Chapter 10
An Evaluation of Oral and Dental Health Services in Turkey and in the Member States of the EU in Terms of Economy

Dental health expenditures are a big part of general health expenditures. In Turkey, oral health services are provided by both private practitioners and government sections. In 2012, approximately 7 million fillings were made by government clinics. According to Turkish Dental Association data, in the same year, the number of fillings that Turkish citizens needed was 247 million. Even if the entire budget of the Health Ministry of Turkey were spent for these fillings, it is impossible to handle this demand. In 2012, in the European Union with 24 member countries, dental health spending was close to 74 billion Euro. Because of this financial burden, Turkey and the other countries are trying to find cost-effective methods to minimize dental health spending. This chapter emphasizes dental health conditions of both Turkey and European Union, firstly, and then successful and cost-effective strategies are discussed.

INTRODUCTION

Every year thousands of Turkish Liras (TL) are spent for dental health. In this study, we will discuss how to use the resources more effectively.

We will be explaining the dental health services in the EU and in Turkey and will mention the projects applied to reduce the economic effects of dental health services before the conclusion part.
COST ITEMS IN ORAL AND DENTAL HEALTH SERVICES

Calculating properly the cost of a service plays a role not only in the control and audit of the costs, but also in the efficient allocation of resources. Various cost centers appear in health care units and this issue prevents to calculate the costs exactly. Therefore, the classification method started to be used in determining the cost of health care. Generally costs are divided into three groups as follows: direct costs, indirect costs and immaterial costs (Elliott & Payne 2008):

• **Immaterial Costs:** Immaterial costs are the most difficult ones to express monetarily. Costs of pain due to tooth decay take part in immaterial costs.

• **Indirect Costs:** Indirect costs occur because of the loss of work force of the patient or of the person who takes care of the patient.

• **Direct Costs:** Direct costs are the costs related to the medical care services and can be calculated at market prices. Direct costs are divided into two groups, direct medical costs and direct non-medical costs. This separation can be made in oral and dental health services as follows: Direct dental costs and direct non-dental costs.
  - **Direct Non-Dental Costs:** These costs include foods, drinks, transportations and accommodations.
  - **Direct Dental Costs:** Direct dental costs are divided into three groups:
    - **Fixed Costs:** The building where the service is provided, building-related expenses and service investments are included in this group. Dental units, all equipment, instruments and systems are included in this group.
    - **Semi Fixed Costs:** Personal expenses are included in this group.
    - **Variable Costs:** Drugs and consumables used for treatment are included in this group.

ORAL AND DENTAL HEALTH PROFILE OF TURKEY

In Turkey, oral and dental health problems are among the most important health problems. Oral diseases affect 96% of the individuals and the losses suffered by the country’s economy is quite large.

According to Turkish Dental Association’s report published in 2011, there are 24,203 dentists working actively. Turkish population was 74,724,269 in 2011. So in 2011 there were 3087 patients per dentist. The distribution of the dentists actively employed is, 60% of them work in private clinics, 29% of them work for the Ministry of Health, 10% of them work at faculties, and 1% for other institutions (Table 1).

We can see the current situation below in terms of the number of treatments provided and the number of treatments needed. But considering the number of treatments needed in our country, these numbers seem very low (Figure 1).

In February 2010, the first results of “Health for your mouth” project were published. 3040 persons from 7 different regions and from 9 different age groups participated in this project, which was ongoing for four years. The results of the project are:

1. 1 of every 3 people in Turkey do not have the habit of brushing their teeth.
2. In a year a person has less than one toothbrush.
   a. Annual consumption of toothpaste is 440 grams, it is 870 grams in France, 703 grams in Germany.
3. Frequency of going to the dentist is 0.9 per a year, it’s 5 times a year in the European Union countries.