

## Special Article - Geriatric Medicine

# Lifestyle of Elder Individuals and their Relationship with Neighborhood

Gocer S<sup>1\*</sup>, Ozdemir C<sup>2</sup>, Sibel A<sup>3</sup>, Ahmet O<sup>4</sup> and Mumtaz MM<sup>5</sup>

<sup>1</sup>Kayseri Public Health Division of Health Ministry, Turkey

<sup>2</sup>Department of Forensic Science, University of Erciyes, Turkey

<sup>3</sup>Department of Internal Medicine, University of Erciyes, Turkey

<sup>4</sup>Department of Biostatistics, University of Erciyes, Turkey

<sup>5</sup>Department of Family Medicine, University of Erciyes, Turkey

\***Corresponding author:** Semsinnur Gocer, Kayseri Public Health Division of Health Ministry, Kayseri Public Health Directorate, Chronic Health Care Branch, Seyitgazi Mahallesi Melikgazi, Kayseri, Turkey

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## Introduction

Old age is a period characterized by increased dependency to other individuals for primary needs due to decreased functionality, loss of social status resulting from changes in cultural values and traditional structure of extended family, and detriments in economical status caused by retirement and productivity loss with emerging social problems. Abuse and neglect has become an important social problem in elder population that has been addressed worldwide. To prevent elder abuse and neglect, it is crucial to understand symptoms of abuse and neglect and risk groups [1].

Abuse and neglect can be encountered in all elder individuals. However, vulnerable elders having any kind of illness and those with mental disorder, dependency for primary needs or depression comprise particular risk groups [1,2]. Elder abuse has been long disregarded although it becomes an increasingly common problem. In the literature, most elders subjected to abuse are women older than 75 years who are vulnerable due to disease or disability and share a common house with perpetrator. It is thought that perpetrator is likely to have psychological problems; history of alcohol and substance abuse, and to be subjected to violence at childhood. Literature search revealed that there is limited number of studies on this topic from Turkey [2-5].

In this study, we aimed to evaluate relationships of elder individuals with family and near surrounding and their living conditions, and potential risk factors for abuse/neglect.

## Subjects and Methods

The data used in the present study were extracted from Kayseri Elderly Health Study (KEHES) conducted between August, 2013 and December, 2013. The protocol of KEHES study was described

### Abstract

**Objective:** Problems encountered at old age including abuse and neglect is an emerging issue in Turkey and worldwide. Here, we aimed to contribute available data by assessing relationships with family and neighborhood, living conditions and frequency of neglect or abuse in elder population.

**Materials and Methods:** The data used in this study was extracted from a cross-sectional study conducted on 907 elder individuals from Kayseri Province. A questionnaire regarding sociodemographic characteristics, health status, physical and emotional distress was completed by researches through face-to-face interviews.

**Conclusion:** We think that better understanding of sociodemographic characteristics will contribute prevention of abuse and neglect in this population.

**Keywords:** Elder individuals; Abuse and neglect; Relationship; Living conditions

in details [X], and briefly, it is a cross-sectional study in Kayseri province where estimated elder population is 89,303. The sample size of the study was calculated to encompass 1% of elders living in Kayseri province. The inclusion criteria were all community-dwelling elders aged 60 years or older. Overall, 907 elders were included to the KEHES study. All elders were invited to Family Health Centers (FHCs) by their own family practitioner. The elders invited were chosen by stratifying according to socioeconomic status, age and gender. A questionnaire regarding demographic characteristics, living conditions, health status self-care abilities, physical and emotional stress and nursing conditions was completed by researches through face-to-face interviews. In addition, standardized Mini Mental State Examination (MMSE) and Geriatric Depression Scale (GDS) were used to assess cognitive status and depressive symptoms in the KEHES study. The MMSE is a widely used test to assess cognitive functions, which has five domain including orientation, memory, attention and calculation, recall and language. The GDS includes 30 items that can be responded as "Yes/No".

In the present study, data obtained from 535 cases in the original KEHES study were analyzed. SPSS (Statistical Package for Social Sciences) for Windows version 15.0 was used to analyze data collected. Pearson chi-square test was used for comparisons among groups.  $p < 0.05$  was considered to be statistically significant.

## Findings

Of 535 subjects included, 58.5% were men and 76.4% were married. Of study population, 60.7% were retired and 22.4% were illiterate. Table 1 presents sociodemographic characteristics of patients.

In the study population, self-reported income level was moderate in 53.7% while 71.0% had their own house. Of the subjects, 71.9%

**Table 1:** Sociodemographic characteristics.

Variables	N	%
<b>Sex</b>	<b>n=535</b>	
Female	222	41.5
Male	313	58.5
<b>Age Group</b>	<b>n=535</b>	
60-64	24	4.5
65-74	382	71.4
75-84	120	22.4
85 over	9	1.7
<b>Educational status</b>	<b>n=535</b>	
Illiterate	120	22.4
I-Literate	103	19.3
1-8 years	43.7	43.7
8 years or longer	78	14.6
<b>Marital status</b>	<b>n=535</b>	
Married	409	76.4
Widow	126	23.6
<b>Living with</b>	<b>n=535</b>	
Family	475	89.5
Alone	56	10.5
<b>Occupation</b>	<b>n=494</b>	
Housewife	194	39.3
Retired	300	60.7
<b>Income level (self-reported)</b>	<b>n:535</b>	
Good	129	24.5
Moderate	283	53.7
Poor	115	21.8
<b>Residence</b>		
Alone	56	10.5
At a family member	479	89.5

reported that they spent  $\geq 50\%$  of their income freely. Of elder individuals, 78.7% reported that they were helping housework. However, 1.5% of subjects who were dependent for their self-care activities reported that their caregivers were under influence of alcohol during these activities. Table 2 presents living conditions of elder individuals.

**Table 2:** Findings about living conditions of elder individuals.

	Yes	No
Having own house	71.40%	28.60%
Having own room	88.60%	11.40%
Economic contribution to family	77.30%	22.70%
Spending $\geq 50\%$ of income freely	74.60%	25.40%
Caring will be affected negatively when personal income is lacking	90%	10%
Request for helping housework	38.40%	61.60%
Smoking nearby elder individual by caregivers	4.30%	95.70%
Smoking or substance use such as alcohol or drugs during care activities	1.50%	89.50%

Of the female subjects, 12.6% had idea of being burden to her family. In the age group of 60-64 years, 12.5% had the idea of being burden to his/her family. Again, physical distress at social environment was experienced by 3.8% whereas emotional distress at social environment was experienced by 7.4% of male subjects. In the study population, 5.1% of male subjects and 5.4% of female subjects had idea of living in a nursing facility. Of the subjects with idea of being burden to his/her family, 15.1% weren't married whereas 10.4% had poor income level. Table 3 presents relationship between sociodemographic characteristics and variables evaluated.

Of the subjects with hypertension, 15.6% had experienced domestic emotional stress, 12.2% had idea of being burden to family and 6.4% had idea of living in a nursing home (Table 4). The domestic physical distress and idea of being burden to family were found to be more common in elder subjects with hypertension, reaching statistical significance. There was no significant difference in self-care, domestic physical and emotional distress, and idea of living in a nursing facility among subjects with coronary artery disease, diabetes mellitus, cardiovascular disorder, or chronic renal failure regarding (Table 4).

Of the subjects, 52.6% had bathing frequency of  $\geq 1$  per week while 96.1% had clean, tidy physical appearance. Of the elder individual, 88.4% could achieve self-care activities by her/himself (Table 5). Table 5 presents self-care characteristics in the study population.

## Discussion

In the present study, we aimed to describe sociodemographic characteristics and to evaluate relationships with family and near surrounding and their living conditions, and potential risk factors for abuse/neglect in elder individuals living in Kayseri province.

In agreement with literature, our study sample mainly included elder individuals aged 65-74 years [6].

In the literature, there are studies proposing a positive correlation between advanced chronological age and likelihood of abuse [7]. In our study population, domestic physical and emotional distress rates were higher in the age groups of 65-74 and 75-84 years. Similarly, the ideas of being burden to his/her family in the age group of  $\geq 85$  years whereas living in a nursing facility were more common in the age group of 60-64 years (Table 2). It is thought that this finding results from failure to adapt aging process at the beginning of old age and feeling of incompetency. The idea of being burden to family was significantly more common among housewives (Table 2).

**Table 3:** The relationship between sociodemographic characteristics and variables evaluated.

Variables		Domestic emotional distress	Domestic physical distress	Experiencing domestic emotional distress	Experiencing domestic physical distress	Idea of being a burden on family	Idea of living in a nursing facility
Age group	60-64 n(24)	2 (8.30%)	0 (0.00%)	1 (4.20%)	0 (0.00%)	3 (12.50%)	3 (12.50%)
	65-74 yrs n(381)	57 (15.00%)	8 (2.10%)	28 (7.30%)	16 (4.20%)	33 (8.7%)	17 (4.50%)
	75-84 yrs n(120)	19 (15.80%)	1 (0.80%)	5 (4.20%)	1 (0.80%)	11 (9.20%)	8 (6.70%)
	≥85 yrs n(9)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (11.1)	0 (0.00%)
Sex	Female n(222)	36 (16.20%)	3 (1.40%)	11 (5.00%)	5 (2.30%)	28 (12.6)	12 (5.4)
	Male n(312)	46 (13.50%)	6 (1.90%)	23 (7.40%)	12 (3.80%)	45 (6.40%)	16 (5.10%)
Education status	Illiterate n(120)	13 (10.80%)	2 (1.70%)	2 (1.70%)	1 (0.80%)	16 (13.30%)	5 (4.20%)
	Literate n(103)	<b>22 (21.4%)*</b>	2 (1.90%)	6 (5.80%)	6 (5.80%)	<b>14 (13.6%)*</b>	7 (6.80%)
	1-8 years n(233)	27 (11.60%)	2 (0.90%)	16 (6.90%)	8 (3.40%)	16 (6.90%)	12 (5.10%)
	8 years or longer n(78)	16 (20.50%)	3 (3.80%)	10 (12.80%)	2 (2.60%)	2 (2.60%)	4 (5.10%)
Marital status	Married n(408)	58 (14.20%)	8 (2.00%)	29 (7.10%)	15 (3.70%)	29 (7.10%)	18 (4.40%)
	Other (widow and single) n(126)	20 (15.90%)	1 (0.80%)	5 (4.00%)	2 (1.60%)	19 (15.10%)	10 (7.90%)
Income level	Good n(129)	22 (17.10%)	1 (0.80%)	10 (7.80%)	2 (1.60%)	11 (8.50%)	6 (4.70%)
	Moderate n(282)	45 (16.00%)	7 (2.50%)	21 (7.40%)	10 (3.50%)	24 (8.50%)	14 (4.90%)
	Poor n(115)	11 (9.60%)	1 (0.90%)	3 (2.60%)	5 (4.30%)	12 (10.40%)	8 (7.00%)
Occupation	Retired n(300)	43 (14.30%)	6 (2.00%)	25 (8.40%)	11 (3.70%)	20 (6.60%)	14 (4.70%)
	Housewife n(194)	27 (13.90%)	2 (1.00%)	7 (3.60%)	4 (2.10%)	<b>27 (13.9%)*</b>	10 (5.20%)

\*p<0.05

**Table 4:** The distribution of some chronic diseases in relation with variables evaluated.

Diseases		Domestic emotional distress	Domestic physical distress	Non-domestic emotional distress	Non-domestic physical distress	Idea of being burden to his/her family	Idea of living in a nursing facility
Diseases	Hypertension (n:295)	46 (15.60%)	2 (0.70%)	17 (5.80%)	<b>8 (2.7%)*</b>	<b>36 (12.2%)*</b>	19 (6.40%)
	Chronic Pulmonary Disease (n:84)	16 (19.00%)	0 (0.00%)	6 (7.10%)	5 (6.00%)	5 (6.00%)	2 (2.40%)
	Diabetes Mellitus (n:120)	23 (19.20%)	1 (0.80%)	5 (4.20%)	5 (4.20%)	15 (12.50%)	7 (5.80%)
	Chronic Renal Failure (n:9)	0 (0.00%)	0 (0.00%)	1 (11.10%)	0 (0.00%)	1 (11.10%)	0 (0.00%)

\*p<0.05

In our study, only 14.1% of elder individuals had education longer than ≥8 years. The idea of being burden to family and experience of domestic emotional distress were significantly more frequent in literate elders (Table 2). Educational status has been defined as a risk factor for abuse. It was reported that illiterate elder individuals were most commonly subjected to abuse. There are also studies reporting that individuals who are illiterate or those who are literate but have no formal education were more commonly subjected to abuse and that lower educational status led higher rates of physical and emotional abuse and higher overall rates of abuse [8,9]. In the literature, it is suggested that social problems (isolation, disease or conflicts) and economical difficulties (economical dependency, unemployment or financial instability) may affect relationship dynamics in elder individuals [8,9]. Elder individuals with one or more physical disorder are more vulnerable to abuse due to impaired capacity of self-protection and dependency to caregivers [10,11]. In our study, experience of domestic emotional distress and idea of living in a nursing home were more common in elder individuals with a chronic

disease although there was no temporal finding regarding abuse (Table 3). The experience of domestic emotional distress and idea of living in a nursing home were significantly more common in elder individuals with hypertension (Table 3). In addition, experience of domestic distress was more common in the group with good income level whereas ideas of being burden to family and living in a nursing home were more common in the groups with poor and moderate income levels (Table 2). Given self-reported income status together with findings that 71.4% of subjects had his/her own house and that 88.6% had his/her own room, there was no prominent physical factor that may negatively affect life conditions or quality of life in our study. Living in an extended family is a condition that allows mutual support and solidarity as well as maintaining esteem from generation to generation. Thus, abuse and neglect rates are higher in elder individuals living alone when compared to those living in an extended family. In our study, 10.5% subjects were living alone in our study; however, there was no significant difference in parameters between elder individuals living alone and those living in

**Table 5:** Self-care characteristics in the study population.

Who Gives Care? (n:534)			Bathing (n:530)			Nail care (n:519)			Physical appearance (n:514)	
Himself or herself	Family	Others	<7 days interval	7-14 days interval	≥15 days interval	<7 days interval	7-14 days interval	≥15 days interval	Tidy and clean	Untidy and dirty
472 (88.40%)	36 (6.70%)	26 (4.90%)	279 (52.60%)	231 (43.60%)	20 (3.80%)	62 (11.90%)	409 (78.80%)	48 (9.20%)	494 (96.1%)	18 (3.50%)

extended family. There is no consensus on gender as a risk factor. However, literature data suggest that women are more likely to be subjected to abuse in general and specific types of abuse. In the literature, there are studies reporting that majority of men doesn't experience physical abuse [9]. Demographic disproportion between male and female population in advanced age groups can explain the relationship between gender and increased likelihood of abuse in this population [9,12]. However, there was no significant difference was detected in experience of emotional and physical distress, idea of living in a nursing home and being burden to family among genders (Table 2). It is well-known that individuals dependent to their family or other individuals for daily living activities are at higher risk for abuse [8,9,12]. In our study sample, 88.4% of elder individuals were able to perform self-care activities. When considered together with findings regarding self-care activities, it should be suggested that elder individuals thought to be weak and inefficient had capacity to perform self-care activities, comprising no drawback in elder individuals regarding abuse/neglect in our study. Presence of alcohol or drug abuse in perpetrator is defined as a risk factor for abuse or violence directing elder individuals [13]. In our study, 95.7% of subjects reported that caregivers didn't smoke nearby them (Table 5). This finding can be explained by attention of family members to living space of elder individual. However, in limited number of cases, it was found that caregivers were smoking (5.4%) or under influence of alcohol (1.5%) during care activities. It is considered that the group is, at least, at risk for neglect, in which attention required is lacking regarding care of elder individuals.

## Limitations

This study has some limitations. We couldn't evaluate the environmental factors such as traffic, noise or transportation that may affect elder individuals although we attempted to describe effects of age, gender, educational status, occupation and chronic diseases on living conditions of elder individuals and their relationship with neighborhood.

## Conclusion

By better understanding of inherent problems in elder population which consistently increase in our country, strategies to reduce domestic conflicts and stress and to prevent elder abuse can be

implemented. At this point, improving awareness in community and professionals involved in the care of elder individuals is as important as identifying factors predisposing to neglect and abuse in elder population. On the other hand, development and implementation of healthcare and social service paradigms that will provide protection and access to psychosocial support to elder individuals at risk for abuse and neglect are also needed.

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