# **Abstract**

**Title:** Investigating the level of adherence to a healthy lifestyle and its related factors in the elderly of Khorramabad during the years 1399-1401 (using a classification tree)

### Introduction

The world population is rapidly aging. Determining the subsets of a healthy lifestyle can be helpful in providing a suitable model of a desirable lifestyle. The purpose of this study is to determine the level of adherence to a healthy lifestyle and its related factors in the elderly of Khorram Abad city.

## **Procedure**

The current research was cross-sectional and with a descriptive and analytical approach in 1401 on 1400 elderly people aged 65-75 in Khoram Abad city. Questionnaire "healthy lifestyle measurement in Iranian elderly" was selected as a data collection tool and statistical analysis was performed. In order to determine the relationship between dependent variable and explanatory variables, classification tree (CT) method was used.

#### **Results**

The results of the study showed that out of a total of 1400 samples, 756 (54%) of them were male and the rest were female. The average age of the elderly was  $66.9\pm4.35$ . Ler tribe made up 96.6% of the people in the study. 84.4% of the people lived in the city and the rest lived in the village. The results showed that there is a statistically significant relationship between the subsets of healthy lifestyle and the total score of healthy lifestyle with some demographic factors ( $P \ge 0.05$ ). In general, variables such as owning a personal vehicle, male sex, having insurance and living with a spouse or children, not smoking, living in the city, not having contact with a pet, not having a history of illness, high income and having education in improving all or part of the subcategories Healthy lifestyle and total lifestyle score are influential.

#### **Conclusion:**

A healthy lifestyle is affected by demographic factors, therefore, in order to design and present a program to further improve the lifestyle of the elderly, attention to demographic factors is inevitable. Due to the multiplicity and diversity of the components affecting the lifestyle, the classification tree model is helpful in explaining and interpreting the basic relationships between the data.

**Keywords**: elderly, healthy lifestyle, classification tree