

# The Impact of the Covid-19 Pandemic on Physicians in Turkey Towards Informed Consent

## Covid-19 Pandemisinin Türkiye’de Çalışan Hekimlerde Aydınlatılmış Onam Üzerinde Etkisi

Ömer Faruk BORAN<sup>1</sup> , Ercan AVCI<sup>2</sup> , Maruf BORAN<sup>3</sup> 

<sup>1</sup> Sütçü İmam Üniversitesi Tıp Fakültesi Anesteziyoloji ve Reanimasyon Anabilim Dalı, Kahramanmaraş, TÜRKİYE

<sup>2</sup> Duquesne University, Carl G. Grefenstette Center for Ethics in Science, Pittsburgh, Pennsylvania, USA

<sup>3</sup> Necip Fazıl Şehir Hastanesi Anesteziyoloji ve Yoğun Bakım. Kahramanmaraş, TÜRKİYE

### Abstract

**Background:** The study aimed to figure out whether, how, and why the COVID-19 pandemic has changed physicians’ attitudes toward informed consent in Turkey.

**Materials and Methods:** An online questionnaire was distributed to physicians through the snowball sampling method and 528 physicians treating COVID-19 patients responded to the questionnaire.

**Results:** Most of the physicians (n= 317) reported that the COVID-19 pandemic has influenced their attitudes on giving information about patients’ situation, benefits, risks and consequences of planning treatment and taking consent of patient / relatives (informed consent), while 39.96% of them (n= 211) stated that the pandemic did not change their behaviors on informing patients and/or their families. An overwhelming majority of the physicians (n= 259) emphasized the impact of the higher mortality rate of the disease, the lack of standard treatment for the disease, and the higher demand from patients and families for information on providing patients and/or families with more information. On the other hand, 18.30% (n= 58) of the physicians admitted that the pandemic has caused them to disclose less information because of the lack of time to provide information, the need for urgent treatment, and the lack of information regarding the risks, benefits, and outcomes of applied treatments.

**Conclusions:** COVID-19 pandemic affected the majority of the physicians attitudes and behaviors towards informed consent.

**Key Words:** Informed consent, COVID-19 pandemic, Physicians’ attitude, Turkey

### Öz

**Amaç:** Çalışma Covid-19 pandemisinin, Türkiye’de çalışan hekimlerin hasta / hasta yakını bilgilendirme davranışlarını niçin ve nasıl değiştirdiğini saptamayı amaçlamaktadır.

**Materyal ve Metod:** Covid 19 tedavisi ile uğraşan hekimlere kartopu örneklem yöntemi ile online anket uygulaması yapıldı ve toplam 528 anket yanıtı alındı.

**Bulgular:** Katılımcıların % 60,4’ü (n=317) Covid-19 pandemisinin hastanın durumunu hakkında bilgi verme, uygulanması planlanan tedavinin olası fayda ve zararlarını belirtme ve hasta /hasta yakınının planlanan tedavi için onayını alma (aydınlatılmış onam) yaklaşımını etkilediğini belirtir iken, % 39,6’sı (n=211) pandemisinin hasta / hasta yakınından aydınlatılmış onam alışkanlıkları üzerine etkisi olmadığını belirtti. Çalışmaya katılan hekimlerin çoğu, hastalığa bağlı yüksek mortalite oranı, hastalığın standart tedavisi olmaması ve hasta / hasta yakınlarının daha fazla bilgi istemesi sebebi ile daha fazla bilgilendirme yaptıklarını belirtti. Diğer taraftan, 58 katılımcı (% 18,3) bilgilendirme için yeterli zaman olmaması, acil tedavi gereksinimi ve uygulanan tedavinin risk, fayda ve sonuçları ile ilgili yeterli bilgi olmadığından daha az bilgi verdiklerini belirtti.

**Sonuç:** Covid 19 pandemisi, Türkiye’de çalışan hekimlerin çoğunda bilgilendirme davranışları üzerinde etki göstermektedir.

**Anahtar Kelimeler:** Aydınlatılmış onam, Covid-19 pandemisi, Hekim yaklaşımı, Türkiye

### Corresponding Author/Sorumlu Yazar

**Dr. Ömer Faruk BORAN**

Sütçü İmam Üniversitesi Tıp Fakültesi  
Anesteziyoloji ve Reanimasyon Anabilim  
Dalı,  
Avşar Mahallesi, Onikişubat,  
Kahramanmaraş, TÜRKİYE

E-mail: omerfarukboran@hotmail.com

Received / Geliş tarihi: 10.10.2022

Accepted / Kabul tarihi: 22.12.2022

DOI: 10.35440/hutfd.1186090

## Introduction

The therapeutic relationship requires a voluntary collaboration between healthcare professionals and patients “to achieve the goals of medicine” in light of patients’ needs, expectations, and consent (1). According to the bioethical standards, healthcare professionals should use their greatest ability and judgment to benefit patients according to patients’ wishes through the informed consent process. Even in the case of life-saving treatments, any unauthorized interference in patients’ physical privacy would breach ethical standards. A proper informed consent process, which demands disclosing all available information about the nature of the medical intervention, the benefits, risks, and consequences of accepting or rejecting the intervention, and the alternatives with their outcomes, is the ethically acceptable way to provide healthcare professionals with the authorization to employ their medical knowledge and experience in favor of patients (2).

However, informed consent is not a unilateral transfer of information from healthcare professionals to patients through signed forms, but a process of continuous communication between two equal parties to promote the patients’ self-determination, autonomy, and the best interest (3,4). As a pivotal element of informed consent, disclosure entails accurately and adequately informing patients in order to help them to make an autonomous decision (5). At that point, the lack of treatment for COVID-19 and the use of unapproved medications or treatment regimens have raised serious questions about the informed consent process. For instance, in Turkey, based on the treatment protocol of the Ministry of Health, all COVID-positive patients, even those who have had mild symptoms, have given certain medications, such as hydroxychloroquine, azithromycin, and favipiravir (for patients with pneumonia) without knowing the exact outcomes, drug effects, and drug interactions (6). Furthermore, the fear of getting infected shadows the communication between healthcare professionals and patients or causes postponing certain indicated medical procedures (7,8). Therefore, the application of unapproved treatments and medications emerges serious questions about whether it is possible to satisfy the informed consent process under the current circumstances (9,10). In this context, this study aimed to conduct an online self-administered survey to explore physicians’ attitudes towards informed consent in the treatment of COVID-positive patients in Turkey. The main questions behind carrying out the study were whether, how, and why the COVID-19 pandemic has affected physicians’ practices during the informed consent process.

## Materials and Methods

This study was approved by the Non-interventional Ethics Committee of Kahramanmaraş Sutcu Imam University (Date: 25/01/2021, Decision number:11). After the approval of ethics committee from Kahramanmaraş Sutcu Imam University, an online structured questionnaire was delivered to physicians implementing treatment regimens for COVID-19

patients in Turkey through social media platforms, such as WhatsApp, Facebook, and Instagram. A non-probability sampling method where new units are recruited by other units to form part of the sample known as “Snowball sampling” was utilized to collect data from a sufficient number of participants. G\*Power 3.1.9.4 Statistical Software was used to calculate the statistical power of the study that produced the total sample size of 472 with the actual power of 0.95. The inclusion criteria in the study were that physicians are literate in Turkish, actively taking part in the pandemic process, using information systems enough to fill out the online form and using social media. The obtained data from 528 participants was included in the study. Frequency analyzes and cross tables were performed. Data from participants was analyzed with the IBM SPSS Statistics V22.0.

## Results

The online questionnaire was turned in by 528 physicians treating the COVID-19 patients. The gender of the respondents was found to be as 0.75% (n= 4) not specified, 43.37% (n= 229) female, and 55.88% (n= 295) male; 2.46% (n= 13), 41.10% (n= 217), and 56.44% (n= 298) of whom were working for a private healthcare organization, public hospital, and university hospital respectively.

The majority of the respondents, 60.04% (n= 317) of physicians (59.62% from university hospitals, 36.60% from public hospitals, and 3.78% from private healthcare institutions as well as 0.95% not specified, 35.65% female, and 63.40% male), acknowledged that the COVID-19 pandemic affected their attitudes toward the informed consent process, whereas 39.96% of them (n= 211) mentioned that the pandemic did not alter their behaviors. The findings reveal that the pandemic caused changes in 92.3% of physicians working for private hospitals, 63.42% of physicians working at university hospitals, and 53.45% of physicians working at public hospitals.

In regard to the way of the change, 81.70% (n= 259) of the participants pointed out that they started disclosing more information to the patients and/or their families, when 18.30% (n= 58) of the physicians stated that the pandemic caused them to divulge less information.

The major motivation behind the attitude toward disclosing more information were delineated as the higher mortality rate of the disease (37.45%). More information summarized in Table 1 for other reasons for behind the attitude.

On the other hand, the participants who admitted providing patients and/or families with less information during the pandemic expounded on the major reason as the need for urgent treatment + the lack of time to inform patients and/or families (20.69%). Other reasons for providing patients and/or families with less information during the pandemic were summarized in Table 2.

The survey allowed the participants to choose more than one option when elaborating on how and why the pandemic impacted their stance on informed consent. In this view, regarding disclosing more information, as table-6 shows,

75.29% (n= 195) the physicians accepted the influence of a higher mortality rate of the disease on their attitudes (*the total of all the options containing "a higher mortality rate of the disease"*), whereas 53.67% (n= 139) them indicated the lack of a proven cure, and 38.23% (n= 99) the participants addressed a higher demand for information. In terms of giving patients and/families less information, as

table-7 illustrates, 60.34% (n= 35) of the physicians justified their behavior with the lack of time to provide information (*the total of all the options containing "the lack of time to provide information"*), while 39.66% (n= 23) of them pointed out the need for urgent treatment, and 22.41% (n=13) of the respondents underscored the lack of information regarding the risks, benefits, and outcomes of applied care.

**Table 1.** Reasons for disclosing more information

	Percentile	Number (n)
I disclosed more information due to higher demand for information (a)	5.02%	13
I disclosed more information due to the higher mortality rate of the disease (b)	37.45%	97
I disclosed more information due to the lack of a proven cure (c)	13.51%	35
I disclosed more information due to the higher mortality rate of the disease and higher demand for information (a+b)	3.86%	10
I disclosed more information due to the lack of a proven cure and higher demand for information (a+c)	6.18%	16
I disclosed more information due to the higher mortality rate of the disease and the lack of a proven cure (b+c)	10.81%	28
I disclosed more information due to the higher mortality rate of the disease, the lack of a proven cure, and higher demand for information (a+b+c)	23.17%	60
	<b>100%</b>	<b>259</b>

**Table 2.** Reasons for disclosing less information

	Percentile	Number (n)
I disclosed less information due to the lack of time to inform patients and/or families	17.24%	10
I disclosed less information due to the patients and/or families demanded less information	15.52%	9
I disclosed less information due to the need for urgent treatment	6.90%	4
I disclosed less information due to informing patients and/or families via phone	5.17%	3
I disclosed less information due to the risk of getting infected	12.07%	7
I disclosed less information due to the lack of information regarding the risks, benefits, and outcomes of applied care and the lack of time to inform patients and/or families	10.34%	6
I disclosed less information due to the need for urgent treatment and the lack of time to inform patients and/or families	20.69%	12
I disclosed less information due to the need for urgent treatment, the lack of information regarding the risks, benefits, and outcomes of applied care, and the lack of time to inform patients and/or families	12.07%	7
	<b>100%</b>	<b>58</b>

## Discussion

Informing patients adequately and appropriately via a thorough informed consent process is an indispensable requirement stemming from the right to self-determination and privacy (11). However, unique characteristics of the COVID-19 pandemic, such as the risk of getting infected, the high number of patients with limited healthcare resources, and the lack of standard treatment have constrained healthcare professionals to sufficiently meet the requirements of informed consent (12,13). Therefore, the issue of how to obtain informed consent during the pandemic is an important discussion (14,15). Healthcare organizations and professionals should explore certain ways to deal with this challenge. However, prior to suggesting any recommendations, examining physicians' perception of and approach to informed consent may facilitate resolutions. In this context, this study inquires into physicians' attitudes toward informed consent in the treatment of COVID-19 patients. The findings demonstrate that the pandemic has remarkably

impacted physicians' position on informed consent in Turkey. The numbers show that 60.04% of the physicians affirmed that the COVID-19 pandemic changed their attitudes and behaviors toward information patients and/or their families. In regard to the institutions, the percentages of the physicians are found to be 63.42 at university hospitals and 53.46 at public hospitals, and 92.31 at private healthcare organizations, and based on gender, the percentages are found to be 75 not specified, 49.34 female, and 68.14 male, respectively. These numbers illustrate that the pandemic affected the physicians working for university hospitals (63.42%) and male physicians (68.14%) more than the physicians at public hospitals (53.46%) and female physicians (49.34%).

In relation to gauging how the pandemic changed physicians' attitudes, the participants were asked to articulate the course of the change, and 81.70% of physicians declared disclosing more information, while 18.30% admitted

giving less information to patients and/or families. The inquiry into why providing more information revealed that 75.29% of the physicians pointed out a higher mortality rate of the disease, 53.67% of them addressed the lack of a proven cure for the disease, and 38.23% of the respondents called attention to the higher demand from patients and families for information. On the other hand, the physicians disclosing less information expounded on the main reasons as the lack of time to provide information (60.34%), the need for urgent treatment (39.66%), and the lack of information regarding the risks, benefits, and outcomes of applied care (22.41%).

In this context, the study manifested a significant number (317) and a percentage (60.04%) of physicians influenced by the pandemic regarding disclosing pertinent information to patients and/or families. However, the outcomes of the change are twofold: first, a higher mortality rate of the disease, the lack of a proven cure, and the higher demand for information urged the physicians to pay more attention to the informed consent process by providing the patients and their families with more information; and secondly, the lack of time, the need for urgent treatment, and unknown outcomes of treatments for COVID-19 caused the physicians to give the patients and their families less information.

There is no doubt that providing healthcare services to COVID-19 patients or any patients during the COVID-19 pandemic and informing patients and their families about medical procedures is overly burdensome due to various factors, including the risk of getting the infection, the lack of information on the outcomes of COVID-19 treatments, healthcare professionals' burnout, the shortage of healthcare resources, and the high mortality rate of COVID-19 cases. However, none of these reasons means that informed consent can be overlooked. On the contrary, as Ava Ferguson Bryan et al., suggest, healthcare institutions should develop new approaches to cope with those challenges (8). At that point, the effort of the majority of physicians (participants) in Turkey to disclose more information to patients and their families is a favorable and encouraging attitude.

## Conclusion

The study revealed that the COVID-19 pandemic affected the majority of the physicians' attitudes and behaviors towards informed consent. The higher mortality rate of the disease, the lack of standard treatment for the disease, and the higher demand from patients and families for information have compelled most of the physicians to disclose more information to patients and/or families. However, a small number of the physicians acknowledged that they have disclosed less information to patients and/or their families due to the lack of time to provide information, the need for urgent treatment, and the lack of information regarding the risks, benefits, and outcomes of applied treatments.

## Limitations

The questionnaire contained questions about the informed consent process to evaluate physicians' reactions during the COVID-19 pandemic. However, it is unclear how the respondents interpreted informed consent and its elements, such as disclosure, understanding, and recommendation. The studies conducted in Turkey reveal various shortcomings in the implementation of and insight into informed consent (16,17). Therefore, as a primary disadvantage of surveys, it is difficult to know how the participants comprehend the term informed consent and its ethical components.

## Acknowledgments

This study was approved by the Non-interventional Ethics Committee of Kahramanmaraş Sutcu Imam University (Date: 25/01/2021, Decision number:11). All authors contributed and gave final approval of the version to be published. Other assistance with the article: none. Financial support and sponsorship: no financial support was received for this study. This research received no external funding. The authors declare no conflict of interest.

---

**Ethical Approval:** This study was approved by the Non-interventional Ethics Committee of Kahramanmaraş Sutcu Imam University (Date: 25/01/2021, Decision number:11)

---

## Author Contributions:

Concept: E.A., Ö.F.B.

Literature Review: E.A., M.B.

Design : E.A., Ö.F.B.

Data acquisition: Ö.F.B., M.B.

Analysis and interpretation: E.A., M.B.

Writing manuscript: E.A., M.B.

Critical revision of manuscript: Ö.F.B.

**Conflict of Interest:** The authors have no conflicts of interest to declare.

**Financial Disclosure:** Authors declared no financial support.

---

## References

1. Jonsen AR, Siegler M, Winslade WJ. Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine, 8th Edition, New York: McGraw Hill Education; 2015:100.
2. Lo B. Resolving Ethical Dilemmas: A Guide for Clinicians. 6th Edition. Philadelphia: Wolters Kluwers; 2020:22-23.
3. English DC. Valid informed consent: a process, not a signature. *Am Surg.* 2002;68(1):45–8.
4. Stunkel L, Benson M, McLellan L, Sinaii N, Bedarida G, Emanuel E, et al. Comprehension and Informed Consent: Assessing the Effect of a Short Consent Form. *IRB.* 2010;32(4):1–9.
5. Beauchamp TL, Childress JF. Principles of Biomedical Ethics. 7th Edition. New York: Oxford University Press; 2013:124-125.
6. Covid-19-favipiravirpdf.pdf [Internet]. [cited 2021 March 9]. Available from: <https://covid19.saglik.gov.tr/Eklenti/40620/0/covid-19-favipiravirpdf.pdf>
7. Alberto Julius Alves W, Ana Paulo DL, Reitan R, Heber Salvador de Costa R, Rodrigo Nascimento P, Glauco B, et al.

- Risks of COVID-19 for surgical cancer patients: The importance of the informed consent process. *J Surg Oncol.* 2020;1-3.
8. Bryan AF, Milner R, Roggin KK, Angelos P, Matthews JB. Unknown Unknowns: Surgical Consent During the COVID-19 Pandemic. *Ann Surg.* 2020;272(2):e161–e162.
  9. Pilkington V, Pepperrell T, Hill A. A review of the safety of favipiravir - a potential treatment in the COVID-19 pandemic? *J Virus Erad.* 2020;6(2):45–51.
  10. Echeverría-Esnal D, Martín-Ontiyuelo C, Navarrete-Rouco ME, De-Antonio Cuscó M, Ferrández O, Horcajada JP, et al. Azithromycin in the treatment of COVID-19: a review. *Expert Rev Anti Infect Ther.* 2021;19(2):147–63.
  11. Carnevale FA, Vissandjée B, Nyland A, Vinet-Bonin A. Ethical considerations in cross-linguistic nursing. *Nurs Ethics.* 2009;16(6):813–26.
  12. Turnham HL, Dunn M, Hill E, Thornburn GT, Wilkinson D. Consent in the time of COVID-19. *J Med Ethics.* 2020;46(9):565–8.
  13. Desouky E. Urological surgery in the COVID-19 era: Patient counselling and informed consent. *Arab J Urol.* 2020;18(2):62–4.
  14. Garg PK, Kaul P, Choudhary D, Yendamuri S. Informed surgical consent during the COVID-19 pandemic: Exploring the risk of unknown. *J Surg Oncol.* 2020;122(6):1257–8.
  15. Bhattacharya N, Bhattacharya K. Informed Consent for Surgery During COVID-19. *Indian J Surg.* 2020;82(3):271–3.
  16. Egri M, Celbis O, Karaca M, Ozdemir B, Kok AN. The informed consent status for surgery patients in eastern Turkey: a cross-sectional study. *Indian J Med Ethics.* 2008;5(1):26–8.
  17. Sahin N, Oztürk A, Ozkan Y, Demirhan Erdemir A. What do patients recall from informed consent given before orthopedic surgery? *Acta Orthop Traumatol Turc.* 2010;44(6):469–75.