## REPUBLIC OF TURKEY MARMARA UNIVERSITY INSTITUTE OF HEALTH SCIENCES ORAL HEALTH STATUS OF ASTHMATIC CHILDREN RELATED TO MEDICATION BELKAYS M.OMRAN ABUBAKR MASTER THESIS DEPARTMENT OF PEDIATRIC

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## **Abstract**

Introduction: Asthma has been defined as a chronic inflammatory disorder of the airways characterized by recurrent episodes of wheezing, breathlessness, chest tightness, and coughing, particularly at night or in early morning. These episodes are usually associated with widespread, but variable, airflow obstruction within the lungs caused by edema of the mucous membranes, increased mucous secretions, and spasm of smooth muscle that is often reversible either spontaneously or with treatment. The aetiology is poorly understood but it is a complex disorder involving immunological, infectious, biochemical, genetic, and psychological factors. It is the most common chronic disease among children, and its a leading cause for childhood hospitalization. Pharmacological treatment is a cornerstone in asthma management. Asthma medications are generally divided into 2 categories, controllers or bronchodilators. The controllers—inhaled corticosteroids (ICS), and The shortacting beta agonists (SABA) are used on an as-needed basis or regularly to reverse bronchoconstriction

and relieve symptoms (relievers). These medications may have an adverse effect on the patient's oral health .Asthma can demonstrate a wide spectrum of oral and dental manifestations affecting both the hard and soft tissues of the mouth. The most observed are higher caries prevalence, oral candidiasis, periodontal diseases dental erosion, Ulcerations, xerostomia and Halitosis. Aim: The aim of the thesis is to investigate oral dental findings and determine the oral health status of Turkish children with Asthma in relation to their medication. Material and Methods: 102 subjects will be divided into 2 groups: 51 were asthmatic children undergoing treatment with short-acting ß2-agonists (relievers). And 51 were asthmatics undergoing treatment with inhaled corticosteroids (controllers). We obtained Oral Health Status by collecting carious, debris, calculus, gingival conditions data by using specific indices. Medical and dental history was obtained for each subject. Results: We found that children in controller group ICS have lower prevalence of caries while the prevalence of calculus, and having poor oral hygiene seems to be higher. Conclusion: The Asthmatic children treated with SABA are at a greater risk of developing dental caries than the children treated with ICS.

**Key words:** Asthma, Oral Health Status.