Prevalence of Dental Caries Among a group of Preschool Children in El Suez City

Thesis

Submitted to The Faculty of Dentistry Cairo University

In Partial Fulfillment of The Requirement for Master's Degree in Dental Science (Pediatric Dentistry and Dental Public Health)

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2019

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(إَنَّ الِّذبن ءامنوا وعملوا الصالحات إنَّا لا نضبع أجر من

أحسن عملا)

صدق الله العظيم

سورة الكهف - آية (30)

Acknowledgment

First and foremost all thanks and Gratitude to **Allah**, the most gracious and the most merciful for all the wonderful blessings He bestowed on me.

I would like to express my deepest sense of gratitude and appreciation for **Professor Dr. Sherine Ezz-Eldin,** Professore of Pediatric Dentistry and Public Health, Faculty of Dentistry, Cairo University for her supervision, support and valuable advices that were of great value throughout the present work.

I am heartily thankful *to Dr. Dalia M. Moheb*Assistant Professor of Pediatric Dentistry and Dental Public Health, Faculty of Dentistry for her supervision, generous support and sincere help.

My other dear professors who stood by me through all this, Sincerely, thank you for all your positivity and help.

Finally, I would like to thank all mothers and their children who permitted me to accomplish this thesis.

THIS WORK IS DEDICATED TO ...

*My dear parents Ahmed Abd El Rahman & Samira Ahmed.

* My dear wife Dr/ Marwa Mobarez and my children Ammar and Malak.

* My dear brother/ Tamer Abd El Rahman.

* Special thanks to my Heads: The Major General dentist Dr/ Raffat Riad and Dr/ Mohamed Gomaa for their great support.

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Introduction

Dental Caries is a public health crisis that poses an immediate and long-term threat not just to the teeth of young children but to their overall health and development. Caries, which derives from the Latin word for rotten and is commonly referred to as cavities or tooth decay, is a disease that is chronic, infectious and transmissible (American Academy of Pediatric Dentistry, 2006).

In primary teeth dental caries is a preventable and reversible infectious disease process that when left untreated results in pain, bacteremia, high treatment costs, reduced growth and development, speech disorders and premature tooth loss with its sequelae of compromised chewing and harm to the permanent dentition (American Academy of Pediatric Dentistry, 2007).

It can be arrested and potentially reversed in its early stages, but is often not self-limiting and without proper care, caries can progress until the tooth is destroyed. Therefore, physicians and other health-care providers should be familiar with dental caries and its causes (**Selwitz et al., 2007**).

Dental caries (decay) is one of the most prevalent chronic childhood diseases worldwide and is a major problem both from a population health perspective and for individual families who have to deal with a young child suffering from toothache (Alves et al., 2008).

Many studies were conducted in Africa (Nigeria, Libya and Uganda) detected a serious increase in the dental caries prevalence, where 90% of the lesions were found untreated. On the contrary, developed countries experienced a significant caries reduction over the last 20 years mainly due to the higher awareness, better orientation of the public about use of fluorides and behavior modification (**Bourgeois et al., 2005 and Leake et al., 2008**).

Cross- sectional studies demonstrated complex interactions between socioeconomic status(SES), parental education, infant feeding practices, fluorid exposure, oral hygiene and dental caries presence in preschool children (**Tiberia et al., 2007 and Casamassimo et al., 2009**).

Young children from poor or minority families are vulnerable to health and development issues, particularly oral health issues, according to the National Institutes of Health. This includes children who are born to single mothers or whose parents have low education levels (American Academy of Paediatric Dentistry, 2010).

Early childhood caries (ECC) is a distinctive pattern of severe tooth decay in infants and young children and considered as one of the most common diseases in this population segment. It has been referred by various names such as nursing caries and baby bottle tooth decay. These terms have been replaced with Early Childhood Caries (ECC) because it has been shown that the use of bottles is not the only cause (*Colak et al.*, 2013).

Information about caries prevalence and severity form the basis for caries prevention programs and treatments needs in population; therefore, there is a continous need for more studies about the prevalence and severity of dental caries ((*Prakash et al., 2013*).

Although dental caries prevalence has significantly decreased among Egyptian Schoolchildren in the last decade, the incidence of dental caries is still high among younger children in Egypt, this could be attributed to several factor mainly lack of oral awareness and over consumption of refined carbohydrate (**Bedwani et al., 2008 & Hamed et al., 2016**).

As prevention is better than cure, so early diagnosis is very important in order to allow for application of preventive measures or even to allow conservative treatment of the lesion to obtain a longer life span of the tooth.

The present study is a part of a series of studies taking place among Egyptian children; aiming to investigate dental caries prevalence in preschool children in El Suez city.