

Undergoing surgery in the pandemic: A qualitative study

Surgical experiences in the pandemic

Dilay Hacidursunođlu Erbař, Betül İlbey Koç, Sevda Suçeken, Fatma Eti Aslan
Department of Nursing, Faculty of Health Sciences, Bahçeşehir University, Istanbul, Turkey

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Abstract

Aim: The aim of the study was to understand the experiences of patients with a negative COVID-19 test who underwent elective surgery during the pandemic and thus contribute to patient-focused care.

Material and Methods: The study was carried out with patients who had elective surgery under regional anesthesia. Study data were collected with a patient information form and a semi-structured interview form. To analyze the data, patients' answers to the semi-structured questionnaire were brought together under themes relevant to the purpose and grouped and evaluated using the content analysis method.

Results: The study was conducted with 13 patients, of whom eight were women, 10 were married, and six had their first surgery. Two themes and eight sub-themes were determined after the analysis of the data. The themes were experienced emotional states and access to treatment.

Discussion: In the literature, it has been stated that the anxiety of the patients who underwent surgery is high. In the COVID-19 pandemic, problems related to the pandemic such as the prolongation of the treatment period, uncertainty and visitor restriction were added to this anxiety. Since the number of qualitative studies on how patients who underwent surgery during the pandemic period perceive and experience the surgical process is limited, our study is a study that provides information on this subject. In this process, patients' concerns are increasing and this issue should be emphasized in patient-centered care.

Keywords

Surgery, Human Experimentation, COVID-19, Pandemic, Qualitative Research

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Corresponding Author: Dilay Hacidursunođlu Erbař, Department of Nursing, Faculty of Health Sciences, Bahçeşehir University, 34353, Beşiktaş, Istanbul, Turkey.

E-mail: dhacidursunoglu@gmail.com P: +90 506 863 90 44

Corresponding Author ORCID ID: <https://orcid.org/0000-0002-1151-0765>

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Introduction

Surgery is a special experience associated with anxiety and reduced control. According to the data of the General Directorate of Health Services of the Ministry of Health, a total of 4,704,094 patients underwent surgery in Turkey in 2021 [available at: <https://sbsgm.saglik.gov.tr/Eklenti/40566/0/health-statistics-yearbook-2019pdf.pdf>].

In this process, patients experience anxiety for a number of reasons such as being unfamiliar with the hospital environment, possible complications, and fear of the unknown. In their meta-analysis, Abate et al. (2020) found that the prevalence of preoperative anxiety was 48% in surgical patients and that patients with fear of complications had four times higher preoperative anxiety.

It is known that many major pandemics have been recorded since the existence of humanity [2]. After the black plague, cholera, Spanish flu, and swine flu, the most recent worldwide pandemic was the COVID-19 pandemic [3]. Getting the disease and being hospitalized, as well as disallowing patient relatives in hospitals and companions or visitors in the clinics due to the pandemic were factors that caused stress in patients (available at: <https://www.who.int/teams/mental-health-and-substance-use/mental-health-and-covid-19>) [4, 5]. Preoperative anxiety levels increased in patients undergoing elective surgery during the COVID-19 pandemic. In their study with neurosurgery patients scheduled to undergo elective surgery, Doglietto et al. (2020) found that the strongest factor associated with anxiety in patients was the risk of being infected with COVID-19 disease.

How do patients who have a negative COVID-19 test and have to undergo surgery during the pandemic process feel? The answer to this question will help identify patients' needs, thus allowing for a better quality of care. A limited number of studies were found in the literature with patients with negative COVID-19 tests. For this reason, the study was conducted to understand the operating room experiences of patients with negative COVID-19 test who underwent elective surgery and thus contribute to the literature.

Material and Methods

This study was carried out in Istanbul to understand the operating room experiences of patients using the qualitative interpretative phenomenological design [7, 8]. The conduct of the study was based on the Qualitative Research Reporting Consolidated Criteria Checklist (COREQ) [9].

Sample selection

There is no limitation on the number of samples in studies with the qualitative phenomenological design [8]. The criterion sampling method was used in this study. Sampling criteria in the study were patients operated electively with regional anesthesia, 18 years of age and older, oriented and able to answer questions, had a negative COVID-19 test, and agreed to participate in the study.

Ethical Approval Statement

Institutional permission and ethics committee approval for the research were obtained with the decision no. 2021-202 on October 27, 2021. The patients who participated in the study were informed about the study, and their consent was

obtained by explaining that their voices would be recorded with a tape recorder, and that the information provided would be kept confidential and would not be used for any other purpose. Accordingly, the participants were coded as "H" to express "patient [hasta in Turkish]" and each participant was given numbers next to the code, for example H1, H2, H3.

Data Collection

The patient information form includes four open-ended questions on participants' age, gender, marital status, and the number of surgeries they have had.

Semi-structured interview form included six questions about hospital stays and surgeries during the pandemic period.

During the interview, a voice recorder was used to record the interviews. The interviews were held in the patient rooms in the hospital. Each interview lasted an average of 30 minutes.

Data Analysis

Patient responses to the semi-structured questionnaire were coded in line with the purpose by the researchers. Researchers compared and classified the various codes according to their differences and similarities. Patients' answers were brought together under the determined themes and evaluated using the content analysis method.

Ethical Approval

Ethics Committee approval for the study was obtained.

Results

Thirteen patients with an age range of 34-73 years participated in the study. Eight of them were women, 10 were married, and six had their first surgery.

Two themes and eight sub-themes were obtained in the study (Table 1).

Theme 1. Experienced emotional states

Sub-theme 1: Fear of being sick with COVID-19

Most of the patients stated that they were afraid of contracting COVID-19 disease during the operation and did not feel safe. One of them expressed his feelings as follows: "I was so afraid that I even quit smoking, and I have been smoking for 20 years, believe me. I am very afraid that I will catch the virus in the hospital" (H10).

Sub-theme 2: Fear of having COVID-19 and infecting their relatives

Regarding patients' fears, patients, especially those living with an elderly family member were afraid of infecting them. A remarkable example was from a patient who lived with his mother and father: "My parents are old. Now I'm very careful not to catch COVID-19 in the hospital and infect my family" (H6).

Sub-theme 3: Fear of the unknown

Patients, especially those who had not previously had COVID-19 disease, seemed to have a serious fear of the unknown. The statement of a 53-year-old patient was a notable example "I have had stomach aches for a long time. I want to have this surgery as soon as possible, but I do not know what will happen if I get COVID from the hospital, if my surgery is delayed" (H11).

Sub-theme 4: Fear of death

One patient's statement was as follows: "We hear a lot of deaths on the news. They say that especially those who have diseases die. I also have high blood pressure, so I am afraid of

dying if I get COVID” (H4).

Sub-theme 5: Not feeling safe

The majority of patients stated that hospitals are risky areas for COVID-19 disease and therefore they do not feel safe. One patient commented, “I do not feel safe at all because I do not know who may have COVID” (H3).

Sub-theme 6: Submission

One patient said, “I was hospitalized again last month. The nurses told me how important it is to wash my hands, I never take off my mask anyway. That is why I am not afraid, we will get what is in our destiny” (H9).

Theme 2: Access to treatment

Sub-theme 1: Conveniences

A patient said, “I am a teacher, I am together with many children at school. I think I would have been sick already because it was crowded at school. I am very happy to have my surgery now, it is easy to make an appointment right now.” (H5).

Sub-theme 2: Challenges

A patient stated the difficulties she had in accessing treatment during the COVID-19 pandemic as follows: “Because my doctor has COVID-19, the patients he was going to operate piled up and we had to postpone my surgery a little. Actually, I was going to have surgery earlier.” (H8).

Table 1. Themes and Sub-Themes

Themes	Sub-Themes
Experienced emotional states	Fear of being sick with COVID-19
	Fear of having COVID-19 and infecting their relatives
	Fear of the unknown
	Fear of death
	Not feeling safe
Access to treatment	Submission
	Conveniences
	Challenges

Discussion

Abrupt postponement of elective surgeries, fear of contracting COVID-19 disease during hospital visits, the predicted increase in postoperative morbidity in COVID-19 patients undergoing surgery are described as factors that increase concern and anxiety in patients awaiting and undergoing surgery during the pandemic [6, 10, 11, 12].

Balkaya et al (2021) determined in their study that patients who were concerned about being infected with COVID-19 disease during hospitalization had higher anxiety scores than those who did not have such concerns. In the study of Moveman et al. (2021) determined in their study that 61% of the patients were worried about contracting the COVID-19 disease, especially during admission to the operating room and waiting areas. Işıklı et al. (2023) found in their study that patients’ fear of COVID-19 disease was close to moderate. In our study, similar to the literature, the majority of patients stated that they were afraid of surgery and did not feel safe in the COVID-19 pandemic. Most of these fears were caused by the need for prolonged hospitalization, the unknowns about the process, staying away

from their relatives, the risk of infecting family members with COVID-19 disease. Besides, they experienced the fear of death, especially those with chronic diseases and elderly patients.

Three of the patients did not have any negative reports of fear of getting sick since they had the COVID-19 disease previously. A study in the literature on the emotional state and fears of patients scheduled for elective surgery during the COVID-19 pandemic reported that 55% of the patients were afraid of contracting COVID-19 disease during hospitalization. In addition, a previous infection due to COVID-19 disease has been associated with reduced fear of COVID-19 disease [10]. The study by Gültekin et al (2021) determined that 72.3% of the patients did not receive any information about the rates of COVID-19 disease among patients and staff, the tests performed in the hospital where they were treated, or the precautions taken. In the study by Keskin et al. (2021), patients who reported that they could not get enough information about the surgical processes, and who were concerned that the treatment could not be completed, had higher levels of fear. In our study, the majority of the patients stated that they did not think that they had enough information about the COVID-19 disease measures taken in the hospital, so they were worried and afraid.

In the study by Keskin et al. (2021), patients experienced a moderate fear of the pandemic, and 16.1% of the patients postponed their follow-up dates at least once due to this fear. In access to treatment theme, some of the patients stated that having surgery in the COVID-19 pandemic had some conveniences, whereas some others mentioned difficulties. As conveniences, they said that it would be easier for them to access treatment because other patients were afraid of going to the hospital. However, there were also patients who noted that disruptions could occur in the planned surgical treatments, and their surgeries were postponed to a later date because of the healthcare workers who had COVID-19.

Strengths and limitations

These results cannot be generalized to all patients as the study was conducted in a single institution and a qualitative design was used. The strength of the study was that it examined how patients who underwent surgery during the pandemic period perceived and experienced the process. The results indicated that patients’ anxiety increased in this process and that this issue should be emphasized in patient-centred care.

Conclusion and Suggestions

There are quantitative studies in the literature on the concern and anxiety experienced by patients undergoing elective surgery related to COVID-19 disease. We think that our qualitative study on the subject will contribute to understanding and interpreting the experiences of patients with negative COVID-19 tests undergoing elective surgery. We believe that healthcare professionals should identify patients’ fears of surgery and COVID-19 disease and support them accordingly.

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Scientific Responsibility Statement

The authors declare that they are responsible for the article’s scientific content including study design, data collection, analysis and interpretation, writing, some

of the main line, or all of the preparation and scientific review of the contents and approval of the final version of the article.

Animal and human rights statement

All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. No animal or human studies were carried out by the authors for this article.

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Conflict of interest

None of the authors received any type of financial support that could be considered potential conflict of interest regarding the manuscript or its submission.

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