paediatric patients with Down syndrome is oral care provided by a professional health care provider. An electronic search was conducted via MEDLINE Complete and Dentistry and Oral Sciences Source using the following parameters: Terms: Dentistry, Prevention, Down syndrome children, special needs children and paediatric dentistry; Fields: all; Limits: within the last decade, Human, and English. Sources for this thesis were chosen from the resultant list of articles and from references within selected articles.

Although this study is a pure review, it aims to make its reader aware of the current situation in Latvia. Moreover, quantitative research could add to the existing body of knowledge obtained from the results of the said electronic searches and could aid the researcher in testing the hypothesis. Thus, a quantitative research method was carried out in the form of a questionnaire targeted at 124 members of *Dauna sindroma biedrība* (Eng. Down Syndrome Association) (DSB), a Latvian based parent's network, approved of by Down Syndrome International that was set up eight years ago to connect parents of children with DS in Latvia. The 124 members consist of parents and caregivers of children with Down syndrome who reside in Latvia.

**Results.** The results of the research were used to construct a leaflet which was translated into Latvian and made available to the DSB. It must be acknowledged that the results of the questionnaires were found to be inconclusive.

**Conclusions.** The preventive measures with optimal results for paediatric patients with Down syndrome are not only oral healthcare provided by a healthcare professional or the parents of the patient or self care, but a combination of all, everything working in synergy. Though it is the sole responsibility of a parent / guardian to ensure that the child is receiving satisfactory levels of oral hygiene practices, it is the duty of healthcare professionals to educate parents / guardians about the importance of oral hygiene practices and to deliver oral hygiene instructions, and the duty of the state to provide such services free of charge. It is also the duty of the state to ensure that parents of these individuals are made aware of the services available to them. Moreover, the state must provide support for healthcare professionals, a means for healthcare professionals to share and disseminate information in regards to medical and dental aspects of Down syndrome and to promote interest in the specialist management of Down syndrome.