## Social Statistics

## **Investigating Dental Care Status with Multilevel Modeling**

ELİF ÇOKER (Department of Statistics, Faculty of Science and Letters, Mimar Sinan Fine Arts University, eunal@msgsu.edu.tr)

MERAL YAY (Department of Statistics, Faculty of Science and Letters, Mimar Sinan Fine Arts University, myay@msgsu.edu.tr)

ÖMER UYSAL (Department of Biostatistics, Istanbul University, Cerrahpasa School of Medicine, omuysal@istanbul.edu.tr)

The aim of this study is to explore the status of dental care. For this purpose, the data set is taken from a survey carried out in 2003 at Istanbul, Turkey. The framework of the population is determined as the people who are over the age of 18, living in Istanbul. According to the Turkish Statistical Institute indicators, Istanbul is divided into three regions. In these regions, there are 25 towns in total and all of them are included. From these 25 towns, 588 districts are selected randomly. In total, the analysis is performed with the participation of 1000 individuals. Taking account of the nested structure of the data set (individuals are nested within districts, districts within towns and towns within regions), multilevel modeling approaches are investigated.

Keywords: Dental care, Multilevel modeling, Nested data