

Examining the Individuals' Smoking Cessation Success during Covid-19 based on Some Variables

Bireylerin Covid-19 Sürecindeki Sigara Bırakma Başarılarının Bazı Değişkenler Bağlamında İncelenmesi

Şenel ÇITAK¹

ABSTRACT

The fact that Covid-19 virus has caused the death of about 3 million people in the world has forced countries to take strict quarantine and health measures, and people have entered a period they have never experienced before. The aim of the study was to determine pre- and post-pandemic smoking, continued smoking and smoking cessation behaviors of individuals in Covid-19 pandemic, and to examine the correlations between smoking cessation success and some variables such as age, education level, current employment status, the level of exposure to the virus of people around them and experienced anxiety.

A questionnaire with 15 questions developed by the researcher and the Smoking Cessation Success Prediction Scale (SCSPS) were applied on the participants. The study was conducted in line with the correlational research models and 545 (F=256, M=289) individuals aged between 18-65 in Turkey were reached within the framework of the convenience sampling method. Descriptive statistics, ANOVA and Independent group *t* test were used within the scope of SPSS analyses.

Of the participants, 31.9% had a decrease in smoking behavior and 25.8% quit smoking completely. The existence of people who got infected by the virus around them and employment status with an active income were found to be strong variables that increase the smoking cessation success of individuals. On the other hand, the individuals' smoking cessation success levels significantly decreased as the level of experienced anxiety/worry significantly increased during the pandemic. In this regard, it is recommended that psycho-social intervention support systems should be established to increase the smoking cessation behavior.

Keywords: Anxiety, Covid-19, Employment status, Smoking cessation, Stress

ÖZ

Covid-19 virüsün dünya geneli 2,5 milyonun üzerinde insanın ölümüne neden olması ülkeleri sıkı karantina ve sağlık tedbirleri almaya zorlamış ve insanlar daha önce hiç tecrübe etmedikleri bir süreçte girmişlerdir. Bu çalışmada Covid-19 salgınında bireylerin salgın öncesi ve sonrası sigara içme, sigara içmeyi devam ettirme ve sigarayı bırakma davranışlarını belirlemenin yanında sigara bırakma başarısı ile yaş, eğitim düzeyi, mevcut çalışma durumu, çevresindeki insanların virüsten etkilenme düzeyi ve yaşadıkları kaygı durumları gibi bazı değişkenler arasındaki ilişkilerin incelenmesi amaçlanmaktadır.

Katılımcılara araştırmacı tarafından geliştirilen 15 soruluk bir anket formu ve Sigara Bırakma Başarısı Öngörü Ölçeği (SBBÖÖ) uygulanmıştır. Araştırma ilişkisel araştırma yöntemlerine uygun olarak yürütülmüş ve kolay örnekleme yöntemi çerçevesinde Türkiye geneli 18-65 yaş arası 545 (K=256, E=289) kişiye ulaşılmıştır. SPSS analizleri kapsamında tanımlayıcı istatistik, ANOVA ve bağımsız grup *t* testi kullanılmıştır.

Katılımcıların %31,9'unda sigara içme davranışında azalmalar olmuş, %25,8'i ise sigarayı tamamen bırakmıştır. Yakın çevresinde virüs salgınına yakalanan insanların varlığı ve aktif kazanç getiren çalışma durumu, bireyin sigara bırakma başarısını artıran güçlü değişkenler olarak belirlenmiştir. Diğer taraftan bireylerin salgın sürecindeki kaygı/endişeleri ciddi düzeyde arttıkça sigarayı bırakma başarılarının düştüğü tespit edilmiştir. Bu bağlamda sigara bırakma davranışının artırılması için salgın dönemlerinde psiko-sosyal müdahale destek sistemlerinin geliştirilmesi önerilmektedir.

Anahtar Kelimeler: Çalışma durumu, Covid-19, Kaygı, Sigara bırakma, Stres

¹Dr. Öğr. Üyesi, Şenel ÇITAK, Rehberlik ve Psikolojik Danışmanlık, Ordu Üniversitesi Eğitim Fakültesi, Eğitim Bilimleri Bölümü, Rehberlik ve Psikolojik Danışmanlık AD, senelcitak52@gmail.com., ORCID: 0000-0003-1155-1767

INTRODUCTION

The Covid-19 pandemic that started to affect the entire globe after the late periods of 2019 and that still has adverse impacts on the people has resulted in death for more than 3 million people.^{1,2} It is safe to state that this pandemic has been one of the greatest disasters that have affected people in the last century. A similar pandemic occurred under the name SpanishFlu in the early years of 20th century.³ Although certain outbreaks such as swine flu and SARS have been recently experienced, they have not yielded results as severe as those of Covid-19. World Health Organization (WHO) decided to treat Covid-19 outbreak as a pandemic to collectively fight against the increasing number of cases and deaths.⁴ The number of cases and related deaths have significantly increased in Turkey, which is also the case for many other countries. The daily number of cases reached beyond 10 thousands, reflecting the severity of the situation in Turkey.³ The virus has rapidly spread in the entire globe, making the health systems of many countries incapable of responding to the needs.⁵ Higher probability for the Covid-19 virus to spread rapidly in social environments has obligated the inclusion of practices that are more extensive than the medical practices and approaches for the process of fighting against the virus.⁶ Accordingly, it is fair to state that taking politic, financial, sociological and psychological actions in coordination with medical precautions has become an obligation.

Many countries have taken protective actions to reduce the impacts of the Covid-19 pandemic. The restrictive actions regarding people's lives and social life are particularly interesting. With the precautions taken in the pandemic of Covid-19, people have been witnessing a period they have not seen before. Staying at home for long periods, quitting jobs, working from home/part-time which people have not been accustomed to, and distortions in the income-expense balances are among the severe results of this

period.^{7,8} Long pandemic period and preventive actions have affected people's physical and mental characteristics.

Many researchers from the relevant literature accept that outbreaks such as Covid-19 severely affect people's social and mental lives.⁹ Attitudes regarding the changes in the pandemic period and viral thoughts may create serious uncertainty and loss of control in people's minds.^{10,11} People's mental approaches regarding the virus may determine their approaches in this regard.¹² Additionally, a relevant study emphasizes that adverse incidents such as outbreaks and crises distort people's current adaptation mechanism.¹³ People's approaches toward the virus are expected to increase their stress levels when combined with the precautions they have never experienced before.¹⁴⁻¹⁶

Studies indicate a strong relationship between stress level and smoking habit.^{17,18} There are many studies indicating that stress and rapid changes in one's life increase the rate of smoking.^{19,20} In addition, people's thoughts on their diseases shape their smoking habit. For instance, the news that Covid-19 progresses more heavily and severely among the people who smoke may positively affect the idea of quitting smoking, but uncertainties and unexpected changes in daily and professional lives such as the decrease in income owing to the closing of shops, short-time working payment, unpaid leave and staying at home during the quarantine period may direct people to smoke more.^{17,21} The information that smoking adversely affects the lungs which are the direct target of Covid-19 may decrease the rate of smoking among people.²² As people are making efforts to live under the challenging conditions full of uncertainties, it has become an obligation for them to attribute more attention to their health behaviors (such as hygiene or using addictive substances) following the statement that smoking increases the probability of being infected with Covid-19, which will

create a severe dilemma for the people who smoke. Therefore, determining the changes in the habit of smoking during outbreaks and understanding the reasons in the background will contribute to the literature in terms of maintaining people's physical health and fighting against the habit of smoking.

The holistic assessment of the literature on smoking and pandemic indicates that relevant studies are mostly medical.²² The number of international and national studies reviewing the psychological and sociological aspects of smoking during the Covid-19 pandemic was limited.^{23,24} The studies in the literature mainly defined the virus and examined the spreading rate and field, and methods of protection from the virus.²² It has been inevitable for people to have flaws in their lives in this pandemic. During this period, many people stay at home despite the need of working and earning under these conditions; in addition, people's income has significantly decreased as certain workplaces had to be closed, which has adversely affected people's physical and mental health.²⁵ Analyzing smoking habits during the Covid-19 pandemic is a critical need in terms of increasing people's quality of life during pandemic and overcoming the adverse impacts of outbreaks more easily.

The aim of the study was to examine how the Covid-19 pandemic which has been suffered by more people every day has affected people's smoking habits. Efforts will be made to answer the following questions in this study: How did people's smoking levels change compared to the pre-pandemic period? Did people's smoking habits change according to their ages, and educational and employment statuses in the Covid-19 period? Is there a relationship between the impacts of Covid-19 on the people around the smokers and smoking cessation success? Is there a significant relationship between smoking cessation success and people's concerns/concern-related violence? Using the Covid-19 data from the field, the relationship between the habits of smoking in the pre- and post-pandemic periods, maintaining the habit of smoking, smoking cessation attitudes and certain variables will be examined in this study. Considering its objectives and the scientific gap it will fill, this study has an original characteristic. Another objective is to provide a reference to the researchers who perform studies on the habit of smoking, to policy makers who develop policies on pandemic management, and to the future scientific studies.

METOT

Study design

It is useful to follow a correlational path to explain and predict facts and events in studies on social matters. This study was designed in line with the correlational research model which enables to observe and understand the correlations between socially facts and events. Correlational studies try to determine whether there is a correlation between two or more quantitative variables and the degree of this correlation.²⁶

Participants

The convenience sampling method, which enables the researcher to reach the target data faster and provide them with economic convenience, was used.²⁷ In this regard, 545

(Female=256, Male=289) individuals aged between 18-65 in Turkey were reached. The study group consisted of government officials (37,2%), private sector employees (34,1%), unemployed individuals (17,2%) and students (11,4%).

Data Collection Tools

The data collection tool used in this study has two sections. The first section of the data collection tool includes questions on the participants' demographic characteristics and experiences during the Covid-19 pandemic. The question items in this section were formed in line with the literature.^{22,27-30} The second form consists of the "Smoking Cessation Success Prediction Scale" (SCSPS) developed by Aydemir, Doğu, Dede and Çınar

(2019).²⁸ It is a self-report scale with 10 items in two dimensions in five-point Likert-type (1=very low, 2=few, 3=average, 4=many, 5=too many). The maximum score that can be obtained from the scale is 50 while the minimum score is 10. Higher scores on the scale indicates higher level of smoking cessation success.

Processing Course of the Study

The data collection tool used in the study was formed in line with the literature on smoking and Covid-19 and was handled in consistent with the study hypotheses. Opinions of two experts were obtained for Form A of the data collection tool which was formed according to the experience and observation of the researcher. Form A was finalized in line with the opinions of the experts on the research subject. Later, necessary permissions were obtained for the SCSPS, which was planned to be used in the study, through e-mail. After the data collection tool was finalized, randomly selected groups such as government officials,

workers, artisans and students in Turkey were reached through WhatsApp and e-mail. The study data were processed and analyzed in line with the study problem.

Data Analysis Techniques Used in the Study

The study data were analyzed with SPSS 23.0 package program. The data on the study variables were analyzed using descriptive statistical processing and were presented in line with the quantitative study design. In addition to descriptive statistics, one-way variance analysis (ANOVA) and independent group *t* test were used.

Aspect of Research Ethics

Before starting the research, the necessary permission was obtained from the Ethics Board of Ordu University in order to carry out the study by Decision dated 27.01.2021 and numbered 2021/9. Participants in the study were told about the purpose of the study and the study was carried out by taking the consent form.

RESULTS

Results Related to Demographic Variables

Frequency values for descriptive information about demographic characteristics of the participants are presented in Table 1. The results regarding the demographic variables indicated that most of the participants consisted of people who were aged over 30 years (47,7%) and married (62%), while the people who were divorced (3,7%) and aged over 45 years (18,%) represented the lowest rate. The results regarding the employment status of people indicated that people worked as a civil servant (37,2%) the most, while the students (11,5%) represented the minority.

The results regarding participants' latest educational statuses indicated that most of the participants were university graduates (63,9%). Participants were asked whether they were employed, and most of the participants (63,3%) stated that they were employed; most of them (65,3%) did not actively work in Covid-19 pandemic or

worked half time (9%). Results regarding the social lives of participants during the Covid-19 pandemic included their quarantine practices. According to these results, only 14,5% of the participants stated that they did not stay at home for long periods during the quarantine period.

According to the results regarding the physical health of people during the Covid-19 pandemic in Table 1, 76 participants stated that some of their relatives or friends were infected with Covid-19 and 24 people among the close relatives of the participants lost their lives. It is probable for people to have changes in their medical attitudes during the pandemic when infection and death rates are high. According to the results regarding the smoking attitudes of participants, 39,1% of the participants smoked.

Of the smoking participants, 31,9% reported decreases in their rate of smoking and 25,8% totally quitted smoking. However,

15,8% reported increases in their rate of smoking, and 26,5% mentioned no changes in their smoking habits. The answers given

by the participants to the items in the Form A are briefly presented in Table 1.

Table 1. Results Related to Demographic Variables

Variables	(N=545)	
	f	%
Marital Status		
Married	33	6
Single	18	3
Divorced	20	3
Age		
18-30 years old	1	3
31-45 years	2	4
45 and older	1	1
Employment Status		
Government Official	2	3
Private Sector Employee	1	3
Unemployed	9	1
Student	6	1
Education Level		
Primary-Middle School	78	14
High School	11	20
University	35	65
Are you currently working in a job?		
Yes	34	63
No	2	3
Have you actively gone to work during the Covid-19 pandemic?		
Yes	1	2
No	3	6
I have worked part-time	4	9
Have you stayed at home for a long time during the Covid-19 pandemic?		
Yes	4	8
No	9	1
Have you or someone around you got infected by the Covid-19 disease?		
Yes	7	1
No	4	8
Has any of the people around you lost their lives due to Covid-19 disease?		
Yes	2	4
No	5	9
Do you smoke?		
Yes	2	3
No	3	6
How has your smoking behavior changed during the Covid-19 pandemic?		
I had an increase in my smoking rate	3	1
I quit smoking during Covid-19 pandemic	5	2
I had a decrease in my smoking rate	6	3
There is no change in my smoking rate	5	2
Considering your days before the pandemic (in February), to what degree does your anxiety or worry currently affect your family, business or social lives?		
None	8	1
Slightly	1	3
Moderately	2	4
Severely	7	1
I feel more stressed and worried right now compared to my life before the pandemic (in February).		
Never	6	1
Sometimes	2	5
Usually	1	3
Always	3	5

Individuals' Smoking Cessation Success During the Covid-19 Pandemic and Results Related to Some Demographic Variables

Participants' educational statuses, which are one of the variables that may affect the process of smoking cessation in the Covid-19 pandemic, were examined first in this study. According to the analyses, no significant relationship was present in the smoking cessation success prediction scores among the participants of the study and their educational statuses ($F=1,044$; $p>,05$). The relationship between the factor of age and smoking cessation success was examined later, and no significant relationship was found between participants' ages and smoking cessation prediction scores ($F=2,028$; $p>,05$). The normality tests constituted the first step of analyses performed to determine whether there was a relationship between people's habit of smoking and employment status in the

Covid-19 pandemic. According to the normality tests, groups were homogeneous and displayed normal distribution as understood from visual (histogram) and analytic (Kolmogorov-Smirnov, Shapiro-Wilk tests) methods. Independent sample t test was performed to see whether there was a significant difference between the smoking cessation success and employment or unemployment for a long period of time. The results in Table 2 were analyzed and the difference between the groups' mean arithmetic scores indicated a statistically significant difference ($t=2,542$; $p<,05$). The results indicate that the mean smoking cessation prediction scores among the employed people were higher than the scores of unemployed people. The difference between the mean scores indicates that smoking cessation success of employed people in the Covid-19 pandemic was greater than that of the people who were unemployed.

Table 2. Individuals' Smoking Cessation Success during the Covid-19 Pandemic and the Results of Independent Group t Test Based on Their Current Employment Status

Variable	Groups	N	\bar{x}	sd	t Test		
					Sd	t	p
SCSPS	Yes, I am currently working in a job	159	19,52	5,07	211	2,542	,012*
	No, I do not currently work in a job	54	17,57	4,19			

* $p <,05$

Results Related to Individuals' Smoking and Exposure to Covid-19 Virus During the Covid-19 Pandemic

Firstly, normality tests were made to determine the findings related to this section and it was found that the groups showed normal distribution and were homogeneous. Then, independent group t test was made to determine whether the smoking cessation success of the individuals in the study group differed based on their state of exposure to the Covid-19 virus (Infected/Death).

According to Table 3, there were significant differences between the arithmetic

means of the groups based on the variables of someone around them getting infected by the Covid-19 virus and smoking cessation success. The smoking cessation success prediction means of individuals who had someone around them infected by the Covid-19 virus were higher than those who did not have someone around them infected by the Covid-19 ($t=2,310$; $p<,05$). Abovementioned results indicate that the situation that the individual had someone around them infected by the Covid-19 virus increases their smoking cessation success.

Table 3. The Results of Independent Group t Test Made Based on Individuals' Smoking and Exposure to Covid-19 Virus During the Covid-19 Pandemic

Variable	Groups	N	\bar{x}	sd	t Test		
					Sd	t	p
SCSPS	Yes, I have someone around me who got infected by Covid-19 virus	41	20,60	4,92	211	2,310	,022*
	No, I do not have anyone around me who got infected by Covid-19 virus	172	18,55	4,84			

*p <,05

Results Related to Individuals' Anxiety Levels and Smoking Status During Covid-19 Pandemic

One-way variance analysis (ANOVA) technique was used to determine whether the smoking cessation success of the participants during the Covid-19 pandemic significantly differed based on the anxiety/worry experienced by the participants during this period. The first step of analyses procedures carried out for this purpose was the normality tests. According to the normality tests performed, it was revealed that the groups were homogeneous and normally distributed using visual (Histogram) and analytic (Kolmogorov-Smirnov, Shapiro-Wilk) methods.

A statistically significant difference was found between the mean levels of anxiety/worry experienced by the individuals as a result of the performed statistical analysis (F=4,442; p<,05). Additionally, the variances were found to be homogeneous according to the results of Levene's test which was made within the scope of statistical processing (F=4,442; p<,05). Considering these results, the fact that the levels of anxiety/worry felt by the individuals were significantly high affected their smoking cessation success. Then, descriptive complementary post-hoc techniques presented in Table 5 were used to determine the source of this significant difference.

Table 4. Results of the One-way Variance Analysis (Anova Test) Made Regarding the Individuals' Anxiety Levels and Smoking Status During the Covid-19 Pandemic

Variable	Groups	N	\bar{x}	sd	F	p
SCSPS	None	24	16,760	5,402	4,442	,005*
	Slightly	56	18,789	4,850		
	Moderately	98	18,878	4,986		
	Severely	32	15,705	5,402		

*p <,05

The Bonferroni multiple comparison test among the post-hoc techniques was performed to determine the source of the significant difference found between the groups, and the results of the analysis are presented in Table 5. According to these results, no significant difference was found between the state that anxiety levels of individuals severely affected their family,

business and social lives during the Covid-19 pandemic and the state that anxiety levels of individuals moderately affected their family, business and social lives during the Covid-19 pandemic. Accordingly, if the individuals' level of anxiety and worry significantly increases during the pandemic, their smoking cessation success got negatively affected.

Table 5. Results of the Post-Hoc Bonferroni Test Made to Determine the Groups Which Caused the Difference in the Individuals' Smoking Cessation Success Prediction Scores Based on the Levels of Anxiety/Worry Experienced by the Individuals During the Covid-19 Pandemic

Groups	Groups (J)	$\bar{x}_i - \bar{x}_j$	<i>se</i> \bar{x}	<i>p</i>
Severely	None	,916*	1,189	1,00
	Slightly	-2,571	,976*	,054*
	Moderately	-2,561	,896*	,028*

**p* <,05

RESULTS AND DISCUSSION

According to the study results, most of the individuals were of working age and did not actively go to work during the Covid-19 pandemic. The results of the study showed that the Covid-19 virus infection and death rates of the participants were similar to the average in Turkey.² The fact that the demographic characteristics of the participants in the study group did not show significant differences compared to the general sampling, sample in the Covid-19 pandemic strengthens the representativeness of this study sample.²⁹

It is a known fact that serious changes occur in people's lives and health behaviors during pandemics. Physical health of individuals is not only affected from the potential of the virus in these periods. At this point, precautions and measures taken about the outbreak become quite important. For example, paying attention to the protective measures taken and following the measures taken strengthen the physical health of individuals and can break the power of the virus.^{30,31} In this regard, smoking behavior which is known with negative effects on human health draws attention. It was found in this study that a good part of the participants who smoked before the Covid-19 pandemic either quit smoking or decreased the number of cigarettes smoked daily. This situation shows that individuals pay attention to the information about smoking behavior during the Covid-19 pandemic and the warnings stating that smoking behavior increases the risk of infection. The abovementioned findings are similar to the knowledge of literature which indicates that individuals decrease or quit smoking when

they encounter a serious health issue.^{24,32} Additionally, the daily smoking levels of some participants increased. This situation can be explained with stress due to uncertainties during the pandemic.^{14,33} Undoubtedly, uncertain periods like quarantine cause important stress sources for individuals and affect their smoking behavior.³⁴ This increase in the daily smoking levels is considered to be associated with stress and anxiety experienced by the individual during the long quarantine periods. The fact that individuals included in the study felt more stressed and worried compared to times before the pandemic supports this information.

Situations like death and disease experienced during outbreaks may cause certain changes in the individuals' daily routines. Abiding by the social distancing rule, using masks, hygiene suggestions and attempts to quit/reduce some harmful habits are observed.^{22,30,31} Thus, it was aimed to examine the level of influence on the individuals' smoking cessation behaviors of the state of individuals exposure to Covid-19 virus (infected). Considering the results of the analyses made within this scope, it was found that the smoking cessation success prediction score of the individuals infected by the Covid-19 virus were higher than others. According to these results, the fact that individuals had someone around them infected by the Covid-19 virus increased their smoking cessation success.⁴⁵ Additionally, in cases where the individual witnesses the harmful effects of smoking behavior on the health of people around them, the thought of quitting smoking

becomes more powerful.

We have mentioned the negative effects of stress on smoking behavior before.³⁵ Especially the business life and economic status of the individuals during the quarantine period are effective on stress and anxiety.³⁶ The fact that majority of the participants were of working age also gives clues to the possible stress and anxiety-based behaviors experienced during quarantine period. According to analyses that were made to determine whether there was a correlation between the smoking behaviors and employment status of the individuals during the Covid-19 pandemic, it was found that the smoking cessation success prediction scores of the individuals who had a job during the quarantine were higher than those without a job. Thus, the individuals who had a job during the quarantine periods felt more successful about their attempts to quit smoking. This information shows that the state of working in a job during the quarantine periods affects the individuals' smoking cessation success.³⁷ However, it was found that age and education levels did not have an effect on the individuals' smoking cessation success during the quarantine periods.³⁸ It is considered that knowing the employment status of the individuals as well as their stress and anxiety situations will give clues about the course of smoking cessation behavior.^{35,39} Thus, the study tried to find to what degree anxiety/worry experienced by the individuals during the Covid-19 pandemic affected their smoking cessation success. Performed analyses indicate that levels of anxiety/worry experienced by the individuals affected their smoking cessation success. As the levels of anxiety and worry experienced by the individuals during the pandemic significantly increased, their smoking cessation success decreased. This situation can be associated with the individuals' ability to cope with anxiety and worry in situations where uncertainty is intense such as the Covid-19 pandemic.⁴⁰ It is apparent that providing information about the effects of smoking on virus and fatal diseases is not enough to prevent and reduce the smoking behaviors of individuals during pandemic. Therefore, it is

revealed that establishing psychological support systems to enable individuals to cope with emotions like anxiety, stress and worry to make them quite smoking or reduce daily smoking level during outbreaks like Covid-19 virus is necessary. When such psychological support systems are provided for the needs of individuals, it is thought that individuals' smoking cessation success will increase, smoking relapses will decrease, and less physical effort and economic resources will be needed in the prevention and treatment of many chronic diseases.²³

In conclusion, this study determined that various people have reduced or completely quit smoking during this pandemic. The existence of people who got infected by the virus around them and employment status with an active income were found to be strong variables that increase the smoking cessation success of individuals. Nevertheless, it was found that individuals who experienced high level of stress during the pandemic had a decreasing smoking cessation success. This situation brings to mind the level of coping skills of individuals for stressful and uncertain situations in outbreaks. Thus, it is important to develop psycho-social intervention support systems as an addition to protective measures for physical health during outbreaks. The study has some limitations as well as results revealed in line with the literature. This study was conducted in accordance with the quantitative study methods. Since mixed-pattern studies in which qualitative and quantitative research methods are designed together enable obtaining more in-depth information and detecting contradictions, this method can be used in future studies on this subject. This study was conducted based on the individuals' smoking cessation behaviors, pandemic period, employment status, and stress/worry variables. Future studies on this subject should be conducted considering the psycho-social variables will contribute to the literature. Lastly, policy makers are recommended to make adjustments to ensure mental health professionals' active participation in the pandemic management and prevention process.

KAYNAKLAR

1. Callaway, E. (2020). Time to Use The P-Word? Coronavirus Enter Dangerous New Phase. *Nature*, 579 (12), 10-1038.
2. Ministry of Health. (2021). Covid-19 Durum Raporu. Available From: <https://Covid19.Saglik.Gov.Tr/TR-68443/Covid-19-Durum-Raporu> (Cited 28/01/2021).
3. Türk Toraks Derneği. (1918). İspanyol Salgını Ve Biz. [Cited 15/12/2020]; Available from: <https://www.toraks.org.tr/>
4. The Ministry of Interior. (2020). 81 İl Valiliğine Coronavirüs Tedbirleri Konulu Ek Bir Genelge Daha Gönderildi. [Updated 2020 December 16; Cited 2020 Nisan 25]. Available From: <https://www.icisleri.gov.tr/koronavirus-tedbirleri-genelgesi>
5. Armocida, B, Formenti, B, Ussai, S, Palestra, F. and Missoni, E. The Italian Health System and The COVID-19 Challenge. *The Lancet Public Health*, 2020, 5 (5), E253.
6. Vanderweele, T.J, Chen, Y, Long, K, Kim, E.S, Trudel-Fitzgerald, C. and Kubzansky, L.D. (2020). Positive Epidemiology? *Epidemiology*, 31 (2), 189-193.
7. İŞKUR. (2020). Kısa Çalışma Ödeneği, 2020. [Cited 25/11/2020]; Available from <https://www.iskur.gov.tr/Isveren/Kisa-Calisma-Odenegi> Cited 2020 Nisan 25].
8. Üstün, Ç. ve Özçiftçi, S. (2020). COVID-19 Pandemisinin Sosyal Yaşam Ve Etik Düzelem Üzerine Etkileri: Bir Değerlendirme Çalışması. *Anadolu Kliniği Tıp Bilimleri Dergisi*, 25 (1), 142-153.
9. Taylor, M.R., Agho, K. E, Stevens, G.J. and Raphael, B. (2008). Factors Influencing Psychological Distress during A Disease Epidemic: Data from Australia's First Outbreak of Equine Influenza. *BMC Public Health*, 8 (1), 347.
10. Gosselin, P, Ladouceur, R, Evers, A, Laverdiere, A, Routhier, S. and Tremblay-Picard, M. (2008). Evaluation of Intolerance of Uncertainty: Development and Validation of A New Self-Report Measure. *Journal of Anxiety Disorders*, 22 (8), 1427-1439.
11. Freeston, M.H, Rhéaume, J, Letarte, H, Dugas, M. J. and Ladouceur, R. (1994). Why Do People Worry? Personality And Individual Differences, 17 (6), 791-802.
12. Hekler, E.B, Lambert, J, Leventhal, E, Leventhal, H, Jahn, E. and Contrada, R.J. (2008). Commonsense Illness Beliefs, Adherence Behaviors, and Hypertension Control among African Americans. *Journal of Behavioral Medicine*, 31 (5), 391-400.
13. Kavakçı, Ö. (2014). Ruhsal Travma Tedavisi İçin EMDR. Ankara: HYB Yayıncılık.
14. Xiang, Y.T, Yang, Y, Li, W, Zhang, L, Zhang, Q, Cheung, T. and Ng, C.H. (2020). Timely Mental Health Care for The 2019 Novel Coronavirus Outbreak Is Urgently Needed. *The Lancet Psychiatry*, 7 (3), 228-229.
15. Huang, Y. and Zhao, N. (2020). Generalized Anxiety Disorder, Depressive Symptoms and Sleep Quality during COVID-19 Epidemic In China: A Web-Based Cross-Sectional Survey. *Psychiatry Research*, 288, 1-6,
16. Kauffman, J.M. and Landrum, T.J. (2015). Duygusal ve Davranışsal Bozukluğu Olan Çocukların ve Gençlerin Özellikleri. Ankara: Nobel Yayınları.
17. McCabe, R.E, Chudzick, S.M, Antony, M.M., Young, L, Swinson, R.P. and Zolvensky, M.J. (2004). Smoking Behaviors Across Anxiety Disorders. *Journal of Anxiety Disorders*, 18 (1), 7-18.
18. Ögel, K. (2007). Riskli Davranışlar Gösteren Çocuk ve Ergenler. İstanbul: Yeniden Sağlık ve Eğitim Derneği Yayınları.
19. Tomko, R.L, Saladin, M.E, Baker, N.L, McClure, E.A, Carpenter, M.J. and Ramakrishnan, V.R. (2020). Sex Differences in Subjective and Behavioral Responses To Stressful and Smoking Cues Presented in The Natural Environment Of Smokers. *Nicotine and Tobacco Research*, 22 (1), 81-88.
20. Vatan, İ, Ocakoğlu, H. ve İrgil, E. (2009). Uludağ Üniversitesi Tıp Fakültesi Öğrencilerinde Sigara İçme Durumunun Değerlendirilmesi. *TAF Preventive Medicine Bulletin*, 8 (1), 43-48.
21. Sönmez, Ö, Taşdemir, Z.A, Kara, H.V. ve Akçay, Ş. (2020). COVID-19 ve Tütün. *Eurasian Journal of Pulmonology*, 1, 22-27.
22. Vardavas, C.I. and Nikitara, K. (2020). COVID-19 And Smoking: A Systematic Review of The Evidence. *Tobacco Induced Diseases*, 18 (20), 24.
23. Duan, L. and Zhu, G. (2020). Psychological Interventions For People Affected By The COVID-19 Epidemic. *The Lancet Psychiatry*, 7 (4), 300-302.
24. Tattan-Birch1, H, Perski, O, Jackson, S, Shahab, L, West, R. and Brown, J. (2020). COVID-19, Smoking, Vaping and Quitting: A Representative Population Survey in England. *Addiction*. 2020.
25. Patrick, S.W, Henkhaus, L.E, Zickafoose, J.S, Lovell, K, Halvorson, A, Loch, S. and Davis, M.M. (2020). Well-Being of Parents and Children during The COVID-19 Pandemic: A National Survey. *Pediatrics*, 146 (3), 1-10.
26. Fraenkel, J.R, Wallen, N.E. and Hyun, H.H. (2012). How To Design and Evaluate Research in Education (8th Ed.). New York: Mc Graw Hill.
27. Cohen, L, Manion, L. and Morrison, K. (2007). *Research Methods in Education*. Newyork, NY: Routledge.
28. Aydemir, Y, Doğu, Ö, Dede, C. ve Çınar, N. (2019). Sigara Bırakma Başarısı Öngörü Ölçeği: Geliştirme ve Geçerlik, Güvenirlik Çalışması. *Addicta: The Turkish Journal on Addictions*, 6 (2), 387-402.
29. Gobo, G. (2004). Sampling, Representativeness and Generalizability. C, Gobo, G, Gubrium, J.F. and Silverman, D. (Eds), In: *Qualitative Research Practice*. London: Sage.
30. Greenhalgh, T, Schmid, M.B, Czypionka, T, Bassler, D. and Gruer, L. (2020). Face Masks for The Public During The Covid-19 Crisis. *Thebmj*, 369-373.
31. Lewnard, J.A. and Lo, N.C. (2020). Scientific and Ethical Basis for Social-Distancing Interventions against COVID-19. *The Lancet Infectious Diseases*, 20 (6), 631-633.

32. Argüder, E, Karalezli, A, Hezer, H, Kiliç, H, Er, M, Hasanoglu, H.C. and Demir, P. (2013). Sigara Bırakma Basarisini Etkileyen Faktörler/Factors Affecting The Success of Smoking Cessation. Turk Toraks Dergisi, 14 (3), 81-87.
33. Şahiner, N.C, Şahin, A. ve Akbağ, N.N.A. (2020). Üniversite Öğrencilerinin Sigara İçme Durumları ve Sigara Bağımlılığına Yönelik Tutumları. Bandırma Onyedü Eylül Üniversitesi Sağlık Bilimleri ve Araştırmaları Dergisi, 2 (2), 64-79.
34. Ekiz, T, İlman, E. ve Dönmez, E. (2020). Bireylerin Sağlık Anksiyetesi Düzeyleri İle COVID-19 Salgını Kontrol Algısının Karşılaştırılması. Uluslararası Sağlık Yönetimi ve Stratejileri Araştırma Dergisi, 2020, 6 (1). 139-154.
35. Patwardhan, P. (2020). COVID-19: Risk Of Increase in Smoking Rates among England's 6 Million Smokers and Relapse among England's 11 Million Ex-Smokers. BJGP Open, 4 (2), 1-3.
36. Forbes, P, Feneberg, A.C, Lamm, C, Nater, U, Pronizius, E, Silani, G. and Stijovic, A. (2020). The COVID-19 Crisis, Stress, Mood, And Behaviour: An Ecological Momentary Assessment Study. OSF. Available From: Osf.io/Gsvdf (Cited 16 February 2020)
37. Eş, A.Ç, Çakici, M, İskender, C. ve Kizilgöl, Z. (2020). KKTC Riskli Bölgelerde Psikoaktif Madde Kullanım Profili ve Risk Etkenleri: KKTC Dört Bölge Örnelemi. Anadolu Psikiyatri Dergisi, 21 (2), 165-172.
38. Kanık, M.K. ve Tözün, M. (2020). İzmir'de Sigarayı Bırakma Polikliniklerine Başvuranların Sigara ve Diğer Tütün Ürünleri Kullanım Özellikleri ve Nikotin Bağımlılık Durumları. ESTÜDAM Halk Sağlığı Dergisi, 5 (1), 84-95.
39. Er, T. ve Kurçer, M. (2020). Tıp Fakültesi 1. ve 6. Sınıf Öğrencilerinin Sigara İçme Davranışları ve Anksiyete Düzeyleri. Bağımlılık Dergisi, 21 (3), 201-209.
40. Dugas, M.J, Buhr, K. and Ladouceur, R. (2004). The Role of Intolerance of Uncertainty in The Etiology And Maintenance of Generalized Anxiety Disorder. R.G. Heimberg, C.L. Turk, D. S. Menin (Eds), In: Generalized Anxiety Disorder: Advances in Research and Practice. New York: Guilford Press.