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## HEALTH SCIENCES

## **RESEARCH ARTICLE**

## KORONAVİRÜSE KARŞI ALINAN ÖNLEMLER

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## ÖZET

Giriş

Covid 19 2019 yılının Çin'in Wuhan şehrinde ortaya çıkıp bütün dünyaya etkisi atına almıştır. Bu virüsten korunmak için bazı önlemlerin alınması zorunlu hale gelmiştir. Bu araştırmanın amacı, 2019 yılında Çin'in Wuhan kentinde ortaya çıkıp kısa sürede tüm dünyayı etkisi altına alan SARS-Cov-2 (COVID 19) virüsü hakkında bireylerin aldığı önlemlerin incelenmesidir.

Yöntem

Çalışmanın örneklemini kamu, özel sektör çalışanları ve öğrenciler oluşturmuştur. Veri toplama aracı olarak araştırmacılar tarafından hazırlanan anket kullanılmıştır. Araştırmada veriler frekans, yüzde gibi betimsel istatistikler ve oluşabilecek olası farklılıklar için de ki-kare analizi ile incelenmiştir.

Bulgular

Koronavirüs karşısında alınan önlemlerin cinsiyet, bireylerin çalıştığı sektör ve kronik rahatsızlılığı olup olmamasına göre farklılık yarattığı ve ilişkili olduğu yönünde anlamlı bulgular tespit edilmiştir. Sonuç ve Tartışma

Türkiye'deki koronavirüs salgınında katılımcıların büyük çoğunluğu temel önlemleri uygulamaktadır. Ancak maske kullanımı beklenilenin altındadır. Kronik rahatsızlığı olmayan kişilerin maske kullanımı, kronik rahatsızlığı olanlara göre beklenilenin aksine daha fazla bulunmuştur. Kadınların bu salgın karşısında önlemleri daha fazla uygulayarak korunmaya çalıştığı anlaşılmıştır. Koronavirüs salgınına karşı kişilerin aldığı önlemler devam ettirilerek aşı veya tedavi bulunana kadar, Koronavirüs karşısında etkili bir mücadele yöntemi olabilir.

Anahtar Kelimeler: Koronavirüs, Alınan Önlemler, Covid19

#### MEASURES TAKEN AGAINST CORONAVIRUS

#### ABSTRACT

#### Introduction

Covid 19 emerged in the city of Wuhan, China in 2019 and took its toll on the whole world. It has become necessary to take some measures to protect against this virus. The aim of this research is to examine the measures taken by people against the SARS-Cov-2 (COVID 19) virus, which appeared in Wuhan, China in 2019 and affected the world in a short time.

#### Method

The sample of the study was made up of public and private sector employees and students. A survey prepared by researchers was used as a data collection tool. In the research, the data were also examined with chi-square analysis for possible differences and descriptive statistics such as frequency and percentage.

#### Results

The majority of participants in the coronavirus outbreak in Turkey has been implementing basic measures. However, the use of masks is lower than expected. Contrary to expectations, people without chronic illnesses are more careful and conscious about using masks than people with chronic illnesses. It was understood that women tried to be protected against this epidemic by applying more precautions. Until vaccine or treatment is found, measures taken by people against the coronavirus epidemic can be an effective method against coronavirus. Discussion

Although the image of nursing is so important an issue, and attempts to improve it have been made, the image of nurses is still not at the desired level.

Keywords: Coronavirus, Measures Taken, Covid19

#### **INTRODUCTION**

Coronaviruses are among the common cold-flu factors that we are accustomed to seeing around us. Since it has been genetically modified in the past, it has also caused various infections. Its first occurrence is Severe Acute Respiratory Syndrome, which has passed through wild cats, affecting millions of people in the Far East in late 2002 and early 2003. SARS affected 8000 people and caused approximately 800 deaths. This makes a 10% mortality rate. Later, in 2012, the Middle East Respiratory Syndrome (MERS) appeared in Saudi Arabia and other Middle Eastern countries, which caused many deaths and is thought to have spread from camels. The mortality rate of MERS is 30% (1).

It is defined as "Coronavirus Disease-2019 (COVID-19)", which belongs to the Cov type beta-Cov group, which occurred in Wuhan, China on 29-31 December 2019 and causes the epidemic. It can affect all mammals. On 23 January 2020, Wuhan was locked and it was decided to be quarantined (1).

The human population is more active than before. Thanks to the air transportation, you can travel around the world in a few hours. This causes a pathogen to spread faster. Currently, more than 4 billion trips are made by air transportation. An infected and moving global

population is an excellent opportunity for the rapid spread of the virus. In this sense, it is a very bad chance that the timing of Covid-19 coincided with the New Year's holiday. During this holiday period, the largest mass migration of the world, close to 385 million people, traveled nearly 3 billion. This is one of the reasons why the epidemic spread so quickly (2).

According to the reported cases, symptoms of coronavirus such as fever, dry cough and weakness are not very obvious symptoms that may occur in most diseases. The incubation period of the disease is 14 days. The exact case diagnosis is made by PCR tests. Coronavirus particles hang in the air when the infected person sneezes or coughs. This situation explains how the virus spreads. Another transmission way is that they take their hands to their mouths, noses or eyes after touching the inanimate surfaces where the droplets are smeared (1).

There is currently no antibiotic available for the treatment of this disease. There is not any medicine recommended for patients to use. Patients are recommended to consume plenty of liquids and resting to relieve their complaints. It is more beneficial to take a shower rather than taking medicine to reduce the fever. Studies are ongoing to find vaccines for Covid-19 but no vaccine has yet been found (1).

One of the most important measures that the society can take as an individual in this epidemic is to sneeze or cough by turning their head towards their elbows not their hands during sneezing or coughing. If they cannot do this, it is simple and effective to close the mouth and nose with a handkerchief. The handkerchief should be thrown away after using (1).

In situations such as before or after entering any place, before entering or after leaving the toilet, hands should be properly washed with plenty of soapy water for at least 20-30 seconds. There is no need to keep the water on for 20-30 seconds. To rinse our hand, we can open the tap again with our elbow. Let's save water to use it after getting rid of the epidemic (1).

Crowded places should be avoided. If it is necessary to enter these places, it is necessary to use a mask, pay attention to the general cleaning rules and follow the social isolation rules (1).

The surfaces that the patients touch or frequently used (door handles, elevator buttons, etc.) should be cleaned regularly with water and detergent. Using disinfectant can be effective and useful (1).

While Covid-19 infection causes death and diseases worldwide, it has a bad effect on people socioeconomically. Therefore, social and individual measures should be taken to end and prevent the disease. States should make regulations on this issue, taking into account laws and regulations (1). Regarding these regulations, The Republic of Turkey has taken a number of measures since before and the first day of the infection. A new type of coronavirus cases was seen for the first time on March 11, 2020 in Turkey (2). The Ministry of Health of the Republic of Turkey has taken measures quickly against this rapidly spreading virus by collaborating with many institutions and ministries. The most important ones of those are to take measures for foreign travel and to interrupt education throughout the country. The universities were vacationed for three weeks by the Higher Education Council and afterwards distance education was initiated.

The importance of social isolation and social distance is frequently stated by the Ministry of Health of the Republic of Turkey and experts. The most efficient way for protecting from this illness is not to have a contact with sick people.

Within the scope of the measures taken due to this disease, theater, cinema, show center, concert hall, engagement / wedding hall, restaurant / café with a musical instrument / music, casino, pub, tavern, coffee shop, café, cafeteria, hookah cafe, internet cafe, all kinds of indoor children. Activities of playgrounds (including shopping malls and restaurants), tea garden, clubs of the association, amusement park, swimming pool, Turkish bath, sauna, thermal spring, massage parlor, SPA and sports centers are temporarily closed (4). The Ministry of Health and experts are frequently warned about staying at home and not going out unless it is a compulsory. As a result, curfews were imposed on people with chronic diseases and people 65 years old age and older (5). Later, with a circular dated 03.04.2020, the curfew was temporarily imposed for people under the age of 20 and the entrance and exit to 30 metropolitan and Zonguldak is forbidden for 15 days (6). With the circular dated 10.04.2020, a curfew was declared in 30 metropolitan cities and Zonguldak for 2 days (7).

While the activities of many businesses such as cafes, hairdressers and sports halls were stopped by the state; many other businesses such as restaurants and clothing stores have come to the point of collapsing because the public could not go out. Business owners have started to dismiss their workers in order not to get worse economically (8). Within the scope of travel measures, many tourism and bus companies have also come to the point of collapsing. This situation causes anxiety and fear for the layoffs and business owners. In addition, as a result of the interruption of education, working from home for many companies and the closure of places where leisure time is spent for precautionary reasons, people had to spend a lot of time at home (9).

The aim of this research is to examine the measures taken by individuals about the SARS-Cov-2 (COVID 19) virus, which appeared in Wuhan, China in 2019 and affected the world in a short time.

## METHOD

This is a cross-sectional and quantitative research which examines the measures taken against coronavirus by public officials, private sector employees and students in Turkey.

Population and sample

The sample of the study consists of public employees, private sector employees and students. These sectors were preferred because the measures taken in the study were mostly taken on the basis of private sector employees in the public sector and on the basis of students as a first measure, with the closing of schools. In the study, all public employees, private sector employees and students were tried to be reached. However, random sampling (haphazard) sampling was used because participation in the study was voluntary and it was difficult to reach to the all people. In cases where the researcher cannot reach the determined sample size, choosing any part of the universe in any way and sampling without probability is random sampling (8). Within the scope of the research, 417 (36.6%) public employees, 75 (6.6%) public retirees, 280 (24.6%) private sector employees, 12 (1.1%) private sector retirees and 355 (31.2%) students, 1139 people in total were reached.

All applications within the scope of the research were carried out with the approval of Çanakkale Onsekiz Mart University, Clinical Research Ethics Committee dated 08.06.2020 and numbered 18920478-050.01.04-E.2000072143.

## **Data Collection Tools and Its Method**

The "Coronavirus (Sars-Cov-2 / Covid-19) Questionnaire" developed by the researchers was sent to 1139 people via the internet. Internet-based surveys are less costly than traditional surveys and more people can be reached in less time. In addition, faster response, sending reminders to the responders, simpler implementation of data processing and low rates of errors are other positive aspects of internet-based surveys (15). For this reason, the questionnaire was conduct on an internet basis (10). In this period, our university's clinical research ethics committee only approves surveys to be applied online. Because the principle of reducing contact and isolation with people is taken into consideration.

While creating the survey, opinions were received from a microbiologist, an infection specialist and a statistics specialist. In the survey, 5 factual questions and 21 questions about the measures taken were asked.

The survey consists of two parts. First part; It consists of factual questions that determine the demographic characteristics of the responders. In this part, 5 factual questions were asked to the survey responders.

In the second part, 2-degree related questions were used to learn the measures taken by the participants against the coronavirus. The answers of the participants are obtained as "yes" and "no". In this section, responders choose 21 items.

During the data collection process, the researchers reached the responders via e-mail or mobile phones and provided information.

## **Analysis of Data**

The data obtained in the research were transferred to statistical package programs. First of all, the frequency and percentages of the answers given by the 1139 participants to the questions were analyzed as descriptive statistics. In this way, it was determined which measures were taken more frequently and which ones were taken less frequently. On the other hand, it was investigated whether there are differences in the measures taken by individuals according to some variables (such as gender, age) or not. In the research, information about the variables was categorically obtained (for example, for gender, men and women, and yes and no for measures taken). The analysis that should be used when examining the relationships between two different and categorical variables differences is the chi-square analysis. For this reason, possible differences that may occur in the study were examined by chi-square analysis (11).

## RESULTS

### Measures Taken by People Against Coronavirus

The study included 1139 individuals from different genders, with and without chronic illness, working in various sectors. The measures taken by these individuals against the coronavirus were examined. The results are summarized in Table 1.

Мас	Takan		Yes		
Mea	asures Taken	f	%	f	%
1	I am constantly resting in my home.	848	74,5	291	25,5
2	I try to take precautions with flu medicines at home.	219	19,2	920	80,8
3	I consume herbs and herbal teas.	499	43,8	640	56,2
4	I try not to be in crowded places.	990	86,9	149	13,1
5	I wash my hands more often.	1101	96,7	38	3,3
6	I use mask.	393	34,5	746	65,5
7	I pray.	748	65,7	391	34,3
8	I take a shower before going out or after coming.	790	69,4	349	30,6
9	I get plenty of vitamins.	719	63,1	420	36,9
10	I consume fruits and vegetables.	922	80,9	217	19,1
11	I avoid eating food of animal origin.	201	17,6	938	82,4
12	I drink alcohol against the disease.	77	6,8	1062	93,2
13	I had an acupuncture operation.	55	4,8	1084	95,2

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Table 1: Measures	LANCH	1) V	NESU	UNUCIS	Availist	VUUU	lavii us.
		~					

14	I clean my living and working area with sodium carbonate.	754	66,2	385	33,8
15	I wash the food with vinegar water.	554	48,6	585	51,4
16	I disinfect my hands with cologne every hour.	703	61,7	436	38,3
17	I ventilate indoor places.	1035	90,9	104	9,1
18	I don't shake hands with people, I don't hug.	946	83,1	193	16,9
19	I wash my clothes at 60-90 degrees with normal detergent.	885	77,7	254	22,3
20	I try not to take my hands to my eyes, mouth and nose.	965	84,7	174	15,3
21	I consume plenty of liquids.	1002	88,0	137	12,0

The number of people who take measures against coronavirus by washing their hands more frequently is 1101 (96.7%). 1035 (90.9%) of the participants stated that they ventilate closed places. 1002 (88.0%) people tried to take precautions against coronavirus by consuming plenty of liquids. The least used measures against coronavirus is to have an acupuncture operation and drink alcohol against the disease. The number of people who have an acupuncture operation 55 (4.8%). The number of people consuming alcohol against the disease is 77 (6.8%).

#### **Measures Taken According to Gender**

Are there any differences between the measures taken by individuals against the epidemic according to gender? The answer to this question was sought in the context of the research. The results are given in the table below.

Table 2: Comparison of the measures taken by the responders against the coronavirus according to the gender.

			Gender		X2	s d	р			Gender		<b>X</b> <sup>2</sup>	s d	р									
		Woman	Man	Total					Woman	Man	Total												
ii ii	Yes	495	353	848					36	41	77												
I am constantly resting in my home.		77,8%	70,2%	74,5%	8,644	4 1	1	1	1	1	1	1	1 <b>0,003</b>	1 0,003	0,003	1 0,003	ease.	5,7%	8,2%	6,8%	2,764	1	0,096
constantly re my home.	No	141	150	291				the disease.	600	462	1062												
Iamo		22,2%	29,8%	25,5%					94,3%	91,8%	93,2%												
at	Yes	122	97	219				ure	30	25	55												
u medicines home.		19,2%	19,3%	19,2%	0,002	1	0,965	an acupunct operation	4,7%	5,0%	4,8%	0,039	1	0,843									
with flu medicines at home.	No	514	406	920				I had an acupuncture operation	606	478	1084												
wi		80,8%	80,7%	80,8%				ЧI	95,3%	95,0%	95,2%												
teas.	Yes	314	185	499				е. Ш.	490	264	754												
I consume herbs and herbal teas.		49,4%	36,8%	43,8%	18,090	1	0,000	with sodium carbonate.	77,0%	52,5%	66,2%	75,707	1	0,000									
I coi and	No	322	318	640				, Wi	146	239	385												

## Batuhan TAY, Furkan KARACA, Hakan ALAN

		50,6%	63,2%	56,2%					23,0%	47,5%	33,8%						
ded	Yes	566	424	990					381	173	554						
I try not to be in crowded places.	103	89,0%	84,3%	86,9%	5,455	1	0,020	water.	59,9%	34,4%	48,6%	73,177	1	0,000			
ot to be in places.	No	70	79	149			0,020	vinegar water.	255	330	585	,		0,000			
I try n		11,0%	15,7%	13,1%				-	40,1%	65,6%	51,4%						
e	Yes	625	476	1101				łi.	418	285	703						
ands mo		98,3%	94,6%	96,7%	11.528	11.528	11,528	1	1 <b>0,001</b>	1 0,001	hands v sry hour	65,7%	56,7%	61,7%	9,765	1	0,002
I wash my hands more often.	No	11	27	38			ŕ					I disinfect my hands with cologne every hour.	218	218	436		
I was		1,7%	5,4%	3,3%				I disin cole	34,3%	43,3%	38,3%						
	Yes	253	140	393				ces.	606	429	1035						
ıask.		39,8%	27,8%	34,5%	17,739	1	0,000	0,000	loor pla	95,3%	85,3%	90,9%	33,816	1	0,000		
I use mask.	No	383	363	746				I ventilate indoor places.	30	74	104						
		60,2%	72,2%	65,5%				I ven	4,7%	14,7%	9,1%						
	Yes	456	292	748			1 0,000			569	377	946					
ay.		71,7%	58,1%	65,7%	23,201	1		people, I don't hug.	89,5%	75,0%	83,1%	42,048	1	0,000			
I pray.	No	180	211	391					ople, I d	67	126	193					
		28,3%	41,9%	34,3%				be	10,5%	25,0%	16,9%						
ore ning.	Yes	460	330	790		1		mal	514	371	885						
I take a shower before going out or after coming.		72,3%	65,6%	69,4%	5,969		1	0,015	0,015	90 degrees with normal detergent.	80,8%	73,8%	77,7%	8,080	1	0,004	
ke a sho out or 2	No	176	173	349					egrees with n detergent.	122	132	254					
I ta going		27,7%	34,4%	30,6%				P 06	19,2%	26,2%	22,3%						
ins.	Yes	432	287	719				h and	569	396	965						
I get plenty of vitamins.		67,9%	57,1%	63,1%	14,249	1	0,000	'es, mouth ; nose.	89,5%	78,7%	84,7%	75,707	1	0,000			
t plenty	No	204	216	420				to my eyes, moutl nose.	67	107	174						
I ge		32,1%	42,9%	36,9%				ton	10,5%	21,3%	15,3%						
P	Yes	548	374	922				uids.	571	431	1002						
fruits a ables.		86,2%	74,4%	80,9%	25,400	25,400 1	0,000	ty of liq	89,8%	85,7%	88,0%	4,449	1	0,035			
I consume fruits and vegetables.	No	88	129	217				I drink plenty of liquids.	65	72	137						
Ic		13,8%	25,6%	19,1%				I dri	10,2%	14,3%	12,0%						
from mal	Yes	127	74	201													
I stay away from food of animal origin.		20,0%	14,7%	17,6%	5,341	1	0,021										
I sta foc	No	509	429	938													

80,0%	85,3%	82,4%		

When Table 2 is examined, the results found according to the gender are as follows:

a) It has been determined that it creates significant difference compared to those who try to take precautions by resting at home (X2(3) = 8,644, p <.05). It is understood that women try to be protected against the epidemic by staying more at home than men.

b) It has been determined that it does not make a significant difference according to those who try to take precautions by using flu medicines. (X2(3) = 0.002, p>.05).

c) It has been determined that it creates a significant difference compared to those who try to take precautions by consuming herbs and herbal teas (X2(3) = 18,090, p <.05). It is understood that women consume more herbs and herbal tea than men.

d) It has been determined that it has a significant difference according to those who try to take precautions by trying not to be in crowded places (X2(3) = 5.455, p <.05). It is understood that women try not to be in crowded places more than men.

e) It has been determined that it creates a significant difference compared to those who try to take precautions by washing their hands more frequently (X2(3) = 11,528, p <.05). It was understood that women used masks more than men.

f) It has been determined that it creates a significant difference compared to those who try to take precautions by using a mask (X2(3) = 17.739, p <.05). It is understood that women use masks more than men.

g) It has been determined that it creates a significant difference compared to those who try to take precautions by praying (X2(3) = 23,201, p <.05). It is understood that women pray more than men.

h) It has been determined that it creates a significant difference compared to those who take measures by taking a shower before going out or after coming. (X2(3) = 5,969, p <.05). It was understood that women took a shower before going out or after coming more than men.

i) It has been determined that it creates a significant difference compared to those who try to take precautions by taking plenty of vitamins (X2(3) = 14,249, p <.05). It is understood that women take vitamins more than men.

j) It has been determined that it creates a significant difference compared to those who try to take precautions by consuming fruits and vegetables (X2(3) = 25,400, p <.05). It is understood that women consume fruits and vegetables more than men.

k) It has been determined that it creates a significant difference according to those who avoids consuming foods of animal origin. (X2(3) = 5,341, p <.05). It is understood that women avoid consuming foods of animal origin more than men.

l) It was determined that it did not make a significant difference compared to those who tried to take precautions against coronavirus by consuming alcohol (X2(3) = 2.764, p>.05).

m) It has been determined that having an acupuncture operation doesn't make a significant difference. (X2(3) = 0.039, p > .05).

n) It has been determined that it creates a significant difference compared to those trying to take precautions by cleaning living and working areas with sodium carbonate. (X2(3) = 75,707, p <.05). It is understood that women clean their living and working areas with sodium carbonate more than men.

o) It has been determined that washing food with vinegar water makes a significant difference. (X2(3) = 73,177, p <.05). It is understood that women wash food with vinegar water more than men.

p) It has been determined that it creates a significant difference according to those who try to take measures by disinfecting their hands with cologne every hour (X2(3) = 9,765, p <.05). It was understood that women disinfect their hands using more cologne more than men.

q) It has been determined that it creates a significant difference compared to those who try to take measures by ventilating indoor places (X2(3) = 33,816, p <.05). It was understood that women ventilate indoor places more than men.

r) It has been determined that it makes a difference according to those who avoids shaking hands with people and doesn't hug people. (X2(3) = 42.048, p <.05). It is understood that women avoid shaking hands with people and hugging more than men.

s) It has been determined that washing clothes by 60-90 degrees with normal detergent creates a significant difference. (X2(3) = 8,080, p <.05). It was understood that women washed their clothes more than men.

t) It has been determined that taking hands to the eyes, mouth and nose creates a significant difference. (X2(3) = 25,021, p < .05) It is understood that women try not to take their hands to their eyes, mouth and nose more than men.

u) It has been determined that it creates a significant difference compared to those who try to take precautions by consuming plenty of liquids (X2(3) = 4.449, p <.05). It is understood that women consume liquid more than men.

#### Measures Taken According to Working Conditions (Sector They Work in)

Are there any differences between the measures taken by people against the epidemic, depending on their employment status? The answer to this question was sought in the context of the research. The results are given in the table below.

	1 am constan	ly resting in my home.			
No	Yes	Total	$X^2$	sd	р
		355			
		100,0%			
167	250	417			
40,0%	60,0%	100,0%	122,906	2	0,000
87	193	280			
31,1%	68,9%	100,0%			
	I am using f	lu medicines at home		•	
267	88	355			
75,2%	24,8%	100,0%			
358	59	417	14 452	2	0,001
85,9%	14,1%	100,0%	14,435	2	0,001
230	50	280			
82,1%	17,9%	100,0%			
	I consume h	erbs and herbal teas.			
185	170	355			
52,1%	47,9%	100,0%			
242	175	417	2 720	2	0,257
58,0%	42,0%	100,0%	2,720	2	0,257
155	125	280			
55,4%	44,6%	100,0%			
	I try not to	be in crowded places.			
23	332	355			
6,5%	93,5%	100,0%			
63	354	417	20.021		0,000
15,1%			20,921	4	0,000
50	230	280			
17,9%	82,1%	100,0%			
	20 5,6% 167 40,0% 87 31,1% 267 75,2% 358 85,9% 230 82,1% 185 52,1% 242 58,0% 155 55,4% 23 6,5% 63 15,1% 50	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

Table 3: Comparison of the measures	taken by the participan	ts against the coronavirus according
to the sector they work.		

I am a student.	7	348	355			
I am a student.	2,0%	98,0%	100,0%			
I am a public employee	9	408	417	6,380	2	0,041
r am a public employee	2,2%	97,8%	100,0%	0,500	2	0,041
I work in private	14	266	280			
sector	5,0%	95,0%	100,0%			
			I use mask.	-		
I am a student.	280	75	355			
i uni u studenti	78,9%	21,1%	100,0%			
I am a public employee	218	199	417	61,954	2	0.000
	52,3%	47,7%	100,0%	01,001	-	0,000
I work in private	193	87	280			
sector	68,9%	31,1%	100,0%			
			I pray.			
I am a student.	124	231	355			
i am a student.	34,9%	65,1%	100,0%			
I am a public employee	143	274	417	0,206	2	0,902
i ani a public employee	34,3%	65,7%	100,0%	0,200	2	0,902
I work in private	93	187	280			
sector	33,2%	66,8%	100,0%			
		I take a shower bef	fore going out or after comin	g		
Tana a stadant	113	242	355			
I am a student.	31,8%	68,2%	100,0%			
I am a public employee	124	293	417	1 102	2	0.551
i ani a public employee	29,7%	70,3%	100,0%	1,192	2	0,551
I work in private	78	202	280			
sector	27,9%	72,1%	100,0%			
		I get p	lenty of vitamins.			
I am a student.	128	227	355			
i am a student.	36,1%	63,9%	100,0%	1		
T	162	255	417	0,654	2	0,721
I am a public employee	38,8%	61,2%	100,0%	0,034	2	0,721
I work in private	104	176	280	1		
sector	37,1%	62,9%	100,0%	1		
				1	1	1

		I consume fr	uits and vegetables.			
Louis a standard	61	294	355			
I am a student.	17,2%	82,8%	100,0%			
I	77	340	417	0.605	2	0.000
I am a public employee	18,5%	81,5%	100,0%	2,635	2	0,268
I work in private	62	218	280			
sector	22,1%	77,9%	100,0%			
		I drink p	lenty of liquids.			
I am a student.	36	319	355			
i ani a student.	10,1%	89,9%	100,0%			
I am a public employee	48	369	417	3,121	2	0,210
1 am a public employee	11,5%	88,5%	100,0%	5,121	2	0,210
I work in private	41	239	280			
sector	14,6%	85,4%	100,0%			
		I stay away from ea	ting food of animal origin			
	No	Yes	Total	X <sup>2</sup>	sd	р
I am a student.	287	68	355			
I am a student.	80,8%	19,2%	100,0%			
x 11. 1	356	61	417	2.945	2	0,241
I am a public employee	85,4%	14,6%	100,0%	2,845	2	0,241
I work in private	234	46	280			
sector	83,6%	16,4%	100,0%			
		I drink alcoho	ol against the disease.			
I am a student.	326	29	355			
I am a student.	91,8%	8,2%	100,0%			
I	399	18	417			
I am a public employee	95,7%	4,3%	100,0%	5,693	2	0,058
I work in private	258	22	280			
sector	92,1%	7,9%	100,0%			
sector	92,170		· · · · · · · · · · · · · · · · · · ·			
			puncture operation.	•		
I am a student.	340	15	355	4		
i um a stuutht.	95,8%	4,2%	100,0%	4		
I am a public employee	397	20	417	4		
i am a public employee	95,2%	4,8%	100,0%	0,176	2	0,916
I work in private	268	12	280	4		
sector	95,7%	4,3%	100,0%			
	1	I clean my living and worl	king area with sodium car	bonate.	1 1	
<b>T</b> ( <b>)</b> (	138	217	355			
I am a student.	38,9%	61,1%	100,0%	7		
	124	293	417	7,498	2	0,024
I am a public employee	29,7%	70,3%	100,0%			
I work in private	101	179	280		1	

sector	36,1%	63,9%	100,0%			
		I wash the fo	od with vinegar water.			
I am a student.	209	146	355			
i am a student.	58,9%	41,1%	100,0%			
Lom o nublic complexes	200	217	417			
I am a public employee	48,0%	52,0%	100,0%	9,218	2	0,010
I work in private	146	134	280			
sector	52,1%	47,9%	100,0%			
		I disinfect my han	ds with cologne every hour	<u>ا</u> ــــــــــــــــــــــــــــــــــــ	1	
I am a student.	128	227	355			
i am a student.	36,1%	63,9%	100,0%			
Tomo o mobilio anna lanca	174	243	417			
I am a public employee	41,7%	58,3%	100,0%	4,096	2	0,129
I work in private	98	182	280			
sector	35,0%	65,0%	100,0%			
		I ventil:	ate indoor places.			
	31	324	355			
I am a student.	8.7%	91.3%	100.0%			
	35	382	417			
I am a public employee	8,4%	91,6%	100.0%	1,188	2	0,552
<b>x x</b> • • •	30	250	280			
I work in private – sector	10,7%	89,3%	100,0%	1		
		I don't shake han	ds with people, I don't hug.			
	55	300	355			
I am a student.	15,5%	84,5%	100,0%			
	62	355	417			
I am a public employee	14,9%	85,1%	100,0%	3,080	2	0,214
Tanan la instruction	55	225	280			
I work in private	10.00	80,4%	100,0%			
sector	19,6%	· · · · · · · · · · · · · · · · · · ·	<i>'</i>			
			90 degrees with normal det	ergent.		
I am a student.	82	273	355	4		
	23,1%	76,9%	100,0%	_		
I am a public employee	85	332	417	0.755	2	0.050
	20,4%	79,6%	100,0%	2,755	2	0,252
I work in private	72	208	280			
sector	25,7%	74,3%	100,0%			
			nds to my eyes, mouth and	nose.		
	38	317	355	4		
I am a student.	10.7%	89,3%	100,0%			
I am a student.	.,		417			
	66	351	417			
I am a student.	66 15,8%	351 84,2%	100,0%	9,385	2	0,009
	66			9,385	2	0,009

When Table 3 is examined, the results found according to the working status are as follows:

a) It has been determined that it creates significant difference compared to those who try to take precautions by constantly resting at home (X2(3) = 122,906, p <.05). It was understood that the students tried to be protected against the epidemic by staying in the home more than others.

b) It has been determined that it creates a significant difference compared to those who try to take precautions by using flu medicines at home (X2(3) = 14,453, p <.05). It was understood that the students took precautions with flu medicines at home more than other groups.

c) It has been determined that it does not make a significant difference compared to those who try to take precautions by consuming herbs and herbal teas (X2(3) = 2.720, p>.05).

d) It has been determined that it makes a significant difference compared to those who try not to be in crowded places. (X2(3) = 20.921, p <.05). It is understood that students take precautions by staying at home more than other groups.

e) It has been determined that it creates a significant difference compared to those who try to take measures by washing their hands more frequently (X2(3) = 6.380, p <.05). It was understood that the students took measures by washing their hands frequently more than the other groups.

f) It has been determined that it creates a significant difference compared to those who try to take precautions using a mask (X2(3) = 61.954, p <.05). It is understood that public employees take measures by using masks more than other groups.

g) It has been determined that it does not make a significant difference compared to those who try to take precautions by praying (X2(3) = 0,206, p>.05).

h) Taking a shower before going out or after coming doesn't make a significant difference. (X2(3) = 1, 192, p > .05).

i) It has been determined that it does not make a significant difference according to those who try to take precautions by taking plenty of vitamins (X2(3) = 0.654, p>.05).

j) It has been determined that it does not make a significant difference according to those who try to take precautions by consuming fruits and vegetables (X2(3) = 2,635, p>.05).

k) It has been determined that it does not make a significant difference compared to those who try to take precautions by consuming plenty of fluids (X2(3) = 3,121, p > .05).

1) It has been determined that it does not make a significant difference compared to those who avoids consuming foods of animal origin. (X2(3) = 2,845, p> .05).

m) It was determined that it did not make a significant difference according to those who tried to take precautions against coronavirus by consuming alcohol (X2(3) = 5,693, p>.05).

n) It has been determined that having an acupuncture operation doesn't make a significant difference. (X2(3) = 0,176, p>.05).

o) It has been determined that cleaning the living and working areas with sodium carbonate makes a significant difference. (X2(3) = 7.49, p <.05). It is understood that public employees

take precautions by cleaning living and working areas with sodium carbonate more than other groups.

p) It has been determined that cleaning food with vinegar water creates a significant difference (X2(3) = 9,218, p <.05). It is understood that public employees take measures by cleaning food with vinegar water more than other groups.

q) It has been determined that it does not make a significant difference according to those who try to take measures by disinfecting their hands with cologne every hour (X2(3) = 4.096, p> .05).

r) It has been determined that it does not make a significant difference according to those who try to take measures by ventilating indoor places (X2(3) = 1.188, p>.05).

s) It has been determined that it does not make a significant difference compared to those who try to take precautions by not shaking hands with people (X2(3) = 3,080, p>.05).

t) It was determined that washing clothes at 60-90 degrees with normal detergent did not make a significant difference. (X2(3) = 2.755, p > .05).E

u) It has been determined that taking hands to the eyes, mouth and nose creates a significant difference. (X2(3) = 9,385, p < .05). It was understood that the students took precautions by trying not to take their hands to their eyes, mouth and nose more than other groups.

## Precautions Taken According to The People Who Have Chronic Disease

Are there any differences between the measures taken by individuals compared to those with chronic diseases? The answer to this question was sought in the context of the research. The results are given in the table below.

Table 4: Comparison of the measures taken by the participants against the coronavirus according to the chronic disease status of the participants.

		Do you have a chronic disease?			<b>X</b> <sup>2</sup>	sd	р		Do you have a chronic disease?			<b>X</b> <sup>2</sup>	sd	р
		No	Yes	Total					No	Yes	Total			
I am constantly resting in mv home	Yes	48	100	148	4,238	1	0,040	I drink alcohol against the	141	7	148	1,113	1	0,291
		32,4%	67,6%	100,0%					95,3%	4,7%	100,0%			
	No	243	748	991					921	70	991			
		24,5%	75,5%	100,0%					92,9%	7,1%	100,0%			
I try to take precautions by using flu medicines at	Yes	127	21	148	- 2,780	1	0,095	I had an acupuncture operation.	143	5	148	0,779	1	0,378
		85,8%	14,2%	100,0%					96,6%	3,4%	100,0%			
	No	793	198	991					941	50	503			
		80,0%	20,0%	100,0%					95,0%	5,0%	100,0%			
ume herb s and	Yes	88	60	148	0,739	1	0,390	g and wor king area	49	99	148	0,037	1	0,848
		59,9%	40,5%	100,0%	0,739	1		a kiya ar	33,1%	66,9%	100,0%			

-	1				1	1	1			1			1	
I try not to be in crowded nlares	No	552	439	991					336	655	991			
	110	55,7%	44,3%	100,0%					33,9%	66,1%	100,0%			
	Yes	26	122	148	3,011	1	0,083	I wash the food with vinegar	62	86	148	6,105	1	0,013
	1 es	17,6%	82,4%	100,0%					41,9%	58,1%	100,0%			
	No	123	868	991					523	468	991			
		12,4%	87,6%	100,0%					52,8%	47,2%	100,0%			
I wash my hands more often.	Yes	6	142	148	0, 272	1	<b>0,</b> 602	I disinfect my hands with cologne every hour.	57	91	148	0,004	1	0,950
		4,1%	96,8%	100,0%					38,5%	61,5%	100,0%			
		32	959	991					379	612	991			
	No	3,2%	94,6%	100,0%					38,2%	61,8%	100,0%			
	Yes	83	65	148	6,672	1	0,010	I ventilate indoor places.	14	134	148	0,022	1	0,882
I use mask.	ies	56,1%	43,9%	100,0%					9,5%	90,5%	100,0%			
		663	328	991					90	901	991			
	No	66,9%	33,1%	100,0%					9,1%	90,9%	100,0%			
I pray.	Yes	49	99	148	0,112	1	0,737	hands with people, I don't hug	32	116	148	2,644	1	0,104
		33,1%	66,9%	100,0%					21,6%	78,4%	100,0%			
	N	342	649	991					161	830	991			
	No	34,5%	65,5%	100,0%					16,2%	83,8%	100,0%			
I take a shower before going out or after coming.	Yes	53	95	148	2,139	1	0,144	clothes at 60-90 degrees with normal determent	34	114	148	0,044	1	0,833
		35,8%	65,2%	100,0%					23,0%	77,0%	100,0%			
		296	695	991					220	771	991			
	No	29,9%	70,1%	100,0%					22,2%	77,8%	100,0%			
I get plenty of vitamins.	Yes	51	97	148	0,426	1	0,514	take my hands to my eyes, mouth and	22	126	148	0,022	1	0,881
		34,5%	65,5%	100,0%					14,9%	85,1%	100,0%			
		369	622	991					152	839	991			
	No	37,2%	62,8%	100,0%					15,3%	84,7%	100,0%			
I consume fruits and vegetables.		24	124	148	0,887	1	0,346	I consume plenty of liquids.	17	131	148	0,047	1	0,828
	Yes	16,2%	83,8%	100,0%					11,5%	88,5%	100,0%			
	No	193	798	991					120	871	503			
	No	19,5%	80,5%	100,0%					12,1%	87,9%	100,0%			
I avoid eating food of animal origin.	Yes	111	37	148	6,328	1	0,012							
		75,0%	25,0%	100,0%										
	N	827	164	991										
	No	83,5%	16,5%	100,0%										
P				•				-						

When Table 4 is examined, the results found according to the working status are as follows:

a) It has been determined that it creates a significant difference according to those who try to take precautions by resting at home (X2(3) = 4.238, p <.05). It is understood that people who have chronic illnesses try to take precautions by) resting at home more than those without.

b) It has been determined that it does not make a significant difference according to those who try to take precautions by using flu medicines. (X2(3) = 2,780, p > .05).

c) It has been determined that it does not make a significant difference compared to those who try to take precautions by consuming herbs and herbal teas (X2(3) = 0.739, p> .05).

d) It has been determined that it does not make a significant difference compared to those who try to take precautions by not being in crowded places. (X2(3) = 3,011, p > .05).

e) It has been determined that it does not make a significant difference compared to those who try to take measures by washing their hands more frequently (X2(3) = 0, 272, p > .05).

f) It has been determined that it creates a significant difference compared to those who try to take precautions by using mask (X2(3) = 6,672, p <.05). It is understood that people who do not have chronic illnesses try to take more precautions by using mask more than those who have illnesses.

g) It was determined that it did not make a significant difference compared to those who tried to take precautions by praying (X2(3) = 0.112, p>.05).

h) It was determined that taking a shower before going out or after coming doesn't make a significant difference. (X2(3) = 2,139, p > .05).

i) It has been determined that it does not make a significant difference according to those who take precautions by taking plenty of vitamins. (X2(3) = 0.426, p> .05).

j) It was determined that it did not make a significant difference according to those who tried to take precautions by consuming fruits and vegetables. (X2(3) = 0.887, p> .05).

k) It has been determined that it does not make a significant difference according to those who try to take precautions by consuming plenty of liquids. (X2(3) = 0.047, p>.05).

l) It has been determined that it makes a significant difference compared to those who avoids consuming foods of animal origin. (X2(3) =6,328, p<.05). It is understood that people who do not have chronic illnesses try to take measures by avoiding foods of animal origin more than those who have chronic illnesses.

m) It was determined that it did not make a significant difference according to those who tried to take precautions by consuming alcohol against the disease (X2(3) = 1.113, p>.05).

n) It has been determined that having an acupuncture operation doesn't make a significant difference. (X2(3) = 0,779, p>.05).

o) It has been determined that it does not make a significant difference according to those trying to take precautions by cleaning the living and working area with sodium carbonate. (X2(3) = 0.037, p > .05).

p) It has been determined that cleaning food with vinegar water creates a significant difference. (X2(3) = 6,105, p < .05). It is understood that people with chronic diseases try to take precautions by washing their food with vinegar water more than those without.

q) It has been determined that it does not make a significant difference according to those who try to take measures by disinfecting their hands with cologne every hour (X2(3) = 0.004, p > .05). r) It has been determined that it does not make a significant difference according to those who try to take measures by ventilating indoor places (X2(3) = 0.022, p > .05).

s) It was determined that it did not make a significant difference compared to those who tried to take precautions by not shaking hands with people (X2(3) = 2.644, p>.05).

t) It has been determined that it does not make a significant difference compared to those who try to take measures by washing their clothes with normal detergent at 60-90 degrees (X2(3) = 0.044, p>.05).

u) It has been determined that it does not make a significant difference compared to those who try to take measures by not taking their hands to their eyes, mouth and nose (X2(3) = 0.022, p> .05).

#### DISCUSSION

People spend most of their lives in many environments built by people, including buildings, cars, roads, public transport, and other man-made areas. In these environments, contact and close interactions between people are very high and this increases the speed of coronavirus spreading (12). The individual has direct and indirect contact with the surrounding surfaces when he moves throughout his living areas. When the individual touches a surface, a microbial life change occurs, including transferring viruses from person to surface or from surface to person (13). Coronaviruses have a life span that changes according to the factors like humidity and temperature of the environment and the texture of the surface it contaminates. It is generally accepted that it loses its activity within a few hours on lifeless surfaces. Therefore, general cleaning rules have a very important role in eliminating the virus. The most effective and easiest measures that can be taken to protect yourself from the virus are hand washing and maintaining social distance (14).

In this study, 848 (74.5%) people are constantly resting at home and trying to take precautions. In a study conducted in China, the average time to stay at home is 19 hours and the rate of those who stay above this average is 84.7% (15). In a study conducted by telephone survey in Hong Kong, it was stated that 83.8% of the participants were resting at home as much as possible (16). Compared to gender, women try to be protected by resting at home more than men. 495 (77.8%) of them are female and 353 (70.2%) are male. When analyzed according to the working status, 335 (94.4%) person are students, 250 (60%) person are public employees, 193 (68.9%) person are private sector employees. Due to the interruption of the education and training life (3), the opportunity of students to take measures in this way has increased. It is thought that private sector employees can take measures by staying at home because many workplaces are closed by the government for preventive purposes (4) and public employees continue to work at home. 100 (67.6%) people with chronic illness and 48 (32.4%) people without chronic illness tried to take measures by staying at home. Those with chronic illness are more anxious to Coronavirus (15) and those with chronic illness are in a higher risk group (17). Therefore, they try to take such precaution.

In a study conducted in Konya, when the rational medicine usage of individuals was examined, 77.3% of them stated that they used medicines without a doctor's recommendation (18). In this research, the number of people who tried to take precautions against the coronavirus by using flu medicines at home is 219 (19.2%). It was thought that the reason for the differing results of the study was that the research was conducted on a single disease and this disease belongs to a new

type. When examined according to the employment status, it was understood that there were 88 (24.8%) students, 59 (14.1%) public employees and 50 (17.9%) private employees. In the study conducted by YAPICI and his friends, it was stated that 55% of students, 31.7% of civil servants and retirees, 39.2% of workers used medicines without consulting a doctor (19).

Throughout human history and today, many diseases (diabetes, jaundice, shortness of breath, etc.) have been tried and treated by using herbs. The World Health Organization (WHO) reports that approximately 4 billion people in the world are trying to resolve their health problems with herbal medicines at first. (80% of the world population) (20). There is no anti-virus medicine or vaccine for the treatment of this sudden and fatal disease. Supportive care and nonspecific treatment is currently the only option to treat the patient. More than 85% of patients infected with coronavirus in China are undergoing Traditional Chinese Medicine treatment (21).

In the study, 499 (43.8%) people consume herbs and herbal teas to protect against coronavirus.

314 (49.4%) of these people are women and 185 (36.8%) are men. In the coronavirus epidemic, acute respiratory distress syndrome (ARDS) is an important factor of death. Early use of large doses of antioxidants such as vitamin C can be an effective treatment for these patients. Clinical studies also show that high-dose oral vitamin C provides certain protection against viral infections. It shows that high dose intravenous vitamin C decreases the rate of hospitalization to intensive care unit (22). Vitamin D has many mechanisms reducing the risk of microbial infection and death. A recent study has shown that vitamin D reduces the risk of catching cold.

Vitamin D has been shown to reduce the risk of colds in a recent review. Former director of the Disease Control and Prevention Center, Dr. Tom Frieden suggested using vitamin D to fight the COVID-19 outbreak on March 23, 2020 (23). In this study, there are 719 (63.1%) people who try to take precautions by taking plenty of vitamins, 922 (80.9%) people who try to take measures by consuming fruits and vegetables. 432 (67.9%) of those who try to take precautions by taking plenty of vitamins more than men. It is understood that women prefer to take precautions by consuming vitamin usage did not make a significant difference according to the gender, but 30.7% of the participants stated that they used vitamins to strengthen their immune system (24). 548 (86.2%) of those who take precautions by consuming fruits and vegetables are women and 374 (74.4%) of them are men. It is understood that women try to take measures by consuming fruits and vegetables more than men.

Social distancing is designed to reduce interaction between people in a large community. Since diseases transmitted by respiratory droplets require a certain distance of people, maintaining social distance will decrease the transmission rate (25). When we investigate the short-term effects of social distance interventions that started early in the outbreak, it is thought that interventions covering all age groups will significantly reduce the number of cases. However, a 25% reduction in interaction rates for the adult population, a 95% reduction in older adults, number of hospitalization and deaths within the first 100 days can reduce by 90% (26). In the study, 990 (86.9%) of the participants tried not to be in crowded places. Those who try not to shake or hug with people are 946 (83.1%) people. In the study conducted by COWLING and his friends, 85.1% of the people avoided going to crowded places

(16). In another study conducted in South Korea, the rate of those who avoided crowded places was 41.5% (27). In a study in Japan, the rate of those who try not to be in crowded places is 87.4% (28). When it is examined according to the people who try to take precautions by not being in crowded places, 606 (89.5%) people are women and 429 (75%) people are men. It is understood that women try not to be in crowded places more than men. When analyzed according to the working status, it is understood that 332 (98%) people are students, 408 (97.8%) are public employees and 230 (82.1%) are private employees. When the people who do not shake and hug are examined according to the gender, 569 (89.5%) women and 377 (75.0%) people are men. Women tried to take precautions by taking care not to shake or hug with people more than men.

The most important strategy that society will undertake is to wash their hands frequently and use a portable hand disinfectant and avoid touching the face and mouth after possibly entering a contaminated environment (25). In the study conducted by LEE and YOU, 67.8% of the participants stated that they frequently wash their hands and use hand disinfectants (27). In the study conducted by MACHIDA and his friends, rate of those who pay attention to hand hygiene is 93.9% (28). In a study conducted in Hong Kong, this rate is 93.0% (16). In a study in China, the rate of those who wash their hands more often is 97.9%. 98.3% of them are women and 96.8% are men (29). In a study conducted in Riyadh, Saudi Arabia in 2019, 59.7% of people tried to provide hand hygiene by washing their hands with soap and water, and 34.8% used antibacterial soap. (30). In this study, it is 1101 (96.7%) people who wash their hands more frequently, while those who disinfect their hands with cologne are 703 (61.7%) people. In a study conducted by SUEN and his friends according to the general hand hygiene of the public, it was stated that 76% of the participants washed their hands in infectious disease outbreaks and there was no significant difference according to the gender (31).

When those who wash their hands are examined according to the gender, 625 (98.3%) people are women and 476 (94.6%) people are men. It is understood that women wash their hands more than men, even if there is a little difference. When analyzed by employment status, 348 (98.0%) people are students, 408 (97.8%) people are public employees and 266 (95.0%) people are private sector employees. In a study conducted by CHEN and his friends among primary school students in Wuhan, 42.05% of primary school students stated that they washed their hands (32). In this study, since the questionnaire is applied over the age of 18, undergraduate and graduate students are included in the student group. The epidemic was controlled much more quickly, with an increase in the number of people carrying hand disinfectants with them for immediate hand hygiene and the widespread use of masks among countries such as China, Korea and Japan. In countries where such measures are not obligation, the increase in the number of cases continues increasingly (25). When those who disinfect their hands with cologne per hour are examined according to gender, 418 (65.7%) people are women and 285 (56.7%) people are men. It is understood that women disinfect their hands hourly more than men.

Using face masks in the community can be used primarily as a source control tool. This measure may be particularly relevant in outbreak situations where the number of asymptomatic

but infectious people in the community is assumed to be high. People should use a face mask especially when visiting crowded, closed areas such as a grocery store and a shopping mall, when using public transport and in certain workplaces and job that involve physical interaction (25). In a South Korea-based study, it was stated that 63.2% of the participants always wear face masks when they are out and there are significant positive findings when examined according to gender. (27). In a study by CHENG and his friends, they observed that the usage of face masks was 97% in all administrative buildings (33). In a study conducted in Hong Kong, the rate of those who wear face masks was reported as 98.8% (16). In an internet-based survey conducted in China, 97.9% of the participants stated that they use masks in the public area, and 98.2% of those who use masks are women and 97% are men (29). In this study, 393 (34.5%) people use masks. The number of people using masks was lower than expected. When analyzed according to gender, 253 (39.8%) people are women and 140 (27.8%) people are men. Women preferred to take measures by using masks more than men. When examined according to the working status, the public employee number is 199 (47.7%), the private sector number employee is 87 (31.1%) and the student number is 75 (21.1%).

In the study conducted in Wuhan, 32.47% of primary school students stated that they use masks (32). When examined according to chronic disease status, it is understood that people who do not have chronic illness try to take more precautions by using masks more than those with chronic illness. 83 (56.1%) people without chronic illness are 65 (43.9%) with chronic illness. The usage of masks is thought to be low due to the curfew being applied to people with chronic conditions (5).

Religion is a strong phenomenon that functions in a wide range of individuals and society. In the study of TEKIN, 26.6% of the participants prayed to God for recovery, 94.5% prayed to stay healthy during their religious prayers, 70.4% stated that religious beliefs and practices are beneficial for health. (34).In this study, 748 (65.7%) people prayed against coronavirus. When examined according to gender; 456 (71.7%) women and 292 (58.1%) men.

In a study conducted by NİESOBECKİ and his friends about the prevention of tick-borne diseases in the endemic region, 42% of the participants stated that they had a shower after spending time outside. When the participants are analyzed according to gender, 43% of them are women and 41% of them are men. In this study, 790 (69.4%) people took a shower before or after going out against the coronavirus. When analyzed according to gender, the female number is 460 (72.3%) and the male number is 330 (65.6%).

MERS-CoV is a type of coronavirus that occurs in the Middle East (1). In a study conducted in the countries of the Gulf Cooperation Council (GCC), 79% of respondents were aware that the disease can be transmitted by droplets from the infected person, while only 12% stated that MERS-CoV was transmitted through camels, and about a quarter of people stated that they avoided the consumption of raw camel products, including milk (28%) and meat (22%) (35). In this study, the number of people trying to take measures against new type of coronavirus by avoiding foods of animal origin is 201 (17.6%). When analyzed according to gender, 127 (20.0%) female and 74 (14.7%) males preferred to take measures in this way. When examined

according to chronic condition, 37 (25%) people with chronic disease and 111 (75%) people without chronic disease tried to take measures by avoiding foods of animal origin.

Coronaviruses can remain infectious on lifeless surfaces for up to 9 days at room temperature. The permanence period is shorter at a temperature of  $30 \degree C$  or higher. Therefore, contamination of contact surfaces in healthcare environments is a potential source of viral transmission.

Although the viral effect of coronaviruses on lifeless surfaces is not known in the event of an epidemic, it seems logical to reduce the viral effect on surfaces which close to the patient by disinfection, especially in the environment where the highest viral effect is expected. WHO recommends that environmental cleaning and disinfection procedures be followed consistently and accurately. Cleaning environmental surfaces thoroughly with water and detergent and to apply disinfectants (such as sodium hypochlorite), which are commonly used in hospitals are effective and sufficient procedures (36). In a study conducted in Hong-Kong, those who disinfect the home environment constitute 89.6% of the participants (16). In this study, the rate of those who disinfect the living and working places with sodium carbonate is 66.2%.When analyzed according to gender, 490 (77.0%) of those trying to take precautions in this way are women and 264 (52.5%) of them are men. When analyzed according to working status, public employee number is 293 (70.3%), private sector employee number is 179 (63.9%), student number is 217 (61.1%)

It has been reported that vinegar containing 3.95% acetic acid can be used as a home disinfectant to reduce pathogen counts (37). In this study, it is 554 (48.6%) people who try to take measures against coronavirus by washing their food with vinegar water. When analyzed according to gender, female number is 381 (59.9%), male number is 173 (34.4%). In the research carried out by VATANDAŞ, the rate of cooking of women who works only in domestic works is 65.3% (38). For this reason, such a result has come out, since the duty of cooking at home is usually women's duty. When analyzed according to the working status, 217 (52%) of them are public employees, 134 (47.9%) of them are private sector employees, 146 (41.1%) people are students. When examined according to the chronic condition, there are 86 (58.1%) people with chronic disease and 62 (41.9%) people without chronic disease.

Natural ventilation also has effects for other respiratory infections such as influenza and tuberculosis, but it should be noted that the protective effect of ventilation decreases while the infection increases (39). In a study conducted in China, it is stated that 92.4% of the participants ventilate closed places more frequently against the coronavirus. 93.1% of women and 90.6% of men stated that they tried to take measures in this way (29). In this study, 1035 (90.5%) people are trying to take measures by ventilating closed places. When analyzed according to gender, 606 (95.3%) of them are women and 429 (85.3%) of them are men. The literature supports our findings.

It is 885 (77.7%) people who try to take measures against coronavirus by washing their clothes with normal detergent at 60-90 degrees. When analyzed according to gender, 514 (80.8%) of them are women and 371 (73.8%) of them are men.

In this study, 965 (84.7%) of the participants tried not to take their hands to their eyes, mouth and nose and tried to take precautions against coronavirus. When analyzed according to gender, 569 (89.5%) women and 396 (78.7%) men tried to take measures in this way. When analyzed according to working status, 317 (89.3%) people are students, 351 (84.2) people are public employees, 226 (80.7%) people are private employees. In a study in Japan, 81.3% of the participants tried to take measures in this way (26). The rate of those who try not to take their hands to their eyes, mouth and nose is 43% in a study on the measures taken against MERS-Cov, another coronavirus type (35).

The participant who tries to take precautions by consuming plenty of liquids is 1002 (88%). When analyzed according to gender, 571 (89.8%) people are women and 431 (85.7%) people are men. When analyzed according to working status, 319 (89.9%) people are students, 369 (88.5%) people are public employees and 239 (85.4%) people are private employees.

Our findings are in line with other countries and studies on old infectious diseases. Women have largely tried to take measures against the Coronavirus. Only the expected results could not be obtained from the usage of mask of the participants. On the other hand, students tried to take precautions more than public and private sector employees. There were not much meaningful results compared to people with and without chronic disease.

#### CONCLUSION

Until coronavirus vaccine or definitive treatment is found, measures taken by societies will be the only valid method for fighting this virus. In the measures taken by societies against coronavirus, there should be holistic and strict measures. The main points of preventing the spread of coronavirus are hand hygiene, social distance, social isolation and mask usage. Our findings show that other measures except for the usage of masks were applied by the participants. The struggle against coronavirus will continue strongly by promoting continuity of measures. Authorities can provide more information and support on measures to the community. This study is one of the first studies in the early stages of the coronavirus in Turkey. More research is needed to study on this subject.

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