

A SNAPSHOT OF A PSYCHIATRY OUTPATIENT CLINIC IN THE CAPITAL OF TURKEY: EVALUATION OF DIAGNOSES AND SOCIODEMOGRAPHIC CHARACTERISTICS OF APPLICANTS

Başkentte Bir Psikiyatri Polikliniğine Bakış: Başvuranların Tanı Ve Sosyodemografik Özelliklerinin Değerlendirilmesi

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ABSTRACT

ÖZ

Objective: The aim of this study was to investigate admissions to a psychiatry outpatient clinic in an urban area through one year period and analyze sociodemographic characteristics, diagnosis, and treatment protocols of individual patients with an emphasis on age and gender. **Material and Method:** Patients who applied to University of Health Sciences, Ankara Numune, Education and Research Hospital Kolej Psychiatry outpatient clinic between February 2016 and February 2017 were included in the study. The patient files were retrospectively reviewed in terms of sociodemographic characteristics, diagnoses, treatment protocols and the number of admissions within one year.

Results: Retrospective evaluation of hospital records yielded 1247 patients. Among these patients, 66.5% were female and 85.2% were under 65 years old. The most common diagnoses were depressive and anxiety disorders with a percentage of 42% and 40.3%, respectively. Anxiety disorders (66.4%, 33.6%, $p<0.001$, respectively), depressive disorders (72.7%, 27.3%, $p<0.001$, respectively) and somatic symptom disorders (90.9%, 9.1%, $p=0.007$, respectively) were significantly more frequent in females compared to male gender. On the other hand, all psychiatric diagnoses except normal psychiatric examination were significantly higher in patients <65 years old compared to patients ≥ 65 years of age. There was a positive and moderate correlation between age and number of comorbid conditions ($r=0.57$, $p<0.001$) and positive and weak correlation between age and number of psychiatric medications ($r=0.07$, $p=0.006$). However, there was no correlation between age and number of control visits.

Conclusion: Depressive and anxiety disorders were the most common diagnoses both in adult and elderly patient populations among patients who admitted to a district outpatient clinic of a tertiary hospital within one year period. Female gender admissions were more prevalent than males.

Keywords: Psychiatry clinic, psychopathology, psychiatric epidemiology

Amaç: Bu çalışmanın amacı, kentsel bir bölgedeki bir psikiyatri polikliniğine bir yıllık süre içinde yapılan başvuruları araştırmak ve hastaların sosyodemografik özelliklerini, tanı ve tedavi protokollerini yaş ve cinsiyet kıyaslamaları yaparak incelemektir.

Gereç ve Yöntemler: SBÜ Ankara Numune Eğitim ve Araştırma Hastanesi Kolej Psikiyatri semt polikliniğine Şubat 2016-Şubat 2017 tarihleri arasında başvuran hastalar çalışmaya dahil edildi. Hasta dosyaları sosyodemografik özellikler, tanılar, tedavi protokolleri ve bir yıl içindeki başvuru sayıları açısından geriye dönük olarak incelendi.

Bulgular: Hastane kayıtlarının retrospektif değerlendirilmesi neticesinde 1247 hasta tespit edildi. Bu hastaların %66.5'i kadın olup %85.2'si 65 yaş altındaydı. En sık görülen tanılar sırasıyla %42 ve %40.3 ile depresif ve anksiyete bozuklukları idi. Anksiyete bozuklukları (%66.4, %33.6, $p<0.001$, sırasıyla), depresif bozukluklar (%72.7, %27.3, $p<0.001$, sırasıyla) ve somatik belirti bozuklukları (%90.9, %9.1, $p=0.007$, sırasıyla) kadınlarda erkek cinsiyete göre anlamlı olarak daha sıkıydı. Diğer yandan, 65 yaş altı hastalarda normal psikiyatrik muayene dışındaki tüm psikiyatrik tanılar ≥ 65 yaş hastalara göre anlamlı derecede daha fazlaydı. Yaş ile eşlik eden hastalık sayısı arasında pozitif ve orta düzeyde ($r=0.57$, $p<0.001$), yaş ile psikiyatrik ilaç sayısı arasında pozitif ve zayıf bir ilişki ($r=0.07$, $p=0.006$) vardı. Ancak, yaş ile kontrol ziyaretlerinin sayısı arasında bir ilişki yoktu.

Sonuç: Üçüncü basamak bir hastanenin semt polikliniğine bir yıl içinde başvuran hastalarda hem erişkin hem de yaşlı hasta popülasyonunda en sık görülen tanılar depresif ve anksiyete bozukluklarıydı. Kadın cinsiyet başvuruları erkeklerle göre daha yaygındı.

Anahtar Kelimeler: Psikiyatri kliniği, psikopatoloji, psikiyatrik epidemiyoloji



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INTRODUCTION

Psychiatric epidemiology is a broad discipline that evaluates the distribution, risk factors and course of mental disorders and/or related conditions in a population. Psychiatric epidemiology studies are very important in terms of obtaining data about the etiology and pathogenesis of psychiatric disorders, determining risk groups and prevalence, as well as planning, developing, and evaluating mental health services (1-3). Recent studies focused on the distribution of psychiatric diseases according to sociodemographic patterns and their relationship with the use of psychiatric services (4-6). According to the data of World Health Organization (WHO), depression, bipolar affective disorder (BAD), alcohol and substance use disorder, schizophrenia and obsessive compulsive disorder (OCD) are amongst the most common diseases that cause disability throughout life (7). The fact that mental disorders play an important role among diseases that cause disability can be explained by population and demographic changes such as increasing urbanization, changes in social relations and the long duration of these diseases (3). Therefore, epidemiological studies that aim to investigate the prevalence, demographic patterns and risk factors of mental disorders are needed to provide adequate mental health care services.

There is a close relationship between various sociodemographic characteristics such as age, gender, socioeconomic status, and admissions to psychiatric institutions (3,4,6). On the other hand, epidemiological data evolves due to aging population and changes in demographic parameters. Although not sufficient alone, evaluation of hospital admissions is important because they shed light on psychiatric epidemiology studies. In this retrospective study, we aimed to investigate admissions to a psychiatry outpatient clinic in an urban area through one year period and analyze sociodemographic characteristics, diagnosis, and treatment protocols of individual patients with an emphasis on age and gender.

METHOD

Patients who applied to University of Health Sciences University Ankara Numune Education and Research Hospital Kolej Psychiatry outpatient clinic between February 2016 and February 2017 were included in the study. The patient files

were retrospectively reviewed in terms of sociodemographic characteristics, diagnoses according to Diagnostic and Statistical Manual of Mental Disorders 5th Edition, treatment protocols, comorbid conditions, and the number of admissions within one year period. The patients were evaluated by a single psychiatrist for one year period. Socio-demographic data of the patients were gathered during the routine mental state examination. Examination of the patients was performed in line with the admission complaints and evaluation for differential diagnosis was also carried out. Each patient was informed for regular follow-up visits. Due to epidemiological pattern of the study, all patients who applied to outpatient clinic were included in the study. Comorbidities were assessed by evaluation of hospital medical records and self-report of the patients. Informed consent was not obtained from the subjects due to retrospective design of the study. The study protocol was approved by the local ethics committee of the same hospital (Ethics Committee number: E-17-1345) and conforms with the principles underlined in the Declaration of Helsinki.

Statistical analyses were performed by using SPSS 22.0 (Statistical Package for the Social Sciences Inc, Chicago, IL, USA). Sociodemographic variables, diagnoses, comorbid conditions, medications, and number of control visits were specified with descriptive analyses. One-sample Kolmogorov-Smirnov was used to test the distribution of numerical variables. The chi-squared test was applied for categorical variables and the results were presented as percentages. Quantitative variables were presented as mean and standard deviation. Independent samples t-test was applied to the numerical data and the results were entered as mean \pm standard deviation. Correlation analyses were performed by either Pearson's correlation test or Spearman's correlation test depending on the distribution pattern of variables. A two-sided p value of less than 0.05 was determined as statistically significant.

RESULTS

Retrospective evaluation of hospital records between the specified period yielded 1247 patients. Baseline characteristics and medications of the patients are

demonstrated in Table 1.

Table 1. Baseline characteristics and medications of the patients

Variable	n (%)
Gender	
Female	829 (66.5)
Male	418 (33.5)
Age	
18-65	1064 (85.2)
≥65	183 (14.8)
Marital status	
Single	443 (35.5)
Married	628 (50.4)
Divorced	60 (4.8)
Widow	116 (9.3)
Education	
Illiterate	27 (2.2)
Literate	31 (2.5)
Primary school	388 (31.1)
High school	549 (44)
University	252 (20.2)
Occupation	
Unemployed	421 (33.8)
Employed	425 (34.0)
Retired	188 (15.1)
Student	213 (17.1)
Psychiatric history	
No	677 (54.3)
Yes	570 (45.7)
Control visit	
0	747 (59.9)
1	236 (18.9)
2	83 (6.7)
3	65 (5.2)
≥4	116 (9.3)
Medications	
SSRI	793 (54.6)
NASSA	274 (18.9)
SNRI	127 (8.7)
Atypical antipsychotic	95 (6.5)
Typical antipsychotic	10 (0.7)
Mood stabilizer	16 (1.1)
Benzodiazepine	13 (0.9)
Tricyclic antidepressant	6 (0.4)
Others	117 (8.1)
Comorbidities	
None	905 (72.6)
Hypertension	214 (17.2)
Diabetes mellitus	80 (6.4)
Coronary artery disease	36 (2.9)
Other	134 (10.7)

NASSA, Noradrenergic Specific Serotonergic Antagonist; SNRI, Serotonin Noradrenaline Reuptake Inhibitor; SSRI, Selective Serotonin Reuptake Inhibitor.

Among these 1247 patients, 66.5% were female and 85.2% were under 65 years old. There was no difference in terms of age between female and male gender (43±17, 42±19, p=0.30, respectively). None of the patients indicated substance abuse but self-reported cigarette and alcohol usage were 21.1% (n=264) and 4.6% (n=58), respectively. When it comes to marital status and habitation, 50.4% of the patients were married and 93.3% of the applicants were living in the city center. Evaluation of educational status of patients demonstrated that 44% of the applicants were high school graduates and 20.2% were university graduates, whereas the percentage of illiterate applicants was 2.2%. Unemployed and employed patients included 33.8% and 34% of the cases, respectively. The remaining patients were either retired or student. 45.7% of the patients indicated a previous history of psychiatric diagnosis at admission mostly being depressive disorder. 59.9% of the patients did not apply for a control visit, whereas 18.9% applied for a control visit only once. The percentages of patients who applied for a control visit twice and three times were 6.7% and 5.2%, respectively. The percentage of patients who applied for a control visit at least four times was 9.3%. Patients diagnosed with psychotic

disorders constituted the most common patient group who came for follow up visits. Selective serotonin reuptake inhibitors (SSRIs) were the most frequently prescribed drugs with a percentage of 54.6% followed by Noradrenergic-specific serotonergic antidepressants (NASSA) in second place (18.9%) and Serotoninnorepinephrine reuptake inhibitors (SNRIs) in the third place (8.7%). 27.4% of the patients had multiple drug usage, whereas 5.2% of the patients did not receive any pharmacotherapy and were followed only with psychotherapy. 72.6% of the patients had no accompanying comorbid condition, whereas hypertension was the most prevalent comorbid disease among patients. 29.4% of anxiety disorder patients were using more than one drug and 8.2% were followed up with only psychotherapy. NASSA and benzodiazepines (BDZs) were the most frequent add on drugs in anxiety disorder patients. 30.4% of depressive disorder patients were using more than one drug and 2.5% of these patients were followed up with psychotherapy. Mostly used drug combinations were SSRI plus NASSA, SSRI plus BDZ and SSRI plus antipsychotics, respectively. Psychiatric diagnoses and their comparison according to gender and age are represented in Table 2.

Table 2. Psychiatric diagnoses and their comparison according to gender and age

	Total	Female	Male	p value	<65 years	≥65 years	p value
Diagnosis	n (%)	n (%)	n (%)		n (%)	n (%)	
Normal psychiatric examination	70 (5.6)	32 (45.7)	38 (54.3)	0.47	34 (48.5)	36 (41.5)	0.81
Anxiety disorders	503 (40.3)	334 (66.4)	169 (33.6)	<0.001	432 (85.8)	71 (14.2)	<0.001
Depressive disorders	524 (42)	381 (72.7)	143 (27.3)	<0.001	472 (90.1)	52 (9.9)	<0.001
Psychotic disorders	24 (1.9)	10 (41.7)	14 (58.3)	0.41	23 (95.8)	1 (4.2)	<0.001
Bipolar Affective Disorders	16 (1.3)	10 (62.5)	6 (37.5)	0.31	14 (87.5)	2 (12.5)	0.003
Obsessive Compulsive Disorder	19 (1.5)	8 (42.1)	11 (57.9)	0.49	18 (94.7)	1 (5.3)	<0.001
Sleep Disorders	54 (4.3)	28 (51.9)	26 (48.1)	0.78	38 (70.3)	16 (29.7)	0.003
Somatic Symptom Disorders	11 (0.9)	10 (90.9)	1 (9.1)	0.007	11 (100)	0 (0)	<0.001
Others	26 (2.1)	16 (61.5)	10 (38.5)	0.23	22 (84.6)	4 (15.4)	<0.001

Among all patients, the most common diagnosis was depressive disorders (42%) followed by anxiety disorders (40.3%), sleep disorders (4.3%), psychotic disorders (1.9%), OCD (1.5%), BAD (1.3%) and somatic symptom disorders

(0.9%). 26 patients (2.1%) suffered from other psychiatric disorders such as attention deficit and hyperactivity disorder (ADHD) or neurocognitive disorders. 70 patients (5.6%) had no complaints and had a normal mental state examination who

applied for a medical report. When it comes to comparison of diagnoses according to gender, anxiety disorders (66.4%, 33.6%, $p < 0.001$, respectively), depressive disorders (72.7%, 27.3%, $p < 0.001$, respectively) and somatic symptom disorders (90.9%, 9.1%, $p = 0.007$, respectively) were significantly more frequent in females compared to male gender. The other psychiatric diagnoses including normal psychiatric examination were similar between two genders. On the other

hand, all psychiatric diagnoses except normal psychiatric examination were significantly higher in patients < 65 years old compared to patients ≥ 65 years of age.

Correlation analysis between age and number of comorbid conditions, number of psychiatric medications and control visits are given in Table 3.

Table 3. Correlation analysis between age, number of comorbidities, psychiatric medications, and control visits

Co-variables	Age	
	Correlation r coefficient	p value
Comorbidities	0.57	< 0.001
Psychiatric medications	0.07	0.006
Control visits	-0.03*	0.27

*Spearman's rho analysis

There was a positive and moderate correlation between age and number of comorbid conditions ($r = 0.57$, $p < 0.001$) and positive and weak correlation between age and number of psychiatric medications ($r = 0.07$, $p = 0.006$). However, there was no correlation between age and number of control visits.

DISCUSSION

This study provides important clues about the sociodemographic characteristics, diagnoses, follow-up patterns and medications of patients who applied to a district outpatient psychiatry clinic in an urban area within one year period. We evaluated the diagnoses of patients according to gender and age. We also investigated the correlation between age and comorbidity, psychiatric medication, and control visit frequencies.

Most patients who applied to the outpatient clinic were women. This finding is consistent with previously published reports (6,8-10). For example, Eda Aslan Uckardes demonstrated that 67.2% of patients who applied to psychiatry outpatient clinic in a rural area were women (8). We found a similar rate of woman admission despite diverse living areas of populations. In addition, 65.2% of 17757 patients diagnosed with a mental illness were women in a study published by

Asoglu and colleagues (6). In our study, women constituted most of the patients numerically even in disease groups except psychotic disorders and OCD. This might be due to easier access of women to health centers particularly district outpatient clinics. Besides, women are less active in business life, participate less in social life and may internalize hospitals as a part of socialization consequently resulting with increased hospital admissions both in rural and urban populations. Domestic violence, trauma history, anemia and cutaneous infectious disease were significant predictors of mental illness in women according to a previous study performed in Southeastern region of Turkey (11). Gender difference in psychiatry outpatient clinic applications might also be related with that men attribute psychiatric symptoms to failure, daily stress and financial situations (6, 8). Female dominance in psychiatric disorders is also relevant for other countries such as Iran (12). However, no gender differences were found in overall prevalence of mental disorders in Dutch population (13). These differences might originate from various diversities such as study populations, study designs and statistical analyses.

The proportion of elderly patients is exponentially increasing in the world as well as Turkey because of improvements in

healthcare. This means that more elderly patients admit to psychiatry clinics for any reason. For instance, Kirmizioğlu et al. found that anxiety disorders are common in elderly patients with a 17.1% current prevalence and 18.6% lifetime prevalence (14). Accordingly, anxiety disorders were the most common mental disorder in elderly patients in our study. None of the evaluated psychiatric disorders were higher compared to adult patients. However, number of psychiatric medications positively correlated with aging. Aging is also associated with increased comorbid conditions. Number of comorbidities increased as the age of the study population increased in our study.

According to medical reports, more than 90% of psychiatric patients also suffer from comorbid chronic diseases (15). The main reasons for the frequent occurrence of comorbid diseases in the psychiatric patient population are sedentary life, alcohol use, lack or absence of exercise, malnutrition, and smoking. Psychotropic drug usage is also thought to negatively affect physical health. Previous studies demonstrated that CVDs are more common in patients with psychotic disorders and depression compared to general population (15,16). Eda Aslan Uckardes detected comorbid medical conditions with a rate of 29.4% in patients with psychiatric disorders and stated that the most common comorbid disease was HT and the second most common DM (8). In our study, almost one to five patients had any comorbid disease. HT was the most prevalent comorbid situation consistent with the study of Eda Aslan Uckardes. Besides, smoking rate, which is among the CVD risk factors, was 21.1% in our study.

Depression is known to be the most common psychiatric disorder in general population (17,18). In a study conducted in Turkey, the most common diagnosis was mood disorders (44%) followed by anxiety disorders (32.5%) and psychotic disorders (9.4%) (8). According to 2015 data of the WHO, the most common psychiatric illness in the world was depressive disorder (17). Similarly, the most common diagnosis was depressive disorders in our study. On the contrary, the diagnosis of depressive disorders was found to be less than anxiety disorders in a recent study (6). According to large communitybased studies, the rate of developing anxiety disorder throughout life is 33.7%. Besides, anxiety disorders have increased by 15% in the last 10 years according to data of WHO (17). For instance, anxiety disorder is among the two most common diagnosis in Turkey (6,8). In line with this, anxiety disorder was found to be the second most common

diagnosis in our study. Both depressive and anxiety disorders were significantly higher in female and younger patients compared to their counterparts in our study.

Psychotic disorders are known to be more frequent in men than women (19,20). In the study of Asoğlu et al., the prevalence of psychotic disorders was 4.4% and it was prevalent two times more in men than women (6). However, in a study performed in United States of America, psychotic disorders were found equally in men and women (21). On the contrary, some studies in Turkey found higher rates of psychotic disorders in women than men (4,22,23). In our study, the percentage of patients diagnosed with psychotic disorder was 2.0% (n = 25). Because patients were recruited from a district outpatient clinic which is very close to a large tertiary hospital that includes Community Mental Health Center and inpatient clinic might have been associated with few admissions of psychosis patients. Likewise, presence of a separate AMATEM (Research, Treatment and Training Center for Alcohol and Substance Dependence) clinic affiliated to our hospital might have been associated with no admission of alcohol and/or substance use disorder patients. 4.6% of the applicants were alcohol consumers in our study but none of them met the diagnostic criteria for alcohol and substance use disorder.

Previous studies indicate that patients diagnosed with psychiatric disorders have a low follow up rate. In a study conducted in a university hospital in Turkey, the rate of 4 or more follow-up outpatient clinic visits was found to be 5.8% (4), which was 9.3% in our study. However, 59.9% of the applicants did not apply for a second follow-up visit. Psychotic disorders were the most common patient group who came for follow up visits. More frequent admissions of these patients can be attributed to the chronicity of the disease and its course with exacerbations. In addition, number of control visits inversely correlated with age although this association was weak with no statistical significance in our study.

The study has many limitations. One of the most important limitations is its retrospective design and the absence of structured diagnostic interviews. The patients were not evaluated at fixed time-intervals and the patients were examined by only one psychiatrist. Conducting the study in a district outpatient clinic far from the inpatient service and AMATEM unit, the presence of another education and research hospital and a Community Mental Health Center unit

nearby may have also affected the distribution of patient patterns, number of applicants and subsequently patient diagnoses. Moreover, we did not include disease subtypes as different variables. However, the fact that study was conducted in a district outpatient clinic of a large tertiary hospital and relatively large sample size are among the strengths of the study.

In conclusion, depressive and anxiety disorders were the most common diagnoses both in adult and elderly patient populations among patients who admitted to a district outpatient clinic of a tertiary hospital within one year period. Female gender admissions were more prevalent than males. The findings obtained from this study may be useful for comparison of regional differences underlining the need for larger scale field studies to understand risk factors and epidemiology of psychiatric diseases in the population.

Authors' Note

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Ethical approval: The study protocol was approved by the local ethics committee of the University of Health Sciences , Ankara Numune Education and Research Hospital (Ethics Committee number: E-17-1345) and conforms with the principles underlined in the Declaration of Helsinki.

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