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Evaluation of clinical and demographic characteristics of elderly patients receiving inpatient treatment in a university hospital psychiatry clinic

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■ MAIN POINTS

- This retrospective study analyzed 252 geriatric inpatients (≥ 65 years) treated in a university psychiatry clinic between 2018 and 2023. The most common diagnoses were anxiety disorders (46%), depression (25.0%), mood disorders (10.7%), and psychotic disorders (8.3%).
- Rehospitalization occurred in 22.8% of patients, mainly due to anxiety; 39% of these had chronic comorbidities.
- Depression co-occurred with anxiety in 15.3% of cases.
- Dementia was detected in 37.5% of patients undergoing cognitive screening.
- The rate of female patients hospitalized due to psychotic disorders was higher than that of males and chronic diseases were more common among patients covered by Yeşil Kart.

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■ ABSTRACT

Aim: In this study, we aimed to examine the sociodemographic and clinical characteristics of geriatric patients receiving inpatient treatment in the psychiatry clinic of a university hospital.

Materials and Methods: This retrospective study was conducted by examining the medical records of patients aged 65 and over who received psychiatric treatment between January 1, 2018 and December 31, 2023. Data related to the patients were obtained from the electronic patient database of the hospital.

Results: A total of 252 patients, consisting of 124 females and 128 males, were included in the study. The mean age of the patients was 70.67 ± 5.01 years, and the average length of hospital stay was 17.35 ± 12.18 days. The diagnoses were, respectively, anxiety disorder (46.8%), depression (25.0%), mood disorder (10.7%), psychotic disorders (8.3%), alcohol/substance dependence (2.0%), psychiatric disorders related to general medical conditions (4.8%), dementia (1.2%), and intellectual disability (0.4%). In total, 22.8% had received inpatient treatment more than once. The condition that most often caused repeated hospitalizations was anxiety disorder, and 39% of these patients had a coexisting chronic disease. Depression was the most common mental disorder accompanying anxiety (15.3%). Mild or higher dementia was detected in 24 of 64 patients who underwent Mini-Mental State Examination. While the rates of comorbid chronic diseases were high in patients with Yeşil Kart (s form of preliminary social security), the rate of female patients hospitalized due to psychotic disorders was higher than that of males.

Conclusion: Determining the frequency of psychiatric disorders in hospitalized elderly patients and knowing the characteristics that cause repeated hospitalization will contribute to the planning and development of appropriate treatment strategies.

Keywords: Old age, Psychiatry, Demographic characteristics, Repeated hospitalization

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■ INTRODUCTION

Aging is a physiological process in which physical and mental abilities are irreversibly reduced. The World Health Organization (WHO) has determined the beginning of this process as the age of 65, and has classified it as 65-74 as young-old, 75-84 as old-old and 85+ as oldest-old [1].

As is the case worldwide, the elderly population in our country is also rapidly increasing. According to data from the Turkish Statistical Institute (TUIK), the proportion of the elderly population increased by 21.4% in the last five years and reached 8 million 722 thousand 806 people in 2023. This ra-

tio is expected to increase to 12.9% in 2030 and 25.6% in 2080 [2]. This demographic change feeds into increasing life expectancy and decreasing birth rates, and is certainly a happy situation [3,4]. Because most elderly people are in good shape in terms of both mental and physical health and continue to contribute to their families and society. On the other hand, physiological changes and social and economic losses that occur with aging pave the way for the development of mental illnesses as well as physical illnesses in the elderly.

Studies report that approximately 25% of elderly individuals have a significant mental disorder [5]. Perhaps the most com-

mon psychiatric illness in elderly patients is depression. Depression is a significant risk factor for disability and death. WHO reports that global depressive disorder among older adult's ranges from 10% to 20%. Among all mentally ill, the rate of depressive disorder patients is 40%. However, although depression is a common mental health problem among the elderly population, approximately 50% of cases remain undiagnosed [6]. The psychiatric diseases frequently seen in the elderly population are the anxiety disorders (AD). The prevalence of anxiety in community samples varies between 1.2% and 15% while in clinical settings, it varies between 1% and 28%. The prevalence of anxiety symptoms is much higher, ranging from 15% to 52.3% in community samples and 15% to 56% in clinical samples [7]. In a study conducted in our country involving 462 individuals aged over 65, the current prevalence of all anxiety disorders was reported as 17.1% and the lifetime prevalence as 18.6% [8]. However, anxiety often accompanies depression, and almost half of the patients exhibit significant symptoms of depression and anxiety [9,10].

Panic disorders and obsessive-compulsive disorder are less common in the elderly, while specific phobias and generalized anxiety disorder (GAD) are more common mental disorders. The rate of psychotic disorders seen in the elderly varies between 0.1% and 0.5%, and psychotic attacks seen during this period may occur for the first time as a continuation of a pre-existing disease or mostly due to organic causes. The prevalence of manic episodes tends to decrease with aging [11]. Dementia is one of the most common neurological diseases in the geriatric population. Alzheimer's type dementia is the most common type in this group and constitutes 50-75% of all dementia cases [12].

Although psychiatric illnesses are common in the elderly population, they are often difficult to recognize. The fact that psychiatric diseases in the elderly may show different clinical findings compared to adults, patients denying or forgetting these conditions, the perception that the symptoms of some diseases, especially dementia and depression, are a natural part of the aging process, and the masking of symptoms by chronic diseases and medications used, can make it difficult for a correct diagnosis [5]. As the elderly population increases, it is anticipated that these and similar negativities will cause an increase in the need for care services and treatment costs in addition to individual losses in the future [13]. Moreover, aging and the challenges associated with it affect not only the individual but also the society to which the individual belongs. Therefore, identifying the characteristics and diagnostic distributions of elderly individuals with mental illness is essential for setting service goals, improving service quality, and ensuring that these individuals can lead meaningful and dignified lives.

Despite the rapidly increasing elderly population in our country, data on the assessment of mental health and the utilization of mental health services in this age group remain quite limited. In particular, there is a lack of systematic data re-

garding the psychiatric admission profiles, diagnostic distributions, and hospitalization patterns of individuals aged 65 and older.

The aim of this study is to determine the sociodemographic characteristics and diagnostic profiles of patients aged 65 and over who received inpatient psychiatric treatment at the Psychiatry Clinic of İnönü University Faculty of Medicine Hospital between 2018 and 2023. Additionally, the study seeks to examine clinical and cognitive factors that may be associated with repeated hospitalizations in this population.

In doing so, this study aims to contribute to a better understanding of the mental health needs of elderly individuals, provide a scientific basis for mental health service planning, and establish a region-specific dataset that may serve as a reference for future research.

■ MATERIALS AND METHODS

In this retrospective study, data of patients aged 65 and older who received inpatient treatment at the Psychiatry Clinic of İnönü University Faculty of Medicine Hospital between January 1, 2018, and December 31, 2023, were examined. Patient-related information such as age, gender, type of health insurance (Emekli Sandığı, Bağ-Kur, SSK, Yeşil Kart), admission diagnosis, history of comorbid chronic illnesses (e.g., diabetes mellitus, congestive heart failure, hypertension, chronic obstructive pulmonary disease), length of hospital stay, number of repeated hospitalizations, and Mini-Mental State Examination (MMSE) scores were obtained from the hospital's electronic medical records and documented by the researchers.

In our clinic, psychiatric diagnoses are made based on the DSM-5 diagnostic criteria [14]. Due to the small sample size, diagnoses were classified under broader disease categories.

Sample size

Using the G*Power program, with an effect size of 0.3, alpha error of 0.05, and a power of 0.95, the minimum required sample size was calculated to be 220 (15).

Mini mental state examination (MMSE)

The MMSE is a simple screening test used to assess cognitive functions. It consists of 11 items, categorized under five cognitive domains, with a maximum possible score of 30 [16]. Its validity and reliability in Turkish were established by Güngen et al. in 2002 [17]. Scores between 24 and 30 are considered indicative of normal cognitive function; 19–23 suggest mild, 10–18 moderate, and ≤ 9 severe cognitive impairment [18].

Statistical analysis

The data were analyzed by transferring them to the IBM SPSS Statistics 22.0 (Armonk, NY: IBM Corp.) package program. Qualitative data from the variables included in the study were summarized by number (percentage). The conformity of

quantitative data to normal distribution was evaluated using the Kolmogorov-Smirnov test, and normally distributed data were summarized with mean $\pm$ standard deviation. In statistical analyses, categorical variables were compared using the chi-square test and the Yates-corrected chi-square test. The results were evaluated at a 95% confidence interval and a significance level of $p < 0.05$.

■ RESULTS

Our psychiatric ward has a capacity of 32 beds. Between 2018 and the end of 2023, 2,264 patients underwent inpatient treatment, among whom 252 were aged 65 years or older. The mean age of the patients analyzed within the scope of the study was 70.67 ± 5.01 and 49.2% (n:124) were female. When hospitalization diagnoses were evaluated, 46.8% had anxiety disorder, 25.0% depression, 10.7% mood disorder, and 8.3% had psychotic disorder. The mean initial hospitalization period was 17.35 ± 12.18 days.

Table 1. Demographic characteristics of patients, hospitalization diagnoses, MMSE scores, re-hospitalization rates.

	Mean $\pm$ SD
Age (Mean $\pm$ SD)	70.67 $\pm$ 5.01
Initial hospitalization duration (mean $\pm$ SD)	17.35 $\pm$ 12.18
	n (%)
Health Insurance	
Emekli Sandığı	77 (30.5)
Bağ-Kur	39 (15.5)
SSK	94 (37.3)
Yeşil Kart	42 (16.7)
Gender n(%)	
Female	124 (49.2)
Male	128 (50.8)
History of additional chronic diseases n(%)	
Yes	143 (56.7)
No	109 (43.3)
Initial hospitalization primary diagnosis n (%)	
Anxiety Disorder	118(46.8)
Depression	63(25)
Psychotic Disorders	21(8.3)
Adjustment Disorders	2(0.8)
General Medical Condition	12(4.8)
Intellectual Disability	1(0.4)
Mood Disorder	27(10.7)
Alcohol/Substance Addiction	5(2)
Dementia	3(1.2)
MMSE n(%)	
Normal	40(62.5)
Mild Dementia	23(35.9)
Moderate Dementia	1(1.6)
Severe Dementia	0 (0.0)
Repeated hospitalization	
Yes	55(22.8)
No	197(77.2)

MMSE was applied to 64 patients during their inpatient treatment; 35.9% of the patients who underwent MMSE had mild dementia (n:23) and 1.6% (n:1) had moderate dementia.

Demographic data, hospitalization diagnosis, MMSE scores, repeated hospitalization diagnoses and hospitalization duration of the patients included in the study are given in Table 1.

Findings regarding the distribution of hospitalization diagnoses according to demographic and clinical variables are given in Table 2. The proportion of female patients hospitalized due to psychotic disorders was 11.7% (n=15), while the proportion of male patients was 4.8% (n=6), and the difference between them was statistically significant ($p=0.048$). The rate of hospitalization due to mental disorders related to general medical condition (GMC) in patients with Yeşil Kart health insurance was 14.3% (n=6), and this was statistically significantly higher than those with other health insurance ($p=0.012$).

The psychiatric diagnoses accompanying anxiety disorder were, depression (15.3%; n=18), alcohol/substance use (3.4%; n=4) and psychotic disorder (3.4%; n=4), sleep disorder (1.2%; n=2), respectively, while the psychiatric diagnoses accompanying dementia were anxiety (50%; n:12), depression (33.3%; n:8), mood disorder (12.5%; n:3) and psychotic disorder (4.2%; n:1), respectively.

According to the neuropsychiatric test results performed during hospitalization, 33.3% (n: 9) of 27 male patients were diagnosed with mild dementia, 37.8% (n:14) of 37 female patients were diagnosed with mild dementia, and 2.7% (n:1) were diagnosed with moderate dementia. When evaluated according to age groups, it was found that 32.7% (n:16) of patients aged 65-74 had mild dementia, 50.0% (n:7) of patients aged 75-84 had mild dementia, and 7.1% (n:1) had moderate dementia. Information on the distribution of dementia diagnoses by gender and age is given in Table 3.

Of the 55 patients with repeated hospitalizations, 41.8% (n:23) were male and 58.2% (n:32) were female, and their mean age was 71.08 ± 5.09 . Of the 109 patients with additional chronic diseases, 33.9% (n:37) had repeated hospitalizations. In the comparison made to determine whether there was a relationship between repeated hospitalization and clinical and demographic variables, no significant difference was detected ($p > 0.05$). The evaluation of the data of patients with repeated hospitalizations regarding age, gender, initial hospitalization duration, additional chronic disease and presence of dementia is given in Table 4.

When the diagnostic distribution of 55 patients with repeated hospitalizations was examined, the most common condition leading to rehospitalization was anxiety disorder (36.4%), followed by depression (32.7%). Other diagnoses were observed at lower frequencies, including psychotic disorders (12.7%), mood disorders (9.1%), alcohol/substance use disorders (3.6%), dementia (1.8%), adjustment disorder (1.8%), and psychiatric conditions due to general medical ill-

Table 2. Distribution of psychiatric diagnoses according to demographic and clinical variables.

	Anxiety Disorder		Depression		Psychotic Disorders		GMC		Mood Disorders		Dementia	
N (%)	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Gender												
Female	53(41.4)	75(58.6)	34(26.6)	94(73.4)	15(11.7)	113(88.3)	5(3.9)	123(96.1)	15(11.7)	113(88.3)	15(11.7)	113(88.3)
Male	65(52.4)	59(47.6)	29(23.4)	95(76.6)	6(4.8)	118(95.2)	7(5.6)	117(94.4)	12(9.7)	112(90.3)	9(7.3)	115(92.7)
p	0.080		0.561		0.048		0.517		0.600		0.228	
Age												
65-74	92(47.2)	103(52.8)	51(26.2)	144(73.8)	18(9.2)	177(90.8)	8(4.1)	187(95.9)	19(9.7)	176(90.3)	16(8.2)	179(91.8)
75-84	25(46.3)	29(53.7)	12(22.2)	42(77.8)	2(3.7)	52(96.3)	4(7.4)	50(92.6)	8(14.8)	46(85.2)	8(14.8)	46(85.2)
85≥	1(33.3)	2(66.7)	0(0.0)	3(100)	1(33.3)	2(66.7)	0(0.0)	3(100)	0(0.0)	3(100)	0(0.0)	3(100)
p	0.889		0.5065		0.124		0.557		0.472		0.292	
Health Insurance												
Emekli Sandığı	38(49.4)	39(50.6)	24(31.2)	53(68.8)	7(9.1)	70(90.9)	1(1.3)	76(98.7)	5(6.5)	72(93.5)	6(7.8)	71(92.2)
Bağkur	23(59)	16(41)	6(15.4)	33(84.6)	3(7.7)	36(92.3)	2(5.1)	37(94.9)	3(7.7)	36(92.3)	7(17.9)	32(82.1)
SSK	43(45.7)	51(54.3)	27(28.7)	67(71.3)	5(5.3)	89(94.7)	3(3.2)	91(96.8)	12(12.8)	82(87.2)	9(9.6)	85(90.4)
Yeşil Kart	14(33.3)	28(66.7)	6(14.3)	36(85.7)	6(14.3)	36(85.7)	6(14.3)	36(85.7)	7(16.7)	35(83.3)	2(4.8)	40(95.2)
p	0.131		0.080		0.370		0.012		0.287		0.205	
Additional Chronic Disease												
Yes	46(42.2)	63(57.8)	25(22.9)	84(77.1)	11(10.1)	98(89.9)	9(8.3)	100(91.7)	12(11)	97(89.0)	6(5.5)	103(94.5)
No	72(50.3)	71(49.7)	38(26.6)	105(73.4)	10(7)	33(93)	3(2.1)	140(97.9)	15(10.5)	128(89.5)	18(12.6)	125(87.4)
p	0.199		0.509		0.256		0.023		0.895		0.058	
GMC: General Medical Condition												

GMC: General Medical Condition

Table 3. Distribution of dementia diagnosis by gender and age groups.

	Normal n(%)	Mild Dementia n(%)	Moderate Dementia n(%)	Severe Dementia n(%)
Gender				
Male	18 (66.7%)	9 (33.3%)	0 (0.0%)	0 (0.0%)
Female	22 (59.5%)	14 (37.8%)	1 (2.7%)	0 (0.0%)
Age Groups				
65-74	33 (67.3%)	16 (32.7%)	0 (0.0%)	0 (0.0%)
75-84	6 (42.9%)	7 (50.0%)	1 (7.1%)	0 (0.0%)
85 and older	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

ness (1.8%). The distribution of primary diagnoses among elderly patients with multiple psychiatric hospitalizations is presented in Table 5.

■ DISCUSSION

In this study, the diagnostic distribution and demographic characteristics of elderly patients receiving inpatient treatment in a psychiatric clinic were examined.

Previous studies have shown that sociodemographic characteristics such as age, gender, marital status, economic level, social environment, and previous health care experiences, as well as the duration and severity of mental disorder, are effective in seeking psychiatric help [19]. None of the demographic variables examined in this study were found to be effective in psychiatric hospitalization. However, it has been determined that the rate of hospitalization due to GMC-related disorders in patients with health insurance and Yeşil Kart is higher than

in individuals with other health insurances. The additional chronic disease rates of these patients were also found to be higher than the others. Yeşil Kart is a health insurance program offered in our country to individuals who do not own property and have low economic income [20]. In this context, it is known that Yeşil Kart patients are expected to experience financial difficulties. Financial difficulties create serious obstacles to the prevention and treatment of diseases due to many reasons such as poor living conditions, malnutrition, increased stress levels, and restricted access to health services. Therefore, this result can be interpreted as the economic difficulties experienced may have negatively affected not only the physical health of individuals but also their mental health.

It has been reported in the literature that women with psychotic disorders are hospitalized less often than men, have shorter hospital stays, and have lower relapse rates [21,22,23].

Table 4. Relationship between repeated hospitalization and age, gender, duration of hospitalization, additional chronic disease and dementia.

		Repeated Hospitalization	n	Mean±SD	p
Age		No	197	71.08±5.090	0.087
		Yes	55	69.22±4.453	
Gender	Female	No	96	38.1%	0.055
		Yes	32	12.7%	
	Male	No	101	40.1%	
		Yes	23	9.1%	
Hospitalization duration		No	197	16.00±11.99	0.673
		Yes	55	22.01±11.73	
Additional chronic disease n(%)	No	No	125	49.6%	0.357
		Yes	18	7.1%	
	Yes	No	72	28.6%	
		Yes	37	14.7%	
Dementia n(%)	No	No	29	72.5%	0.663
		Yes	11	27.5%	
	Yes	No	18	75.0%	
		Yes	6	25.0%	

Table 5. Distribution of primary diagnoses of patients with repeated hospitalizations.

Primary Diagnose	n(%)
Anxiety Disorder	20(36.4)
Depression	18(32.7)
Psychotic Disorders	7(12.7)
Mood Disorder	5(9.1)
Alcohol/Substance Addiction	2(3.6)
Dementia	1(1.8)
Adjustment Disorders	1(1.8)
General Medical Condition	1(1.8)

In this study, contrary to expectations, it was found that the proportion of female patients treated with a diagnosis of psychotic disorder was higher than that of males. Although our study was not designed to explain this result, this difference may be attributable to a shift in the onset of psychotic disorders from a male predominance in the early twenties to a female predominance in older ages, leading to more severe symptoms in elderly women [24]; the effects of hormonal changes that occur with aging on psychological well-being [25]; and the lower resistance of women to seeking psychiatric help [26]. Earlier onset of psychosis, more frequent medication uses with associated side effects, and increased physical illnesses linked to gender may contribute to shorter lifespans in male psychotic patients. Therefore, this result may be a reflection of the shorter life expectancy of male psychotic patients [27].

Despite its relative neglect, numerous studies suggest that anxiety is highly prevalent among older adults and is associated with significant distress and morbidity [28]. In their study examining 304 elderly individuals who visited the outpatient clinic between 2016 and August 2018, Harmacı et al. reported that the most frequently diagnosed mental disorder

was generalized anxiety disorder [13]. Similarly, Kalenderoğlu et al. examined 57 patients who applied to a psychiatry clinic between 2004 and 2005 and showed that the most common diagnosed conditions were anxiety disorder (31.6%), dementia (17.5%) and depression (10.5%), respectively [29]. Şen B et al. found that among 95 elderly patients who received inpatient treatment between 2010 and 2017, the most common diagnosis was depression (38.9%), followed by anxiety disorder (16.7%), psychotic disorder (11.1%) and bipolar disorder (15.3%) [13]. In this study covering a 5-year period, it was found that the most common reason for hospitalization of the elderly group was anxiety disorders (46.8%), followed by depression (25%), mood disorders (10.7%), psychotic disorders (8.3%), GMC (4.8%), alcohol/substance dependence (2%), adjustment disorders (0.8) and dementia (1.2%). Moreover, it was observed that the most frequent diagnosis among the reasons requiring repeated hospitalization was anxiety disorder (36.4%). This result was consistent with previous studies. The high prevalence of anxiety among elderly individuals can be explained by factors such as a decline in physical strength with aging, an increase in physical illnesses, economic difficulties, changes in circumstances, social isolation, decreased autonomy, and awareness of mortality [11, 30].

As seen in studies showing a high prevalence of anxiety and chronic disease comorbidity, our study also found that patients with anxiety disorders had a high rate of chronic disease comorbidities (39%). Studies have shown that anxiety is effective in the development of many diseases such as inflammatory bowel disease, cardiovascular diseases, diabetes, and chronic pain, especially by causing disruptions in the stress response. In addition, the coexistence of these two conditions may lead to an exacerbation of symptoms and/or masking of existing symptoms, preventing early diagnosis and treatment of the underlying disease and worsening the prognosis

[31,32]. Therefore, the findings highlight the need to be careful about comorbid physical diseases, especially in elderly patients presenting with anxiety disorders.

One of the most common neurological diseases in elderly patients is dementia. Epidemiological studies have reported a worldwide prevalence of dementia of 5% to 7% in people aged 60 years and older [33]. According to World Health Organization estimates, the number of patients with dementia, which is currently over 55 million, is expected to reach 75 million by 2030 and 132 million by 2050. Studies show that a new dementia diagnosis is made every three seconds and 60-80% of them are Alzheimer's patients. According to the 2022 Türkiye Health Survey Report published by TÜİK, the prevalence of Alzheimer's disease in individuals over the age of 65 in our country is 5.5% [34]. Almost two-thirds of patients with dementia have a comorbid mental illness and therefore need psychiatric help and sometimes hospitalization [35]. In this study, the number of patients hospitalized due to dementia was initially only three; however, following further testing, this rate increased to approximately 9.5%. Moreover, it was found that 87% of these patients had a comorbid psychiatric disorder, with anxiety (50.0%) and depression (33.3%) being the most common. Dementia is a disease that leads to a decline in cognitive functions, daily living activities, and disruptions in emotional and behavioral domains. People with dementia often need care. Family members, while caring for these patients, often face significant pressure and challenges related to finances, personal matters, marriage, and relationships. In addition, the chronic nature of the disease also leads to an increased burden on healthcare services. In 2018, the worldwide cost of dementia was \$1 trillion, and is expected to rise to \$2 trillion by 2030 [36]. Therefore, giving due importance to neurocognitive examinations of elderly patients applying to the clinic will help in early diagnosis of the disease, reduce the burden on the individual and the family, and contribute to the protection of the global economy.

One of the notable results of this study is the higher number of geriatric patients seeking psychiatric care compared to previous studies. In our study, the number of patients who received inpatient treatment over a 5-year period was 252, while Şen et al. reported this number as 95 over a 7-year period [5]. This result suggests that over time, the proportion of the elderly population has increased, mental health services have become more widespread, and societal prejudices related to seeking psychiatric help may have changed.

Limitations

This study has a number of limitations. Firstly, the study included patients treated at a single center, meaning that the results obtained do not reflect the general population. Secondly; the retrospective nature of the study and the use of electronic records limited the investigation of factors that may influence the development of mental health issues, such as marital status, occupation, living environment, life stressors,

and the type of comorbid disease. Thirdly, the small sample size prevented the analysis of disease subgroups. Lastly, the absence of MMSE data for some patients may have limited the ability to assess the relationship between cognitive status and other variables (e.g., length of hospitalization, repeated admissions, diagnosis). Future multicenter studies with larger sample sizes and more detailed data could help in developing more definitive conclusions. Despite these limitations, our study is the first to investigate this patient group in our region and can provide preliminary data for future studies.

CONCLUSION

In conclusion, the study is significant in terms of examining the distribution of diagnoses and socio-demographic variables in elderly patients. Social difficulties, multiple physical problems and sensory deficits increase the prevalence of psychiatric disorders in the elderly. Proper detection and management require specialist expertise and skills as well as multidisciplinary collaboration. Understanding the main mental issues of old age can guide the development of appropriate intervention methods. This approach can lead to more accurate and accessible treatment, ultimately improving the quality of life for both patients and their families.

Ethics Committee Approval: The study was approved by the Inonu University Non-Interventional Clinical Research Ethics Committee (Decision number: 2024/5974).

Informed Consent: This retrospective study was approved by the institutional ethics committee. Since the data were collected from existing medical records and anonymized, informed consent was not required.

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REFERENCES

1. Kuzu A, Aydın C, Yıldız M, Erik HE, Keskinkılıç HG. et al. Dünya sağlık örgütü Avrupa Bölgesi'nde yaşlanma ile ilgili seçilmiş bazı ölçütlerin değerlendirilmesi. *STED*. 2019;28(1):17-27. doi: 10.17942/sted.378109
2. TÜİK veri portalı. İstatistiklerle Yaşlılar, accessed January 10, 2025. <https://data.tuik.gov.tr/Bulten/Index?p=İstatistiklerle-Yaslılar-2023-53710> 2023.
3. Carcelén-Fraile MDC, Déniz-Ramírez NDP, Sabina-Campos J, et al. Exercise and Nutrition in the Mental Health of the Older Adult Population: A Randomized Controlled Clinical Trial. *Nutrients*. 2024;16(11):1741. doi: 10.3390/nu16111741.

4. Levkoff SE, MacArthur IW, Bucknall J. Elderly mental health in the developing world. *Soc Sci Med*. 1995;41(7):983-1003. doi: 10.1016/0277-9536(94)00434-u.
5. Şen B, Aydın M, Altınbaş K. Bir Üniversite Hastanesi Psikiyatri Kliniğinde Yatırılarak Tedavi Gören Yaşlı Hastaların Tanı ve Tedavilerinin Değerlendirilmesi. *Genel Tıp Derg*. 2020;30(1):5-10.
6. Zenebe Y, Akele B, W/Selassie M, Necho M. Prevalence and determinants of depression among old age: a systematic review and meta-analysis. *Ann Gen Psychiatry*. 2021;20(1):55. doi: 10.1186/s12991-021-00375-x.
7. Bryant C, Jackson H, Ames D. The prevalence of anxiety in older adults: methodological issues and a review of the literature. *J Affect Disord*. 2008;109(3):233-250. doi: 10.1016/j.jad.2007.11.008.
8. Kirmizioglu Y, Doğan O, Kuğu N, Akyüz G. Prevalence of anxiety disorders among elderly people. *Int J Geriatr Psychiatry*. 2009;24(9):1026-1033. doi: 10.1002/gps.2215.
9. Parkar SR. Elderly mental health: needs. *Mens Sana Monogr*. 2015;13(1):91-99. doi: 10.4103/0973-1229.153311.
10. Pandey NM, Tripathi RK, Kar SK, Vidya KL, Singh N. Mental health promotion for elderly populations in World Health Organization South-East Asia Region: Needs and resource gaps. *World J Psychiatry*. 2022;12(1):117-127. doi: 10.5498/wjp.v12.i1.117.
11. Aslan M, and Çiçek H. Yaşlanma ve yaşlanma dönemiyle ilişkili psikiyatrik sorunlar. *DÜ Sağlık Bil Enst Derg*. 2017; 7(1): 53-62.
12. Ağar A. Yaşlılarda ortaya çıkan psikolojik değişiklikler. *GBD*. 2020;3(2):75-80. doi: 10.47141/geriatrik.744968.
13. Harmancı H. Psikiyatri Kliniğine Başvuran Yaşlı Hastaların Klinik Ve Sosyodemografik Özellikleri: Bir Özel Tıp Fakültesi Hastanesi Deneyimi. *Kıbrıs Türk Psikiyatri ve Psikoloji Dergisi*. 2019;1(3): 152-157. doi: 10.35365/ctjpp.19.1.19
14. APA (2013) Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM 5). Washington, DC, American Psychiatric Association.
15. Buchner A, Erdfelder E, Faul F, et al. G* Power 3.1 Manual. Heinrich-Heine-Universität Düsseldorf; 2017.
16. Borson S, Scanlan JM, Watanabe J, Tu S P, Lessig M. Simplifying detection of cognitive impairment: comparison of the Mini-Cog and Mini-Mental State Examination in a multiethnic sample. *J Am Geriatr Soc*. 2005;53(5), 871-874. doi: 10.1111/j.1532-5415.2005.53269.x.
17. Güngen C, Ertan T, Eker E, Yaşar R, Engin F. Standardize mini mental test'in Türk toplumunda hafif demans tanısında geçerlik ve güvenilirliği. *Türk Psikiyatri Dergisi*. 2002;13(4), 273-281.
18. Cansel N, Datlı Yakaryılmaz F. The Relationship Between Malnutrition, Depressive Symptoms, and Cognitive Impairment in Geriatric Patients. *Med Records*. 2022;4(2):217-23. doi:10.37990/medr.1082777.
19. Keskin A, Ünlüoğlu İ, Bilge U, Yenilmez Ç. Ruhsal Bozuklukların Yaygınlığı, Cinsiyetlere Göre Dağılımı ve Psikiyatrik Destek Alma ile İlişkisi. *Nöropsikiyatri Arşivi*. 2013;50(4): 344-351. doi: 10.4274/Npa.y6522.
20. Ödeme Gücü Olmayan Vatandaşların Tedavi Giderlerinin Devlet Tarafından Karşılanması ve Yeşil Kart Uygulaması Hakkında Yönetmelik, accessed February 20, 2025. <https://www.aile.gov.tr/ey-hgm/mevzuat/ulusal-mevzuat/yonetmelikler/odeme-gucu-olmayan-vatandaslarin-tedavi-giderlerinin-devlet-tarafindan-karsilanmasi-ve-yesil-kart-uygulamasi-hakkinda-yonetmelik/>.
21. Galbally M, Wynter K, Siskind D, Correll CU, Northwood K, Every-Palmer S. Sex Differences Between Female and Male Individuals in Antipsychotic Efficacy and Adverse Effects in the Treatment of Schizophrenia. *CNS Drugs*. 2024;38(7):559-570. doi: 10.1007/s40263-024-01089-w.
22. Salokangas RK. Prognostic implications of the sex of schizophrenic patients. *Br J Psychiatry*. 1983; 142:145-151. doi: 10.1192/bjp.142.2.145
23. Karamustafaoglu N, Tomruk N, Alpay N. Şizofrenide cinsiyet farklılıkları: Bir gözden geçirme. *Düşünen Adam*. 1998;11(2): 22-32.
24. Abel KM, Drake R, Goldstein JM. Sex differences in schizophrenia. *Int Rev Psychiatry*. 2010;22(5):417-428. doi: 10.3109/09540261.2010.515205.
25. Evlice Y E, Tamam L, Karataş G. Menopoz ve tedavi sürecinde ortaya çıkan ruhsal sorunlar. *Anadolu Psikiyatri Dergisi*. 2002;3(2):108-112.
26. Kahraman S. Yetişkinlerde Psikolojik Yardım Almaya İlişkin Tutumları Yordayan Değişkenlerin İncelenmesi: Psikolojik Belirtiler, İçgörü, Damgalanma ve Demografik Değişkenler. *Uluslararası Anadolu Sosyal Bilimler Dergisi*. 2024;8(2):462-486. doi: 10.47525/ulas-bid.1472685.
27. Yaşar H, Yıldız M. Şizofrenide 10 Yıllık Ölüm Oranı ve Risk Etmenlerinin Değerlendirmesi. *Türk Psikiyatri Dergisi*. 2021;32(3):151-159. doi: 10.5080/u25752.
28. Sable JA, Jeste DV. Anxiety disorders in older adults. *Curr Psychiatry Rep*. 2001;3(4):302-307. doi: 10.1007/s11920-001-0023-0
29. Kalenderoğlu A, Yumru M, Selek S, Cansel N, Vırt O, & Savaş H A. Gaziantep Üniversitesi Tıp Fakültesi Yaşlılık Psikiyatrisi Birimi'ne başvuran hastaların sosyodemografik ve klinik özellikleri. *Anadolu Psikiyatri Dergisi*. 2007;8(3): 179-185
30. Demet M M, Taşkın E O, Deniz F, Karaca N, İçelli İ. Manisa huzurevlerinde kalan yaşlılarda depresyon belirtilerinin yaygınlığı ve ilişkili risk etkenleri. *Türk Psikiyatri Dergisi*. 2002; 13(4): 290-299.
31. Palmer BW, Jeste DV, Sheikh JI. Anxiety disorders in the elderly: DSM-IV and other barriers to diagnosis and treatment. *J Affect Disord*. 1997;46(3):183-190. doi: 10.1016/s0165-0327(97)00146-8.
32. Roy-Byrne PP, Davidson KW, Kessler RC, et al. Anxiety disorders and comorbid medical illness. *Gen Hosp Psychiatry*. 2008;30(3):208-225. doi:10.1016/j.genhosppsych.2007.12.006.
33. Perry E, Walton K, Lambert K. Prevalence of Malnutrition in People with Dementia in Long-Term Care: A Systematic Review and Meta-Analysis. *Nutrients*. 2023;15(13):2927. doi: 10.3390/nu15132927.
34. 21 Eylül 2024 Dünya Alzheimer Günü, accessed February 20, 2025. <https://hsgm.saglik.gov.tr/tr/haberler-16/21-eylul-2024-dunya-alzheimer-gununu.html>.
35. Kunik ME, Snow AL, Molinari VA, et al. Health care utilization in dementia patients with psychiatric comorbidity. *Gerontologist*. 2003;43(1):86-91. doi: 10.1093/geront/43.1.86.
36. Demans Bakım Planı Modeli, accessed February 20, 2025. <https://www.aile.gov.tr/media/9332/demans-bak%C4%B1m-modeli-proje-kitab%C4%B1.pdf>.