ORIGINAL ARTICLE

Investigation of Psychiatric Symptoms of Inpatients Treated in a Training and Research Hospital

Bir Eğitim Araştırma Hastanesinde Yatarak Tedavi Gören Hastalardaki Psikiyatrik Belirtilerin İncelenmesi

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Abstract

Introduction: This research was carried out as a descriptive study to examine psychiatric symptoms and some affecting factors in hospitalized patients.

Methods: This descriptive study was conducted with 260 patients who were hospitalized in the internal medicine, general surgery, and orthopedics services of a training and research hospital between June 2017 and January 2018 and who agreed to participate in the study. "Personal Information Form," "General Health Questionnaire-12 (GHQ-12)," and "Symptom Checklist-90-Revised (SCL-90-R)" were used as data collection tools.

Results: When the 260 patients included in the study were evaluated according to the GHQ, 48.8% were found to be at risk for mental health disorders. According to the Symptom Screening Test, 16.9% were found to be at risk for somatization, 10% for obsessive–compulsive disorder, 13.8% for interpersonal sensitivity, 20% for depression, 8.1% for anxiety, 10.4% for anger-enmity, 5% for phobic anxiety, 11.1% for paranoid thought, 12.2% for psychoticism, and 19.2% for additional disorders (sleep disorders, eating disorders, and guilt).

Discussion and Conclusion: As a result of the study, psychiatric symptom scores of individuals who were hospitalized due to physical illness were found to be high. It is recommended that individuals who are hospitalized due to physical illness should be followed up for psychiatric symptoms throughout their stay and that individuals with chronic illnesses should be evaluated comprehensively in terms of psychiatric disorders.

Keywords: Chronic disease; Consultation-liaison psychiatry (CLP); Psychiatric nursing; Psychiatric symptom

Since ancient times, when diseases are mentioned, physical diseases come to mind first. While treating people with physical illness, the person is not considered as a whole, and only the area or organ of the disease is focused. For the first time, Hippocrates pointed out that imbalances between the patient's body, mental state, and environment

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lead to illness. According to the World Health Organization, health is not merely the absence of disease or infirmity but a state of complete physical, mental, and social well-being.[1,2]

People who encounter many stressors in their daily life try to maintain their homeostatic balance by developing a coping mechanism. Loss of health is also an important stressor for people. The individuals' response to physical illness varies according to their personality traits, age, gender, economic status, social support, and type of disease.[3] With the diagnosis of the disease, emotional reactions such as denial, anger, depression, inability to accept, mourning, feeling incomplete, not enjoying life, fear of death, loneliness, and helplessness occur in individuals. If an individual cannot receive sufficient support from his/her social environment, cannot accept his/her current situation, blames himself/herself, and isolates himself/herself from the outside world while in this situation, mental problems may accompany physical illness. Therefore, mental disorders are more common in individuals with physical illnesses than in healthy individuals.[1,2,4] The 1-month prevalence of mental disorders was found to be 16% in the general population, but it was between 21% and 26% in those with physical illness.[5] The lifetime prevalence of mental disorders was reported to be 42% in people with a chronic physical illness and 41.3%–46.5% in hospitalized patients.[6–8] Studies on the early diagnosis and treatment of these patients show that psychiatric disorders accompanying the physical illness adversely affect the patient's compliance, quality of life, response to treatment, course of the disease, mortality, and morbidity.[2,9]

Although mental problems are high in individuals with physical illness, studies show that the rate of diagnosis of psychiatric symptoms in individuals with medical illness is low. According to Silverstone's results, the rate of recognizing psychiatric symptoms is 61% for nurses and 41% for medical personnel, and the rate of patients who cannot be diagnosed in both groups is 40%. Problems and deficiencies in many areas, from the education of health workers to the functioning of the health system, can cause the psychosocial dimension of care and the psychosocial needs of patients to be neglected.[10,11] However, it is stated that psychosocial approaches not only reduce the physical symptoms that develop in the patient but also increase the sense of confidence, reduce the inability to cope with the negative emotional reactions due to the disease, and increase the quality of life.[9,12] The way patients evaluate the emotions and events they will experience in the hospital can also affect the next illness and hospital life. For this reason, it is important to recognize and intervene in the psychological state of the patients in terms of the course of the

disease and provide a cost-effective treatment service.[9,13]

As a result of the high rates of mental disorders due to physical illness, the branch of consultation-liaison psychiatry (CLP) has emerged, which takes the integrative approach to these patients as a principle.

CLP includes studies on the psychosocial dimensions of medical treatment and care, investigating mental disorders in physical diseases and difficulties in compliance with treatment, with the introduction of biopsychosocial care.[14] Within the CLP team, there are people from different professions such as psychiatrists, CLP nurses, psychologists, and social workers.[1]

Materials and Methods

Type of Research

This descriptive study was conducted to determine psychiatric symptoms and affecting factors in hospitalized patients.

Population and Sample of the Research

The population of the research consists of 5840 patients hospitalized in the general surgery, internal medicine, and orthopedics services of a training and research hospital in 2016. When the sample size was calculated as p=0.18*, q=0.82, d=0.05, n=8540, and t=1.96 according to the sample size calculation formula, the sample size of the study was found to be 221 people. To achieve result, a total of 260 patients from general surgery, internal medicine, and orthopedics services were included. (*Psychiatric disorder rate in Türkiye in 2011. Source: Ministry of Health National Mental Health Action Plan.)

Data Collection Tools

Personal Information Form, General Health Questionnaire-12 (GHQ-12), and Symptom Checklist-90-Revised (SCL-90-R) were used to collect data.

Personal Information Form

It is a form prepared by the researcher, consisting of 20 questions including the sociodemographic characteristics of the individuals (age, gender, etc.) and some factors affecting their mental state.

General Health Questionnaire-12 (GHQ-12)

In 1979, Goldberg and Hillier created the 28-question GSA, and in 1988, the 12-question GSA was created by Goldberg and Williams. It was translated into Turkish by Cengiz Kılıç in 1996. In the reliability study, Cronbach's alpha coefficient

was 0.78 for GHQ-12 and 0.84 for GHQ-28.[15] GHQ-12 consists of 12 questions and 4 subscales. Each item consists of 4 answers ranging from "less than usual" to "more than ever." Two types of evaluation (GHQ and Likert) are used in the evaluation of the scale. Those who scored "2 and above" in the GHQ-type assessment were accepted to be at risk in terms of mental problems according to the GHQ-12 result. Likert-type evaluation is scored as 0 out of 0 and 1, and 1 out of 2 and 3. Accordingly, the lowest score to be obtained is 0, and the highest score is 12. Scores less than 2 on the scale are considered low, scores between 2 and 3 are grouped as medium, and scores 4 or more are grouped as high. Those who get high and medium scores on the scale are evaluated in terms of psychological and physical disorders.[16]

Symptom Checklist-90-Revised (SCL-90-R)

It was developed by Derogatis in 1977. It contains 90 items answered on a 5-point Likert-type scale. It was adapted into Turkish by İhsan Dağ in 1991. In a sample of 9 subjects, Cronbach's alpha internal consistency was calculated as 0.97 according to the General Symptom Index (GSI) scores of the scale.[17] The subscale scores of the scale are obtained by summing the scores of the answers given to the relevant items and dividing the sum by the number of items that make up that subscale. The GSI average is obtained by dividing the obtained score by 90 after the evaluations were made for each item (0–4 points).[18]

Statistical Analysis

IBM SPSS software package version 22.0 (IBM Corp, Armonk, NY) was used to analyze the data obtained from the study. Within the scope of the research, descriptive statistics of the dependent variables were examined to determine the methods to be applied in the analysis of independent and dependent variables. As a result of the statistics, nonparametric tests were used in the analyses of SCL-90-R and parametric tests were used for GHQ. For this purpose, the Mann–Whitney U test and the Kruskal–Wallis H test were used to compare SCL-90-R subdimensions according to the sociodemographic characteristics, while independent sample t-test and one-way analysis of variance were used for GHQ.

Ethics

Approval was obtained from the ethics committee of a university on June 5, 2017. Written permission was obtained from the hospital's management where the study was to be conducted, and informed consent was obtained from the patients. The study was conducted according to the Declaration of Helsinki.

Results

When the demographic characteristics of the individuals participating in the study were examined, it was found that 53.8% the patients were males, 69.2% were married, 53.5% were primary school graduates, 49.2% lived with their spouses and children, 84.6% lived in the city, 61.8% perceived their economic status as "moderate," 58.7% did not smoke, 45.2% had a chronic disease, 83.8% had not received mental health services before, and 64.2% had been hospitalized before. It was determined that they received treatment, and 96.16% did not receive psychiatric consultation during their hospitalization (Table 1).

Considering the mean scores of the health questionnaires of the patients included in the study, it was determined that 27.6% of them were at low risk, 21.5% at medium risk, and 48.8% at high risk in terms of mental disorders (Table 2).

When the patients included in the study were evaluated according to Symptom Checklist, 16.9% had somatization, 10% had obsessive–compulsive disorder, 13.8% had interpersonal sensitivity, 20% had depression, 8.1% had anxiety, 10.4% had anger-enmity, 5% had phobic anxiety, 11.1% had paranoid thought, 12.2% had psychoticism, and 19.2% had additional disorders (sleep disorders, eating disorders, and guilt) (Table 3).

Discussion

While the difference in the psychological scores of the patients to be determined was analyzed, the divorced/determined scores were shown higher than the patients and singles. The psychiatric symptom scores of the individuals hospitalized in the internal medicine service were higher than those hospitalized in the general surgery and orthopedics service. Psychiatric symptom scores of primary school graduates were higher than high school and university graduates. The psychiatric symptom scores of individuals who perceived their economic situation as bad were higher than those who perceived their economic situation as good or moderate. The psychiatric symptom scores of individuals with a chronic disease were much higher than those without. Psychiatric symptom scores of individuals who received mental health services before were higher than those who did not. Psychiatric symptom scores of individuals who were hospitalized before were higher than those who were not hospitalized. Psychiatric symptom scores of individuals who are currently working in a job are higher than those who are not working.

Table 1. Sociodemographic characteristics

	Frequency	Percent	Stacked percent		Frequency	Percent	Stacked percent
Clinic				Status of receiving psychiatric assistance			
Internal medicine	57	21.9	21.9	Yes	42	16.2	16.2
Orthopedics	73	28.1	50.0	No	217	83.8	100.0
General surgery	130	50.0	100.0	Working status			
Gender				Working	112	43.1	43.1
Male	140	53.8	53.8	Not working	148	56.9	100.0
Female	120	46.2	100.0	Exercise status			
Marital status				Yes	10	3.9	3.9
Married	180	69.2	69.2	No	249	96.1	100.0
Single	50	19.2	88.5	First hospitalization			
Divorced/widowed	30	11.6	100.0	Yes	93	35.8	35.8
Educational status				No	167	64.2	100.0
Primary education	139	53.5	53.5	Reason for hospitalization			
High school	75	28.8	82.3	Diagnosis	3	1.2	1.2
College or university	46	17.7	100.0	Medical treatment	78	30.4	31.5
Perceived social support				Operation	176	68.5	100.0
Yes	134	51.7	51.7	Parent presence			
No	125	48.3	100.0	They both live	94	36.2	36.2
Perceived economic situation				Only one lives	74	28.5	64.6
Bad	83	32.0	32.0	Neither are living	92	35.4	100.0
Middle	160	61.8	93.8	Sleep habit			
Good	16	6.2	100.0	Regular	137	52.7	52.7
Smoking				Irregular	123	47.3	100.0
Using	107	41.3	41.3	Status of receiving psychiatric consultation in the hospital			
Not using	152	58.7	100.0				
Having a chronic illness				Yes	10	3.85	3.85
Yes	117	45.2	45.2	No	250	96.15	100.0
No	142	54.8	100.0				

When the 260 patients included in the study were evaluated according to the GHQ, 48.8% were found to be at risk for mental disorders. According to Symptom Check List, them were found to be at risk for; 16.9% had somatization, 10% had obsessive–compulsive disorder, 13.8% had interpersonal sensitivity, 20% had depression, 8.1% had anxiety, 10.4% had anger-enmity, 5% had phobic anxiety, 11.1% had paranoid thought, 12.2% had psychoticism, and 19.2% had additional substances (sleep disorders, eating disorders and guilt).

In a study conducted in 2008 on 424 individuals with chronic physical diseases, Bilge applied PRIME MD to the patients and measured the levels of psychiatric disorders. According to the results of the study, 165 (38.9%) of these 424 individuals reported a diagnosis of PRIME MD (mood disorder, alcohol abuse, anxiety disorder, and somatization disorder).[19] In a study conducted in primary health care institutions in Belgium, it was determined that 42.5% of

Table 2. General health survey score averages

	Frequency	Percent	Stacked percent
Low	77	29.6	29.6
Middle	56	21.5	51.2
High	127	48.8	100.0

2316 people had a psychiatric disorder.[20] Clarke et al.[21] reported that the rate of psychiatric disorder was 30% and the rate of depressive disorder was 12% in their study on 209 hospitalized patients. Abiodun and Ogunremi[22] reported the rate of psychiatric disorder as 40%, depressive disorder as 30.4%, and anxiety disorder as 21.9% in their study. According to the results of Ateşçi et al.'s[23] study, the rate of psychiatric disorders in patients hospitalized in general wards was found to be 23.4%. Of these patients diagnosed with psychiatric disorders, 38.3% (18 patients) reported that they were hospitalized in internal medicine,

Table 3. Psychological symptom scores averages

	Frequency	Percent	Stacked percent		Frequency	Percent	Stacked percent
Somatization				High	18	6.9	96.5
Normal	216	83.1	83.1	Very high	9	3.5	100.0
High	39	15.0	98.1	Phobic anxiety			
Very high	5	1.9	100.0	Normal	247	95.0	95.0
Obsessive–compulsive disorder				High	9	3.5	98.5
Normal	234	90.0	90.0	Very high	4	1.5	100.0
High	20	7.7	97.7	Paranoid thought			
Very high	6	2.3	100.0	Normal	231	88.8	88.8
Interpersonal sensitivity				High	23	8.8	97.7
Normal	224	86.2	86.2	Very high	6	2.3	100.0
High	31	11.9	98.1	Psychoticism			
Very high	5	1.9	100.0	Normal	247	95.0	95.0
Depression				High	11	4.2	99.2
Normal	208	80.0	80.0	Very high	2	0.8	100.0
High	38	14.6	94.6	Additional disorders			
Very high	14	5.4	100.0	Normal	210	80.8	80.8
Anxiety				High	43	16.5	97.3
Normal	239	91.9	91.9	Very high	7	2.7	100.0
High	18	6.9	98.8	General Symptom Index			
Very high	3	1.2	100.0	Normal	236	90.8	90.8
Anger-enmity				High	20	7.7	98.5
Normal	233	89.6	89.6	Very high	4	1.5	100.0

29.8% (14 patients) in surgery, 23.4% (11 patients) in obstetrics, and 8.5% (4 patients) in neurology services. In their study, Saravay and Lavin reported that psychiatric disorders were seen at a rate of 30%–60% in patients hospitalized in surgery and internal medicine clinics.[24] In the study of Katon and Gonzales,[25] the rate of major depressive disorder and dysthymia was 40%, the rate of somatization disorder was 20%, the rate of anxiety disorders was 21.8%, the rate of panic disorder was 12%, and the rate of alcohol and substance use was 5% in hospitalized patients. Depressive disorder (9.6%–44.6%), organic mental disorder (4.8%–27.6%), and anxiety disorder (2.8%–24.4%) are among the most common psychiatric diagnoses in studies conducted on patients hospitalized for physical illness in Türkiye.[26] The high prevalence of mental problems in hospitalized patients can be explained by reasons such as physical and social restrictions brought by the disease, diagnosis, and treatment methods that disturb the person, anxiety about the future, fear of death, deterioration in family processes, financial problems, being in a hospital environment, being away from home, family, and friends, and symptoms developing due to the disease and treatment (pain, nausea, vomiting, and itching).

Limitations

The data were collected from a single hospital; the personal characteristics and cultural structures of the individuals affect their reactions to the disease, and the patients are from very different diagnostic groups.

Conclusions

As a result, psychiatric symptom scores of individuals who were hospitalized due to physical illness were higher. Individuals with a chronic illness, those who received mental health services before, and those who had previous hospital experience had higher psychiatric symptom scores than others.

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