

Physical Health Status of Individuals with Mental Disorders: A Cross Sectional Study*

Ruhsal Bozukluğu Olan Bireylerin Fiziksel Sağlık Durumları: Kesitsel Bir Çalışma

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ABSTRACT

Aim: Patients with mental disorders have common psychological comorbidities, however there is limited studies about this issue in Turkey. This cross-sectional, descriptive study was conducted to evaluate the physical health of outpatients being followed up in the psychiatric clinic of a university hospital.

Methods: Data from a total of 137 patients were collected using a detailed information form. Physical health was assessed by questioning patients about substance use, health-promoting behaviors, exercise, diet, sleep, self-care, oral hygiene, elimination, and sex life and measuring their height, weight, and vital findings.

Results: It was determined that 21.9% of the participants had a physical disease. The patients slept an average of 8.24±2.24 hours per night and 59.9% did not feel rested when they woke up; 55.5% of the patients had bowel movements once a day; 55.5% were not satisfied with their sex life and 80.3% did not use any contraceptive methods. In addition, 33.6% of the patients reported experiencing pain, with headaches being the most common (13.9%). The mean body mass index of the participants was 25.26±4.94.

Conclusion: In this study, the results was similar with literature that patients with mental disorders physical health status should be improved. In order to improve the physical health of people with mental disorders, their lifestyle habits should be evaluated, and psychosocial interventions used to effect behavioral changes.

Anahtar kelimeler: Mental disorders, physical health, psychiatry

Öz

Amaç: Ruhsal bozukluğu olan bireylerin pek çok fiziksel hastalığının olmasına rağmen bu konu ülkemizde yeterince incelenmemiştir. Bu çalışma bir üniversite hastanesinin psikiyatri kliniğinde ayakta takip edilen hastaların fiziksel sağlık durumlarının belirlenmesi amacıyla kesitsel ve tanımlayıcı araştırma deseninde yapıldı.

Yöntem: Çalışmaya 137 birey katıldı. Çalışmada verilerin toplanmasında Bilgi Formu kullanıldı. Hastaların fiziksel sağlık davranışlarının değerlendirilmesinde; madde kullanımı, sağlığı geliştiren davranışlar, egzersiz, beslenme, uyku, öz bakım, ağız hijyeni, boşaltım ve cinsel yaşamlarına ilişkin sorular soruldu ve hastaların boy, kilo, beden kitle indeksi, yaşam bulguları ölçüldü.

Bulgular: Bu çalışmaya katılan hastaların %21,9'unun bir fiziksel hastalığı olduğu, günlük ortalama 8,24±2,24 saat uydukları, hastaların %59,9'unun uyandığında kendini dinlenmiş hissetmediği bulundu. Katılımcıların boşaltım alışkanlıkları değerlendirildiğinde %55,5'inin günde bir kez defakasyona çıktığı belirlendi. Katılımcıların %55,5'inin cinsel yaşamlarından memnun olmadığı, %80,3'ünün herhangi bir kontraseptif yöntem kullanmadığı belirlendi. Hastaların ağrı durumları değerlendirildiğinde %33,6'sının ağrı yaşadığı; en sık yaşanan ağrının %13,9 ile baş ağrısı olduğu belirlendi. Katılımcıların Beden Kitle İndekslerinin (BKI) ortalama 25,26±4,94 olduğu belirlendi.

Sonuç: Ruhsal bozukluğu olan bireylerin fiziksel sağlık durumlarının geliştirilmesinde, hastaların sağlıklı yaşam alışkanlıklarının tanımlanması, davranış değişikliği yaratan psikososyal müdahalelerden yararlanılması önerilebilir.

Keywords: Fiziksel sağlık, psikiyatri, ruhsal bozukluk

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INTRODUCTION

The nature of mental disorders and the psychotropic agents used to treat them adversely affect patients' physical health. The most common comorbidities reported in individuals with mental disorders are metabolic syndrome, type 2 diabetes mellitus, cardiovascular diseases, respiratory diseases, cancer, and stroke. Psychotropic drug use has been associated with weight gain, unhealthy eating habits, physical inactivity, and higher risk of physical diseases⁽¹⁻⁴⁾. In addition, the adverse effect of physical illnesses on psychological well-being may result in poorer prognosis of the existing mental disorder. Neglect of these patients' physical health can occur for several reasons, including the patients not utilizing general health system services adequately due to unhealthy lifestyle habits or, even when they do seek healthcare services, being unable to express themselves adequately due to their low socioeconomic and sociocultural level. Furthermore, mental health professionals may not have enough information about physical illnesses or the somatic evaluation of patients' physical complaints. As a consequence of these circumstances and conditions, the lifespan of people with mental disorders is 15–20 years shorter than the general population^(1,4-6), with cardiovascular diseases being the leading cause of death⁽⁵⁾.

Adverse effects of the drugs used by patients with mental disorders include anorexia, somnolence, and sleep disturbances. Patients may sleep during the day, have difficulty falling or staying asleep at night, and not feel rested when they wake. This results in daytime fatigue and can cause impaired immune or endocrine responses⁽⁴⁾ and lead to a sedentary lifestyle. Exercise avoidance due to negative symptoms or social isolation also contribute to patients' sedentary behavior^(5,6). Sedentary lifestyle, an unhealthy diet high in fat and sugar^(2,3), plus psychotropic drug use cause patients to become overweight compared to the normal population⁽²⁾. Patients' reduced mobility and limited fiber and fluid consumption also result in elimination problems⁽⁷⁾.

Mental disorders are accompanied by a decline in self-care ability, including poor body and oral hygiene. Oral health problems are seen at a higher prevalence in patients with mental disorders compared to the general population. Tooth erosion is

common in tobacco and alcohol use, hypersalivation or dry mouth caused by psychotropic medications, or eating disorders, and causes dental problems such as receding gums, tooth decay, and tooth loss^(8,9).

Health-promoting behaviors are limited in individuals with mental disorders. Just as patients may neglect their routine psychiatric evaluations, they may not attend annual routine physical examinations and may not know about or practice monthly testicular or breast self-examinations. Although cancer prevalence is unknown in this population, patients do not utilize these services⁽¹⁰⁾. Because patients' pain experiences are also ignored, early diagnosis is not possible. Furthermore, psychotropic drugs disrupt patients' sexual patterns, and because mental health professionals talk less about sexuality with patients, they are less informed about contraceptive methods and sexually transmitted diseases⁽¹¹⁾.

When developing psychosocial interventions to improve the physical health and health behaviors of people with mental disorders, determining their physical diagnoses and evaluating their lifestyle behaviors are of critical importance. These behaviors include self-care habits, coping methods, diet, elimination, sleep, physical activity, oral health, sexuality, and health-promoting behaviors. Careful evaluation of all these parameters will enable holistic patient care. Although research on the physical health of patients with mental disorders has increased recently in Turkey, most of these studies have focused on metabolic syndrome. To our knowledge, no previous study has evaluated patients holistically in Turkey. Therefore, the aim of this study was to evaluate the physical health status of outpatients with mental disorders in our country.

MATERIALS AND METHODS

Study Design

This cross-sectional, descriptive study was performed in the psychiatry outpatient clinic of a university medical school between November 2018 and February 2020.

Participants

The universe of the study comprised all patients who were under follow-up in the psychiatry department of the hospital at the time of data collection. The study sample consisted of those patients who presented

to the psychiatry outpatient clinic for treatment during the study period. Sample size calculation was not performed; all patients who received outpatient treatment during the study period were invited to participate. At total of 137 individuals, including 74 females and 63 males, were included. Inclusion criteria were being under follow-up in the psychiatry outpatient clinic, being 18 years of age or older, having a psychiatric diagnosis according to the DSM-V, and the patient or their legal guardian consenting to participate in the study.

Data Collection Instruments

Data about the participants' sociodemographic characteristics, physical health, and lifestyle habits were collected using an information form created by the researchers in line with the literature^(8,12,13).

Information Form: This structured form was created by the researchers based on literature⁽¹⁻¹⁰⁾ and filled in by one of the researchers AA while taking the patient's history, measurements, and making observations. The form consists of a total of 50 questions in 4 sections: sociodemographic characteristics; clinical history; lifestyle behaviors and habits; and physical parameters and vital signs. Physical health and behavior evaluation included questioning patients about substance use, health-promoting behaviors, exercise, diet, sleep, self-care, oral hygiene, bowel movements, and sex life, and measuring the patients' height, weight, and vital signs. We also planned to record laboratory values from routine hemogram, biochemistry, and full urine test performed during a specific time period from the patients' charts or the hospital record system. However, these values could not be included in the study due to missing data.

Data Collection

Study data were collected via a one-to-one interview and physical evaluation that lasted about 30 minutes for each patient. After the patients and their relatives were informed about the study, data were collected, and measurements taken. The patients' vital signs were measured after a rest period of 10–15 minutes.

Data Analysis

The data were analyzed using SPSS version 22.0 (IBM Corp., Armonk, NY) and expressed in number and percentage or mean and standard deviation.

Ethics

Before the start of the study, ethics committee approval was obtained from the Dicle University Faculty of Medicine Noninvasive Clinical Research Ethics Committee and permission to conduct the study was obtained from the Dicle University Hospital Chief Physician's office. All study participants or their legal guardians provided written informed consent prior to the study.

RESULTS

The mean age of the patients in this study was 31.81 ± 11.03 ; 54% were female and 46% were male (Table 1). According to the participants' clinical history, the mean duration of mental illness was 71.51 ± 73.93 months, duration of medication use was 49.74 ± 62.26 months, and the patients had been hospitalized a mean of 2.36 ± 2.55 times (Table 2). The participants' lifestyle behaviors and habits are presented in Table 3 and their vital signs and body measurements are given in Table 4.

Table 1. Sociodemographic Characteristics of the Participants (n=137)

Characteristic	Mean±SD	Min-Max
Age	31.81±11.03	18-66
Gender	N	%
Female	74	54
Male	63	46
Education Level		
Illiterate	8	5.8
Elementary school	23	16.8
Middle school	32	23.4
High school	37	27
University	37	27
Economic Status		
Low	28	20.4
Middle	86	62.8
High	23	16.8
Social Insurance		
Yes	107	78.1
No	30	21.9
Employment Status		
Working	41	29.9
Not working	96	70.1

Table 2. Clinical History of the Participants (n=137)

Characteristic	Mean±SD	Min-Max
Duration of Disease (months)	71.51±73.93	0-384
Duration of Medication Use (months)	49.74±62.26	1-384
Number of Hospital Admissions	2.36±2.55	0-20
Mental Disorder Diagnosis	N	%
Schizophrenia and Other Psychotic Disorders	20	14.6
Depressive Disorder	32	23.4
Bipolar Disorder	31	22.6
Anxiety Disorder	37	27
Alcohol and Substance Use Disorder	4	2.9
Dissociative Disorders	2	1.5
Other	11	8
Physical Disease		
Yes	30	21.9
No	107	78.1
Physical Disease Diagnosis		
Cardiovascular Disease	4	2.9
Diabetes Mellitus	3	2.2
Migraine	3	2.2
Asthma	1	0.7
Disc Herniation	5	3.6
Kidney Diseases	2	1.5
Epilepsy	1	0.7
Other	6	4.4
Adverse Drug Effects		
Yes	56	40.9
No	81	59.1
Experienced Adverse Effects	5	3.6
Weakness, Fatigue, Drowsiness, Sleepiness	18	13.1
Insomnia	8	5.8
Nausea, Vomiting, Anorexia	4	2.9
Weight Gain	5	3.6
Sexual Dysfunction	11	8
Other	20	7.3

Table 3. Lifestyle Behaviors of the Participants (n=137)

	N	%
Smoking		
Yes	75	54.7
No	62	45.3
Alcohol Use		
Yes	17	12.4
No	120	87.9
Substance Use		
Yes	9	6.6
No	128	93.4
Testicular/Breast Self-examination		
Yes	18	13.1
No	119	86.9
Exercise		
Yes	60	43.8
No	77	56.2
Special Diet	N	%
Yes	4	2.9
No	133	97.1
Appetite		
Increased	35	25.5
No change	71	51.8
Decreased	31	22.6
Feels Rested Upon Waking		
Yes	55	40.1
No	82	59.9
Problem Falling Asleep		
Yes	67	48.9
No	70	51.1
Daytime Sleepiness		
Yes	55	40.1
No	82	59.9
Bathing Frequency		
Every day	20	14.6
Every other day	15	10.9
Every 3-4 days	45	32.9
Every 5-6 days	57	41.6

Table 3. Continued

	N	%
General Appearance		
Well-groomed/Good self-care	101	73.7
Unkempt/Poor self-care	36	26.3
Teeth Brushing Frequency		
Never	19	13.9
Once a day	45	32.8
Twice a day	40	29.2
Three times a day	10	7.3
Once every other day	10	7.3
Occasionally	13	9.5
Dentures		
Yes	19	13.9
No	118	86.1
Halitosis		
Yes	30	21.9
No	107	78.1
Oral Mucosa		
Normal	122	89.1
Stomatitis	4	2.9
Hyperemic	6	4.4
Hemorrhagic	5	3.6
Bowel Movement Frequency		
Once a day	76	55.5
Twice a day	30	21.9
Once every other day	7	5.1
Once every 3 days	14	10.2
Laxative Use		
Yes	12	8.8
No	125	91.2
Problem When Urinating		
Yes	36	37
No	100	73
Sex Life		
Satisfied	61	44.5
Not satisfied	76	55.5

Table 3. Continued

	N	%
Contraceptive Method Used		
None	110	80.3
Condom	21	15.3
Intrauterine device (IUD)	1	0.7
Withdrawal	4	2.9
Tube Ligation	1	0.7
Sexually Transmitted Disease		
Yes	1	0.7
No	136	99.3
Menstrual Cycle		
Male	63	46
Regular	49	35.8
Irregular	18	13.1
Menopause	6	4.4
Pregnant	1	0.7
	Mean±SD	Min-Max
Daily Water Intake (glasses)	7.18±3.74	1-20
Number of Meals		
Main meals per day	2.56±0.69	1-5
Between-meal snacks per day	0.80±0.88	0-4
Sleep Duration (hours)	8.24±2.24	3-15
Number of Missing Teeth	2.20±4.64	0-32
Number of Decayed Teeth	1.97±1.5	0-8
Urination Frequency (times/day)	3.85±1.42	1-6

Table 4. Participants' Physical Parameters, Body Mass Index, and Vital Signs

Characteristic	Mean±SD	Min-Max
Height (cm)	167.67±9.00	150-192
Weight (kg)	70.99±14.20	43-110
Body Mass Index	25.26±4.94	17.68±38.2
Heart Rate (beats/min)	80.58±6.69	64-100
Systolic Blood Pressure (mmHg)	117.55±11.66	90-140
Diastolic Blood Pressure (mmHg)	73.69±9.41	60-100
Respiratory Rate (breaths/min)	18.66±2.56	12-26

DISCUSSION

The aim of this study was to evaluate the physical health status of outpatients with mental disorders in Turkey and we determined that patients with mental disorders experienced adverse drug effects, the most common of which were sexual dysfunction, somnolence, insomnia, gastrointestinal symptoms, and weight gain. In addition, 21.9% of the participants had a physical disease, with cardiovascular disease, diabetes mellitus, and migraine being the most common. High prevalence of hypertension, hyperglycemia, and dyslipidemia has been reported previously in people with mental disorders, and these conditions are associated with cardiovascular disease. Smoking or alcohol use, unbalanced diet, weight gain due to psychotropic drug use, and physical inactivity also predispose patients to cardiovascular diseases ⁽²⁾. Moreover, increased appetite and weight gain caused by psychotropic drugs increases the risk of type 2 diabetes and metabolic syndrome, which are also associated with cardiovascular disease ⁽¹²⁾. In a study evaluating the relationship between long-term antipsychotic use and cardiometabolic risk in patients with mental disorders, approximately half of the patients did not have a healthy diet, 44% were obese, 23% had high triglycerides, 26% had high blood pressure, and 78% smoked, indicating high cardiometabolic risk ⁽⁵⁾. The use of olanzapine and clozapine was also reported to increase cardiometabolic risk.

In the present study, more than half of the participants used cigarettes or other tobacco products, 12.4% used alcohol, and 6.6% reported substance use. In another study, it was determined that half of patients diagnosed with schizophrenia smoked ⁽¹⁾. Tobacco or other substances are likely used by people with mental disorders for the purpose of self-medication, as a coping mechanism for patients with anxiety disorder or depression, and because they increase dopamine regulation in patients with psychotic disorder. However, the use of these substances can increase the prevalence of chronic obstructive pulmonary disease or cardiovascular disease in patients ⁽²⁾.

In our study, 20.4% of the patients stated that they exercise daily. In recent years, exercise programs have been used to reduce patients' sedentary behavior, improve sleep hygiene, reduce social isolation, and reduce the symptoms of the disease, and have yielded favorable results ⁽¹⁴⁾. With more research on

this subject and the growing evidence that exercise improves mental health as well as physical health, exercise is recommended along with cognitive behavioral therapy and psychopharmacology for some mental disorders. However, it is reported that in practice, exercise is only recommended for patients with depression and anxiety disorders. Exercise is under recommended and overlooked in substance abuse, psychotic disorder, and bipolar disorder. Way et al., (2018) determined that 70% of mental health professionals recommend exercise to patients with symptoms of depression, anxiety, and stress ⁽¹⁵⁾. Mental health professionals informing patients about exercise and advising them to exercise regularly is an intervention that can both reduce their cardiovascular risks and increase their mental well-being. Patients should be informed about how often, for how long, and how exercise should be done. In the present study, 43.8% of the sample reported exercising; however, the fact that the information form used for data collection was not a standardized instrument and relies on patient self-report of the frequency, duration, and intensity of exercise can be considered a limitation of our study. It is important for mental health professionals to effect behavioral change and increase motivation to adopt health-promoting behaviors among patients with mental disorders. In this context, cognitive behavioral techniques and motivational interviewing can be recommended to increase patients' mobility. Ringen et al., (2018a) determined that although motivational interviewing did not affect physical activity levels in patients with psychosis, their smoking rates decreased significantly, thereby altering the patients' cardiovascular risk ⁽²⁾.

Only a small proportion of patients in our study reported performing breast or testicular self-examination, which is another health-promoting behavior. Similarly, it was reported previously that fewer women with mental disorders undergo cervical and breast cancer screening compared to the general population and that despite the patients' higher cancer risk, there are inequalities in the receipt of health care services ⁽¹⁰⁾. Another study revealed a relationship between the number of days with depression and anxiety reported by patients with mental disorders and the rate of mammography ⁽¹⁶⁾.

Water intake among patients in this study was at a good level. Patients with mental disorders are reported to exhibit variable water drinking behavior,

sometimes leading to fluid–electrolyte imbalances. Electrolyte imbalances can occur as a result of excessive water intake due to psychogenic polydipsia or thirst associated with psychotropic agents, especially in psychotic patients, or in patients with eating disorders who increase their water intake or restrict fluid and nutrient intake in order to lose weight. Insufficient fluid intake during depressive episodes, excessive fluid loss during manic episodes, and not replacing lost fluid or using lithium can also lead to fluid–electrolyte imbalances and impaired kidney function ⁽¹⁷⁾. For this reason, it is extremely important to encourage patients to drink 2–3 liters of water per day. Our results may have been influenced by the fact that our study period was long and included the summer months, and the location of the study is extremely hot in the summer, but the amount of fluid intake was also good in this period. In another study conducted in Turkey, 53.2% of the patients reported drinking 5–6 glasses of water a day ⁽¹³⁾, and our findings were consistent.

In our study, more than half of the patients reported no change in appetite and ate an average of 2.5 meals and 1 snack per day, and despite having physical illnesses, only 2.9% of the patients followed a special diet (diabetic or salt-free). It is known that patients often experience changes in appetite and eating habits during acute periods. Psychotic patients may refuse food due to delusions, patients eat less during mania while appetite may decrease or increase in depression, and the psychotropic agents used in the treatment of mental disorders often cause an increase in appetite and lead to weight gain. In a study of outpatients, 12.5% of the participants were on a special diet ⁽¹³⁾, while in another study, schizophrenic patients consumed more fat, carbohydrates, and alcohol and less fiber, fruit, vegetables, and fish than the general population ⁽¹⁾. Eating behavior is also affected by cultural factors, which may help explain some of the discrepancies between studies.

The participants in our study slept for a mean of 8.24 ± 2.24 hours a night, more than half of them did not feel rested when they woke up, about half had difficulty falling asleep, and 40.1% reported daytime sleepiness. Sleep is an important factor in quality of life, and sleep problems are a common problem in people with mental disorders ^(18,19). Most mental illnesses are reported to be associated with sleep disruptions ⁽¹⁹⁾. One study showed that although patients' sleep patterns improved between admission and discharge, 47% still had sleep-related complaints

even at discharge. The authors emphasized that sleep disorders were more common in patients with depression or posttraumatic stress disorder in particular, and pharmacotherapy and psychotherapy were insufficient to regulate their sleep patterns. In the same study, it was determined that nearly half of the patients had difficulty falling asleep and over half did not feel rested when they woke up ⁽¹⁸⁾. Psychoeducational programs are recommended to improve patients' sleep hygiene, encourage healthy dietary habits, and increase exercise frequency ⁽⁴⁾.

Most of the patients in our study were observed to have good self-care. In the literature, it is stated that people with mental disorders often show a decline in self-care ability and health-promoting behaviors. A moderate level of self-care ability was observed in previous studies ⁽²⁰⁾. In a study conducted among schizophrenic patients, 37.3% stated that they experienced problems while performing daily care and 41.9% stated that they had difficulties in self-care due to fatigue and unwillingness ⁽²⁰⁾. The higher level of self-care among the patients in our study may be attributable to the fact that most of the patients lived with their families and received good care.

In contrast, it was observed that our patients had inadequate tooth brushing habits and had problems such as tooth decay, dentures, and halitosis. The patients' halitosis was likely caused by gum disease and tooth decay. Küçük et al. (2018) reported that 43.6% of the participants in their study had decayed or missing teeth ⁽¹³⁾. A strong relationship has been reported between mental disorders and the number of missing and filled teeth ⁽⁸⁾, and patients with schizophrenia were found to have significantly more missing and decayed teeth than control groups and the general population ⁽²¹⁾. This may be related to patients' negative symptoms, poor dietary intake, frequent smoking and alcohol use, consumption of sugary and carbohydrate-rich foods, inability to seek dental health services due to limited financial means, dry mouth due to psychotropic drugs, and/or insufficient oral hygiene and eating habits, and it has also been reported that the extrapyramidal side effects of antipsychotics can make tooth brushing difficult ^(8,21). Our findings were consistent with those in the literature.

When the participants' bowel habits were evaluated, it was determined that more than half had bowel movements once a day. It has been reported in previous studies that patients with mental disorders

frequently experience constipation problems that constipation is associated with depression, and that patients who have substance use disorders or are using anticholinergic drugs are at higher risk of constipation due to low mobility and fiber intake. In our study, more than half of the patients reported having bowel movements every day and 10.2% once every 3 days. The rate of constipation was lower in our sample compared to the reported prevalence of 22–40% in the general population of Turkey⁽⁷⁾. This may be attributable to the good fluid intake of the participants in our study or to their eating habits. However, while the participants' mean urination frequency of 4 times a day indicated adequate fluid intake, 37% of the patients also reported symptoms such as burning during urination or frequent urination. Therefore, it may be advisable for mental health professionals to request urine tests in addition to routine blood tests during patient evaluation.

The majority of the participants in this study were not satisfied with their sex life, did not use any method of contraception, and the women had irregular menstrual cycles. In a study conducted in Turkey, it was determined that 57.5% of the patients had reduced sex drive compared to pre-illness, 39% reported an impact on their sex life, 30.2% had no knowledge of sexually transmitted diseases, and 74% had sexual dysfunction according to a standardized assessment tool⁽¹¹⁾. Although sexuality is a basic human need, mental health professionals often overlook patients' sexual patterns for reasons such as they assume that patients with mental disorders do not have a sex life, they do not talk about it with patients, and they believe that talking about it may bring about different problems. Adverse sexual effects such as change in sexual patterns, decreased libido, or inability to orgasm may cause patients to discontinue treatment, which can increase relapses⁽²²⁾. On the other hand, it has also been pointed out that having multiple sexual partners, being the victim of sexual abuse, or having sex with intravenous drug users increase patients' susceptibility to sexually transmitted diseases, and the use of contraceptive methods is important to prevent unplanned pregnancies^(11,22). Montejo et al., (2018) reported that sexual activity helped patients with psychosis cope with their symptoms, increase their self-esteem, regulate their sleep and mood, and reduce their anxiety⁽²²⁾. Dinç et al., (2019) determined that the women with bipolar disorder in their study had more irregular menstrual cycles, masturbated more frequently, were more likely to have multiple partners,

and had more unplanned pregnancies and abortions when compared to the control group⁽²³⁾. It should not be forgotten that women with mental disorders may have unplanned or unwanted pregnancies and that drug use during pregnancy can cause teratogenic effects on the fetus; therefore, patients should be educated about sexually transmitted diseases and contraceptive methods.

In terms of pain experience, the participants mostly frequently reported headaches, knee and joint pains, and abdominal and back pain. Studies have reported that pain, especially headache or migraine, adversely affects mental health and often accompanies psychiatric diagnoses⁽²⁴⁾, and reduces quality of life⁽²⁵⁾. This is supported by our finding that headache was the most common pain experienced by patients in the present study. Moreover, it has been determined that individuals with mental disorders and chronic pain have a lower quality of life⁽²⁵⁾. There is no study in the literature that characterizes the pain experiences of people with mental disorders and the type, intensity, frequency, or contributing and mitigating factors. One reason for this may be that the pain of patients with mental disorders is evaluated as a mental symptom, and it may be called somatic complaint. It can be recommended that mental health professionals also evaluate pain, which is considered a fifth vital sign.

The mean BMI of the patients participating in this study was 25.26 ± 4.94 , indicating that they were overweight. Some previous studies have reported similar mean BMI values. In studies of patients with schizophrenia, the mean BMI was high⁽¹⁾, and 83.6% of the patients were obese. While our findings are similar to those of another study conducted in our country, the difference from results from other countries may be related to cultural factors and eating habits, or it may be due to the predominance of patients with anxiety and depressive disorders compared to schizophrenic patients in the present study⁽¹⁾. Being overweight or obese can increase cardiovascular risk, reduce body image satisfaction and self-esteem, and result in patients experiencing a secondary stigma due to their obesity^(3,12). Therefore, patients should be given guidance and education on healthy nutrition and followed at regular intervals.

Vital sign assessment of the patients in this study showed that their mean heart rate was 80.58 ± 6.69 beats per minute, respiratory rate was within normal range, and mean systolic and diastolic

blood pressures were also within the normal range (<130/<80 mmHg) for individuals younger than 60 years of age ⁽²⁵⁾. In other studies, the mean systolic blood pressure of patients with schizophrenia was reported to be 127.57±14.17 mmHg, and patients with mental disorders receiving inpatient treatment in psychiatry clinics were found to have mean systolic and diastolic blood pressures <130/<80 mmHg and heart rate of 80.75 beats per minute at the time of discharge ⁽¹²⁾. The results of this study are consistent with the literature.

Limitation of the Study

Limitations of this study are that it was conducted in a single center, that a standardized assessment tool could not be used, and that the patients' eating patterns could not be evaluated in terms of most frequently eaten food items. However, the strength of our study is that the inclusion of patient self-reports, objective measurements, and clinician observations yielded comprehensive data on these patients.

CONCLUSION

It was found that the most of participants of this study was young, female, graduated high school and university, had middle economic status, had social insurance, did not working. Most of them did not have a physical disease, experienced drug side effect and smoked. A small percentage of patients examined their breast or testis themselves, nearly half of them exercised regularly, did not eat special diet, could not feel themselves rested when they got up, had a good self-care ability, most of them had dental problems. As a result, it was found that there were some physical health problems among patients with mental disorders in this study. Psychiatric and mental health workers should train the patients about healthy nutrition habits, quitting smoking and dental care to protect dental health of patients. Psychiatric and mental health workers may also benefits psychoeducation program for sleep hygiene of patients. While their daily water intake was enough in this study, more than half of patients have one-time bowel movement in daily frequency. It was found most of participants did not feel satisfy action about their sexual life and did not use any kind of contraception. Psychiatric and mental health workers should interview the patients about their sexual life and also trained them about safe sexual habits. Although their vital signs were in normal line,

the participants' BMI was higher. High BMI may a sign of cardiovascular problem, risk of diabetes and metabolic syndrome. Psychiatric and mental health workers should be aware of the evaluation of these parameters. They should also evaluate the patients with mental disorders according to standardized measurements such Health Improvement Profile (HIP), developed to psychosocial program to enhance the physical of patients with mental disorders and benefit them.

Author contribution

Study conception and design: GD and FG; data collection: AA; analysis and interpretation of results: GD; draft manuscript preparation GD, FG and AA. All authors reviewed the results and approved the final version of the manuscript.

Ethical approval

The study was approved by the Dicle University Faculty of Medicine Non-Invasive Clinical Research Ethics Committee (Protocol no. 284/01.08.2018).

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Conflict of interest

The authors declare that there is no conflict of interest.

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Araştırma fikri ve tasarımı: GD ve FG; veri toplama: AA; sonuçların analizi ve yorumlanması: GD; araştırma metnini hazırlama: GD, FG ve AA Tüm yazarlar araştırma sonuçlarını gözden geçirdi ve araştırmanın son halini onayladı.

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