

# What is Geriatrics? Geriatrics or Older Adults Health and Diseases?

İbrahim Halil Türkbeyler<sup>1</sup>, Zeynel Abidin Öztürk<sup>2</sup>, Mehmet Göl<sup>3</sup>, Azer Abiyev<sup>4</sup>, Bünyamin Kaya<sup>4</sup>, Selman Atakur<sup>4</sup>, Mehmet Öz<sup>4</sup>

<sup>1</sup>Dr. Ersin Arslan Training and Research Hospital, Clinic of Internal Medicine, Division of Geriatrics, Gaziantep, Turkey

<sup>2</sup>Gaziantep University Faculty of Medicine, Department of Internal Medicine, Division of Geriatric Medicine, Gaziantep, Turkey

<sup>3</sup>Gaziantep University Faculty of Medicine, Department of Physiology, Gaziantep, Turkey

<sup>4</sup>Gaziantep University Faculty of Medicine, Department of Internal Medicine, Gaziantep, Turkey

## Abstract

**Objective:** To determine awareness of "geriatrics" among elderly patients and reveal which expression is preferred, "older adults's health and diseases" or "geriatrics" as a term.

**Materials and Methods:** This study was conducted with 479 patients, admitted to a university hospital. Each participant was asked to respond to 11 questions.

**Results:** The mean age of the participants was 39.30±15.30 years, 40.7% of them were men. Twenty-eight percent stated that they knew what the geriatrics was. Only 13.2% of them satisfactorily defined it. Nine-point-six percent of them stated that they were thinking geriatrics was an illness, 2.3% -a brand name of a drug, 0.6% - a TV cliff-hanger, 0.6% -a car brand, 0.4% -a city, 0.4% -a country name, 0.4% -one of the organs in the body and 0.4% -a film star. After explaining the "geriatrics" to the patients who did not know or could not know the correct meaning, 75.4% of all patients declared that the 'older adult's health and diseases' was more favorable to describe geriatric medicine.

**Conclusion:** The patients had a low awareness level about geriatrics. Most of the patients preferred to use the term "older adult's health and diseases" instead of, "geriatrics". If we used "older adult's health and diseases" more frequently in conjunction with "geriatrics" over the course of public disclosure efforts, we could get a better public awareness of geriatrics.

**Keywords:** Geriatrics, older adult, health, diseases

## Introduction

Older adults' population has been steadily increasing in percentage during recent decades. It is also estimated that Turkey will be among those countries characterized as having a huge older adults' population as high as more than 10% by the United Nations (1). Advances in treatment of diseases and public health in the last century has led to a spectacular increase in life expectancy, a decrease in the birth rate, alterations in age pyramids and a prognosticative increase in ratio of older adults' population worldwide (2).

Geriatrics refers to a branch of medicine focusing on management of health status and treatment of diseases in the older adults'

population. In fact, it is referred to as science of the elderliness and regarded to aim at presenting comprehensive doctrines to promote well-being of older adults (3). As for the geriatrics in medicine, it is a discipline which is interested in maintaining of a high quality of life in the old age without being detached from the society, protection and enhancement of current health and functional status and providing effective therapeutic applications based on multidimensional assessments (4).

A geriatrics center clinic is available in a limited number of healthcare institutions in Turkey. There are a total of 41 different centers, private and public, in Turkey; 11 in İstanbul and Ankara, two in each of İzmir, Adana, Gaziantep, Kayseri, Erzurum, Bursa,

**Address for Correspondence:** İbrahim Halil Türkbeyler, Dr. Ersin Arslan Training and Research Hospital, Clinic of Internal Medicine, Division of Geriatrics, Gaziantep, Turkey

**E-mail:** ihturbeyler@gmail.com **ORCID:** orcid.org/0000-0001-6588-5645

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Antalya, Konya, Mersin, Diyarbakır, Eskişehir, Malatya, Isparta and Kırkkale. It is a genuine requisite to make the geriatrics clinics, serve for protection, promotion of health status and treatment of the older adults only in a limited number of institutions, more familiar and accessible in society.

In this study, awareness level of the patients about the geriatrics and how much of the patients prefer to use the statement of the (like analogy existing between the title of the "pediatrics" and the statement of the "child health and diseases") 'older adult's health and diseases' instead of the "geriatrics" for designation of the department were investigated.

## Materials and Methods

### Selection of the Participating Patients

This study, as a descriptive and cross-sectional survey, was conducted between January to November in 2015. The study population consisted of the patients admitted to the internal medicine outpatient clinics of Gaziantep University Medical Faculty Hospital. A total of randomly selected 479 patients were involved. Initially, each patient individually was asked whether he willingly wanted to participate in the survey or not. Each patient who was called and accepted to participate in the study was included in the study. Ethical approval was obtained from Ethics Committee of the Gaziantep University Medical Faculty Hospital (approval no: 02/04/2013-134). All the participant patients consented.

### Questionnaire Form

The questionnaire form was composed of two parts. In the first part, there were eight questions posed to inquire about gender, age, educational status, occupation, monthly income, marital status, residence and chronic diseases (diabetes mellitus, hypertension, hyperlipidemia, chronic infectious diseases, oncological and neurological diseases etc.). The patients were categorized into three groups which were low-, middle- or high-income earners. The patients with a monthly income lower than minimum wage were defined as having low-income level, those with a monthly income level up to a double minimum wage were appraised as being in a middle-income level range and the patients who had even more monthly income were classified as high-income earners. In the second part, all patients were asked the question of "what is geriatrics?" The meaning of "geriatrics", literally a branch of medical science deals with older adult's health and diseases, was explained to patients who declared that they knew what the "geriatrics" was, but indeed who mis-knew it. Next, the question, "to designate the department, which of the following would you like to use, "older adult's health and diseases" as a statement or "geriatrics" as a title?" was posed to each patient.

## Statistics

The resultant data was analyzed with SPSS 20.0 (SPSS Inc., Chicago, Illinois, USA) software. The descriptive statistics were presented as mean  $\pm$  standard deviation (SD). Independent two sample groups were compared to each other by using the Student's t-test. The chi-squared test was applied to analyze categorical variables. Two sided values of  $p < 0.05$  were considered of statistical significance.

## Results

The mean age of the patients in the survey was  $39.3 \pm 15.3$  and 59.3% (n=284) of them were women. While 31.4% (n=150) had a bachelor's degree, 12.4% (n=59) were illiterate. Eighty-nine point four percent (n=428) of the patients were living in a city and 39.4% (n=189) in a low-income level range. The most common diseases were diabetes mellitus (33.2%), hypertension (25.1%) and hyperlipidemia (13.4%) respectively. The detailed socio-demographic attributes were depicted in Table 1.

Twenty-eight percent (n=134) of the patients were declared that they knew what the "geriatrics" is. However, only 13.2% (n=63) of them satisfactorily defined the geriatrics as a medical department dealing with older adult's health and diseases. But then, it was corroborated that the remaining had some wrong information about the geriatrics. Nine-point-six (n=46) of them were considering the geriatrics as an illness, 2.3% (n=11) as a brand name of a drug, 0.6% (n=3) as a cliffhanger on tv, 0.6% (n=3) as a car brand, 0.4% (n=2) as a city, 0.4% (n=2) as a country name, 0.4% (n=2) as being one of the organs in the body and 0.4% (n=2) as a film star (Table 2). Where the patients who properly told the meaning of the "geriatrics" (13.2%), acquired the knowledge about it from was also explored. 52.3% (n=33) asserted that they had first acquainted with the "geriatrics" in hospitals, 17.4% (n=11) through relatives, 6.3% (n=4) through media and as to the remaining 24% (n=15), they declared other options as a source of knowledge.

When the patients were classified according to the educational level, the awareness level about the geriatrics was conspicuously the highest in two groups, the bachelor's degree and high school graduate, respectively 21.3% and 14.3% of whom properly knew exact meaning of the geriatrics. The higher educational level among the patients in the survey, the more sophisticated awareness about the geriatrics was encountered ( $p < 0.015$ ). When the patients were classified according to the occupation, the awareness level about the geriatrics was conspicuously the highest in two groups, the officers and the students, respectively 19.6% and 18.9% of whom properly knew exact meaning of the "geriatrics" ( $p < 0.036$ ). There was also a significant difference in terms of awareness level between the patients having at least one chronic disease or not ( $p < 0.05$ ). A higher awareness level was observed among the patients in a high-income level

range ( $p < 0.001$ ). There was no marked difference according the gender ( $p > 0.05$ ) (Table 3).

After explaining what the "geriatrics" is to the patients who were not able to approximate the correct meaning or had never heard of it before, which of the following they would prefer to use for designation of the department, the descriptive statement of the "older adult's health and diseases" or the title of the "geriatrics", was asked to all patients. While 24.6% ( $n = 118$ ) of them preferred to use the title, 75.4% ( $n = 361$ ) preferred the statement. It was also detected that the higher the level of income among the patients, the more frequently they preferred to use the title ( $p = 0.046$ ). There was no marked difference in terms of preference, the statement or the title, when the patient groups compared to each other according to educational level, occupation or residence ( $p > 0.05$ ).

### Discussion

The geriatrics, as a discipline, should be made more familiar in society and prevalent in health institutions to improve health status of the older adults. In this survey study, 86.8% of the patients did not know what the geriatrics is. After the

"geriatrics" was elucidated to patients who had some wrong convictions about it or did not know it at all, which one they would like to use for designation of the geriatric departments, the statement of the "older adult's health and diseases" or the title of the "geriatrics" was asked to the patients and it was seen that most patients (75.4%) chose to use the statement.

The "geriatrics", as a term, was reproduced from the "geronte", a group of mature men over the 60 years, who formed the legislative assembly (Gerousia) of Athens. French physicians had antecedently put the phrase "gerocomie"—a term used to imply the requirement of imaginative facilities for older adults—into the medical jargon that corresponds to the institutions in where the older adults could be adequately cared for and treated (5). One of the first articles about the geriatric medicine was "Diseases of Advanced Life", published in 1849 by George Day (6,7). In 1881, Charcot was the first physician to set forth that the geriatric medicine should be a medical specialty, based upon his observations of a residential aged care facility in Paris (8).

Notwithstanding those olden consideration we mentioned; it was only able to be plausible to conceive of a modern geriatrics following launching of the word "geriatrics" by Nascher (9). Nascher (9) was born in Vienna, 1863. He became a pharmacist in 1882 and was qualified as a medical doctor by New York University in 1885. Nascher (9) published two articles covering a prospectively brand-new view regarding the aging and age-related diseases in New York Medical Journal in 1909. He exactly composed, "geriatrics, from geras, old age and iatrikos, relating to the physician, is a term I would suggest as an addition to our vocabulary to cover the same field that is covered in old age that is covered by the term pediatrics in childhood, to emphasize

n=479	
<b>Age</b>	39.30±15.30
<b>Gender (%)</b>	
Female/Male	59.3/40.7
<b>Educational level (%)</b>	
Uneducated	12.6 (n=60)
Primary school graduate	26.5 (n=127)
Secondary school graduate	7.7 (n=37)
High school graduate	21.9 (n=105)
University	31.3 (n=150)
<b>Occupation (%)</b>	
Unemployed	4 (n=19)
Farmer	4 (n=19)
Retiree	9 (n=43)
Self-employment	25.7 (n=123)
Officer	27.5 (n=132)
Student	29.8 (n=143)
<b>Residence (%)</b>	
Urban	89.4 (n=428)
Rural	10.6 (n=51)
<b>Presence of any chronic disease (%)</b>	40.3 (n=193)
<b>How much percent of the patients accurately know the geriatrics? (%)</b>	13.2 (n=63)

n=479	
<b>Do you know what the "geriatrics" is?</b>	
Yes	28% (n=134)
Elderly Health and Diseases	13.2% (n=63) (answer correctly)
Incorrect answer	14.8% (n=71)
<b>Division of the remaining patients who said that they knew the meaning but couldn't know the correct meaning</b>	
An illness	9.6% (n=46)
A brand name of a drug	2.3% (n=11)
A cliffhanger on tv	0.6% (n=3)
A car brand	0.6% (n=3)
A city	0.4% (n=2)
A country	0.4% (n=2)
One of the organs in the body	0.4% (n=2)
A film star	0.4% (n=2)

the necessity of considering senility and its disease apart from maturity and to assign it a separate place in medicine." in 1909. As a contribution to the terminology, he suggested that the term "geriatrics" would be used to represent "medicine branch dealing with diseases and care of older adults", as in the case of "pediatrics" representing "medicine branch dealing with childhood diseases and health". He referred to the term "pediatrics", previously assigned one, meaning the medicine of the childhood, and offered to use the term "geriatrics" in an identical manner.

In the last century, both the geriatrics and gerontology disciplines increased and made significant progresses particularly in the last 10-20 year period of the century. The geriatrics clinics have been serving yet in only a few university hospitals or healthcare institutions in our country. Although much more clinics than we now have are urgently required to adequately reach the older adults in need, supply ample amount of medical cases for education of medical students and health care professionals and train the staff to be employed in geriatrics clinics or services, it is gladsome that new geriatric departments and clinics under auspices of the internal medicine departments are slowly but surely sprouting around the country day by day.

**Table 3. The frequency of correct answer to the question, what is the geriatrics? and socio-economic attributes**

How much percent properly know the geriatrics?	(%) (n=63)	p
<b>Education</b>		
Uneducated	3.2 (n=2)	p=0.015
Primary school	5.5 (n=7)	
Secondary school	13.5 (n=5)	
High school	14.3 (n=15)	
University	21.3 (n=32)	
<b>Occupation</b>		
Self-employment	4.9 (n=6)	p=0.036
Unemployed	5.3 (n=1)	
Retiree	7 (n=3)	
Officer	18.9 (n=25)	
Student	19.6 (n=28)	
<b>Income level</b>		
Low	8.7 (n=18)	p>0.05
Middle	10 (n=22)	
High	36.5 (n=23)	
<b>Residence</b>		
Urban	13.1 (n=56)	p>0.05
Rural	13.7 (n=7)	

The physicians, specialized in any branch of medicine, obviously will encounter older adult patients in the future because of structural alterations in population pyramids. Evaluation, examination, follow-up or nursing of the older adults requires certain exclusive aspects of medical knowledge and skills which are supposed to have been gorgeously grasped by the physicians or any other health care professionals occupying with the older adults (10). Therefore, it is considered that relaying of those medical aspects to the medical students help us conquer the common fear of examining older adults, overcome the difficulties and reduce mistakes in patient diagnosis and treatment. Implantation of a "geriatric insight" into the medical education would also encourage young doctors to become a geriatrist.

Also, the geriatrics, as a discipline, should be made more familiar in society and prevalent in health institutions to improve health status of the older adults. In this survey study, 86.3% of the patients did not know what the geriatrics is. In one of the previous studies, Kızırlaranoğlu et al. (11) determined the level of awareness about the geriatrics at 11.6%, which is close to the level we reached in our survey. After the "geriatrics" was elucidated to patients who had some wrong convictions about it or did not know it at all, which one they would like to use for designation of the geriatric departments, the statement of the "older adult's health and diseases" or the title of the "geriatrics" was asked to the patients and it was seen that most patients (75.4%) chose to use the statement. The preferences of the patients did not differ according to the educational level, occupational status or residence of the patients. However, the higher income level, the more frequently encountered preference was the title of the "geriatrics".

A key strength of this study is; before our study only one study. Kızırlaranoğlu et al. (11) determined the awareness level about the geriatrics. Another strong aspect of its design is its large sample size.

**Conclusion**

A very low awareness level about the geriatrics among the patients was encountered in our survey. In addition, most of the patients preferred to use the statement, "older adult's health and diseases" instead of the title, the "geriatrics". As it is formerly mentioned, Nascher (9) suggested that the title of the "geriatrics" should be used for discipline dealing with older adult's health and diseases, like analogy existing between the title of the "pediatrics" and the statement of the "child health and diseases". In our country, awareness level about the geriatrics is very low in society regardless of age, gender or educational level. Even though the "geriatrics" as a title, defining the department is used internationally, it has not accomplished to have been very well-known in Turkey, through recent years. So, it might be

more plausible to use the descriptive statement, "older adults health and diseases" in conjunction with the title "geriatrics" as it is the case for "child health and diseases" which has used to take part in medical jargon since many years, instead of or in conjunction with the title "pediatrics". To say the least, if we used that descriptive statement more frequently in conjunction with the title over the course of public disclosure efforts, we would get a better awareness of society about geriatrics in society.

### Ethics

**Ethics Committee Approval:** Ethical approval was obtained from Ethics Committee of the Gaziantep University Medical Faculty Hospital (approval no: 02/04/2013-134).

**Informed Consent:** Informed consent was obtained all of the patients.

**Peer-review:** Internally peer-reviewed.

### Authorship Contributions

Concept: Z.A.Ö., Design: Z.A.Ö., Data Collection or Processing: A.A., Analysis or Interpretation: İ.H.T., Literature Search: M.Ö., Writing: M.G.

**Conflict of Interest:** No conflict of interest was declared by the authors.

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