

# **Effect of Dental Problems on Health Of Preparatory School Students**

## **Thesis**

Submitted in Partial Fulfillment of the Requirements for the Master  
Science in Nursing  
(Community Health Nursing)

**By**

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## **Abstract**

**T**his study is a descriptive study, aimed to assess the effect of the dental problems on health of preparatory school student through assessment of student's knowledge regarding dental problems, assessment of student's health practice regarding dental care and determining common health problems resulting from dental problem. This study was conducted at in El Waily zone in Cairo Governorate and El Arbeen zone in Suez city,(Governmental Preparatory Schools). The study involved all available children (300 school children), at the previously mentioned settings. Tools of the study involved a pre-designed questionnaire to assess characteristics of the children and their knowledge about dental problem, checklist to assess the practice of the children regarding teeth brushing and assess the dental problem affect the health status. The main results showed that, more than half of the study samples have good total knowledge. The practice of the studied sample regarding dental care is unsatisfactory regarding teeth brushing. The health problems resulting from dental problem are tachycardia, shallow respiration, abdominal pain, and malldigestion, and constipation, pain during chewing and bleeding gums. This study recommended that; Assessing and monitoring regularly factors hindering dental problem that consequently will affect children's.

### **Key words**

Preparatory school, dental problem, Health, school health nurse

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## **Introduction**

**P**reparatory school children is a vulnerable age group because it is a period of great physical growth accompanied by hormonal changes, and exposed to a period of conflict between biological and culture forces **(Wong, 2003)**.

In Egypt, school children consists one-third of the total population. About 14,051,0 students enrolled in 459 governmental and nongovernmental preparatory schools. The total number of student in preparatory schools in Egypt is 6.9% (3.7 males, while 3.2% females) of total population **(Abdel-Satar, 2001)**.

The most common dental problems are tooth decay and gum disease, other dental problems as orthodontic problems or stained/discolored teeth, some dental problems as bad breath and dry mouth might be symptoms of other serious dental problems or systemic diseases **(American Dental Association, 2003)**.



The school has a vital role in communicating and empowering for the importance of oral health to parents and of being the guardians of the information that is collected and reported. All reasonable efforts to encourage parents to seek a dental check-up for their child (**Asuman 2006 and WHO, 2005**).

The community nurse has a major role in the school health programs, especially dental health assessment, screening, health education to children and their families about the important and technique of dental care (**Ismail, and Woosung, 2001**).



## **Aim of the study**

The aims of this study are to assess the effect of the dental problems on health of preparatory school student through:

1. Assessment of student's knowledge regarding dental problems.
2. Assessment of student's health practice regarding dental care.
3. Determining common health problems resulting from dental problem.

### **Research Questions:**

1. What are the relation between school age student's knowledge and their dental care practices?
2. Are their relations between school age student's practices and their dental care?
3. Do dental problems affect the student health status?

## **I- preparatory school**

### **Children Dental Development**

Dental development begins at about three weeks of gestation. By six weeks of gestation the tips or cusps of the primary teeth appear. By the fourth month the hard tissues (the enamel and dentin) of the primary teeth begin to form. The enamel crowns of most primary teeth are fully formed by eight months of gestation. Permanent teeth begin to form shortly before or at birth (Al-Shalan, 2007).

Both the timing of dental development and tooth size are determined primarily by heredity. Individuals differ greatly in the size of the crown (the part of the tooth above the gum line). Except for the earliest stages of **prenatal development**, and possibly the third permanent molars or wisdom teeth, dental development in girls proceeds ahead of that in boys, often by as much as 6 percent. Girls also have slightly smaller crowns and slightly shorter tooth roots than boys (McGeorge, 2005).

At birth the developing teeth usually are still embedded in the gums. Occasionally a baby is born with some erupted teeth or teeth that erupt shortly after birth. These natal or neonatal teeth usually are poorly formed and mobile (**American Academy of Pediatric Dentistry, 2009**). However in most infants the front teeth begin to peek through the gums between four and eight months. Generally from about six months on, children get four new teeth every four months. By 12 to 15 months all of the baby teeth within the gums have formed crowns. Most children have all 20 baby teeth by the age of two-and-a-half to three years. The permanent teeth continue to develop within the jaw (**Wong, 2001**).

A child's first set of 20 teeth are called baby, primary, deciduous, or milk teeth. As these teeth fall out, they are replaced by 32 permanent, adult, or secondary teeth. The entire process of dental development may take more than two decades. Both primary and permanent teeth usually erupt (break through the gum) in a specific order on each side of the upper and lower jaws. However, the