

# Inclination to Ethical Values in Controlling the Spread of COVID-19

## COVID-19'un Yayılımının Kontrolünde Etik Değerlere Yatkınlık

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**ABSTRACT** As a citizen, we must take the responsibility of protecting ourselves from illness as well as preventing someone else from getting sick. In this study, we aimed to determine whether the behaviors exhibited in epidemic control change according to the inclination to the ethical values. In this cross-sectional study we reached 620 people over the age of 18 actively using their social media accounts. The data of the study were collected using the "Introductory Information Form" created by the researchers, and "The Inclination to Ethical Values Scale" in between October 23 and November in 2021. The mean age of participants was 28.56±10 were 77.7% female and 62.9%, were single participant 11.8% of the participants lived at home with an individual aged 65 or over and 14.2% of the participants had chronic illness. The rate of having a coronavirus disease-2019 (COVID-19) test was 25.2% and a positive rate of COVID-19 testing was 11.0%. The mean score of the participants' "Behaviors for the control of the spread of COVID-19" was 4.46. The average score of the participants for "The Inclination to Ethical Values Scale" was 4.38. There was an increase in score of "Behaviors for the control of the spread of COVID-19" with the increase in score of "The Inclination to Ethical Values Scale". As a result of this study, in the contagious "text-based case", those who felt responsible were more sensitive to controlling the spread of the infection.

**ÖZET** Vatandaşlar olarak, kendimizi hastalıktan korumanın yanı sıra başka birinin hastalanmasını önleme sorumluluğunu da almamızdır. Bu çalışmada, salgın kontrolünde sergilenen davranışların etik değerlere eğilime göre değişip değişmediğinin belirlenmesi amaçlanmıştır. Kesitsel türde olan bu çalışmada, sosyal medya hesaplarını aktif olarak kullanan ve 18 yaş üstü olan 620 kişiye ulaşılmıştır. Araştırmanın verileri, araştırmacılar tarafından oluşturulan "Tanıtıcı Bilgi Formu" ve "Etik Değerlere Yatkınlık Ölçeği" kullanılarak 23 Ekim-Kasım 2021 tarihleri arasında toplanmıştır. Katılımcıların yaş ortalaması 28,56±10'dur. Kadın ve bekâr katılımcıların yüzdeleri sırasıyla %77,7 ve %62,9'dur. Katılımcıların %11,8'i evde 65 yaş ve üzeri bir bireyle yaşamaktadır ve katılımcıların %14,2'sinin kronik hastalığı mevcuttur. Koronavirüs hastalığı-2019 [coronavirus disease-2019 (COVID-19)] testi yaptırma oranı %25,2 ve pozitif COVID-19 testi olma oranı %11,0 olarak belirlenmiştir. Katılımcıların "COVID-19 yayılımının kontrolü için davranışlar" puan ortalaması 4,46'dır. "Katılımcıların Etik Değerlere Eğilim Ölçeği"nden aldıkları ortalama puan 4,38'dir. "Etik Değerlere Yatkınlık Ölçeği" puanındaki artışla birlikte "COVID-19 yayılımının kontrolüne ilişkin davranışlar" puanında artış olmuştur. Bu çalışmanın sonucunda, "metin tabanlı vakada", kendilerini sorumlu hissedenlerin enfeksiyonun yayılmasını kontrol etme konusunda daha duyarlı oldukları ortaya çıkmıştır.

**Keywords:** COVID-19; ethical values; inclination; ethical sensitivity; control

**Anahtar Kelimeler:** COVID-19; etik değerler; eğilim; etik duyarlılık; kontrol

Coronavirus disease-2019 (COVID-19) is an infectious disease caused by severe acute respiratory syndrome-coronavirus-2, declared a pandemic on March 11, 2020 by the World Health Organization.<sup>1,2</sup> The COVID-19 epidemic, which has been spreading rapidly around the world, causing morbidity and mortality at increasing rates with each passing day.<sup>2,3</sup>

As in all epidemics, the issues that need to be taken into account in terms of ethics in the COVID-19 pandemic attract more attention and become an important starting point in the fight against the epidemic.<sup>4</sup> Ethics, which is defined as criteria that individuals generally use to distinguish between right and wrong, treat the rules about how individuals should behave or what they should and should not do. There

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are some base factors that direct individuals to ethical behavior. One of them is the ethical values that individuals have. The general and universal meaning of the values do not change according to place, people, society, and time. However, it is not possible to say that values have the same effect on every person. Because each person has a different ideology and thought, values, beliefs, ethical orientations, and personal characteristics have shaped over time from various sources.<sup>5</sup> These differentiate individuals' perspectives on objects, views, and events. It seems that ethical values play an essential role in shaping an individual's thoughts, attitudes, behaviors, and activities. In this context, ethical values can be defined as the base criteria that individuals use in the formation of their preferences.<sup>6,7</sup> Each individual has a great responsibility in the control of COVID-19. Some of these responsibilities are the isolation and quarantine practice of individuals diagnosed or in close contact with the patient diagnosed with COVID-19, compliance with curfew restrictions for individuals under the age of 20 and over the age of 65, the obligation to wear masks, and personal hygiene practices.<sup>8</sup> These practices, which are perceived as a social or personal necessity, cause the protection of public health for the sake of the good of the society on the one hand, and the protection of individual rights and freedoms, on the other hand, causing mutual conflict.<sup>9</sup> However, the emergence of the idea of "violating minority rights for the benefit of the majority" becomes inevitable. In these practices, it would be an upward of correct ethical approach to adopt the idea of "common benefit" which considers the interests of both parties. In the current situation, the benefits of sick and uninfected individuals are collective.<sup>10</sup> In this context, the individual must internalize ethical values and act accordingly and do what who individual thinks is right every time, but these truths should not only be for her benefit.

It will be possible to mention the ethical concept if the concept of the individual's right and the notion of right adopted by the society, in general, are equivalent. In addition, it should not forget that individuals should not be allowed to suffer foreseeable harm under any circumstances, even if it is for the best interest of society in a contagious disease pandemic. In this

process, in which the benefit of the individual take into account, it is of great importance to choose the option that provides the most benefit with the fewest violation in the benefit-harm equation.<sup>11</sup> Each individual has an important responsibility in controlling the spread of COVID-19, which has become a global epidemic.

As citizens, we must take the responsibility of protecting ourselves from illness as well as preventing someone else from getting sick. In this context, individuals with ethical values should do their duty and responsibilities for the control of the epidemic. In this cross-sectional research was aimed to determine whether the behaviors exhibited in epidemic control change according to the inclination to the ethical values.

## MATERIAL AND METHODS

### RESEARCH POPULATION

In this cross-sectional study we aimed to reach individuals over age 18 and who were actively using their social media accounts. The sample size was calculated with the Epi Info Program (Epi info 7.1, Atlanta, GA, USA, 2011). The sample size was determined as at least 522 individuals, considering that regular mask usage prevalence was 14% in individuals who had COVID-19, and 24% in individuals who did not.<sup>12</sup>

### DATA COLLECTING

The research was carried out through the online survey application, between October and November in 2021. The data of the study were collected using the "Introductory Information Form" created by the researchers, and "The Inclination to Ethical Values Scale (IEVS)". The questionnaire was delivered to the participant by social accounts.

"Introductory Information Form" consisted of questions including the sociodemographic characteristics and the behaviors for the control of the spread of COVID-19 (Table 1). It was used "Türkiye Cumhuriyeti Sağlık Bakanlığı Halk Sağlığı Genel Müdürlüğü 2020" as a reference for the formulation of articles on control measures.<sup>13</sup> Expert opinion was taken from 5 scientists to evaluate the intelligibility and validity of the items. The final form of the items was given in line with the recommendations of the experts.

**TABLE 1:** Behaviors for the control of the spread of COVID-19.

I wash my hands frequently with soap and water for at 20 seconds.
I keep a distance of 3-4 steps between me and people.
I often ventilate my environment
I use masks in open areas where people are present.
I use masks in closed areas
I avoid close contact, such as shaking hands and hugging.
I do not share my personal belongings.
I cough, sneeze, or use a tissue into my elbow during coughing, sneezing
I take care not to stay in confined spaces for a long time.
If there is hand sanitizer in common areas, I often use it.
If symptoms occur, I immediately call SABİM 184 or apply to a health institution immediately.
I change my mask when it gets damp.
I take into account the recommendations of health institutions when determining the type of mask I will use.
When using the mask, I make sure that the mask covers the mouth and nose.
I do not touch my mouth, face or eyes before cleaning my hands.
I do not touch environmental surfaces unless necessary in social areas.
I follow the rules when I attend weddings, organizations, funerals, or other mass social events.
I don't go out unless I have to.
If I have a mandatory quarantine due to COVID-19, I follow the quarantine rules.
I warn others to wear masks.
I warn when I notice that others are not complying with the rules regarding COVID-19 control.
If I have a suspicious situation related to COVID-19, I immediately apply to a health institution.

SABİM: Sağlık Bakanlığı İletişim Merkezi (The Ministry of Health Communication Center).

Validity and reliability of IEVS, was assessed by Kaya in 2015. The scale was composed of 16 items and explained 61.93% of the total variance in 3 factors as love, justice and cooperation. The Cronbach's alpha value of the scale was found 0.90. The scale was prepared in a 5-point Likert type and the scale items were formed as "1" totally disagree, "2" disagree, "3" undecided, "4" agree, and "5" completely agree. The lowest and highest score to be obtained from the whole of the scale was between 1 and 5. There was no reverse item in the scale. An increase in the scores obtained from all of the scale indicates that individuals' vulnerability to ethical values is high. Scale usage permission was obtained.<sup>14</sup>

## ETHICAL COMPLIANCE

This current research was conducted in line with the Principles of the Declaration of Helsinki. The participants were informed about the purpose of the research, confidentiality, volunteering and withdrawal by online questionnaire form. In addition, the volunteers must mark a statement declaring their participation. Consent was obtained from each participant that they volunteered. Conducting the study was first approved by the COVID-19 Scientific Research Assessment Commission under the Ministry of Health General Directorate of Health Services. In addition, the research was ethically approved at İzmir Kâtip Çelebi University Non-Invasive Clinical Research Ethics Committee (no: 977, date: September 17, 2020).

## DATA ANALYSIS

The data was analysed by using SPSS 20.0 Software (IBM SPSS Statistics, IBM Corp., USA). The mean values the differences and relationships between dependent and independent variables were provided by one-way analysis of variance, t-test, Kruskal-Wallis H test, and Mann-Whitney U test.

## RESULTS

In this cross-sectional study described the behaviors exhibited in epidemic control. In addition, it was determined whether these behaviors changed according to the tendency towards ethical values.

The mean age of the participants was  $28.56 \pm 10$ . Percentages of female and single participant were 77.7% and 62.9%, respectively. 65.3% of the participants graduated from a university, 37.1% worked in the public sector, and 31.1% were health workers. According to the economic status, 21.0% of the participants stated an earning less than their spending. 11.8% of the participants lived at home with an individual aged 65 or over (Table 2).

In the study, 14.2% of the participants had chronic illness. The prevalence of having a COVID-19 test was 25.2% and a positive rate of COVID-19 testing was 11.0%. Percentage of participants hospitalized and quarantined due to COVID-19 were 0.1% and 14.4%, respectively. In total, 58.5% of the participants were living with a high-risk individual in

**TABLE 2:** Distribution of participants according to their socio-demographic characteristics.

Socio-demographic variables		n	%
Gender	Female	482	77.7
	Male	138	22.3
Marital status	Married/living with partner	230	37.1
	Single	373	62.9
Education status	Primary education	114	18.4
	Graduated from a university	405	65.3
	Postgraduate	101	16.3
Profession	Student	60	11.1
	Private sector	203	32.7
	Public sector	230	37.1
	Doesn't work	118	19.0
Health worker	Yes	193	31.1
	No	427	68.9
Working status at the moment	Working	322	51.9
	Not working	278	44.8
	Does not work actively due to the epidemic	20	3.2
Comparison by earnings and spending for a month	Much	130	21.0
	Equal	323	52.1
	Little	167	26.9
Presence of individuals aged 65 and over at home	Yes	73	11.8
	No	547	88.2

their family who have increased risk for COVID-19 transmission and developing severe disease. The COVID-19 pandemic had greatly affected the daily life of 86.3% of the participants. 7.4% of the participants were not following the COVID-19 news. The rate of respondents who stated “none” or “little” knowledge about COVID-19 were 7.2% (Table 3).

The mean score of the participants’ “behaviors for the control of the spread of COVID-19” was 4.46. In other words, the participants reported that they always followed the nationally rules for controlling the infection. The average score of the participants for the IEVS was 4.38. The scores of “behaviors related to control of the spread of COVID-19” increased with the increase in score of IEVS ethical sensitivity ( $p < 0.001$ ) (Table 4).

Table 5 shows the variation of the score of participants’ “behaviors for the control of the spread of COVID-19” according to their individual characteristics. Females were more compliant in the infection control measures than males ( $p < 0.01$ ). The compli-

ance of the healthcare workers for controlling the spread of infection was higher compared to the other participants, but there was no significant difference ( $p > 0.05$ ). Among the occupational groups, the average score of those working in the private sector was the lowest ( $p > 0.05$ ).

Table 6 shows the variation of the scores of “behaviors for the control of the spread of COVID-19” according to their answers related with COVID-19. Participants who had not have information regarding COVID-19 presented significantly lower scores ( $p < 0.001$ ). Participants who were not affected by the pandemic’s daily life and followed the COVID-19 news had significantly lower scores ( $p < 0.001$ ).

Figure 1a shows the results of the text-based case regarding the determination of individual susceptibility for controlling the spread of COVID-19. At a meeting that took place without complying with the control measures, the rate of participants who stated that COVID-19 would feel very and totally responsible for the transmission was 33.39% and

**TABLE 3:** Distribution of questions related to the COVID-19.

Question items		n	%
Do you have a chronic mental and/or physical illness?	Yes	88	14.2
	No	532	85.8
Have you had any tests for COVID-19?	Yes	156	25.2
	No	464	74.8
Do you have a COVID-19 positive/suspect situation?	Yes	68	11.0
	No	552	89.0
Have you been hospitalized due to COVID-19?	Yes	6	0.1
	No	614	99.0
Is there anyone in your immediate environment who is positive/suspected to have COVID-19?	Yes	229	39.9
	No	391	63.1
Have you been in mandatory quarantine for coming into contact with someone diagnosed with COVID-19?	Yes	89	14.4
	No	531	85.6
Are there individuals in your family at risk for COVID-19 (chronic disease, etc.)?	Yes	363	58.5
	No	257	41.5
What is the impact of COVID-19 on your daily life?	It didn't affect at all	8	1.3
	Slightly affected	77	12.4
	Quite affected	300	48.4
	Highly affected	235	37.9
Are you following the COVID-19 news?	Yes	574	92.6
	No	46	7.4
How knowledgeable do you feel about COVID-19?	I have no knowledge	4	0.6
	I have little knowledge	41	6.6
	I have knowledge	181	29.2
	I have enough knowledge	348	56.1
	I have too much knowledge	46	7.4

**TABLE 4:** The relationship between "behaviors for the control of the spread of COVID-19" and "The Inclination to Ethical Values Scale" scores.

Dependent variables	Means	SD	Significant*
Behaviors for the control of the spread of COVID-19	4.46	0.39	r= 0.477, p=0.000
The Inclination to Ethical Values Scale	4.38	0.42	

\*Paired samples correlations; SD: Standard deviation.

34.19%, respectively. As seen in [Figure 1b](#), the scores of the infection control increased significantly according to the high rate of feeling responsible for transmission ( $p<0.001$ ). The IEVS was the highest for the participants who stated that they felt completely responsible for transmission ( $p<0.001$ ).

## DISCUSSION

In this cross-sectional study, individuals with a high inclination to ethical values were also significantly more likely to engage in behaviors of the controlling spread. A sense of responsibility and respect for rights are essential in ethical values. The importance of compliance with the rules for the management of the COVID-19 has always been emphasized everywhere, and individual responsibility has come into the foreground. As a social being, the responsibilities that a person undertakes in the society who lives in are defined as individual social responsibility. Individual social responsibility is the state of increasing social welfare by taking into account the gains of the society as well as the individual's gains for that being conscious and sensitive in the face of social problems and being aware of how personal actions have an impact on society.<sup>15,16</sup>

**TABLE 5:** The variation of the participants' "behaviors for the control of the spread of COVID-19" scores according to their individual characteristics.

Socio-demographic variables	Control behaviors of the spread of COVID-19	Mean	SD	Significant
Gender	Female	4.48	0.38	t=2.992
	Male	4.35	0.45	p=0.003
Education status	Primary education	4.39	0.40	F=2.955
	University	4.48	0.38	p=0.053
	Postgraduate	4.43	0.37	
Profession	Student	4.46	0.41	F=2.377
	Private sector	4.39	0.40	p=0.070
	Public personnel	4.47	0.36	
	Doesn't work	4.55	0.32	
Health employee	Yes	4.47	0.35	t=0.602
	No	4.45	0.40	p=0.547
Marital status	Married/living with partner	4.49	0.39	t=1.749
	Single	4.43	0.38	p=0.081
Presence of individuals aged 65 and over at home	Yes	4.43	0.38	t=0.637
	No	4.46	0.39	p=0.524
Working status at the moment	Working	4.43	0.41	$\chi^2=1.264$
	Not working	4.48	0.36	p=0.531
	Does not work due to the epidemic	4.53	0.38	
Comparison by earnings and spending	Earnings>spending	4.43	0.43	F=0.631
	Earnings=spending	4.46	0.37	p=0.532
	Earnings<spending	4.48	0.37	

SD: Standard deviation.

It is emphasized that health systems need to consider their internal capacities, managerial interventions, and health centers to overcome the current pandemic, as well as external factors such as socioeconomic and environmental determinants that may affect their preparation. In addition, it has been concluded that community-related interventions such as improving community health literacy, teamwork, community compliance with public protocols, and social responsibility can increase the preparedness and responsiveness of health systems against the COVID-19 outbreak.<sup>17</sup> Based on the research results, it is imperative that government has responsibilities as far as individual responsibilities for the control and management of an epidemic.

The individual interacts with the environment.<sup>15</sup> For this reason, it is extremely important to create awareness that the self-protection of individuals will protect society in epidemic management. According to the results of this research, women were signifi-

cantly more sensitive than men for controlling the spread of COVID-19. In addition, individuals who did not work during the pandemic period and whose earning was lower than their spending were more sensitive to protective measures, although it was not statistically significant. In a study evaluating the public's attitude towards COVID-19, it was concluded that the society most frequently took hand hygiene, social distance and staying at home protective measures. The male gender, retired individuals and people with low earning levels were less sensitive to protective measures against the COVID-19 pandemic; and it was reported that the housewives were more meticulous about protection measures.<sup>18</sup> In another article, the importance of personal and environmental hygiene, improving community behavior and community participation among community initiatives in epidemic management was mentioned.<sup>17</sup> A study conducted in Japan focused on how socio-demographic status and personal characteristics affect

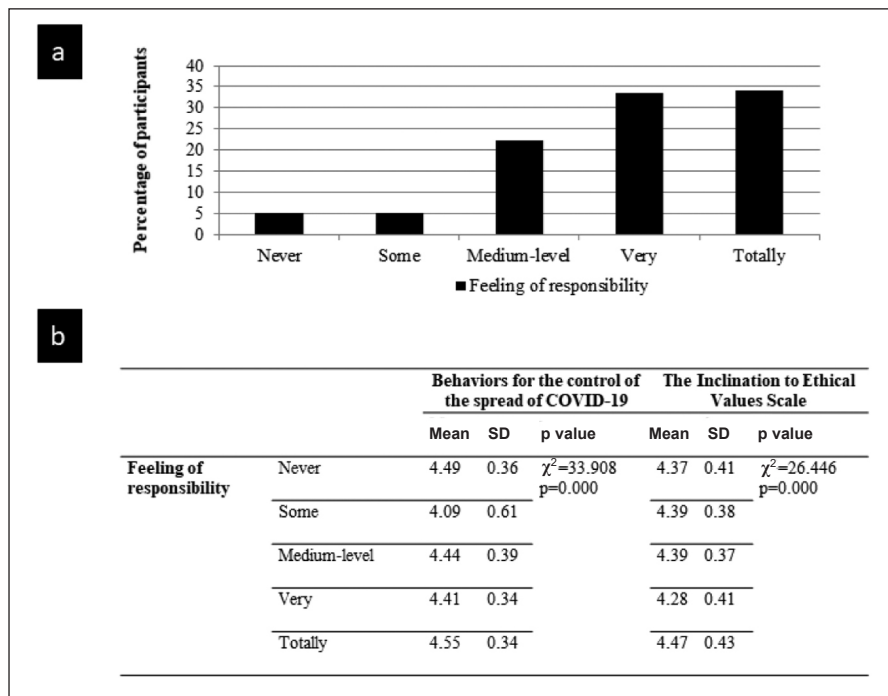
**TABLE 6:** The variation of the participants' "behaviors for the control of the spread of COVID-19" scores according to their answers related COVID-19.

Question items regarding pandemic		Mean	SD	Significant
Do you have a chronic mental and/or physical illness?	Yes	4.53	0.33	t=1.820
	No	4.44	0.39	p=0.069
How knowledgeable do you feel about COVID-19?	I have no information	3.87	1.34	$\chi^2=19.529$
	I have little information	4.37	0.41	<b>p=0.001</b>
	I have knowledge	4.39	0.39	
	I have enough information	4.49	0.35	
	I have too much information	4.63	0.32	
Have you had any tests for COVID-19?	Yes	4.47	0.39	t=0.474
	No	4.45	0.38	p=0.636
Do you have a COVID-19 positive/suspect situation?	Yes	4.41	0.48	t=-1.142
	No	4.46	0.37	p=0.254
Have you been hospitalized due to COVID-19?	Yes	4.52	0.37	t=0.425
	No	4.46	0.38	p=0.671
Is there anyone in your immediate environment who is positive/suspected to have COVID-19?	Yes	4.43	0.41	t=-1.263
	No	4.47	0.37	p=0.207
Have you been in mandatory quarantine for coming into contact with someone diagnosed with COVID-19?	Yes	4.50	0.42	t=1.211
	No	4.45	0.38	p=0.227
Are there individuals in your family at risk for COVID-19 (chronic disease, etc.)?	Yes	4.46		t=0.562
	No	4.45		p=0.574
What is the impact of COVID-19 on your daily life?	It didn't affect at all (n=8) or slightly affected	4.28	0.48	F=20.065 <b>p=0.000</b>
	Quite affected	4.42	0.35	
	Highly impressed effected	4.56	0.35	
Are you following the COVID-19 news?	Yes	4.49	0.36	t=7.158
	No	4.08	0.48	<b>p=0.000</b>

SD: Standard deviation.

self-protection behaviors. It has been revealed that socio-demographic characteristics such as gender, marital status and having children played an effective role in compliance with COVID-19 prevention behaviors. Non-working individuals were more adaptable to protective measures. Especially women with children were more conscious than men. None or fewer smokers were more likely to comply with the prevention behaviors.<sup>19</sup> Another study conducted in Japan demonstrated that approximately 20% of respondents were unwilling to implement appropriate prevention measures against COVID-19; the typical characteristics of these people were male, under 30 years old, single, low-income households, and individuals with drinking or smoking habits.<sup>20</sup> The research results supported our research findings.

To prevent the spread of infection in epidemic management, behavioral changes can be created by using various tools and campaigns to reach and influence individuals with low adherence to prevention behaviors. If all individuals living in the community obey the rules, the spread of infection can be controlled; if some of the society does not follow the prevention behaviors and some do not comply, the spread of infection will not be under control. For this reason, in order to manage the pandemic well, all individuals forming the society should be harmonized with the behaviors and rules to control the spread of COVID-19. A previous research reported that the notification of COVID-19 disease to their relatives including family, close friends, community members, and workplace contacts has an extremely important role in the prevention and control of a virus outbreak.



**FIGURE 1:** Feeling of responsibility. **a)** Feeling responsible of the text based case (After an interview where you did not comply with COVID-19 control measures, you learned that the person you interviewed was diagnosed with COVID-19. To what extent would you feel responsible for the transmission of COVID-19 to the person you are interviewing?). **b)** The relationship between feeling of responsibility and scores of the "Behaviors for the control of the spread of COVID-19" and "The Inclination to Ethical Values Scale".

The main reasons for the statement included government policy, a sense of social responsibility, fear of being blamed if the infection spreads, and the expectation of social support.

This research has shown that the notification of COVID-19 disease plays an extremely important role in the prevention and control of a virus outbreak. On the other hand, despite the potential benefits of receiving support after disclosure, many participants reported experiencing stigma and discrimination, psychological distress, and social isolation.<sup>21</sup> This negative result should not be ignored and the public should be made aware. Society should be informed about the approach to individuals diagnosed with COVID-19, perhaps through public service announcements or social media. In this current study, the individuals who stated that they had knowledge about COVID-19, followed the news, and has affected their lives by the pandemic were significantly more sensitive to control of the spread of COVID-19. It was thought that raising awareness and informing the society will create more sensitive and harmonious behaviors to preventive measures.

## CONCLUSION

In this cross-sectional study, the effect of ethical inclination on the control of the spread of COVID-19 was examined. The pandemic has affected the daily life of the majority of the participants. Very few participants did not follow the news about COVID-19. In the "text-based case", those who felt responsible were more sensitive to controlling the spread of the infection. At the same time, these participants had higher ethical sensitivity. In parallel with the increase in ethical sensitivity, an increase in sensitivity was observed in the control of the spread of infection. Those who did not have enough information about COVID-19, did not follow the news about COVID-19, did not affect daily life due to the pandemic were less sensitive in controlling the spread of infection.

### Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a com-



pany that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

### Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

### Authorship Contributions

**Idea/Concept:** Ayşe Akbiyik; **Design:** Ayşe Akbiyik, Burcu Ceylan, Duygu Yıldırım, Melih Kaan Sözmen, Esra Akın; **Control/Supervision:** Ayşe Akbiyik; **Data Collection and/or Processing:** Ayşe Akbiyik, Burcu Ceylan, Duygu Yıldırım, Melih Kaan Sözmen; **Analysis and/or Interpretation:** Ayşe Akbiyik, Burcu Ceylan, Duygu Yıldırım, Melih Kaan Sözmen; **Literature Review:** Ayşe Akbiyik, Burcu Ceylan, Duygu Yıldırım; **Writing the Article:** Ayşe Akbiyik, Burcu Ceylan, Duygu Yıldırım, Melih Kaan Sözmen; **Critical Review:** Melih Kaan Sözmen.

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