Available online at www.medicinescience.org

ORIGINAL ARTICLE

Medicine Science International Medical Journal

Medicine Science 2023;12(2):436-41

The knowledge levels, sociodemographic characteristics and the reasons for application to the first stage during the COVID-19 pandemic patients who applied to a family medicine clinic in Istanbul

Selin Cakmak

Malatya Battalgazi Hospital, Department of Family Medicine, Malatya, Türkiye

Received 19 January 2023; Accepted 17 April 2023
Available online 31.04.2023 with doi: 10.5455/medscience.2023.01.010

Copyright@Author(s) - Available online at www.medicinescience.org

Content of this journal is licensed under a Creative Commons Attribution-NonCommercial-NonDerivatives 4.0 International License.

Abstract

It is to evaluate whether there is any change in the community's applications to primary care in the Covid-19 pandemic and to evaluate the level of knowledge of patients about Covid-19 in this important process. A total of 331 female and male volunteers between the ages of 18-80 who applied to a family medicine unit on the European side of Istanbul between September 2020 and November 2020 were included in the study. 30 questions in the questionnaire were filled by a single investigator after the patients were informed and their consent was obtained. This study, which we conducted in the early days of the Covid-19 pandemic, showed us that; The most important means of communication in making the pandemic known to the public are TV and social media (87.3%). Thanks to the full closure and other protective measures implemented in the early days of the pandemic, a controlled increase in the number of cases was observed, and the number of people who caught Covid-19 among the people who participated in our survey was quite low (3%) and most of these people were treated at home (62.5%). The epidemic process also affected hospital admissions of people, and it was seen that the number of people who did not apply to the hospital for more than 1 month was the majority (74.9%). One of the remarkable ones among the answers to the Covid-19 information questions; although there is no specific treatment for Covid-19 yet, 209 people (63.1%) say that there is a cure for Covid-19. We think that the preventive treatment (Hydroxychloroquine and Favipiravir) applied by the filiation teams, even if there is no specific treatment, is effective in these discourses. However, although the vaccine studies have not been concluded yet, 34 (10.3%) people stated that the vaccine was available.

Keywords: Covid-19 pandemic, family medicine, socio-demographic characteristics

Introduction

Coronavirus disease-2019 [Coronavirus Disease-2019 (Covid-19)], which first appeared in Wuhan city of China's Hubei province in December 2019 and spread rapidly globally, continues to be a major problem. On March 11, 2020, the World Health Organization (WHO) officially described the global Covid-19 outbreak as a pandemic, due to the large increase in the spread rate and severity of the virus.

The Covid-19 pandemic has severely affected the whole world, causing serious morbidity and mortality. Since the detection of the first case in our country on March 11, 2020, the main strategy regarding the epidemic has been to reduce the incidence of cases with public health measures and to prevent the intense demand for health services by slowing the rise in the epidemic curve. [1]. In this period, in order to minimize the density in health institutions and to reduce the burden on health personnel, patients who do not have an emergency were encouraged to receive services

CITATION
Cakmak S. The knowledge levels, sociodemographic characteristics and the reasons for application to the first stage during the covid-19 pandemic patients who applied to a family medicine clinic in istanbul. Med Science. 2023;12(2):436-41.

Corresponding Author: Selin Cakmak, Malatya Battalgazi Hospital, Department of Family Medicine, Malatya, Türkiye
Email: dr.selinhaliloglu@hotmail.com

DOI: 10.5455/medscience.2023.01.010

from family medicine first [2]. In this way, Family Physicians, who form the backbone of the health system in our country, have undertaken an important role in the fight against the epidemic.

Before the pandemic, Family Medicines were places where women, men, children, elderly, pregnant and disabled people frequently applied with all kinds of complaints; Nowadays, they continue to be the most frequently applied places due to the fact that hospitals work as pandemic hospitals, people's fear of getting infected in the hospital, and hospitals that cannot handle the increasing burden restrict the admission of patients.

A specific antiviral treatment for Covid-19 is not yet available [3-5]. One of the most successful methods worldwide to prevent infectious viral diseases is vaccination. It is known that vaccines against Covid-19 are important to prevent and control Covid-19 [6]. For this reason, worldwide research on Covid-19 vaccines is accelerating day by day.

Material and Methods

Ethics committee approval of the study was received on 03.09.2020 (Decision No: 2/2020.K-059). A total of 331 female and male volunteers between the ages of 18-80 who applied to a family medicine unit on the European side of Istanbul between September 2020 and November 2020 were included in the study. 30 questions in the questionnaire were filled by a single investigator after the patients were informed and their consent was obtained. Individuals who did not fit into the age range and were over 65 years of age with a mental capacity and a history of drug use due to the onset of Alzheimer's or similar reasons were not included in the study. Regarding the sociodemographic profile of the participants; Questions such as age, education level, employment status, income level were asked. Smoking and alcohol use status and chronic disease histories were evaluated. Answers were sought to questions such as their knowledge about Covid-19, whether they were caught in the disease, the ways of transmission of the disease, and the methods of protection from the disease. The symptoms of the disease, its treatment and whether there is a vaccine and the reasons for applying to family medicine were also questioned. NCSS (Number Cruncher Statistical System) 2007 (Kaysville, Utah, USA) program was used for statistical analysis.

Descriptive statistical methods (mean, standard deviation, median, frequency, percentage, minimum, maximum) were used while evaluating the study data. The conformity of the quantitative data to the normal distribution was tested with the Shapiro-Wilk test and graphical examinations. Independent groups t-test was used for the comparison of normally distributed quantitative variables between two groups, and the Mann-Whitney U test was used for comparisons between two groups of non-normally distributed quantitative variables. One-way analysis of variance and binary evaluations with Bonferroni correction were used for comparisons between groups of more than two normally distributed quantitative variables. Kruskal-Wallis test and Dunn-Bonferroni test were used for comparisons between groups of more than two quantitative variables that did not show normal distribution. Statistical significance was accepted as $p<0.05$.

Results

The study was conducted with a total of 331 cases, of which 64% (n=212) were female and 36% (n=119) were male. 42.9% (n=142) of the cases were in the 18-45 age group, 44.1% (n=146) were in the 45-65 age group, and 13% (n=43) were over 65 years old. (Table 1)

Table 1. The distribution of descriptive characteristics

		n (%)
Sexuality	Women	212 (64.0)
	Men	119 (36.0)
Age	18-45	142 (42.9)
	45-65	146 (44.1)
	>65	43 (13.0)
Educational attainment	Illiterate	17 (5.1)
	Primary school	139 (42.0)
	Secondary school	44 (13.3)
	High school	54 (16.3)
	University	69 (20.8)
	Post graduate	8 (2.4)
Working condition	Yes	115 (34.7)
	No	216 (65.3)
Occupation	Officer	17 (14.8)
	Special sector	98 (85.2)
Level of income	Low	185 (55.9)
	Middle	131 (39.6)
	High	15 (4.5)
Smoking	Yes	105 (31.7)
	No	226 (68.3)
Alcohol	Yes	45 (13.6)
	No	286 (86.4)
Chronic illness	Yes	130 (39.3)
	No	201 (60.7)
	HT	91 (70.0)
	DM	62 (47.7)
	HL	37 (28.5)
	Cardiac ilness	41 (31.5)
	Asthma	23 (17.7)
	Copd	3 (2.3)

While 5.1% (n=17) of the cases were illiterate, 42% (n=139) had primary school education, 13.3% (n=44) secondary school, 16.3% (n=54) high school, 20.8% (n=69) university, 2.4% (n=8) graduate and above.

97.9% of the cases (n=324) have information about Covid-19. Of those who have knowledge, 87.3% (n=283) are from TV-social media, 1.2% (n=4) are from newspapers-magazines, 4.9% (n=16) are from health institutions, 6% are from 5 (n=21) learned

DOI: 10.5455/medscience.2023.01.010

from friends-relatives. (Table 2)

3% (n=10) of the participants in the study caught Covid-19. 37.5% (n=3) of those who got Covid-19 were treated at the hospital, and 62.5% (n=5) at home.

Table 2. Distribution of responses to questions regarding covid-19

Information status about Covid-19	Yes
	No
Where did they get the information	TV-social media
	Newspaper-magazine
	Health institution
Situation of catching Covid-19	Yes
	No
Place of treatment	Hospital
	Home
Presence of first-degree relative with Covid-19	Yes
	No
The effect of the epidemic process on hospital admissions	Yes
	No
When was the last time he went to the hospital?	In the last 1 week
	In the last 2 weeks
	In the last 1 month
	More than 1 month ago
Reason for applying to Family Health Center (ASM)	Printing out medicine
	To be examined
	get a report
	Getting referral to hospital
Which would you choose if there was no epidemic?	ASM
	Hospital

More than one option has been ticked

14.5% of the cases (n=48) have a first-degree relative with Covid-19. 67.4% of the cases (n=223) think that the epidemic process affects hospital admissions.

12.1% (n=40) of the cases within the last 1 week, 4.8% (n=16) within the last 2 weeks, 8.2% (n=27) within the last 1 month, 74.9% (n=248) went to the hospital more than 1 month ago.

The reason why 57.4% (n=190) of the cases applied to the FHC was to prescribe medication, 33.5% (n=111) to be examined, 8.2% (n=27) to get a report, 0% .9 of them (n=3) were referred to the hospital.

It is seen that 92.1% (n=305) of the cases would have applied to the FHC even if there was no epidemic, and 7.9% (n=26) would have applied to the hospital if there had been no epidemic. (Table3)

The Covid-19 Knowledge scores of the cases ranged from 9.1 to 90.9 points, and the mean score was determined as 57.37±14.34.

The Covid-19 knowledge scores of those who said they had knowledge about Covid-19 were found to be statistically significantly higher than those who did not ($p<0.01$).

A statistically significant difference was found between the Covid-19 knowledge scores of the cases according to their education levels ($p<0.01$). As a result of the pairwise comparisons made in order to determine the source of the difference; The Covid-19 knowledge scores of the illiterate were found to be statistically significantly lower than those whose educational status was primary school, secondary school, high school, university and postgraduate or higher ($p<0.01$). The scores of those with a university education level were found to be statistically significantly higher than those with a primary school or high school education ($p<0.05$). (Figure 1)

Table 3. Distribution of responses to covid-19 information questions

		n(%)
Covid-19 contagious status	Yes	324 (97.9)
	No	7 (2.1)
If yes, how is it transmitted?	by inhalation	230 (70.6)
	by sensual contact	146 (44.8)
	sexually	1 (0.3)
	with body secretions	60 (18.4)
	All	52 (15.9)
Methods of protection from Covid-19	Washing hands	59 (17.8)
	Wearing mask	60 (18.1)
	wearing gloves	6 (1.8)
	Social Isolation	48 (14.5)
	All	262 (79.2)
Knowing the Covid-19 hotline (184)	Yes	116 (35.0)
	No	215 (65.0)
Covid-19 symptoms	Fire	255 (77.0)
	Cough	204 (61.6)
	Shortness of breath	117 (35.3)
	respiratory distress	45 (13.6)
	runny nose	2 (0.6)
	watering eyes	7 (2.1)
	Headache	34 (10.3)
	heart palpitations	1 (0.3)
	All	17 (5.1)
In case of suspected Covid-19	I call 112	132 (39.9)
	I call 184	48 (14.5)
	I go to ASM	33 (10.0)
	I go to the hospital	118 (35.6)
Treatment of Covid-19 disease	Yes	209 (63.1)
	No	122 (36.9)
State's availability of treatment	Yes	197 (93.8)
	No	13 (6.2)
Status of being vaccinated for Covid-19 disease	Yes	34 (10.3)
	No	297 (89.7)
The situation of a person who has Covid-19 once and will pass it again	Yes	240 (72.5)
	No	52 (15.7)
	He does not know	39 (11.8)
Covid-19 lethality	Yes	327 (98.8)
	No	4 (1.2)

More than one option has been ticked

DOI: 10.5455/medscience.2023.01.010

The Covid-19 knowledge scores of the employees were found to be statistically significantly higher than those of the non-workers (p=0.001; p<0.01).

Covid-19 knowledge scores of those without chronic disease were found to be statistically significantly higher than those with chronic disease (p=0.042; p<0.05).

Covid-19 knowledge scores do not show any statistically significant difference according to gender, age group, occupation, income level, smoking and alcohol use, HT, DM, HL, cardiac disease, asthma, COPD (p>0.05).

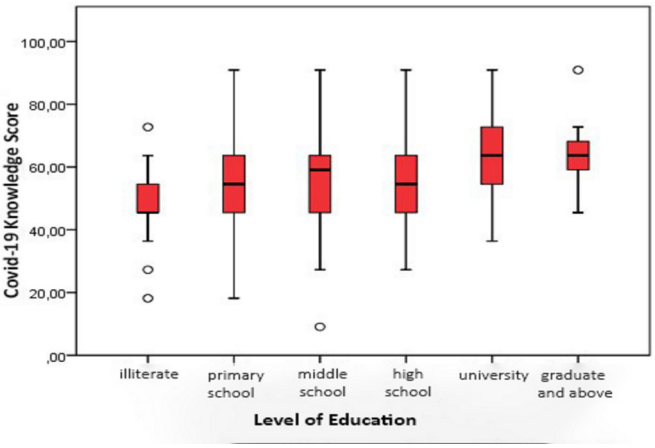

Figure 1. Covid-19 knowledge score by education level

A statistically significant difference was found between the Covid-19 knowledge scores of the cases according to the reasons for applying to the FHC (p=0.028; p<0.05). As a result of the pairwise comparisons made in order to determine the source of the difference; Covid-19 knowledge scores of those whose application reason was to get a report were found to be statistically significantly higher than those whose application reason was to prescribe medication (p=0.012; p<0.05). (Figure 2)

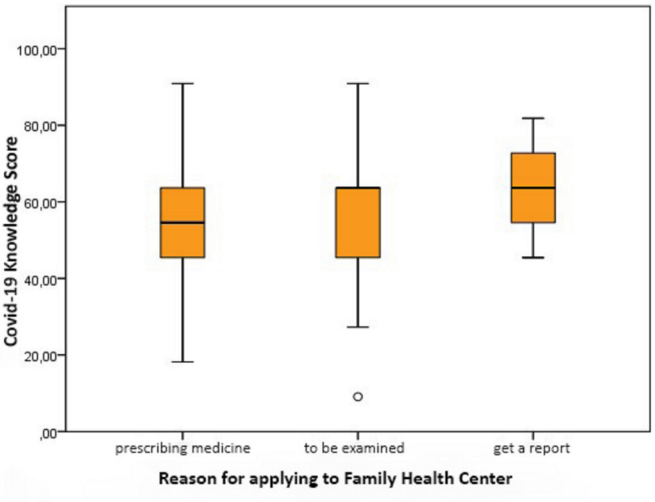

Figure 2. Covid-19 knowledge score by reason of applying to FHC

There is a statistically significant difference in the Covid-19 knowledge scores according to the answers given by the cases to the questions about where they learned their knowledge about Covid-19, their status of catching Covid-19, the presence of first-degree relatives caught in Covid-19, and the last time they went to the hospital. does not show (p>0.05).

Discussion

Family medicine; It works as the cornerstone of primary health care services that provide both preventive and curative health services to every individual in the society, regardless of gender, age and disease [7].

During the pandemic process, decisions were taken to control the disease in Turkey as well as in the whole world, and preventive measures covering the entire society were implemented. In this process, family physicians also took part in the fight against the pandemic and took an active role in the fight against the epidemic. It is important that primary health care services are strong and effective in order to prevent the disease and prevent the spread of the epidemic.

This study, which we conducted in the early days of the Covid-19 pandemic, showed us that; The most important means of communication in making the pandemic known to the public are TV and social media (87.3%). Similarly, in the survey conducted by Çerçi et al. [8], it was seen that 75.4% of the participants used social media to be informed about the Covid-19 pandemic.

A controlled increase in the number of cases has been observed thanks to the full closure and other protective measures implemented in the early days of the pandemic. However, while the province of Istanbul has the highest number of cases in the country with a rate of 40% [9], it was seen that the number of people caught Covid-19 among the people who participated in our survey in the region where we conducted the study was quite low (3%). Our total number of patients has also decreased, as the Ministry of Health ensures that people can take their prescribed drugs directly without being prescribed them, and the number of applications to Family Health Centers (FHCs) and hospitals has decreased due to the fear of getting sick from health institutions. For all these reasons, the number of patients who participated in our survey was limited, and therefore the number of cases was observed to be low.

According to the Covid-19 guide of the Ministry of Health of the Republic of Turkey (TCSB), "under the age of 50, who does not need hospitalization, who has a mild clinic and does not have risk factors that may cause severe course of Covid-19 (hypertension, diabetes mellitus, chronic heart disease, chronic lung disease)" possible/definite Covid-19 cases without any of the poor prognostic factors (lymphocyte count in blood 40mg/l and above, ferritin >500 ng/ml, D-Dimer >1000 ng/ml) Treatment is started by the filiation teams and followed at home until the symptoms subside [10]. In our study, most of the people who participated in our survey who caught Covid-19 were treated at home (62.5%).

The epidemic process affected people's hospital admissions, and in our study, it was seen that the number of people who did not

DOI: 10.5455/medscience.2023.01.010

apply to the hospital for more than 1 month was the majority (74.9%). Similarly, in the study conducted by Karataş Z, it was observed that the desire of people to go to the doctor to be examined decreased by 71%, according to the results of the Covid-19 pandemic impact survey [11].

Covid-19 disease is mainly transmitted by airborne viruses suspended in droplets by being close to people with respiratory viral load at a distance of less than two meters. In addition, droplets shed by sick people through coughing and sneezing are also transmitted after contact with the mouth, eye and nose mucous membranes after the person's hand contact. There is no information on sexual transmission of the virus [12]. However, the presence of the virus was also detected in whole blood, serum, urine and fecal samples [13]. In our study, while the percentage of people who stated that it was only transmitted by respiratory route was the majority (70.6%), the percentage of people who stated that it could be transmitted by mucosal contamination and body secretions after skin contact in addition to respiration was low (15.9%).

While people with Covid-19 infection (including those who are asymptomatic) have a higher rate of contagiousness in the early stage of infection, it has been reported that the viral load, and thus the infectivity, decreases considerably after 7-10 days of illness. For this reason, it is very important to apply measures such as washing hands, wearing masks, distancing measures such as social isolation and the use of personal protective equipment such as wearing gloves [14]. In our study, all these protective measures were known at a high rate of 79.2%.

Within the scope of the measures taken during the Covid-19 pandemic process, the ALO 184 Corona hotline was established by the Ministry of Health in order to obtain information about the disease [15]. In our study, it was observed that the awareness of this line was low (35%).

According to a study examining the clinical features of 138 patients with Covid-19 pneumonia in Wuhan, China [16], the most common clinical features at the onset of the disease were; It was 99% fever, 59% dry cough, 31% shortness of breath (dyspnea). Similarly, when we questioned the symptoms of Covid-19 in our study, the most common answers were fever, cough, and shortness of breath (table 3). Similar to our study, headache and runny nose are among the less common symptoms [17].

No specific effective antiviral treatment has yet been found for Covid-19. While most of the Covid-19 patients have a mild or moderate course, up to 5-10% of them can have a severe life-threatening course. Therefore, there is an urgent need for specific effective drugs for Covid-19 [18]. It was remarkable that the majority (63.1%) of the people who participated in our study said that there was a cure for Covid-19. We think that the preventive treatment (Hydroxychloroquine and Favipiravir) applied by the filiation teams, even if there is no specific treatment, is effective in these discourses.

The mortality and morbidity rates of the Covid-19 pandemic, as well as its impact on the economy, necessitate the evaluation of new generation vaccine technologies and the acceleration of vaccine development studies [19]. WHO stated that there are 25 vaccine candidates in the clinical evaluation and approximately 141 vaccine candidates in the preclinical evaluation [20]. However, although there is no FDA-approved vaccine yet, 34 (10.3%) people in our study stated that there was a vaccine.

Conclusion

Vaccine studies have been concluded all over the world since September 2020-November 2020, when the study was conducted, and Coronavac vaccine was started to be applied in our country as of 14.01.2021. In addition, Pfizer-BioNtech vaccine was started to be applied in our country on 12.04.2021, and our first domestic vaccine, TURKOVAC, started to be administered on 07.02.2022. Covid-19 Outbreak Management and Study and Treatment guides have been renewed many times, and the last guide was updated on April 12, 2022. Although COVID-19 was identified at the beginning of 2020, there is no antiviral treatment with proven safety and efficacy yet [21].

Given the potential side effects of TNF-α blockers, it is essential to monitor patients for dyspeptic symptoms and to test for *H. pylori* infection. Clinicians should consider the risk-benefit profile of TNF-α blocker therapy on a case-by-case basis, considering factors such as disease severity and other comorbidities.

Our study also highlights the need for further research to investigate the underlying mechanisms of the association between TNF-α blockers and *H. pylori* infection. This may include studies that examine the impact of TNF-α inhibition on the immune response to *H. pylori,* as well as studies that investigate the effects of other factors such as duration of therapy and patient demographics.

In conclusion, our study adds to the growing body of evidence on the potential side effects of TNF-α blockers in managing IBD. Our findings underscore the importance of monitoring patients for dyspeptic symptoms and testing for *H. pylori* infection and may inform clinical decision-making in driving these conditions.

Conflict of interests
The authors declare that there is no conflict of interest in the study.

Financial Disclosure
The authors declare that they have received no financial support for the study.

Ethical approval
Ethics committee approval of the study was received on 03.09.2020 (Decision No: 2/2020.K-059).

References

1. Genel bilgiler, epidemiyoloji ve tanı. https://covid19.saglik.gov.tr/TR-66337/genel-bilgiler-epidemiyoloji-ve-tani.html Access date: 05.01.2021

2. Elektif işlemlerin ertelenmesi ve diğer alınacak tedbirler. https://shgmhastahakdb.saglik.gov.tr/TR,64508/elektif-islemlerin-ertelenmesi-ve-diger-alinacak-tedbirler.html Access date: 05.01.2021

3. Huang C, Wang Y, Li X, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. Lancet. 2020;395:497–506.

4. Erkekoğlu P, Köse SBE, Balcı A, Yirün A. Vaccine instability and impacts of covid-19. J Lit Pharma Sci. 2020;9:208-20.

5. Kazak A, Hintistan S, Önal B. Covid-19 vaccine development studies in the world and Turkey. Celal Bayar Ün Sağlık Bil Ens Derg. 2020;7:571-5.

6. Lurie N, Saville M, Hatchett R, Halton J. Developing COVID-19 vaccines at pandemic speed. N Engl J Med. 2020;382:1969–73.

7. Kumar R, Naseem S, Jayatissa J, et al. A Statement of solidarity on COVID-19 pandemic 2020 bythe south asian family physicians. J Family Med Prim Care. 2020;9:1795-97.

8. Çerçi ÜÖ, Canöz N, Canöz K. Use of social media as an information tool during the COVID-19 crisis. Selçuk Ün Sos Bil Ens Derg. 2020;44:184-98.

9. Urhan G, Arslankoç S. Social Policy and local administrations in the COVID-19 pandemic process: the case of Istanbul district. Çalışma ve Toplum. 2021;2:945-80.

10. Republic of Türkiye Ministry of Health, COVID-19 Guide. 2020:35.

11. Karataş Z. Social impacts of the COVID-19 pandemic, change and empowerment. Türkiye Sos Hizmet Araştırmaları Derg. 2020;4:3-15.

12. Republic of Turkey Ministry of Health, General Directorate of Public Health. COVID-19 (sars-cov-2 infection) guide. Date of Access:14.12.2020

13. Kurtulus B, Ozlu T. New coronavirus: sars-cov-2. Mucosa. 2020;3:1-4.

14. Özer ZY, Özcan S. COVID-19 infection in primary health care: prevention and control recommendations. Arşiv Kaynak Tarama Dergisi. 2020;29:67-72.

15. Yücesan B, Özkan Ö. Evaluation of the COVID-19 pandemic process in terms of health management. Eurasian JHS. 2020;3:134-9.

16. Wang D, Hu B, Hu C, et al. Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus-infected pneumonia in Wuhan, China. JAMA. 2020;323:1061-9.

17. Huang C, Wang Y, Li X, et al. Clinical features of patients infected with 2019 novel corona virus in Wuhan, China. Lancet. 2020;395:497-506.

18. Mutlu O, Uygun İ, Erden F. Drugs used in the treatment of coronavirus disease. KOU Sag Bil Derg. 2020;6:168-73

19. Le TT, Andreadakis Z, Kumar A, et al. The COVID-19 vaccine development landscape. Nat Rev Drug Discov. 2020;19:305-6.

20. World Health Organization, Update on WHO solidarity trial accelerating a safe and effective COVID-19 vaccine, https://www.who.int/emergencies/diseases/novel-coronavirus-2019/global-research-on-novel-coronavirus-2019-ncov/solidarity-trial-accelerating-a-safe-and-effective-covid-19-vaccine. Access date: 16.10.2020

21. Erişkin hasta tedavisi. https://covid19.saglik.gov.tr/TR-66926/eriskin-hasta-tedavisi.html Access date: 03.05.2022