

Evaluation of Post-Discharge Attitudes and Behaviors of Patients Affected by The COVID-19 Pandemic

Gokhan TANSEL¹, Bahadır TASLİDERE², Bilgehan DEMİR³, Ozcan ERDOĞAN⁴

¹ Tekirdag Namik Kemal University, Tekirdag, Türkiye

² Department of Emergency Medicine, Faculty of Medicine, Bezmialem Vakif University, Istanbul, Türkiye

³ Department of Emergency Medicine, Faculty of Medicine, Malatya Turgut Ozal University, Malatya, Türkiye

⁴ Bezmialem Vakif University, Health Sciences institute, Department of disaster management, Istanbul, Türkiye

Abstract

Objective: In our study, the changes in the post-discharge attitudes and behaviors of individuals affected by the disease at varying degrees during the COVID-19 pandemic were evaluated. This study, it was aimed to take the necessary precautions to keep our personal and social preparations for COVID-19, which will continue for many years, active and contribute to future studies.

Methods: Information was obtained by interviewing the individuals who agreed to participate in the study one over the phone within the scope of the pandemic period measures. "Sociodemographic Information Form" and "Personal and Social Impacts of the Pandemic Questionnaire" prepared by us were used to collect the research data. We grouped the patients diagnosed with Covid-19 as those who were hospitalized and those who were treated in isolation at home and compared the results.

Result: There were a total of 453 patients who applied to the Emergency Department between the dates of 03.2020 and 05.2020 and were diagnosed with COVID-19. A total of 353 of them were hospitalized, 44 of them were in the intensive care unit, and 100 patients were isolated at home. 35 patients died in the process. 125 of 453 patients diagnosed with COVID-19 were found suitable for the study. 57% of the patients were male, 44.8% were within the 18-30 age group, and 66% were non-hospitalized.

Conclusion: The COVID-19 pandemic has caused significant changes in social life, professional life, education, and health systems. In this process, which has led people to stock up on food and cleaning supplies (54.4%), 36% of the participants developed a desire to avoid social environments. 46% of the patients no longer use public transport due to the fear of infection. It was determined that 82.4% of the recovered patients apply to emergency services for control purposes without any reason. Keeping the health system busy due to anxiety that develops psychologically, healthy eating efforts (80.8%), desire to use drugs even when not feeling sick (52.8%), constantly feeling exhausted (40.8%), and disturbed sleep (51.2%) have developed. However, only 24% of the participants received psychological support.

Keywords: COVID-19, Pandemic, Discharge, Attitudes, Behavior

Introduction

The coronavirus disease-19 (COVID-19), which originated in Wuhan in early December 2019, has become a new global public health crisis (1). COVID-19 is a viral disease that can affect every age group—from infants to the elderly—resulting in a wide spectrum of various clinical manifestations. The most common complications include pneumonia and acute respiratory distress syndrome. Fever, dry cough, muscle weakness, and chest pain are the most prevalent and typical symptoms of COVID-19 (2). Some people, especially those who had severe COVID-19, experience multiorgan effects or autoimmune conditions with symptoms lasting weeks, months, or even years after COVID-19 illness. Multi-organ effects can involve many body systems, including the heart, lungs, renal, skin, and brain (3). Even if individuals recover from a severe and life-threatening illness, they are at risk for post-traumatic stress disorder and depression. Therefore COVID-19, which

has affected the whole world and turned into a global pandemic, is not just a respiratory disease. In our study, the changes in the post-discharge attitudes and behaviors of individuals affected by the disease at varying degrees during the COVID-19 pandemic were evaluated. This study, it was aimed to take the necessary precautions to keep our personal and social preparations for COVID-19, which will continue for many years, active and contribute to future studies (4,5).

Investigating the post-discharge attitudes and behaviors of those who have recovered from the COVID-19 pandemic can enable contingency planning about the measures to be taken in future pandemic situations. Our study is important in terms of ensuring that health workers, who are the main actors of the disaster plan implementer, evaluate the disease correctly during the pandemic. Establishing support groups for people and using strong communication ways during and after the pandemic can increase the motivation of people to act according to the rules as much as possible in case of new pandemics and disasters

Corresponding Author: Bahadır TASLİDERE e-mail: drbahadir@yahoo.com

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Methods

The research is in the type of prospective study, which is descriptive based on the general model. It was conducted by including patients the ages of 18 and over who were diagnosed with Covid-19 upon their admission to the Emergency Service between the dates of 03.2020 and 05.2020. Information was obtained by interviewing the individuals who agreed to participate in the study one on one the phone within the scope of the pandemic period measures (in the same month).”Sociodemographic Information Form” and “Personal and Social Impacts of the Pandemic Questionnaire” prepared by us were used to collect the research data. We grouped the patients diagnosed with Covid-19 (PCR positive) as those who were hospitalized and those who were treated in isolation at home and compared the results. The study was completed with a total of 125 patients when the data were incomplete, could not be communicated and those who did not want to be included in the study were excluded. In our study, two groups were formed: those who were hospitalized and those who were discharged from the emergency department (patients in isolation at home). Within the scope of the pandemic period measures, information was obtained by interviewing the people who agreed to participate in the study on the phone. Ethics Committee Approval was obtained from xxxx University Ethics Committee to conduct the research (Date:

17/06/2020 Decision No: 10/217).

Statistical analysis: The analysis of the data obtained as a result of the applied questionnaire was made in this section. To analyze the data, the questionnaires were first transferred to Excel and then to the IBM SPSS 25.0 program by making appropriate coding. In the analyses, frequency analyses of the demographic data of the participants were made. In the study, the demographic data of the participants and the questionnaire questions, and whether there was a statistically significant relationship between those who were non-hospitalized and those who were hospitalized were examined. The chi-squared test or Fisher’s exact test was used for testing differences in proportions between groups. The Wilcoxon rank-sum test was used for testing the hypotheses about differences in means between the groups. Two-sided p-values were reported for all statistical tests, a p-value below 0.05 was considered to be statistically significant.

There were a total of 453 patients who applied to the Emergency Department between the dates of 03.2020 and 05.2020 and were diagnosed with COVID-19. A total of 353 of them were hospitalized, 44 of them were in the intensive care unit, and 100 patients were isolated at home. 35 patients died in the process. The study was completed with a total of 125 patients and those with incomplete data, those who could not be communicated with, and those who did not want to be included in the study were excluded. 57% of the patients were male, 44.8% were within the 18-30 age group, and 66% were non-hospitalized (Table 1,2)

Table 1: Patient information and questions answered

		Hospitalize d n(%)	Non-Hospitalized n(%)	p-value
Gender	Female	41 (54.7)	27 (54)	0,1000
	Male	34 (45.3)	23 (46)	
Age	18-30	23 (30.7)	33 (66)	0,001
	31-45	23 (30.7)	11 (22)	
	46-65	24 (32)	5 (10)	
	66 ve Üzeri	5 (6.7)	1 (2)	
Additional Disease	Yes	61 (81.3)	48 (96)	0,033
	No	14 (18.7)	2 (4)	
Chronic Diseases	Hypertension	23 (63.9)	2 (50)	0,025
	Diabetes mellitus	11 (30.6)	2 (50)	
	Liver disease	2(5.6)	0 (0)	
Respiratory after recovery Have you had problems?	Yes	35 (46.7)	8 (16)	0.001
	No	40 (53,3)	42 (84,0)	
Have you had a circulation problem?	Yes	11 (14.7)	1 (2)	0.019
	No	64 (85.3)	49 (98)	
Do you feel less active than before?	Yes	25 (33.3)	6 (12)	0.013
	No	50 (66.7)	44 (88)	
	Normal	39 (52)	22 (44)	
Constant feeling of tiredness	Yes	37 (49.3)	14 (28)	0.028
	No	38 (50.7)	36 (72)	
Have you received psychological support?	Yes	26 (34.7)	4 (8)	0.001
	No	49 (65,3)	46 (92)	

Table 2: Questions asked to patients and comparison

Questions	p- value
Patients without respiratory problems after recovery were statistically significantly more non-hospitalized than participants with respiratory problems after recovery.	0.001
The non-hospitalization of those without circulatory problems was statistically significantly higher than those with circulatory problems.	0.019
There was no statistically significant relationship between exercising or not exercising and being non-hospitalized or hospitalized.	0.769
Those who did not feel less active than before were statistically significantly more likely to be non-hospitalized than those who felt less active than before.	0.013
There was no statistically significant relationship between their desire to stay away from people and being non-hospitalized or hospitalized.	0.970
There was no statistically significant relationship between preferring public transportation in transportation and being non-hospitalized or hospitalized.	0.634
There was no statistically significant relationship between the storage of food and cleaning materials and being non-hospitalized or hospitalized.	0.085
There was no statistically significant relationship between being excluded from the environment or not, and being non-hospitalized or hospitalized.	0.265
There was no statistically significant relationship between the expectation that everything will be okay or they think that everything will get worse, and their being non-hospitalized or hospitalized.	0.874
There was no statistically significant relationship between sleep patterns and being non-hospitalized or hospitalized.	0.488
There was no statistically significant relationship between the increase or lack of healthy eating effort and being non-hospitalized or hospitalized.	0.677
There was no statistically significant relationship between having or not focusing on their goals and being non-hospitalized or hospitalized.	0.066
Those who did not feel constantly tired were statistically significantly more likely to be non-hospitalized than those with constant tiredness.	0.028
The non-hospitalization of those who did not receive psychological support was statistically significantly higher than the participants who received psychological support.	0.001
There was no statistically significant relationship between using or not using drugs and being non-hospitalized or hospitalized.	0.442
There was no statistically significant relationship between the presence or absence of side effects related to corona drugs and whether they were hospitalized or non-hospitalized.	0.309
There was no statistically significant relationship between the side effects (skin flushing, bruising, rash and other) related to corona drugs and being non-hospitalized or hospitalized.	0.556
Those who did not return to the emergency department after discharge were statistically significantly more likely to be non-hospitalized than those who went back to the emergency department after discharge.	0.039
There was no statistically significant relationship between the reasons for applying to the emergency department (hypertension, weakness, shortness of breath, allergy, cough and fever) and being non-hospitalized or hospitalized.	0.318
There was no statistically significant relationship between being good or bad in their current situation and being non-hospitalized or hospitalized.	0.097
There was no statistically significant relationship between the duration of phone calls and their being non-hospitalized or hospitalized.	0.474

Results

Of the 125 participants, 68 (54.4%) were female and 57 (45.6%) were male. Patients participating in the study were 56 (44.8%) 18-30, 34 (27.2%) 31-45, 29 (23.2%) 46-65, and 6 (4.8%) were 66 years old and above. Of 125 patients, 64 (51.2%) were married and 61 (48.8%) were single. 44 (35.2%) of the patients were primary school-middle school-high school graduates and 81 (64.8%) were university graduates. 109 (87.2%) of the patients did not have any additional disease and 16 (12.8%) had an additional disease. 25 (62.5%) of the patients had hypertension, 13 (32.5%) diabetes, and 2 (5.0%) liver disease. 50 (40.0%) of the patients stayed in the hospital for 1-10, 19 (15.2%) for 11-20, and 6 (4.8%) patients stayed in the hospital for 21 days or

more. 50 (40.0%) of the patients did not stay in the hospital. There was no statistically significant relationship between the gender of the patients and they're being non-hospitalized or hospitalized ($p > 0.05$). There is a statistically significant relationship between the ages of the patients and those who are non-hospitalized and hospitalized. ($p < 0.05$). The non-hospitalization of the participants in the 18-30 age group was statistically significantly higher than the participants in the other age groups. There was no statistically significant relationship between the patients being married or single and being non-hospitalized or hospitalized. There was no statistically significant relationship between the education status of the patients and those who were non-hospitalized and hospitalized. There was no statistically significant relationship between the occupations of the patients and they're being non-hospitalized or hospitalized. There was

a statistically significant relationship between hospitalized and non-hospitalized patients according to whether they had comorbidities or not ($p < 0.05$). Participants with hypertension were statistically significantly more likely to be hospitalized than participants with diabetes and liver disease. Have you had a circulation problem? (edema, hypertension, hypotension) There is a statistically significant relationship between the answers to the question of “(edema, hypertension, hypotension)” and those who were hospitalized and non-hospitalized ($p < 0.05$). Do you feel less active than before? There is a statistically significant relationship between the answers to the question and those who are non-hospitalized and hospitalized ($p < 0.05$). Do you feel tired all the time? There is a statistically significant relationship between the answers to the question and those who are non-hospitalized and hospitalized ($p < 0.05$). “Have you received psychological support?” There is a statistically significant relationship between the answers to the question and those who are non-hospitalized and hospitalized ($p < 0.05$). “Did you go to the emergency department again after discharge?” There is a statistically significant relationship between the answers they gave to the question and those who were hospitalized and non-hospitalized ($p < 0.05$).

Discussion

The COVID-19 pandemic has caused significant changes in social life, professional life, education, and health systems. . In this process, which has led people to stock up on food and cleaning supplies (54.4%), 36% of the participants developed a desire to avoid social environments. 46% of the patients no longer use public transport due to the fear of infection (6,7). It was determined that 82.4% of the recovered patients apply to emergency services for control purposes without any reason. Keeping the health system busy due to anxiety that develops psychologically, healthy eating efforts (80.8%), desire to use drugs even when not feeling sick (52.8%), constantly feeling exhausted (40.8%), and disturbed sleep (51.2%) have developed (8,9). However, only 24% of the participants received psychological support. Human health has biological, psychological, and social components, so psychological and social support mechanisms can be used for people who have survived the disease. As a disaster manager, mask, distance, and cleaning rules are important for reducing the transmission of the Covid-19 disease, which has turned into a pandemic, and we can ensure that the disease returns to its old life physically and spiritually in a shorter time by cooperating with other branches in the long covid process followed by the observed symptoms and discharge process (10,11)

It seems that the effects of this disease, which causes a pandemic all over the world, on the physical and mental health of people will continue for many years. Protection from the virus can be possible not only with isolation and social restrictions

but also by creating a new lifestyle. During the pandemic, the inadequacy of basic life needs, lack of information, quarantine process, mental reactions from being infected or being in contact, economic losses, stigma, disappointment, isolation, and psychological deterioration are observed, while the reactions differ according to the course of the disease.

Limitation: The fact that the hospitalized group is older and has additional disease may lead to the opinion that it will affect the answers given to the questions, and that both groups will have different psychological and behavioral characteristics

References

1. Guarner, J. Three Emerging Coronaviruses in Two Decades The Story of SARS, MERS, and Now COVID-19 American Society for Clinical Pathology. *Am J Clin Pathol.* 2020; 9;153(4):420-421
2. Budak F, Korkmaz Ş. COVID-19 Pandemi Sürecine Yönelik Genel Bir Değerlendirme: Türkiye Örneği. *Sosyal Araştırmalar ve Yönetim Dergisi.* 2020;(1):62-79
3. T.C. Sağlık Bakanlığı Halk Sağlığı Genel Müdürlüğü. COVID-19 (SARS- CoV-2 enfeksiyonu) Ağır Pnömoni, Ards, Sepsis ve Septik Şok Yöntemi Bilimsel Danışma Kurulu Çalışma Rehberi, 01 Haziran 2020 <https://covid19bilgi.saglik.gov.tr/tr/covid-19-rehberi.html>
4. Çobanoğlu N. COVID-19 Pandemisi ile Değişen Yaşamlar ve Toplumsal. *Eurasian JHS.* 2020;3(COVID-19 Special Issue):90-94
5. Wang J, Wang Z. Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis of China's Prevention and Control Strategy for the COVID-19 Epidemic. *Int J Environ Res Public Health.* 2020;26;17(7):2235.
6. Aşkın R, Bozkurt Y, Zeybek Z. COVID-19 Pandemisi: Psikolojik Etkileri Ve Terapötik Müdahaleler. *İstanbul Ticaret Üniversitesi Sosyal Bilimler Dergisi.* 2020;19(37):304-318.
7. Li W, Fang Y, Liao J, Yu W, Yao L, Cui H, Huang C. Clinical and CT features of the COVID-19 infection: comparison among four different age groups. *European Geriatric Medicine.* 2020;11(5):843-850.
8. Zandifar A, Badrfam R, Yazdani S, Arzaghi SM, Rahimi F, Ghahsemi S, Qorbani M. Prevalence and severity of depression, anxiety, stress and perceived stress in hospitalized patients with COVID-19. *Journal of Diabetes and Metabolic Disorders.* 2020;19(2):1431-1438.
9. Khaled, H, Akhter M. The Outbreak of Novel Coronavirus Disease (COVID-19) Pandemic: Consequences on Public Mental Health. *Journal of Brain Sciences.* 2020;3(1):1-15.
10. Erdoğan, Y., Koçoğlu, F., & Sevim, C. (2020). COVID-19 Pandemisi Sürecinde Anksiyete ile Umutsuzluk Düzeylerinin Psiko-sosyal ve Demografik Değişkenlere Göre İncelenmesi. *Klinik Psikiyatri* syf;23
11. Tian F, Li H, Tian S, Yang J, Shao J, Tian C. Psychological Symptoms of Ordinary Chinese Citizens Based on SCL-90 During the Level I Emergency Response to COVID-19. *Psychiatry Res.* 2020;288:112992