## A Malocclusion Overview of Down Syndrome Children in Semarang

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## **Abstract**

**Introduction:** Down Syndromeis a genetic disorder caused by autosomal abnormalities, which has three chromosomes (trisomy) on the chromosome 21 which can cause changes in mental retardation and most of them are having problems in the oral health, for instance a malocclusion. Objective of the Study: To find out the malocclusion overview of Down Syndrome children in Semarang. Method: It is a descriptive research with a cross sectionaldesign. The population were all of Down Syndrome students in SLB Negeri Semarang, SLB YPAC Semarang and SLB Pelita Ilmu Semarang. This research used a total sampling as the sampling technique, and used 50 children as the subject of the study. The instrument used to collect the data were the observation sheets of malocclusion. The data analysis were processed and presented in the form of tables and graphs of frequency distribution. Results: The results of this research showed a high number of malocclusion in Down Syndrome children. The 86% number of them were malocclusion class III Angle. It happens because of the problem of maxillary formation that is not in line with the growth of the mandible, there forethe prognatic mandible is often found and health problems are usually weak, coupled with lack of education for the parents. Conclusions: The number of malocclusion class III Angle was very high on Down Syndrome children, so that the orthodontic treatment is needed to improve the oral health.

Keywords: Genetic disorder, Down Syndrome, malocclusion.