

## **Assessment of Financial Performance of Public Oral and Dental Health Centers by Geographical Regions**

**Semih ISLİCIK**

Gazi University

Faculty of Economics and Administrative  
Sciences

Ankara, Turkey

[orcid.org/0000-0001-9605-6268](https://orcid.org/0000-0001-9605-6268)

[ssemihislicik@gmail.com](mailto:ssemihislicik@gmail.com)

**Cemre Eda YAR**

Gazi University

Faculty of Economics and Administrative  
Sciences

Ankara, Turkey

[orcid.org/0000-0002-9662-1180](https://orcid.org/0000-0002-9662-1180)

[ceyar@gazi.edu.tr](mailto:ceyar@gazi.edu.tr)

### **Extensive Summary**

#### **Introduction**

With the implementation of the Health Transformation Program in Turkey in 2003, which allowed the beginning of a significant change and transformation process in the health system, oral and dental health services have started to become widespread across the country and the number of health institutions providing oral and dental health services has begun to increase. In this direction, the number of Oral and Dental Health Centers (ODHC) which provide public oral and dental health services has increased, and the number of public ODHCs has been increased from 14 by 2002 to 131 by 2017, facilitating the access to the oral and dental health services provided for the society. Considering the changes in numbers and accessibility, public ODHCs have begun to be among the health facilities that have important functions in the provision of health services. Parallel to the increase in the number of public ODHCs, there has been an increase in sources allocated to the oral and dental health services among the health expenses and the share of public oral and dental health expenses within the total amount has increased. These developments have begun to financially domineer public ODHCs which operate with limited resources at the time of effective, efficient and high-quality presentation of public oral and dental health services. Moreover, in today's conditions, it has become highly important to successfully carry out financial management activities and to keep financial structure strong, particularly due to the effect of cost-limiting policies and competition and to the increase in technology and manpower costs and in medical equipment and drug prices, as well. This relevant condition has necessitated the regular follow-up and evaluation of the activities carried out in public ODHCs for financial business and operations, as in other health facilities.

In health institutions, the method of financial ratio analysis has been used frequently in the evaluation of financial activities and condition for many years. Considering the domestic and foreign studies carried out on this topic, it was seen that

the relevant studies have been generally carried out within the scope of hospitals and the number of studies conducted about the ODHCs was very low. Therefore, in this study, it was aimed to assess the financial performances of ODHCs that provided public oral and dental health services in 2014-2015 in Turkey, by geographical regions, to make a relative comparison between them and to determine the factors that affect their level of performance.

### **Methodology**

In the research conducted in direction of the study objective, the sample selection was not made since the financial statement data of the large majority of ODHCs which have operated in 2014 and 2015 were reached. In this respect, the research was conducted with a total of 124 ODHCs, of which balance sheet and income statements for the statement period 2014-2015 were completely reached. 14 financial ratios determined under four categories that were liquidity, activity, financial structure and profitability, using the financial statement data of the relevant years were analyzed using the ratio analysis method. Subsequently, Kruskal-Wallis test was used to determine whether there was a significant difference among the geographical regions in terms of variables affecting financial performance, using the data obtained from the ratio analysis and Mann Whitney-U test was used in order to determine from which geographical region the relevant difference was originated.

### **Findings**

As a result of the research, there was a significant difference found between the Mediterranean and Black Sea regions in terms of liquidity, activity and financial structure categories in 2014. This relevant difference was found to be originated from the current ratio, acid-test ratio, debt collection period, asset turnover, equity turnover, Short Term Liability/Passive, and Equity/Debt ratios. In addition, there was a significant difference found between the Marmara and Aegean regions in terms of cash ratio, and between the Mediterranean and Southeastern Anatolia regions in terms of Current Asset/Active ratio in 2014.

As a result of the assessment of the financial performances of public ODHCs in 2015, there was a significant difference found between the Mediterranean and Black Sea regions in terms of liquidity, activity, financial structure and profitability categories and it was determined that this relevant difference was originated from the currency ratio, debt collection period, asset turnover, Short Term Liability /Passive, Equity/Debts and net profit margin ratios. Similarly, there was a significant difference found between the Marmara and Black Sea regions in terms of the currency ratio, and between the Southeastern Anatolia and Aegean regions in terms of net profit margin ratio in 2015.

### **Conclusion and Suggestions**

As a result of the assessment made for the financial performances of public ODHCs in 2014-2015, it was determined that the liquidity ratios were sufficient, that the activity ratios were at quite good level except for the equity turnover, that there was an equity insufficiency in terms of financial structure ratios, that short-term debts were at quite high level and that they were not operating profitably in terms of profitability ratios. In general, it is necessary to strengthen equities in public ODHCs, to give

importance to equity management, to manage current assets effectively and to invest in current assets to generate cash.

With the comparison of financial performances of public ODHCs by geographical regions, it was concluded that more work should be conducted to receive their assets in a shorter period in the Mediterranean region and that more importance should be given to activities for asset and resource management. Considering the difference found between the Marmara and Aegean regions in terms of financial performance related to the public ODHCs, it was concluded that there was a cash problem experienced in the Aegean region and that it is necessary to establish an effective cash management system and to invest in cash generating units. Similarly, a significant difference was found between the Marmara and Black Sea regions in terms of currency ratios and it was ended that the currency level in the Marmara region was higher, yet, there was no cash problem in the Black Sea region. Moreover, it was concluded that the difference found between the Mediterranean and Southeastern Anatolia regions in terms of the Current Assets/Active ratios was originated since the relevant ratio was higher in the Mediterranean region and that it is necessary to increase the number of current assets in the Southeastern Anatolia region. Finally, the difference found between the Southeastern Anatolia and Aegean regions in terms of the net profit margin was found to result from the fact that the net profit margin was lower in the Aegean region, however, there was a loss in both. Therefore, more importance should be given to active and equity management and the profitability should be increased.