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A PHENOMENOLOGICAL STUDY ON PHARMACY STUDENTS' INTERNSHIP EXPERIENCES DURING THE COVID-19 PANDEMIC

COVİD-19 PANDEMİSİ SIRASINDA ECZACILIK ÖĞRENCİLERİNİN STAJ DENEYİMLERİNE İLİŞKİN FENOMENOLOJİK BIR ÇALIŞMA

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ABSTRACT

Objective: *The objective of this study was to delineate the perceived impact of the COVID-19 pandemic on pharmacy students engaged in internships at community pharmacies in Turkey.*
Material and Method: *In this study, which adopted a phenomenological approach, data were collected through semi-structured interviews conducted online. This study was conducted with 18 pharmacy students (S1 to S18) who had completed their internships in various regions of Turkey.*
Result and Discussion: *This study yielded two principal themes. The two main themes that emerged from this study were: 1) Challenges and risks, and 2) Changing perspectives on the profession. It would be beneficial for future studies to evaluate the longitudinal effect on pharmacy students' workplace experience and appreciation of the pharmacy profession. Furthermore, additional research is required to examine the experiences of pharmacy students who undertook their internships in hospital settings during the pandemic.*
Keywords: *COVID-19, health counsellor, pharmacy students, qualitative study*

ÖZ

Amaç: *Bu çalışmanın amacı, Türkiye'deki toplum eczanelerinde staj yapan eczacılık öğrencileri üzerinde COVID-19 salgınının algılanan etkisini tasvir etmekti.*
Gereç ve Yöntem: *Fenomenolojik bir yaklaşım benimseyen bu araştırmada veriler, yarı yapılandırılmış görüşmeler aracılığıyla çevrimiçi olarak toplanmıştır. Bu çalışma, Türkiye'nin çeşitli bölgelerinde stajlarını tamamlayan 18 eczacılık öğrencisinin (Ö1-Ö18) katılımıyla gerçekleştirilmiştir.*
Sonuç ve Tartışma: *Bu çalışma sonucunda iki ana tema ortaya çıkmıştır. Bu çalışmada iki ana tema ortaya çıkmıştır: 1) Zorluklar ve riskler ve 2) Mesleğe yönelik değişen bakış açıları. Gelecekteki çalışmalar için eczacılık öğrencilerinin işyeri deneyimi ve eczacılık mesleğine olan takdirleri üzerindeki uzunlamasına etkiyi değerlendirmek faydalı olacaktır. Ayrıca, pandemi sırasında hastane ortamlarında staj yapan eczacılık öğrencilerinin deneyimlerini incelemek için ek araştırmalara ihtiyaç vardır.*
Anahtar Kelimeler: *COVID-19, eczacılık öğrencileri, nitel çalışma, sağlık danışmanı*

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INTRODUCTION

Community pharmacists play a pivotal role in the dissemination of public health information, procurement and delivery of medicines to patients, and facilitation of patient interactions with the health system. Community pharmacies have been compelled to react expeditiously to the advent of the Coronavirus Disease 2019 (COVID-19) pandemic, with frontline healthcare professionals hastening to provide assistance to patients even after the implementation of quarantine protocols [1-4]. In Türkiye, as of 11 May 2021, 51 pharmacists and 19 pharmacy workers had lost their lives to the novel coronavirus. This makes pharmacists the health workers with the highest number of casualties after physicians [5]. In the context of the global pandemic, several noteworthy developments have emerged in the field of pharmacy in Türkiye. This is due to the fact that, as in many other countries, pharmacists represent the most accessible health professionals at the primary healthcare level [6]. During this period, the expanded scope of practice for community pharmacists included the provision of personal protective equipment, such as masks, disinfectants, hand sanitizers, face shields, gloves, and dietary supplements. Furthermore, community pharmacists were granted authority to issue follow-up prescriptions for patients with chronic diseases, obviating the need to visit a healthcare facility and undergo examination by a physician. This enabled patients to procure their medications directly from pharmacies. The opening hours of pharmacies were subject to regulation, and all pharmacies were required to remain open, including on days when a curfew was in effect [7].

It has also been documented that pharmacy students play a significant role in the management of epidemic and pandemic diseases through the operation of free pharmacies [8,9]. In the context of the undergraduate pharmacy program in Türkiye, students are required to complete a six-month internship. The internship experience of students is integrated into the educational process. Some internships occur periodically during the summer months following the second, third, and fourth years of education and training, while others are conducted in free pharmacies, hospitals, pharmaceutical factories, and research and development centers during the ninth and/or tenth semesters of the education and training period, according to students' preferences [10]. In Türkiye, requirements for internships remained in place throughout the course of the pandemic.

Recent studies of pharmacy practice during the pandemic have revealed that pharmacy students constitute an integral part of the pharmacy workforce, playing a pivotal role in combating the pandemic and ensuring the continuity of essential services during the crisis [11,12] and there have been reports of the participation and services provided by pharmacy students during the period of the pandemic [13]. These findings indicate the possibility of a more detailed examination of students' roles and contributions as well as the utilization of such experiences for the benefit of students, health services, and patients. There is a paucity of knowledge regarding the experience of pharmacy students engaged in community pharmacy work during the COVID-19 pandemic. The objective of this study was to delineate the perceived impact of the COVID-19 pandemic on pharmacy students engaged in internships at community pharmacies in Türkiye.

MATERIAL AND METHOD

Study Design

A qualitative approach was employed to gain insight into the experiences of pharmacy students undertaking internships in community pharmacies during the COVID-19 pandemic and to understand how their perspectives on the profession were affected. A phenomenological study design utilizing in-depth interviews permitted participants to delineate their lived and perceived experiences in their own words.

Study Sample

Eligible participants were final-year pharmacy students in Türkiye who had completed their internship for a minimum of 30 days following the initial outbreak of the COVID-19 pandemic in the

country, which occurred on March 11, 2021. A combination of convenience and snowball sampling methods was employed to recruit students. Various recruitment strategies were employed to ensure that the resulting samples were representative. An email was sent to all Turkish pharmacy faculties, requesting that it be forwarded to the final pharmacy students. Furthermore, the researcher contacted a representative of the Turkish Pharmacy Students' Association Youth Commission (TPSAYC) and distributed information about this study to its members. TPSAYC is the largest student organization representing pharmacy students in Türkiye, with representatives from each faculty. Those who expressed an interest in participating were provided with a participant information sheet and question guide for review prior to signing the consent form and agreeing to be interviewed. Participants were permitted to withdraw from this study at any point up to one week after the interview. The inclusion criteria were as follows: a) completion of at least 30 days of internship in a community pharmacy between March 11, 2020, and October 31, 2021; and b) ability and willingness to provide informed consent. The inclusion of trainee pharmacists was intended to facilitate the acquisition of a comprehensive understanding of the challenges encountered by pharmacists and the manner in which their professional perspectives are influenced. Pharmacists with a working period of less than 30 days were excluded from this study because their exposure to the situations in question was insufficient. No financial compensation or remuneration was provided for participation.

Data Collection

A semi-structured interview was employed to elicit students' perspectives on their internship experiences using an interview guide to facilitate the process. The interview guide was developed by drawing on existing literature [14] on the subject. The interview guide was initially tested with one master's and doctoral student. Following the pilot study, minor adjustments were made to the interview guide. The final version is presented in Appendix 1. The use of open-ended questions enabled students to engage in more reflective discourse, facilitating the articulation of their ideas and experiences. The interviews were conducted by the principal researcher (EUD) who had considerable experience in qualitative interviews. Interviews were conducted via Zoom with final-year pharmacy students who completed their internships in various cities in Türkiye between May 1 and July 1, 2024, at mutually agreed-upon dates and times. Each interview lasted between 30 and 45 minutes. The interviews were recorded digitally. The data were stored securely on a password-protected university server, and any personally identifiable information was removed from the transcripts immediately after the interview.

Data Analysis

The data were transcribed in their entirety and not altered by the interviewer. The interview transcripts were subjected to thematic analysis using a six-step framework as a guide [15]. This entailed repeated familiarization with the transcripts, followed by the identification of codes, creation of themes, and identification of main themes and sub-themes. The primary researcher conducted a line-by-line reading of each transcript with the objective of identifying and organizing prominent codes and influential quotes based on the statements made by participants. Subsequently, the codes were organized using MaxQDA software version 24.4.1, and both the codes and raw transcripts underwent approximately 10 reviews to achieve data saturation. Data analysis was conducted concurrently with the interviews. The interview transcripts were reviewed periodically by the research team. The two authors (EUD and FE) convened on a regular basis to deliberate on the themes and sub-themes until a consensus was reached. Furthermore, a peer debriefing was conducted in the form of a discussion with a peer who was not directly involved in this study, but had experience in qualitative research.

RESULT AND DISCUSSION

This study was conducted with the participation of 18 pharmacy students (S1 to S18) who had completed their internships in various regions of Türkiye. 61.1% of the participants were female pharmacy students and a summary of the participants' key demographic characteristics is presented in Table 1. Two main themes emerged in the data collected regarding the community pharmacy internships

of pharmacy students during the pandemic period: 1) Challenges and risks, 2) Changing perspectives on the profession. A detailed account of the categorization of these themes is shown in Figure 1.

Table 1. Baseline characteristics of the participants

Participant number	Gender	Age	City of internship	Month of internship	Internship period
1	Male	23	Erzurum	3	01 July-01 August 2021 01 July-01 September 2022
2	Male	22	Trabzon	4	01 July-01 September 2021 01 July-01 September 2022
3	Female	23	Antalya	3	01 July-01 August 2021 01 July-01 September 2022
4	Female	22	Ankara	3	01 July-01 August 2021 01 July-01 September 2022
5	Male	23	İstanbul	3	01 July-01 August 2021 01 July-01 September 2022
6	Female	22	Şanlıurfa	3	01 July-01 August 2021 01 July-01 September 2022
7	Female	23	Erzurum	3	01 July-01 August 2021 01 July-01 September 2022
8	Female	25	Ankara	3	01 July-01 August 2021 01 July-01 September 2022
9	Male	26	Antalya	3	01 July-01 August 2021 01 July-01 September 2022
10	Female	23	İzmir	3	01 July-01 August 2021 01 July-01 September 2022
11	Female	22	Adana	3	01 July-01 August 2021 01 July-01 September 2022
12	Male	24	Erzurum	4	01 July-01 September 2021 01 July-01 September 2022
13	Male	24	Manisa	3	01 July-01 August 2021 01 July-01 September 2022
14	Female	25	Şırnak	3	01 July-01 August 2021 01 July-01 September 2022
15	Female	24	İzmir	3	01 July-01 August 2021 01 July-01 September 2022
16	Male	23	Ordu	3	01 July-01 August 2021 01 July-01 September 2022
17	Female	24	Mersin	3	01 July-01 August 2021 01 July-01 September 2022
18	Female	26	İstanbul	3	01 July-01 August 2021 01 July-01 September 2022

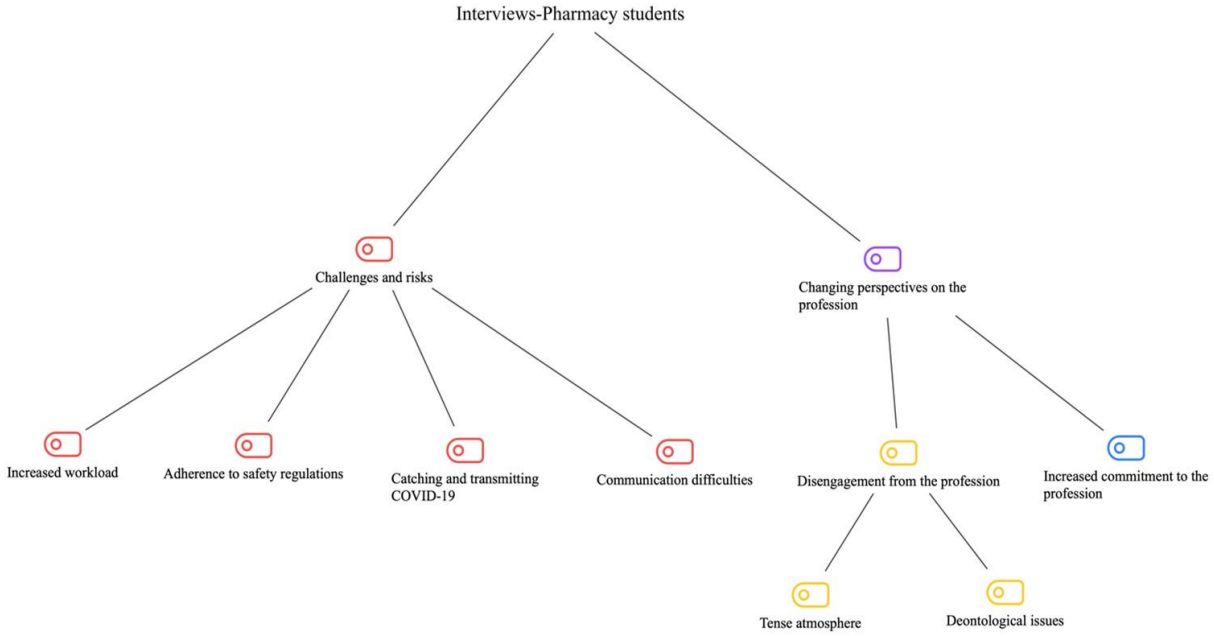


Figure 1. Thematic analysis

Theme 1. Challenges and risks

The vast majority of pharmacy students reported encountering significant challenges during their internships. These include communication difficulties, adherence to safety regulations, catching and transmitting COVID-19, and increased workloads.

Communication Difficulties

Most students reported challenges in communicating with patients due to the measures implemented in response to the pandemic. Among the measures implemented were the use of masks and the establishment of physical barriers and screens within the pharmacy to maintain social distancing. It was emphasized that these factors resulted in difficulties in communicating with patients due to their inability to hear each other effectively.

"I remember that there was a constant communication breakdown because we were using masks. For example, I asked what I asked and we had to ask a few more times. These obstacles, you have a mask, which prevents us, there is a barrier in front, and the patient is already far away in that way. At that time, we were very much in contact with these questions, such as what was your name, I couldn't hear you, could you tell me again?" (S2)

Furthermore, some students indicated that disagreements arose because of the intolerance of both patients and pharmacists as a result of the pandemic.

"Since people also had fear, there were also people who could not tolerate it. Sometimes, patients cannot adjust their distance. Any disagreement was too much in this regard." (S7)

Increased Workload

The majority of students indicated that the additional responsibilities assigned to pharmacists during the pandemic period resulted in an overall increase in the workload of pharmacies. It was reported that the situation in which patients with chronic illnesses, referred to as follow-up prescriptions, take their medication from pharmacists without attending any health institution has resulted in a significant increase in the workload for pharmacies. Furthermore, they reported significant challenges during shifts, owing to the high number of patients diagnosed with COVID-19.

"A new element was introduced to the pharmacy system, designated as a follow-up prescription. A 418 code was introduced. At that time, chronic prescriptions were entered with the code 418. At that

time, a different system was introduced to the pharmacy, resulting in an increased workload for the pharmacist." (S6)

In addition, participants described community pharmacies as the first point of contact for many patients to answer COVID-19-related questions.

"During this period, the workload of pharmacists increased because the hospitals were overcrowded; therefore, the patient would first come to the pharmacist instead of going to the hospital for minor symptoms. They consulted with pharmacists. They were both taking tests and consulting for herbal medicines, vitamin C, multi vitamins in addition to the test." (S7)

Catching and Transmitting COVID-19

The vast majority of pharmacy students expressed concern about the potential to become infected and infect their families or loved ones, given the high level of exposure in pharmacies during the pandemic, as some participants indicated that their family members were classified as vulnerable to COVID-19-related complications. In terms of the psychological impact of this situation, students highlighted that they were fatigued by a constant sense of danger.

"The only establishments open during this period were pharmacies, and it was a common perception that people were always preoccupied with: It is reasonable to conclude that S10 was the source of the infection, having been carried from the pharmacy. I am curious whether my family will divulge this information or if I will infect another individual. There was a pervasive sense of unease in my social circles. I was disinclined to interact with people due to this apprehension. For instance, after leaving the pharmacy, I would take a shower after two hours and then go out to meet my friends once I felt comfortable." (S10)

Adherence to Safety Regulations

The majority of pharmacy students discussed the challenges of refraining from utilizing air conditioning units as a precautionary measure, donning masks, attempting to maintain adequate ventilation, and undergoing constant disinfection procedures during their summer internships.

"I mean, those masks and barriers were very difficult for me. Otherwise, again, those distances, trying to protect yourself there, you are in that internship environment, you need to complete it, and it was really bad that the air conditioning did not work. Where I lived in a summer place, we couldn't breathe." (S2)

Furthermore, a few students indicated that they were confronted with a dilemma between maintaining social distancing and providing assistance to patients.

"Simultaneously, there was a desire to assist the public while grappling with their accompanying anxiety. This presented a unique challenge for pharmacists, particularly in maintaining social distancing. In essence, there was a conflict between the desire to provide assistance and the obligation to adhere to the established guidelines." (S7)

Theme 2. Changing Perspectives on the Profession

Most pharmacy students emphasized that their perspective on the profession changed during their internships. Students expressed differing views on this issue. The majority of students asserted that their dedication to the profession grew, attributing this development to their perception of themselves as the most accessible health counsellors. Conversely, a very small number of students expressed disillusionment with their profession, citing deontological concerns as a contributing factor.

Increased Commitment to the Profession

Students reported that, as the most accessible health institution during the pandemic period, they were frequently consulted by patients seeking information and advice on the use of medicines recommended by physicians for the treatment of COVID-19. Consequently, they felt that they were the closest health counsellors and were more committed to the profession. Furthermore, the majority of students stated that their tendency to open community pharmacies is now higher.

"At the outset, pharmacy was not perceived as a health profession but rather as a trade. This perception was shaped by my own observations and the discourse of those around me. Even from an

external perspective, it was assumed that the sole viable career path was to establish a pharmacy. However, there appeared to be an understanding that we were somewhat more akin to a healthcare professional in the context of the pandemic. Indeed, I was of the same opinion. It is possible that the high number of patients at the pharmacy contributed to the perception that it was a more convenient alternative to the hospital due to the ongoing pandemic. Consequently, it was more straightforward for the patients to seek advice from us. Consequently, I considered ourselves to be the most accessible health counsellors in that process." (S17)

"It was the only internship where I really felt like the closest health counsellor. They used to ask us the most because people had many questions about vaccines and food supplements. They also consulted a lot. It was a productive period." (S5)

Disengagement from the Profession

Tense Atmosphere

A limited number of students indicated that they had been adversely affected by the chaotic and tense environment during the pandemic, leading to a sense of disillusionment with the pharmacy profession. The students expressed that they were discouraged from pursuing their profession because of their inability to interact with patients in the manner they desired, given the constraints of social distancing.

"We are in the position of pharmacists there, but since what we do is to send the patient as soon as possible, not to contaminate the covid, not to pollute the air environment more, to give the medicine immediately, to give instructions and send it, i can say that it slightly cooled me down or discouraged me. In other words, there was such a tense environment in the pharmacy in general." (S15)

Deontological Issues

A minority of students highlighted the detrimental impact of pharmacists by exploiting the circumstances of patients with chronic illnesses who obtain their medications directly from pharmacies without consulting a physician. They asserted that this practice not only negatively affects these patients, but also undermines the integrity and reputation of the profession. They also stated that this situation distanced them from their profession.

"If I look at it from the public side, I agree with my friends, but when I look at it as a pharmacist, our profession in the eyes of the public may have increased, but I think the covid period is when the profession was destroyed the most. As you know, a concept called follow-up prescriptions came in, medicines were prepared without informing the pharmacies of other patients, and patients could not access their medicines. In other words, it was all about money during the covid period, the more prescriptions I enter, the more money i make, and some pharmacists victimised the patient." (S13)

An investigation into the perceived impact of the COVID-19 pandemic on pharmacy students undertaking internships in community pharmacies revealed that the experience was challenging but transformative in terms of their outlook on the profession. This study yielded two principal themes. The two main themes that emerged from this study were: 1) Challenges and risks, and 2) Changing perspectives on the profession.

Pharmacy students reported experiencing significant challenges and risks during their internships. In response to these challenges, the students highlighted communication difficulties with patients, concerns about infection and potential transmission to family members, adaptation to measures such as air conditioner use and mask-wearing during the internship, and an increased workload. A study reported that the continued operation of pharmacies during curfew hours in Türkiye led to an increased workload for pharmacists, and that the first healthcare professional to die from coronavirus disease was a community pharmacist [16]. It has been reported that community pharmacists provided pharmacy services with great dedication during the pandemic, despite having to cope with numerous challenges. In particular, it was stated that the free provision of masks through community pharmacies resulted in an increased workload for pharmacists and led to disruptions in pharmacy services. Furthermore, it was reported that the high density of citizens in pharmacies purchasing masks increased the risk of transmission because of the difficulty in maintaining the required distance [17]. It has been reported that

community pharmacists can assist patients with non-COVID-19 conditions in adhering to their medication regimens, potentially preventing hospitalizations. Thus, it was stated that this approach could reduce the number of hospitalizations and workload of clinical professionals, although it may be quite demanding for pharmacists [7].

The findings of this study concur with those of a similar study conducted by Patel et al., in that pharmacy students identified a decline in physician services and an increased demand for community pharmacies as the primary access point to healthcare [18].

Additionally, the students indicated that they experienced considerable psychological distress due to concerns about infecting their family members or other loved ones. These findings are consistent with those of another study, which found that pharmacy students expressed concern about the potential for contagion to affect their family members [19].

Students also found it difficult to communicate with patients while wearing facemasks and applying other social distancing measures during the pandemic. A recent study demonstrated that the use of personal protective equipment represents a significant obstacle to effective communication between healthcare professionals and patients, particularly in the case of elderly or cognitively impaired individuals [11].

As was the case in the literature published prior to the pandemic, students in this study provided both positive and negative feedback regarding their experiences at community pharmacies [20,21]. The majority of students indicated that they felt a greater sense of connection to the profession and perceived themselves as the most proximate health counsellor. Furthermore, the findings corroborate those of another study, elucidating the role of the pharmacist during the pandemic and underscoring the significance of being an accessible and trusted health professional [22]. In a recently published study, semi-structured interviews were conducted with 18 students, and the theme of "appreciation and value of the pharmacy profession" emerged as a finding [14]. The vital importance of community pharmacies has been highlighted during the COVID-19 pandemic, as most commercial businesses and shops have had to suspend their operations, making them the only remaining pillar of society [23]. Community pharmacies in countries affected by the pandemic have served as the initial point of contact within the health system for individuals seeking guidance on how to address concerns, access reliable information, and prevent diseases [24].

A very small number of students claimed that their internships during the pandemic caused them to have negative feelings towards the profession. In particular, they stated that they were disappointed with deontological problems, such as the abuse of follow-up prescriptions by pharmacists. In a study conducted by Kıran, it was reported that cases related to the abuse of the practice of issuing follow-up prescriptions of patients with medical reports in Türkiye by pharmacists without the need for physicians to write them have not yet been reflected in the study reports, but may be seen in the records of the coming period [16]. A few students who participated in this study also reported that the challenging and disordered atmosphere in the pharmacy prompted them to question their chosen profession. Similarly, in another study, negative views were predominantly associated with stressful work environments where students experienced frustration due to the impact of the COVID-19 pandemic, irritable behavior of patients, or unprofessional conduct of pharmacy personnel [21].

It is important to note that the results of this study may not be representative of all student pharmacists, although the findings from qualitative studies are not intended to be generalizable. In addition, the findings represent self-reported student perceptions that may change over time or in hindsight. Further research is required to determine whether these findings can be replicated in other studies. It may also be interesting to compare our findings with students' perceptions of working in other pharmacy settings, such as hospitals, during the COVID-19 pandemic, although this study focused on community pharmacies.

The participants in this study provided insights into their internship experiences during the pandemic. The participants indicated that the advent of the COIVD-19 pandemic had an impact on their perspectives on the profession during their community pharmacy internships and that they encountered a number of challenges. The majority of students indicated that they felt a greater sense of proximity to the role of a health consultant and a stronger attachment to the profession itself. Conversely, a subset of students reported experiencing negative effects as a result of observing deontological issues and

navigating a challenging environment in the pharmacy setting. It would be beneficial for future studies to evaluate the longitudinal effect on pharmacy students' workplace experience and their appreciation of the pharmacy profession. Furthermore, additional research is required to examine the experiences of pharmacy students who undertook their internships in hospital settings during the pandemic.

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AUTHOR CONTRIBUTION

Concept: E.U.D.; Design: E.U.D.; Control: E.U.D., F.E.; Sources: E.U.D., F.E.; Materials: E.U.D., F.E.; Data Collection and/or Processing: E.U.D., F.E.; Analysis and/or Interpretation: E.U.D.; Literature Review: E.U.D., F.E.; Manuscript Writing: E.U.D., F.E.; Critical Review: E.U.D.; Other: -

CONFLICT OF INTEREST

The authors declare that there is no real, potential, or perceived conflict of interest for this article.

ETHICS COMMITTEE APPROVAL

The research was sanctioned by the Ethics Committee of Atatürk University's Faculty of Pharmacy (2400239514). Additionally, all participants voluntarily provided their informed consent.

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