Ankara Sağlık Bilimleri Dergisi (ASBD)
Journal of Health Sciences (JAHS)
ISSN:2146-328X (print)
e-ISSN: 2618-5989 (online)

Özgün Araştırma / Research Article

Türkiye'de COVID-19 salgınının erken dönemlerinde halkın salgın ile ilgili farkındalık, tutum ve kaygıları

Awareness, attitudes, and anxiety related to COVID-19 pandemic among the public in early terms of the pandemic in Turkey

Esra DOĞRU HÜZMELİ [1]
Özden GÖKÇEK [1]
İrem HÜZMELİ [1]
Çağla Pınar KOLUKIRIK [1]
Ayten DOĞAN [1]
Döndü İRİS [1]
Gamze GÜNEŞAÇAR [1]
Emre DÖNGEL [1]
Ali ÖZBEK [1]
Lena DOĞRU [2]
Evrim ARSLAN [3]
Murat GÜNTEL [4]
Senem URFALI [5]
Boran URFALI [6]

Özet

Amaç: Çalışma, Türkiye'de halkın COVID-19 pandemisinin erken döneminde COVID-19 hakkındaki temel bilgilerini sorgulamak amacıyla yapılmıştır. **Gereç ve Yöntem:** Bu çalışma Hatay Mustafa Kemal Üniversitesi'nde gerçekleştirilmiştir. COVID-19 bilgi düzeyini ölçme anketi yazarlar tarafından geliştirilmiştir. Katılımcılara haber alma kaynakları, tedavi hakkındaki bilgileri, COVID-19'un semptomları ve kuluçka süresi konusundaki düşünceleri sorgulanmıştır. Anksiyete seviyesi 10 cm'lik Görsel Analog Ölçeği kullanılarak sorgulanmıştır (0: Endişeli değilim; 10: Aşırı derecede endişeliyim). Sağlık kaygısı durumunu değerlendirmek için 14 maddelik bir Sağlık Kaygı Envanteri (Kısa Form) kullanılmıştır. **Bulgular**: Yaş ortalaması 32.20 ± 13.27 yıl olan 513 (268 kadın % 52.2, 245 erkek % 47.8) birey dahil edilmiştir. Katılımcıların %43.5'i egzersiz yapmanın virüse karşı koruyucu olduğunu belirtmiştir. Katılımcıların çoğu önlem olarak "toplu taşımada azalma, okulları ve kamu kurumlarını kapatma, kişisel bakım ve hijyen artışları" hususlarını vurgulamışlardır. Son günlerde kendilerini COVID-19 enfeksiyonundan korumak için el yıkama sıklığını artırdıklarını (% 64.7) belirtmişlerdir. Anksiyete düzeyi 5.58 idi ve bu da katılımcıların orta derecede anksiyete düzeyine sahip olduğunu göstermektedir. Tüm katılımcıların Kısa Sağlık Anksiyete Envanteri puanının 15.33 ± 9.83 olduğu bulunmuştur. **Sonuç:** Halkın COVID-19 hakkında yeterli bilgiye sahip olduğu, pandemiye karşı alınması gereken önlemlerin farkında oldukları belirlenmiştir. Ancak kaygı düzeylerinin yüksek olduğu tespit edilmiştir. Yetkili makamların, halkın kaygısını azaltmak amacıyla kamuoyu ile salgın hakkında düzenli bilgiler paylaşmaya devam etmeleri gerektiğini düşünüyoruz.

Anahtar Kelimeler: kaygı, COVID-19, Türkiye, salgın

Abstract

Objective: We conducted the study to question the basic information of the public about the COVID-19 in Turkey in the early term of the pandemic. **Methods:** This study was conducted at Hatay Mustafa Kemal University. COVID-19 knowledge questionnaire was developed by the authors. We questioned the participants about the habit of getting information resources, knowledge of the treatment, symptoms; and incubation period of the COVID-19. We measured anxiety level and it was scored on a 10 cm Visual Analog Scales (0:Not worried; 10:strongly worried). A 14-item Health Anxiety Inventory (Short Form) was used to assess health anxiety status. **Results:** We included 513 (268 female 52.2%, 245 male 47.8%) individuals that mean age was 32.20±13.27 years. Forty-three and five percent of the participants reported that exercising is a virus protector. Most of the participants agreed with the idea "reduction in public transport, closing the schools and public institutions, increase in personal care and hygiene are successful methods as a precaution". An increase in washing hands (64.7%) was the biggest method that is done to protect themselves from COVID-19 infection in the last days. Anxiety level was 5.58, and this means participants have a moderate anxiety level. The Short Health Anxiety Inventory score of all the participants was 15.33±9.83. **Conclusion:** It is determined that the public has sufficient knowledge about COVID-19, they are aware of the necessary precautions against the pandemic. But their level of anxiety was high. We think that authorities should continue to share with the public regular information about the pandemic to reduce the tension of the public.

Key words: anxiety, COVID-19, Turkey, pandemic

Alındığı tarih/Received Date: 04.11.2020
Kabul tarihi/Accepted Date: 09.11.2020

Sorumlu yazar:
Esra DOĞRU HÜZMELİ
e-mail:
esradogru001@hotmail.com

[1] Hatay Mustafa Kemal University, Physiotherapy and Rehabilitaton Depratment, Health Science Faculty, Hatay, Turkey

[2] VertigoRehab Center, Hatay, Turkey

[3] Hatay Mustafa Kemal University, Public Health Department, Tayfur Ata Sokmen Medicine Faculty, Hatay, Turkey

[4] Hatay Mustafa Kemal University, Neurologia Department, Tayfur Ata Sokmen Medicine Faculty, Hatay, Turkey

[5] Hatay Mustafa Kemal University, Anesthesiology and Reanimation Department, Tayfur Ata Sokmen Medicine Faculty, Hatay, Turkey

[6] Hatay Mustafa Kemal University, Neurosurgery Department, Tayfur Ata Sokmen Medicine Faculty, Hatay, Turkey

INTRODUCTION

The Coronavirus disease 2019 (COVID-19) was first identified in December 2019 (Xiao and et al. 2020; Yao and et al. 2020). There is an upsurge in numbers of confirmed cases in China, Italy, USA, Spain, Turkey, and additional

countries so, the World Health Organization (WHO) has declared a public health emergency of international concern considering (Wang and et al. 2020). Bats act as intermediate hosts for COVID-19 infection. The most common symptoms of COVID-19 transmitted from person to person through virus-laden respiratory droplets are fever, chills, cough, sore throat, difficulty breathing, myalgia, nausea, vomiting and diarrhea. Worse outcomes were seen in older people who have medical comorbidities such as hypertension, diabetes mellitus, respiratory failure, cardiac disease, etc. (Paules and et al. 2020; Wang and et al. 2020). Vaccination studies are ongoing (https://www.who.int/docs/default-source/COVID-19e/situation-reports 2020). Travel restrictions and quarantine were extended to additional provinces and cities, affecting more than 1.000.000 million people in total within days. Because of this global pandemic people stayed at home and socially isolated themselves to prevent being infected. COVID-19 pandemic cases are increasing day by day, and this causes fears among the public. So, it is important to detect public awareness, attitudes and anxiety levels at an early stage. Previous studies have revealed that the pandemic causes a wide range of negative psychosocial effects on societies and people at international levels (Wang and et al. 2020). Many studies investigated the psychological impact on the non-infected community, revealing significant psychiatric morbidities which were found to be associated with younger age and increased self-blame while SARS pandemic (Sim, 2010). However, there are insufficient studies on the public health effects of the COVID-19 pandemic. One of the studies revealed the relationship between social support and sleep quality in healthcare professionals treating COVID-19 patients in Wuhan, China. This study resulted in increased levels of anxiety, stress, and self-efficacy that were dependent on sleep quality and social support in medical staff who treated patients with COVID-19. Another study which is about the impact of the pandemic outbreak on older adults in Hong Kong were recommended to the mental and psychological well-being of the community, in particular older adults. Developing pandemic control to combat the future outbreak of diseases in the community was essential, and important to protect the public health from potential risk because of the illnesses or anxieties (Yip and et al. 2010). One of the contagious diseases COVID-19, is an important pandemic that threatens public health. Effective public health interventions are being put in place to eradicate a variety of communicable diseases around the world. Social media and Internet-based data play an important role in real-time reporting to strengthen surveillance systems (Kamel and et al. 2020). WHO publishes daily information about COVID-19 and its effects. Reports around the world carry daily updates and increasing speculation about the potential global impact as the COVID-19 spreads more than predicted. The global impact of this new pandemic is yet uncertain and there is not enough information about the public's level of knowledge and fear about this global pandemic (Singhal 2020; Goyal and et al. 2020; Salkovskis and et al. 2002; Nystoriak and et al. 2018). Nevertheless, there are lots of various alarming video clippings featuring COVID-2019 on social media and individuals through their smartphones/computers. Because of this situation especially the lack of accurate information on the internet can create panic among the general public (Goyal and et al. 2020).

The fight that we have to win against COVID-19 continues in Turkey and over all the world. In the period of the Turkey's outbreak management, public awareness and attitudes about the COVID-19 is very important. As a matter of fact, legislators and healthcare professionals plan the next move in their fight against the pandemic according to the attitude of the public.

We searched the literature and found that no study questioned awareness, attitudes, and anxiety related to COVID-19 of the Turkish public. When we designed this study the first case with COVID-19 was confirmed in Turkey and there was no quarantine on social life to prevent COVID-19's transmission. Therefore, our study questions the pre-quarantine period, where there were fewer cases of COVID-19 in Turkey. We conducted the study to question the basic information (the information about the precautions to be obeyed, the degree of anxiety and health anxiety, the knowledge of the public about the treatment and, symptoms of the COVID-19) of the public about the COVID-19. Another aim is to support the authorities, who are making plans and rules about COVID-19, by showing the public's thoughts and feelings to manage the process healthily.

MATERIALS AND METHODS

Participants

This study was conducted at Hatay Mustafa Kemal University. Individuals who were over 18 years old were included in the study. Patients' companions who applied to the outpatient clinics of Tayfur Ata Sokmen Medicine Faculty were invited to participate in the study. Ethical approval was obtained from the Hatay Mustafa Kemal University Ethical Council. We did not include individuals whose job was health staff.

Questionnaire

The COVID-19 knowledge questionnaire was developed by the authors. An interview survey was designed to collect sociodemographic characteristics of all participants such as gender, nationality, age, education, and occupation. Researchers prepared the questions to include general levels of information about the virus, and ways of protecting themselves from this virus. We questioned the participants about the habit of getting information resources, knowledge of the treatment; symptoms; signs; and incubation period of the COVID-19. Each participant was asked to report the precautionary methods that he or she was obeying during the pandemic to prevent infection. Some questions were answered as "yes, no, don't know" (13 questions), some questions (6 questions) of them were multiple-choice questions. Two of them were open-ended questions and they questioned the incubation period of the virus and the norm of the social distance between people to prevent transmission of the virus. One question measured anxiety level and it was scored on a 10 cm Visual Analog Scales (0: Not worried; 10; strongly worried). A 14-item Health Anxiety Inventory (Short Form) was used to assess health anxiety status.

14-item Short Health Anxiety Inventory

Physical symptoms and sensations that are involved in social phobia and obsessive-compulsive disorder also develop as a result of health anxiety. To evaluate health anxiety, Salkovskis et al. Developed the Health Anxiety Scale (Salkovskis and et al. 2002; Nystoriak and et al. 2018). We used the 14-item Short Health Anxiety Inventory to assess health anxiety. Short Health Anxiety Inventory is a self-report scale consisting of 14 items. The scoring of the scale is between 0-3 for each item, and a high score indicates a high level of health anxiety. Scores on the measure can range between 0 and 42. Scores above 15 suggest that the person is suffering symptoms of health anxiety (Salkovskis and et al. 2002; Nystoriak and et al. 2018; Carrigan and et al. 2017; Seivewright and et al. 2004). Reliability and Validity of the Turkish Version of the Health Anxiety Inventory was made by Aydemir et al (Aydemir and et al. 2013).

Statistical Analyses

The Statistical Package for the Social Sciences [SPSS, Chicago, IL, USA] version 22.0 for Windows was used for statistical analysis. Descriptive statistics with mean and Standard Deviation (SD) were carried out on continuous variables, and percentages were utilized for dichotomous. Independent Sample T-Test was used for two groups' statisitc.

RESULTS

We included 513 (268 female 52.2%, 245 male 47.8%) individuals that mean age was 32.20±13.27 years. We included people over 18 years old from all the sociocultural classes.

We found that most of them had no disease history (%94.7). Most of them (99%) of them were Turkish and there were participants from various education levels and various jobs (Table 1).

Most of them knew the virus's name that causes COVID-19 disease (93%), Most of them agreed on the postpone of the sports competition (85.2%). Most of the participants agreed with the idea" reduction in public transport, closing the schools and public institutions, increase in personal care and hygiene are successful methods as a precaution". An increase in washing hands (64.7%) was the biggest method that is done to protect themselves from COVID-19 infection in the last days. If they could get vaccinated, 66.3% of the participants accepted to have it. Forty-three and five percent of the participants reported that exercising is a virus protector. Some participants did not answer some questions, they are defined as "No answer" (Table 2).

Table 1. Demographic characteristic of the participants

		N	%
Gender	Female	268	52.2
	Male	245	47.8
Nationality	Turkish	508	99
	Syrian	1	0.2

	Other	4	0.8
Disease history	No	486	94.7
	Diabetes Mellitus	7	1.4
	Cardiac Disease	6	1.2
	Orthopedic Disease	4	0.8
	Rheumatic Disease	1	0.2
	Neurological Disease	3	0.6
	Metabolic Disease	6	1.2
Education level	Primary School	46	9
	Middle School	41	8
	High school	130	25.3
	Associate Degree	65	12.7
	Bachelor	231	45
Profession	Retired	22	4.3
	Self-employed	62	12.1
	Artisan	29	5.7
	Housewife	55	10.7
	Student	156	30.4
	Government	49	9.6
	Unemployed	46	9
	Other (Musician, national athlete, etc.)	94	28.3

Figure 1 shows the percentages of different information resources among participants. Radio/TV was the most common source of information (44.4%), followed by social media (37.6%).

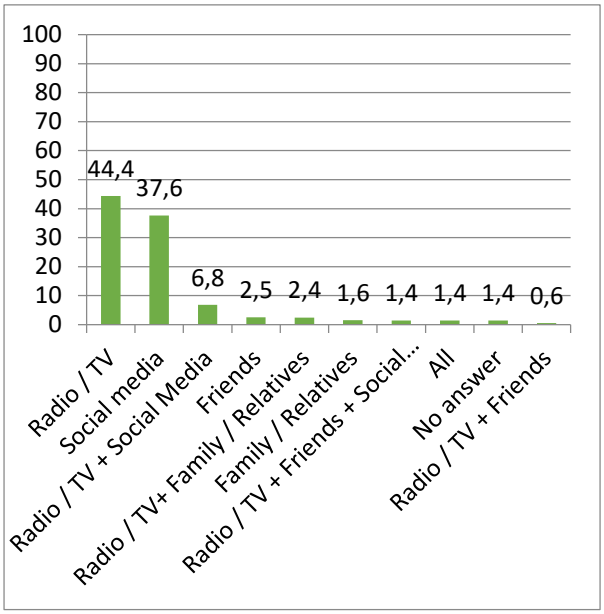

Figure 1. Information accessed resources.

Anxiety level was 5.58 (0-10) and this means participants have a moderate anxiety level. Female participants had an overall higher mean anxiety level than males (Mean ± SD was 6.21±2.73 and 4.89±3.07 respectively), and the difference was found significant in an Independent T-Test (t: 5.102, p: 0.0001). The Short Health Anxiety Inventory score of all the participants was 15.33±9.83 (ranged between 0-42). Females' mean of the Short Health Anxiety Inventory Score was higher than males (Mean±SD was 16.19±9.92 and 14.40±9.65 respectively) and this difference was significant (t: 2.061, p: 0.040), (Table 2, Figure 2).

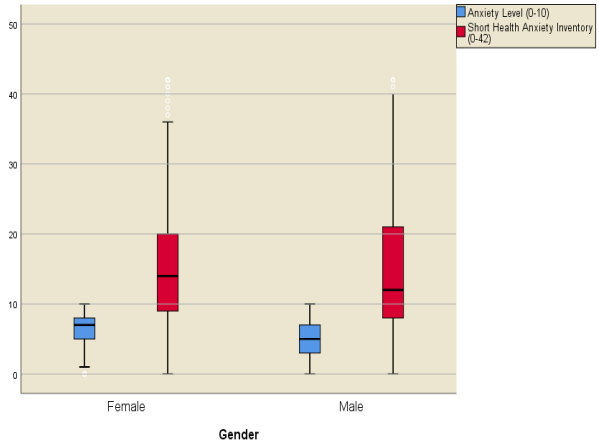

Figure 2. Anxiety level and Short Health Anxiety Inventory Scores in male and female participants.

Seventy-two and seven percent of the participants reported that they were worried about being infected. Ninety-three and eight percent of

them reported that avoiding crowds means avoiding COVID-19. Participants who think that wearing the mask in the public protects them from the transmission of COVID-19 percent was 53%. Seventy-seven of them think the season affects the COVID-19.

Twenty-nine and four percent think that they have not enough information about symptoms of the COVID-19. Some participants did not answer some questions and they are defined as "No answer" (Table 2).

Table 2. Knowledge and opinion of the participants about COVID-19

			n	**%**
1.	Which viruses caused coronavirus disease?	COVID-19	477	93
		No idea	17	3.3
		H1N1	13	2.5
		HIV	6	1.2
2.	Do you find it correct to postpone sports competitions?	Yes	437	85.2
		No	14	2.7
		Overrated	31	6
		No idea	31	6
3.	Which method is the best as a precaution to COVID-19?	Reduction in public transport (1)	12	2.3
		Closing the schools and public institutions (2)	6	1.2
		Increasing in personal care and hygiene (3)	71	13.8
		1 + 2	10	1.9
		1 + 3	34	6.6
		2 + 3	24	4.7
		All	351	68.4
		No answer	5	1
4.	If you think you were infected with COVID-19 what would you do?	I would apply to the nearest health institution	471	91.8
		I expect to heal without leaving home	27	5.3
		No answer	15	2.9
5.	What do you do to protect yourself from COVID-19 in the last days?	I increased my hand washing frequency during the day (1)	332	64.7
		I started using antibacterial gel (2)	88	17.2
		I started using a mask (3)	39	7.6
		1+3	20	3.9
		1+2	16	3.1
		1+2+3	9	1.8
		No answer	9	1.8
6.	Do you think that wearing a mask in the public protects from the transmission of COVID-19?	Yes	272	53
		No	209	40.7
		I do not know	32	6.2
		No answer	2	0.2
7.	Treatment of the COVID-19 is impossible	Yes	132	25.7
		No	244	47.6
		I do not know	134	26.1
		No answer	3	0.6
8.	It has the vaccine	Yes	58	11.3
		No	302	58.9
		I do not know	147	28.7
		No answer	6	1.2
9.	If you can get vaccinated, would you accept it?	Yes	340	66.3
		No	94	18.3
		I do not know	72	14
		No answer	7	1.4

10. Do you think the season affects on the coronavirus?	Yes	395	77
	No	47	9.2
	I do not know	71	13.9
11. Do you think regular sleep and avoiding stress protects from COVID-19?	Yes	292	56.9
	No	103	20.1
	I do not know	116	22.6
	No answer	2	0.4
12. Do you think exercising is a virus protector?	Yes	217	43.5
	No	133	25.9
	I do not know	157	30.6
	No answer	6	1.2
13. Do you think using antibiotics protects you against the virus?	Yes	54	10.5
	No	309	60.2
	I do not know	145	28.3
	No answer	4	0.8
14. Do you think COVID-19 prefers Asian Race?	Yes	55	10.7
	No	288	56.1
	I do not know	166	32.4
	No answer	4	0.8
15. Do you feel free to go to the hospital for any disease except COVID-19?	Yes	311	60.6
	No	177	34.5
	I do not know	21	4.1
	No answer	4	0.8
16. Are you worried about COVID-19?	Yes	373	72.7
	No	92	17.9
	I do not know	42	8.2
	No answer	6	1.2
17. Do you think you have enough information about the symptoms of the COVID-19?	Yes	296	57.7
	No	151	29.4
	I do not know	66	12.9
18. Do you think to avoid the crowds means avoiding the COVID-19?	Yes	481	93.8
	No	18	3.5
	I do not know	10	1.9
	No answer	4	0.8

		X±SD	
How many meters do you think the social distance should be?		6.01±46.82	
How many days is the incubation duration of the COVID-19 duration?		14.7±3.43	
Anxiety level (0-10) (Totally)		5.58±2.97	
Anxiety level (0-10)	Female	6.21±2.73	t: 5.102, p: **0.0001***
	Male	4.89±3.07	
Short Health Anxiety Inventory Score (0-42) (Totally)		15.33±9.83	
Short Health Anxiety Inventory Score (0-42)	Female	16.19±9.92	t: 2.061, p: **0.040***
	Male	14.40±9.65	

**Independent Sample T-Test*

DISCUSSION

To the best of our knowledge, this is a rarely studied subject in Turkey examining the anxiety level and knowledge of the public about COVID-19. Our study is planned to reveal the profile of the people about COVID-19 and to shed light on the public while authorities deciding to prevent the spread of COVID-19 and manage the process.

We found that the occurrence of COVID-19 infection had an emotional impact on the public and cause anxiety. People are aware of preventive methods of transmission in Turkey. Washing hands was the biggest rescuer method that was accepted. The highest information resource was on TV and radio. So in case, the authorities want to make public spots about COVID-19 they may use TV and radio to reach more people. Most of them (85.2%) agreed with the postponement of the sports competition. After one week all the national, international sports competitions postponed, and our result defines that people were ready for this situation.

It is one of the fastest viruses in spreading in recent years. On 9 March 2020 number of the confirmed cases was 114.381 and on 9 November it was 49.578.590 (https://covid19.who.int/). In our study, people were worried about being infected. We think they are right to be worried when we realized the difference in the number of cases between 9 March and 5 April 2020. The anxiety level was moderate (5.58/10). The study was conducted in the term that few cases were confirmed in Turkey, we think in case we apply the same questionnaire right now, we would get a higher anxiety level. Since women are more sensitive than men and easily affected by external factors, stress, and anxiety levels are expected to be higher than men. Al Rabiaah et al. reported that female's (Mean:5.61±1.65) stress level was higher than males (Mean:4.56±1.63) (Tao, 2003; Al-Rabiaahab and et al. 2019). In our study, we found the female's anxiety level was higher than males.

WHO suggests maintaining at least a 1.5-meter distance between yourself and anyone who is coughing or sneezing in the first of the pandemic (WHO, 2019; Paek and et al. 2008). Our result (6.01 meter) is a much greater distance than experts suggest. Previous studies have found that mass media is the most consistent source of information. Paek et al. emphasized that the media should be a source of information, not a source that causes fear (WHO, 2019; Paek and et al. 2008; Gustafson, 1998). We found that most of the public's news resource was on TV and radio. Al Turk states that public awareness should be raised through scientific health education messages without creating anxiety and fear in society and that the conscious public will support the health system service (Al Turk, 2014). Zhong et al. suggest that health education programs aiming to improve knowledge of COVID-19 are useful for promoting optimistic attitudes and maintaining safe practices (Zhong and et al. 2020). We advise officials to actively use TV and radio to raise public awareness of COVID-19.

Cheng stated that most of the population in Hong Kong had higher levels of fear than normal during the SARS outbreak in 2003 (Cheng, 2004). We found that our participants' health anxiety score was 15.33±9.83 (ranged between 0-42), and this means their health anxiety is at a level that should be considered (Salkovskis and et al. 2002; Nystoriak and et al. 2018). Some participants' health anxiety score was 0 while some of them 42 and the 42 score is the highest possible score that maybe get from 14 item health anxiety inventory. A cut-off score of 15 points indicates people who are very health anxious but just miss the criteria for the clinical diagnosis. The mean of the anxiety score of the participants is higher than the cut-off point. They are anxious and scared. Also, the female's anxiety level was higher than the male's. Previous literature accepts that anxiety disorders both more prevalent and more disabling in women than in men and the lifetime prevalence of an anxiety disorder is 60% higher in women than in men (Kessler and et al. 2005; McLean and et al. 2011). In times of the pandemic, the fear of transmission, fear of death, fear of losing loved ones, as well as quarantine related boredoms, and the incidence of depression increase. At the moment the authorities in Turkey are making programs to support the people psychologically through TV, radio, and social media.

The media tools constantly mentioning COVID-19, this overdose information increases the anxiety of individuals. For this reason, we think that it is more correct for individuals with high anxiety to watch 1-2 times a day instead of constantly following news programs.

During the pandemic, WHO emphasized that hygiene is very important to prevent the spread of corona. Apparently, while the importance of hygienic behavior is accepted by the

general population; Sociodemographic characteristics, personal habits are among the factors that affect hygiene compliance (Greenber and et al. 1995; Rabie and et al. 2006; Rayan and et al. 2001, Glass and et al. 2008; Wu and et al. 2006, Boyce and et al. 2002). We found that after the pandemic, everyone has changed their lifestyle and paid attention to hygiene.

The number of individuals who think that exercise is protective of COVID-19 is at a considerable level. It is understood that our people, whose exercise habits are extremely inadequate, appreciate the value of exercise. Being physically active in quarantine will protect us from many diseases, especially cardiovascular diseases (Nystoriak and et al. 2018; Carrigan and et al. 2017). Therefore, we think that it is extremely important for public spots to raise awareness about physical activities that can be done at home.

In today's conditions where transportation is so fast and easy, it is an expected result that the pandemic has been spread so fast. What distinguishes the COVID-19 outbreak from other outbreaks has been its rapid contagiousness among countries due to fast transfer. In this sense, the human type is experiencing an unlucky process caused by technology.

COVID-19 is the first outbreak of the pandemic in Turkey's recent history as we know it. Therefore, we see that the public is anxious. However, when we observe the history of the world, we see that quarantine was applied in leprosy, black plague, and Ebola in ancient times. This is neither the first nor the last pandemic. It is known that no pandemic lasts forever, each pandemic has peaked and subsequently declined. Therefore, the COVID-19 pandemic will also decline after a while. However, in this process, practices that will completely stop the economy can cause more damage to our nation and the world than the pandemic.

Frequent advertisement on these topics on social media, TV, and radio has enabled the public to learn the necessary hygiene to protect themselves from the pandemic. In previous outbreaks, compliance with hygiene rules has been reported to reduce transmission speed. Rubin et al. defined being uncertain about the outbreak and believing that it had been exaggerated was associated with a lower likelihood of change. The authors declare that they have no conflict of interest.

Almutairi et al. conducted a study about awareness, attitudes, and practices related to the COVID-19 pandemic among the public in Saudi Arabia. They included 1147 people. They found that most of the respondents reported high levels of anxiety and most of them receiving necessary precautions. We asked the following questions as applied precautions: reduction in public transport, closing the schools and public institutions, increasing in personal care and hygiene. We found that 99% of the participants made one or two or all of them. In the last days stimulating public spots, which provide information about the methods of protection are frequently passed in all the communication tools, and the results of our study show us the success of these stimulating public spots (Almutairi and et al. 2015, Fung and et al. 2006; James and et al. 2009).

We conducted this study at the beginning of the outbreak, there was only one patient confirmed in Turkey. The anxiety level was at a considerable level, but if we re-question the participants at the moment we would find they had more anxiety level. Because increasing the number of outbreaks and deaths started to make people more nervous. With the proclamation of hospitals as pandemic hospitals, going to the hospital has been limited unless there is an emergency. With the increase in the number of infected cases, the people are asked not to leave the house. Therefore, the COVID-19 outbreak has been the only disease that has suffered the human race so much recently.

CONCLUSION

We searched the literature and found little public reports on knowledge regarding COVID-19 that caused an outbreak among the population in Turkey until now. We think it would be beneficial to make the same study in different periods of the pandemic. Thus, the responses of individuals varying according to the state of the pandemic will be determined.

It is determined that the public has sufficient knowledge about COVID-19, they are aware of the necessary precautions against the pandemic. But their level of anxiety was high. We think that authorities should continue to share with the public regular information about the pandemic to reduce the tension of the public.

Conflict of interest

REFERENCES

Almutairi K.M, Al Helih E. M, Moussa M, Boshaiqah A. E, Saleh Alajilan A, Vinluan J. M, Almutairi, A. (2015) Awareness, Attitudes, and Practices Related to COVID-19 Pandemic Among Public in Saudi Arabia. Family & Community Health, 38(4), 332–340. doi:10.1097/fch.0000000000000082

Al-Rabiaahab A, Temsahabc MH, Al-Eyadhy A, Hasan G, Al-Zamila F, Al-Subaieab S, Alsohimea F, Jamal A, Alhaboob A, Al-Saadia B, Somily AM. (2019) Middle East Respiratory Syndrome-Corona Virus (MERS-CoV) associated stress among medical students at a university teaching hospital in Saudi Arabia JIPH-1244; No. of Pages 5.

Al Turk YA. (2014) Can we increase public awareness without creating anxiety about Corona viruses? Patient Education and Counseling Volume 94, Issue 2, Pages 286-287.

Aydemir Ö, Kırpınar İ, Satı T, Uykur B, Cengisiz C. (2013) Sağlık Anksiyetesi Ölçeği'nin Türkçe için Güvenilirlik ve Geçerlilik Çalışması Nöropsikiyatri Arşivi 50: 325-33

Boyce GM, Pittet D (2002) Guideline for hand hygiene in health-care settings: recommendations of the Healthcare Infection Control Practices advisory Comittee and the Hand Hygiene Task Force. Infect Control Hosp Epidemiol, 23:S3-S40.

Carrigan N, Dysch L, Salkovskis P. M. (2017). The Impact of Health Anxiety in Multiple Sclerosis: A Replication and Treatment Case Series. Behavioural and Cognitive Psychotherapy, 46(02), 148–167. doi:10.1017/s135246581700056x

Cheng C. (2004) To be paranoid is the standart panic responses to sars outbreak in the hong kong special administrative region. Asian Perspective Vol. 28, No. 1, Special Issue on Globalization and SARS in Chinese Societies pp. 67-98 (32 pages)

Fung ICH, Cairncross S. (2006) Effectiveness of handwashing in preventing SARS: a review. Trop Med Int Health 11:1749-58

Glass L, Glass R. (2008) Social contact networks for the spread of pandemic influenza in children and teenagers. BMC Public Health, 8(1):61.

Goyal K, Chauhan P, Chhikara K, Gupta P, Singh M.P. (2020) Fear of COVID 2019: First suicidal case in India ! Asian Journal of Psychiatry 49 101989.

Greenber MR, Schnieder DF. (1995) Gender differences in risk perception: effects differ in stressed vs. non-stressed environments. Risk Anal 15:503-11.

Gustafson PE. (1998) Gender Differences in Risk Perception: Theoretical and Methodological Perspective. Risk Anal, 18:805-11.

https://www.who.int/docs/default-source/COVID-19e/situation-reports/20200306-sitrep-46-covid-19.pdf?sfvrsn=96b04adf_2 accessed date 17.03.2020https://covid19.who.int/ (accessed date: 09.11.2020)

James RG, Richard A, Lisa P, Simon W. (2009) Public perceptions, anxiety, and behaviour change in relation to the swine flu outbreak: cross sectional telephone survey BMJ 339 :b2651

Kamel Boulos MN, Geraghty EM. (2020) Geographical tracking and mapping of COVID-19 disease COVID-19/severe acute respiratory syndrome COVID-19 2 (SARS-CoV-2) pandemic and associated events around the world: how 21st century GIS technologies are supporting the global fight against outbreaks and pandemics. Int J Health Geogr. Mar 11;19(1):8. doi: 10.1186/s12942-020-00202-8.

Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EE. (2005) Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry. 62(6):617-27.

McLean CP, Asnaani A, Litz BT, Hofmann SG. (2011) Gender Differences in Anxiety Disorders: Prevalence, Course of Illness, Comorbidity and Burden of Illness J Psychiatr Res.; 45(8): 1027–1035. doi: 10.1016/j.jpsychires.2011.03.006

Nystoriak MA, Bhatnagar A. (2018) Cardiovascular Effects and Benefits of Exercise. Front Cardiovasc Med. 5:135.

Published 2018 Sep 28. doi:10.3389/fcvm.2018.00135

Paek H-J, Hilyard K, Freimuth VS, Barge JK, Mindlin M. (2008) Public support for government actions during influenza pandemic: lessons learned form a state wide survey. Health Promot Pract 9:60S-72S.

Paules C.I.; Marston, H.D.; Fauci, A.S. (2020) COVID-19 Infections-More Than Just the Common Cold. JAMA

Rabie T, Curtis V (2006) Hand washing and risk of respiratory infections:a quantitative systematic review. Trop Med Int Health 11:258-267.

Rayan MAK, Christian RS, Wohlrabe JR. (2001) Hand washing and respiratory illness among young adults in military training. Am J Prev Med, 21:79-83.

Salkovskis P. M, Rimes K. A, Warwick, H. M, Clark D. M. (2002). The health anxiety inventory: Development and validation of scales for the measurement of health anxiety and hypochondriasis. Psychological Medicine, 32, 843–853.

Seivewright H, Salkovskis P, Green J, Mullan N, Behr G, Carlin E, Young S, Goldmeier D, and Tyrer P. (2004). Prevalence and service implications of health anxiety in genitourinary medicine clinics. International Journal of STD and AIDS, 15, 519–522.

Sim K. (2010) Psychosocial and coping responses within the community health care setting towards a national outbreak of an infectious disease. J. Psychosom. Res., 68, 195–202.

Singhal T. A (2020) Review of COVID-19 Disease-2019 (COVID-19). The Indian Journal of Pediatrics. https://doi.org/10.1007/s12098-020-03263-6

Tao N. (2003) An analysis on reasons of SARS-induced psychological panic among students. Journal of Anhui Institute of Education. 21: 78-9

Wang C, Pan R, Wan X, Tan Y, Xu L, Ho C S, Ho R C. (2020) Immediate Psychological Responses and Associated Factors during the Initial Stage of the 2019 COVID-19 Disease (COVID-19) Pandemic among the General Population in China. International Journal of Environmental Research and Public Health ;17(5), 1729.

Wang L, Gao Y-hua, lou L-L, et al. (2020) The clinical dynamics of 18 cases of COVID-19 outside of Wuhan, China. Eur Respir J; in press

WHO, Basic protective measures against the new COVID-19 https://www.who.int/emergencies/diseases/novel-COVID-19-2019/advice-for-public

Wu JT, Riley S, Fraser C, Leung GM. (2006) Reducing the impact of the next influenza pandemic using household-based public health interventions. PloS Med, 3(9):e361.

Xiao H, Zhang Y, Kong D, Li S, Yang N. (2020) The Effects of Social Support on Sleep Quality of Medical Staff Treating Patients with COVID-19 Disease 2019 (COVID-19) in January and February 2020 in China. Medical Science Monitor ;26.

Yao Y, Tian Y, Zhou J, et al. (2020) Epidemiological characteristics of 2019-ncoV infections in Shaanxi, China by February 8 2020, Eur Respir J; in press (https://doi.org/10.1183/13993003.00310-2020).

Yip PS, Cheung YT, Chau PH, Law YW. (2010) The impact of pandemic outbreak: the case of severe acute respiratory syndrome (SARS) and suicide among older adults in Hong Kong. Crisis;31(2):86-92. doi: 10.1027/0227-5910/a000015.

Zhong BL, Luo W, Li HM, Zhang QQ, Liu XG, Li WT, Li Y. (2020) Research Paper Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: a quick online cross-sectional survey Int. J. Biol. Sci. Vol. 162020; 16(10): 1745-1752. doi: 10.7150/ijbs.