



Dr. Osman GÜNAY  
Dr. İskender GÜN  
Dr. Ahmet ÖZTÜRK  
Dr. Fevziye ÇETİNKAYA  
Dr. Melis NACAR

## THE EFFECTS OF VARIOUS FACTORS ON POOR SELF-RATED HEALTH AMONG THE OLDER PEOPLE IN KAYSERİ, TURKEY

### KAYSERİ İLİNDEKİ YAŞLILARDA ALGILANAN SAĞLIK DURUMUNU ETKİLEYEN FAKTÖRLER

#### ÖZET

Bu çalışma Kayseri ilindeki yaşlılarda algılanan sağlık durumunu etkileyen demografik, sosyal ve tıbbi faktörleri belirlemek amacıyla yapılmıştır.

Araştırma, Kayseri ilindeki 65 ve üzeri yaş grubu nüfustan rasgele seçilen 432 kişilik bir örneklem grubunda yapıldı. On altı soruluk bir anket formu yüz yüze görüşme yöntemiyle uygulandı. Araştırma kapsamına alınan yaşlıların, genel sağlık durumlarını "çok iyi, iyi, orta, kötü ve çok kötü" olmak üzere beş kategoride değerlendirmeleri istendi. İstatistiksel analizde; "çok iyi ve iyi" seçenekleri "iyi" olarak, diğer seçenekler ise "kötü" olarak birleştirildi. Bağımsız değişkenlerin algılanan sağlık durumuna etkisi logistic regression yöntemiyle analiz edildi.

Araştırma grubundaki yaşlıların sadece % 2.1'i genel sağlık durumlarını çok iyi, %25.0'i iyi, %41.2'si orta, %28.5'i kötü ve %3.2'si çok kötü olarak değerlendirdi. Kadınlarda, kırsal bölgelerde, ekonomik durumu kötü olanlarda, beden kitle indeksi 30'un üzerinde olanlarda ve beşten fazla tıbbi yakınması olanlarda algılanan sağlık durumunun daha kötü olduğu belirlendi.

Sonuç olarak; cinsiyet, yerleşim yeri, ekonomik durum, şişmanlık ve tıbbi yakınmaların sayısının, Kayseri ilindeki yaşlıların algılanan sağlık durumlarını etkileyen en önemli faktörler olduğu sonucuna varıldı.

**Anahtar Sözcükler:** Yaşlı, algılanan sağlık durumu, sosyal faktörler, demografik faktörler.

#### ABSTRACT

This study was carried out in order to determine the effects of some demographic, social, and medical factors on the self-rated health condition among the elders in Kayseri province of Turkey.

The study was performed on a sample group of 432 people who are in 65 and over age group in Kayseri, Turkey. A questionnaire containing 16 questions was applied through face to face interviewing method. The older people were asked to rate their own health condition into five categories as "very good, good, fair, bad and very bad". For the statistical analysis, "good and very good" ratings were classified as "good" and the others as "poor". The effects of the independent variables were analysed by logistic regression method.

Only 2.1 percent of the study group was rated their general health condition as very good, 25.0 percent as good, 41.2 percent as fair, 28.5 percent as bad and 3.2 percent as very bad. Totally 72.9 percent of the study group rated their health as poor. The effects of sex, residence area, self-rated economic level, BMI and number of medical complaints on poor rating of health condition were found statistically significant.

It was concluded that sex, residence area, economic level, BMI, and the number of medical complaints were found as significant determinants of self-rating health condition of the older people in Kayseri, Turkey.

**Key words:** Older people, self-rated health, social factors, demographic factors.



## INTRODUCTION

The number and proportion of the older people has been increasing rapidly all over the world. The number of the older people in the world was 390 million and this number was formed 6.6 percent of the total population of the world at the end of 20<sup>th</sup> century. It has been expected that the number of the older population will reach to 800 million and the proportion to 10 percent by the year 2025. Two thirds of this increase will be in the developing countries (1). Social and health problems of the older population in the developing countries have also been increasing.

Self-rating of health has been found a useful measure of health status, because self perceived health condition is a good predictor of the real health condition. Self-rated health is a subjective assessment of the health status, but it is strongly related to the objective health assessments. It has been shown that self-rated health is an important predictor of mortality, morbidity and usage of health services. For this reasons, self-rated health condition has been used frequently in the studies investigating the health level and living quality of the communities (2-6). Chronic conditions and functional ability were important determinants of self-rated health condition in the older people. The effects of the social and demographic factors such as; age, sex, social class, marital status, living arrangement on the self-rated health condition have been also investigating. The effects of these factors vary from one country to another (7).

The purpose of this investigation is to determine the effects of some social and demographic and medical factors on the self-rated health condition in the older population in Turkey.

## MATERIAL AND METHODS

The investigation was performed in Kayseri province of Turkey in 2001. Total population of the province is about one million. Approximately sixty percent of the population was living in urban areas. Five percent of the total population is in 65 and over age group. For the study, 450 people in 65 and over age group were sampled randomly. All the people in the study group were visited in their home and a questionnaire including 16 questions was applied by face to face interviewing method. Eighteen people couldn't be found at home in spite of two visits, so 432 people were taken into the study.

The individuals in the study group were asked to rate their health condition into five categories as "very good, good, fair, bad and very bad". For the statistical analysis, "very good and good" ratings were combined as "good", and the other ratings were combined as "poor".

Nine independent variables; sex, age, residence, marital status, living arrangement, self-rated economic level, functional status, number of medical complaints, and body mass index were taken as independent (explanatory) variables.

In order to evaluate functional status, subjects were asked

if they had difficulty in performing five basic activities of daily living (ADL); such as, eating, toileting, bathing, dressing/undressing, and walking. Functional status of the subjects were classified into three categories; able in all ADL (normal), able with difficulty in at least one ADL (restricted), able with help in at least one ADL (dependent).

The subjects were asked whether they suffered from any of the following 22 health complaints: headache, dizziness, difficulty in seeing, difficulty in hearing, difficulty in chewing, restlessness, loss of appetite, loss of weight, forgetfulness, sleeplessness, dyspnea, palpitation, cough, sputum, nausea, vomiting, constipation, stomach ache, stranguary, urine incontinence, artralgia, and back pain.

Height and weight measurements were taken by the researchers and body mass index (BMI) was calculated

Logistic regression analysis was used in order to determine the effects of the independent variables on the self-rated health condition and odds.

## RESULTS

Only 2.1 percent of the study group was rated their general health condition as very good, 25.0 percent as good, 41.2 percent as fair, 28.5 percent as bad and 3.2 percent as very bad. Self ratings of the study group were divided into two groups as "good" and "poor" for the statistical analysis. For this reason, those who rated their health condition "very good and good" were classified as "good", and those who rated their health condition "fair, bad and very bad" were classified as "poor".

The effects of various social and demographic factors on self-rated health condition were shown in the Table 1.

**Table 1.** Poor self-rated health in the study group according to the various factors

## DISCUSSION

As shown in the table 1; 72.9 percent of the study group rated their own health condition as poor. According to the results of multiple logistic regression analysis, sex, residence area, economic level, BMI and the number of the health complaints have statistically significant effect on poor rating of health condition.

The women rated their health condition poorer than the men. The effect of sex on the self-rated health condition varies from one study to another. In a study in Israel, women rated their health poorer than men (8). However, in a Finnish study, the men rated their health poorer than the women in the same actual health level (4).

There was found no difference between the age groups from the standpoint of self-rated health condition. Similarly, no significant effect of marital status on the self-rated health condition was found. The elders living alone rated their health conditions poorer than the others. But, the effect of the living arrangement was not found statistically significant. In a



Tablo 1- Poor self-rated health in the study group according to the various factors

| Variables                          | Total number | Poor self-rated health n | %           | OR(95% CI)            |
|------------------------------------|--------------|--------------------------|-------------|-----------------------|
| <b>Sex</b>                         |              |                          |             |                       |
| Male                               | 188          | 116                      | 61.7        | 1.000                 |
| Female                             | 244          | 199                      | 81.6        | 1.864 (1.052-3.302)*  |
| <b>Age</b>                         |              |                          |             |                       |
| 65-69                              | 235          | 170                      | 72.3        | 1.000                 |
| 70-79                              | 165          | 120                      | 72.7        | 0.925 (0.554-1.544)   |
| 80+                                | 32           | 25                       | 78.1        | 1.403 (0.510-3.858)   |
| <b>Marital status</b>              |              |                          |             |                       |
| Married                            | 285          | 199                      | 69.8        | 1.000                 |
| Widowed                            | 147          | 116                      | 78.9        | 0.978 (0.536-1.787)   |
| <b>Living arrangement</b>          |              |                          |             |                       |
| With the others                    | 403          | 290                      | 72.0        | 1.000                 |
| Alone                              | 29           | 25                       | 86.2        | 1.199 (0.344-4.171)   |
| <b>Residence</b>                   |              |                          |             |                       |
| Rural                              | 192          | 127                      | 66.1        | 1.000                 |
| Urban                              | 240          | 188                      | 78.3        | 2.301 (1.396-3.792)*  |
| <b>Economic level</b>              |              |                          |             |                       |
| High                               | 60           | 36                       | 60.0        | 1.000                 |
| Moderate                           | 240          | 165                      | 68.8        | 1.370 (0.710-2.643)   |
| Low                                | 132          | 114                      | 86.4        | 3.531 (1.575-7.917)*  |
| <b>Functional status</b>           |              |                          |             |                       |
| Normal                             | 182          | 118                      | 64.8        | 1.000                 |
| Restricted                         | 167          | 125                      | 74.9        | 1.034 (0.609-1.755)   |
| Dependent                          | 83           | 72                       | 86.7        | 1.705 (0.768-3.784)   |
| <b>Number of health complaints</b> |              |                          |             |                       |
| 0-4                                | 69           | 34                       | 49.3        | 1.000                 |
| 5-9                                | 194          | 139                      | 71.6        | 2.623 (1.383-4.974)*  |
| 10+                                | 169          | 142                      | 84.0        | 5.158 (2.434-10.932)* |
| <b>BMI</b>                         |              |                          |             |                       |
| <30                                | 327          | 229                      | 70.0        | 1.000                 |
| 30+                                | 105          | 86                       | 81.9        | 2.157 (1.149-4.052)*  |
| <b>Total</b>                       | <b>432</b>   | <b>315</b>               | <b>72.9</b> |                       |

\*: P < 0.05

study, living arrangement has been found a significant determinant of self-rated health condition (7). In our study, the number of the people living alone was only 29. For this reason, statistically significance of the living arrangement couldn't be shown.

The urban elders were rated their health poorer than the rural elders. On the other hand the health ratings were getting poorer as economic level decrease. In the Finnish study, low economic level has been found correlated with poor health ratings (4).

It was found out that the number of the medical complaints and BMI were significant determinants of the health ratings. In a study in Spain, BMI has been found affecting self-rated health status (7).

### CONCLUSION

It was concluded that the determinants of the self-rated health condition vary from one community to another. In this study; sex, residence area, self-rated economic level, BMI, and the number of medical complaints were found out as significant determinants of self-rated health condition of the older people in Kayseri, Turkey.

### REFERENCES

1. WHO. World Health Report 1998. Geneva, p 2.
2. Bryant LI, Beck A, Fairclough DI. Factors that contribute to positive health in an elder population. *Journal of Aging and Health* 2000; 12(2): 169-192.
3. Helmer C, Gateau PB, Letenneur L, Dartigues JF. Subjective health and mortality in French elderly women and men. *The Journal of Gerontology* 1999; 54B(2): 84-92.
4. Kivinen P, Halonen P, Eronen M, Nissinen A. Self-rated health and associated factors among the men: The Finnish cohorts of the Seven Countries Study. *Age and Ageing* 1998; 27(1):41-7.
5. Mitrushina MN, Satz P. Correlates of self-rated health in the elderly. *Aging* 1991; 3(1): 73-77.
6. Romeis JC, Scherrer JF, Xian H, Eisen SA, Buchlz K, Heath AC et al. Heritability of self - reported health. *Health Ser Res* 2000; 35 : 995 - 1010.
7. Damian J, Ruigomez A, Pastor V, Moreno JMM. Determinants of self assessed health among Spanish older people living at home. *Journal of Epidemiology and Community Health* 1999; 53(7): 412-420.
8. Prager E, Walter Ginzburg A, Blumstein T, Modan B. Gender differences in positive and negative self-assessments of health status in a national epidemiological study of Israeli aged. *Journal of Women and Aging* 1999;11(4): 21-41.